

To: Dutch House of Representatives

Date: 25th November 2019

Topic: End subsidies for burning biomass in coal-fired power stations and dedicated-biomass plants

Dear Sir/Madam,

We are writing to you on behalf of conservation and environmental justice organisations in two of the countries most directly affected by the burning of wood pellets in Dutch coal power stations: Estonia and the USA.

We have been following policy decisions and the ongoing debate about Dutch biomass subsidies with much interest and great concern. We understand that €3.6 billion of subsidies have been approved for cofiring wood pellets in four coal power stations, and a further €5.2 billion is earmarked for burning wood in dedicated biomass power, heat and cogeneration plants. We note with alarm, that additional subsidies for dedicated biomass plants have not been ruled out.

The already permitted level of cofiring in the power stations in Eemshaven, Amercentrale and the two on the Maasvlakte (Rotterdam area) translates into the burning of approximately 3.5 million tonnes of pellets a year. Each tonne of pellets will require at least twice that amount in green wood. The additional amount of wood which is to be burned in dedicated biomass plants already granted subsidies is additional, uncapped, and no official figures are available about it.

Burning wood in power stations emits even more CO₂ upfront than burning coal per unit of energy generated. 800 scientists, many different studies, and the European Academies of Sciences (EASAC) have concluded that cutting down trees to burn in power stations is not compatible with the need to try and stabilise the climate and avoid the worst impacts of climate change. We summarise this evidence below.

We understand that the great majority of Dutch wood pellet imports come from the Baltic States and the southern USA.

As we show in the evidence below (see Appendix), both the Baltic States and the southern USA are already experiencing unsustainably high rates of logging, and logging practices which cause significant harm to biodiversity and to the future of diverse and resilient forest ecosystems in the regions. The new and potentially fast-growing demand for wood pellets from the Netherlands will exacerbate this situation. Pellet producers Enviva (USA) and Graanul Invest (Baltic States) have entered into supply contracts for RWE coal power plants in the Netherlands. Vattenfall has stated that it, too, is looking at sourcing wood from the USA and Baltic states for the biomass plant it seeks to build in Diemen.

Enviva, the world's largest pellet producer, sources predominantly hardwood,¹ which in its sourcing region means wood from the clearcutting of biodiverse forest ecosystems that form part of the world's newest Global Biodiversity Hotspot.² Graanul Invest, the world's second largest pellet producer, relies on sourcing whole logs from trees of all ages (as is the case for Enviva, too). Much

of the wood comes from clearcutting forests which will take up to 80 years to regrow, if they are able to regrow at all in the face of climate change and excessive logging.

We therefore urge the Dutch House of Representatives (Tweede Kamer) to ensure that no further subsidies will be granted for burning biomass either in coal power stations or in dedicated biomass plants. Furthermore, the biomass subsidies already granted must be revoked and redirected towards non-emissive renewable energy such as wind and solar power.

Yours faithfully,

Birdlife Estonia	Estonia
Estonian Fund for Nature	Estonia
Estonian Green Movement	Estonia
Estwatch	Estonia
Forest Aid Estonia	Estonia
Lohusalu Poolsaare Loodusselts MTÜ (Lohusalu Peninsula Nature Society)	Estonia
NPO Tartu Students' Nature Conservation Circle	Estonia
EKOEnergy	Europe
Fern	Europe
Global Forest Coalition	International
Athens County's Future Action Network	USA
Carolina Wetlands Association	USA
Center for Biological Diversity	USA
Clean Air Carolina	USA
Dogwood Alliance	USA
Global Justice Ecology Project	USA
Green Delaware	USA
Greenenvironment, LLC	USA
Individual, founder of 350.org	USA
Lakeland Citizens for Clean Air	USA
Mangrove Action Project	USA
Massachusetts Forest Watch	USA
Natural Resources Defense Council (NRDC)	USA
Neighbors Against the Burner	USA
Partnership for Policy Integrity	USA
Pivot Point	USA
Plastic Ocean Project	USA
RESTORE: The North Woods	USA
Save Our Sky Blue Waters	USA
Sequoia ForestKeeper	USA
Sound Resource Management Group	USA
Southern Environmental Law Center (SELC)	USA
Spruill Farm Conservation Project	USA
Swan View Coalition	USA
The Rachel Carson Council	USA
Wiregrass Activists for Clean Energy (WACE)	USA
Biofuelwatch	USA/UK

Appendix

1. Climate impacts of large-scale energy from forest biomass:

As referred to above, the upfront CO₂ emissions from burning wood in power plants are even higher than those from coal per unit of energy. Advocates of biomass energy argue that those emissions should be ignored because the CO₂ will be re-sequestered by future tree growth. However – even if the regrowth of the logged forests could be guaranteed, this cannot happen within the short window of time which climate science shows is left if we want to avoid global warming of more than 2 degrees, let alone less.

Furthermore, when forests are logged, additional CO₂ is released from soils and other vegetation, and forests' ability to sequester carbon in coming years and decades is diminished. The climate impacts of such foregone carbon sequestration are the same as those of equivalent amounts of carbon emissions from burning coal.

As 800 scientists said in an Open Letter to the European Union: *"Even if forests are allowed to regrow, using wood deliberately harvested for burning will increase carbon in the atmosphere and warming for decades to centuries – as many studies have shown – even when wood replaces coal, oil or natural gas. The reasons are fundamental and occur regardless of whether forest management is 'sustainable'."*³

Similar warnings have been issued by the European Academies of Science.⁴ A recent review by EASAC members states: *"This review, based on recent work by Europe's Academies of Science, finds that current policies are failing to recognize that removing forest carbon stocks for bioenergy leads to an initial increase in emissions. Moreover, the periods during which atmospheric CO₂ levels are raised before forest regrowth can reabsorb the excess emissions are incompatible with the urgency of reducing emissions to comply with the objectives enshrined in the Paris Agreement."*⁵

Furthermore, a 2018 peer-reviewed study which shows that even biomass energy from forestry residues is not compatible with the timescale for greenhouse gas emission reduction required to meet the Paris Agreement goal of keeping global warming to 1.5 degrees.⁶

2. Logging and pellet production impacts in the Baltic States and the southern USA:

Baltic States:

As satellite imaging by the University of Maryland shows, logging of forests across the Baltic States is very intensive and extensive.⁷

In Estonia, total logging volume reached a record 12.5 million tonnes in 2018,⁸ and is expected to rise further this year and beyond. Also in 2018, Earlier, the Nature Conservation Commission of the Estonian Academy of Sciences warned: *"Today's forest management as a whole is unsustainable in its present trend,*

does not guarantee biodiversity conservation, takes little account of ecosystem services and therefore needs to change.”⁹

In Estonia, forestry regulations are weak and poorly enforced. For example, clearcutting inside Natura2000 sites has been authorised by the state, as are logging operations during the prime nesting seasons of birds.¹⁰

The current logging intensity is having a negative impact on landscape’s ability to absorb carbon and is predicted to turn the LULUCF sector from being a sink into a source of carbon emission by 2034.¹¹ This limits Estonia’s options for carbon neutrality substantially.

In Lithuania, clearcutting operations inside regional and national parks, including Natura 2000 sites are happening with government authorisation and without environmental impact assessments, harming wildlife and plant biodiversity. In August 2018, the national felling quota was raised by 6% inside protected areas, some 18% of which are Natura 2000 sites.¹²

In Latvia, the Government has reported that the country’s greenhouse gas removals from Land Use, Land Use Change and Forestry – which primarily means carbon sequestration by forests - declined from 8.75 million tonnes of CO₂e in 2000 to just 1.7 million tonnes in 2017.¹³ This loss of forest carbon sinks is equivalent to 7.05 million tonnes of CO₂ emissions from fossil fuel burning per year.

Southern USA:

Since 2015, the US environmental NGOs Dogwood Alliance and Natural Resource Defense Council (NRDC) and the Southern Environmental Law Center (SELC) have published detailed on-the-ground investigations which show wood used in Enviva’s pellet mills is routinely sourced from clearcuts of mature hardwood forests in a region designated as a global biodiversity hotspot. These investigations also document that vast quantities of whole trees and other large-diameter wood— biomass feedstocks known to be particularly high-carbon— are entering the biomass industry’s supply chain.¹⁴ This has been backed up by media investigations, including reporters for the Washington Post,¹⁵ Climate Central,¹⁶ Channel 4,¹⁷ and TV2 in Denmark.¹⁸

The State of North Carolina, where several of Enviva’s pellet plants are concentrated, has said that the *“large scale use of NC’s [North Carolina’s] natural resource to meet foreign markets’ carbon reduction goals by taking advantage of current accounting of methodology should be challenged at the national and international level.”¹⁹*

In 2016, a peer-reviewed study modelled likely future wood sourcing for bioenergy (including pellets for export) in the southern USA. It concluded that *“Our results demonstrate the complex landscape effects of alternative bioenergy scenarios [and] highlight that the regions most likely to be affected by bioenergy production are also critical for biodiversity”*. Even if the area classified as ‘forest land’ was to increase in the context of increased biomass, the *“remaining forest [would be] composed of more intensively managed forest and less of the bottomland hardwood and longleaf pine habitats that support biodiversity”*, i.e.,

there would be more conifer plantations and less biodiverse forests. Those impacts are indeed being demonstrated by NGO investigations as well as investigations by reporters.²⁰

¹ envivibiomass.com/sustainability/track-and-trace/

² cepf.net/stories/announcing-worlds-36th-biodiversity-hotspot-north-american-coastal-plain

³ Letter from Scientists to the EU Parliament Regarding Forest Biomass, January 2018, pfpi.net/wp-content/uploads/2018/04/UPDATE-800-signatures_Scientist-Letter-on-EU-Forest-Biomass.pdf

⁴

easac.eu/fileadmin/PDF_s/reports_statements/Carbon_Neutrality/EASAC_commentary_on_Carbon_Neutrality_15_June_2018.pdf

⁵ onlinelibrary.wiley.com/doi/10.1111/gcbb.12643

⁶ Not carbon neutral: Assessing the net emissions impact of residues burned for bioenergy, Mary S Booth, Environmental Research Letters, 21st February 2018, iopscience.iop.org/article/10.1088/1748-9326/aaac88

⁷ globalforestwatch.org/map

⁸ err.ee/933157/mullu-raiuti-eestis-rekordiliselt-metsa

⁹ heureka.postimees.ee/4386435/teaduste-akadeemia-looduskaitse-komisjon-jatkusuutmatu-metsandus-vajab-muutmist

¹⁰ eestimetsaabiks.emaliikumine.ee/index.php/bird-peace/ and <http://k6k.ee/k6k/uudised/kaarel-relve-ja-siim-vahtrus-keskkonnamojude-hindamine-on-omadega-metsa>

¹¹ envir.ee/sites/default/files/content-

editors/Kliima/kasvuhoonegaaside_poliitikaid_meetmeid_ja_prognoose_kasitlev_aruanne_15.03.2019.pdf

¹² ejatlas.org/conflict/forest-logging-lithuania

¹³ di.unfccc.int/ghg_profiles/annexOne/LVA/LVA_ghg_profile.pdf

¹⁴ dogwoodalliance.org/wp-content/uploads/2019/07/Biomass-Investigation-Booklet-2019.pdf

¹⁵ washingtonpost.com/gdpr-consent/?destination=%2fnational%2fhealth-science%2fhow-europes-climate-policies-have-led-to-more-trees-cut-down-in-the-us%2f2015%2f06%2f01%2fab1a2d9e-060e-11e5-bc72-f3e16bf50bb6_story.html%3f

¹⁶ climatecentral.org/news/pulp-fiction-the-series-19592

¹⁷ imdb.com/title/tt8288424/

¹⁸ nyheder.tv2.dk/samfund/2019-09-09-tv-2-afsloerer-fejl-i-klimakontrol-helt-sort-siger-ekspert

¹⁹ https://files.nc.gov/governor/documents/files/NC_Clean_Energy_Plan_OCT_2019_.pdf

²⁰ See for example reports.climatecentral.org/pulp-fiction/2/