

Open letter to Members of the European Parliament: Improve the Renewable Energy Directive

October 17, 2017

Dear Members of the European Parliament in the ENVI and ITRE committees,

The Renewable Energy Directive (RED II) is an important policy aiming to reduce EU's greenhouse gas emissions. At the moment, it is being discussed in the ENVI and ITRE committees of the Parliament prior to the final vote. Bioenergy is the largest source of renewable energy in the EU, and therefore it is crucial to ensure that bioenergy effectively reduces emissions and does not have detrimental environmental impacts.

We, the undersigned Swedish NGOs, urge the Parliament to radically improve the Commission's proposals on bioenergy sustainability and transport biofuels in the RED II. The current policies lead to increased forest harvests and the burning of trees for energy, which do not reduce the emissions of greenhouse gases or favor the biodiversity.

In Sweden, natural and semi-natural forests are systematically clear-cut and replaced by even-aged conifer tree plantations, poor of species, to acquire alleged sustainable wood products and bioenergy. Over 90 % of all forests in Sweden have already been affected by forestry in some way¹ and few high conservation value forests remain. According to official reporting under the EU Habitats Directive, 14 of 15 forest biotopes in Sweden do not have a favorable conservation status.² Mainly due to this habitat destruction, over 1,800 forest-living species are red-listed in Sweden.³

Still, Sweden promotes itself as a leader when it comes to sustainable forestry and bioeconomy. The Swedish and Finnish Forest Industries, among others, are strong lobbyists and use the climate as a pretext to increase their forest harvest, production and economic rates.

When forests are clear-cut, large volumes of greenhouse gases are released from the soil, especially on peat land.^{4,5} In general, there is a pattern of decreasing carbon pools in tree plantations as compared to forests.⁶ In Sweden, over half of the productive forests are young, less than 60 years old.⁷ Old-growth forests aged up to 800-3,000 years have large carbon stocks and can continue to function as carbon sinks.^{8,9} By protecting older forest ecosystems from land-use change, greenhouse gas emissions can be avoided.¹⁰

Recently, 190 scientists stated that there is a need for a scientific basis of the EU climate policy on forests.¹¹ They declared that bioenergy from forest biomass is not carbon neutral and risks having seriously negative climate impacts. The combustion of forest biomass can release more carbon dioxide to the atmosphere than fossil fuels.^{12,13,14} In addition, biofuel crops increase the need of agricultural land, converting valuable habitats and displacing other crops, with serious impacts on food security and significant greenhouse gas emissions from land use change as a result.^{15,16,17,18} For example, tropical forests and Cerrados (tropical savanna) in South America are cut down to make room for livestock and soybean cultivations. Sugar cane plantations push pastures and soybean cultivations deeper into the forests. In Indonesia and other Southeast Asian countries, which are major producers of palm oil, the destruction of rainforest is extensive as palm plantations are established. The growing European demand of bioenergy increases greenhouse gas emissions and urgent action needs to be taken.

To change the course of increased bioenergy use and to aim for integrity of sustainable renewable energy, **we urge the Parliament to support amendments which revise the following key issues in the RED II** (which are also recommended by various European environmental groups):

- Introduce no new renewable energy targets for the transport sector that include food or feed based biofuels, such as palm oil, soy, other vegetable oils and sugar crops. (Art 3 or 25)
- Phase out all food and feed land-based biofuels by 2030. (Art 7.1)
- Take indirect emissions from land use into account in the greenhouse gas calculations of biofuels. (Art 28.1)
- Ensure that only truly sustainable advanced (bio)fuels, such as agricultural and forest residues and waste which are not used for any other purposes, qualify for any targets. (Art 25.1 and Annex IX)
- The targets for advanced biofuels should match the availability of sustainable raw materials. (Art 25.1)
- Support additional incentives for renewable electrification (principally powered by solar energy) of transport. (Art 25)
- Only support the use of forest residues and waste for energy (exclude all forest products such as roundwood and pulp wood). (Art 26.5)
- No support for inefficient electricity production from biomass, particularly if co-fired with fossil fuels. (Art 26.8)
- Extend the scope of all sustainability criteria to cover a larger share of bioenergy. (Art 26.1)

The planetary boundaries for climate and biodiversity are already exceeded¹⁹ and catastrophic consequences are ahead if stringent climate mitigation measures are not urgently taken. It is time to act in favor of both the climate and the biodiversity.

Yours sincerely,

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Alice Andersson, Vice President, PUSH Sweden

¹ Larsson, A. (2011). *Tillståndet i skogen – rödlistade arter i ett nordiskt perspektiv* (only in Swedish). Report 9. Swedish Species Information Center SLU, Uppsala: <http://www.artdatabanken.se/media/2258/tillstandet-i-skogen.pdf>

² Swedish Species Information Centre (2013). *Arter & naturtyper i habitatdirektivet – bevarandestatus i Sverige 2013*. SLU;

https://www.artdatabanken.se/globalassets/ew/subw/artd2.-var-verksamhet/publikationer/15.-arter-och-naturtyper-i-habitatdirektivet/arter_naturtyper_2013.pdf

³ Swedish Species Information Center (2015). *Red-listed species in Sweden* (summary in English). Swedish Species Information Center SLU, Uppsala;

http://www.artdatabanken.se/globalassets/artdatabanken/2-vad-vi-gor-var-verksamhet/publikationer/22.-rodlistan-2015/rodlistan_2015.pdf

⁴ Amiro et al. (2010). *Ecosystem carbon dioxide fluxes after disturbance in forests of North America*. Journal of Geophysical Research 115.

doi:10.1029/2010JG001390; <http://onlinelibrary.wiley.com/doi/10.1029/2010JG001390/abstract>

⁵ He, H., Jansson, P.-E., Svensson, M., Björklund, J., Tarvainen, L., Klemedtsson, L., & Kasimir, Å. (2016). *Forests on drained agricultural peatland are potentially large sources of greenhouse gases – insights from a full rotation period simulation*. Biogeosciences 13, 2305-2318;

<http://www.biogeosciences.net/13/2305/2016/>

⁶ Liao C, Luo Y, Fang C, & Li B (2010). *Ecosystem Carbon Stock Influenced by Plantation Practice: Implications for Planting Forests as a Measure of Climate Change Mitigation*. PLoS ONE 5(5): e10867; www.plosone.org/article/info:doi/10.1371/journal.pone.0010867

⁷ The Swedish National Forest Inventory (2016). *Table 3.2 - Produktiv skogsmarksareal efter År, Län, Tabellmehåll och Åldersklass*. SLU (only in Swedish):

http://skogsstatistik.slu.se/pxweb/sv/OffStat/OffStat_ProduktivSkogsmark_Areal/Tabell32.px/table/tableViewLayout2/?rxid=221f3f1d-67b5-479e-afed-a531e50ec9d0

⁸ Luysaert, S., Detlef Schulze, E., Börner, A., Knohl, A., Hessenmöller, D., Law, B. E., Ciais, P. & Grace, J. (2008). *Old-growth forests as global carbon sinks*. Nature 455: 213-215, <http://www.nature.com/nature/journal/v455/n7210/abs/nature07276.html>

⁹ Berg, B., Gundersen, P., Meentemeyer, V., *Kolfastläggning uppskalad till svensk skogsmark – en sänka för koldioxid* (only in Swedish). SLU Fakta Skog Nr 6, 2005; <http://www.slu.se/globalassets/ew/ew-centrala/forsknpopvet-dok/faktaskog/faktaskog05/fs05-06.pdf>

¹⁰ Mackey, B., Prentice, I. C., Steffen, W., House, J. I., Lindenmayer, D., Keith, H. and Berry, S. (2013). *Untangling the confusion around land carbon science and climate change mitigation policy*. Nature Climate Change, 3, 552–557; <http://www.fern.org/sites/fern.org/files/fern-comment/Untanglingper cent 20theper cent 20confusionper cent 20aroundper cent 20landper cent 20carbonper cent 20scienceper cent 20andper cent 20climateper cent 20changeper cent 20mitigationper cent 20policy.pdf>

¹¹ Euractiv (25-09-2017). *Need for a scientific basis of EU climate policy on forests*;

<https://www.euractiv.com/section/energy/opinion/need-for-a-scientific-basis-of-eu-climate-policy-on-forests/>

¹² Johnston, C. M. T. & van Kooten, G. C. (2015). *Back to the past: Burning wood to save the globe*. Ecological Economics 120, 185-193.

¹³ Ter-Mikaelian, M. T., Colombo, S. J. & Chen, J. (2015). *The Burning Question: Does Forest Bioenergy Reduce Carbon Emissions? A Review of Common Misconceptions about Forest Carbon Accounting*. Journal of Forestry 113 (1), 57-68.

¹⁴ Holtmark, B. (2015). *Quantifying the global warming potential of CO2 emissions from wood fuels*. GCB Bioenergy 7 (2), 195–206.

¹⁵ Transport & Environment (2017). *Moving ahead - The world without food-based biofuels*;

https://www.transportenvironment.org/sites/te/files/publications/2017_04_Biofuels_factsheet.pdf

¹⁶ Transport & Environment (2017). *Biofuels policies do increase food prices*;

<https://www.transportenvironment.org/sites/te/files/publications/Food%20price%20Briefing%202017.pdf>

¹⁷ Fargione, J., Hill, J., Tilman, D., Polasky, S. & Hawthorne, P. (2008). *Land Clearing and the Biofuel Carbon Debt*. Science 319: 1235-1238;

<http://faculty.ucmerced.edu/ecampbell3/duane/Fargione-carbondebt-2008.pdf>

¹⁸ Elshout, P. M. F., van Zelm, R., Balkovic, J., Obersteiner, M., Schmid, E., Skalsky, R., van der Velde, M. & Huijbregts, M. A. J. (2015). *Greenhouse-gas payback times for crop-based biofuels*. Nature Climate Change 5: 604-610;

http://www.nature.com/nclimate/journal/v5/n6/full/nclimate2642.html?WT.feed_name=subjects_environmental-health&foxtrotcallback=true

¹⁹ Rockström, J. et al. (2009). *Planetary boundaries: exploring the safe operating space for humanity*. Nature 461, 472-475;

<http://www.nature.com/nature/journal/v461/n7263/full/461472a.html?foxtrotcallback=true>