



“Insanity Is Doing the Same Thing Over and Over Again and Expecting Different Results”

Narcotics Anonymous (1981)

Below we link to 15 documents from 2005 to 2019 which show that in 2005 the disastrous consequences of the Dutch policy to use palm oil to generate energy were already known to everyone and that the Planning Bureau for the Living Environment (PBL) and several scientists of the Copernicus Institute (UU) such as Wim Turkenburg, Kornelis Blok, Andre Faaij and Martin Junginger who are knowledgeable in these matters became part of the paid pro-palm oil biomass lobby proceeded in facilitating the global trade in palm oil. Below each link we give important extracts from the documents to which the links refer.

We have made this document available to show how the Dutch government and several companies, consultancies and universities have been responsible or involved for many years in several biomass files that are known to exist at the expense of our health, nature, climate and thus our future. This document is part of our contribution to the PBL research into the sustainability and use of woody biomass for energy generation, which will serve as the basis for the advice of the Social and Economic Council (SER) to the cabinet with regard to the new biomass policy.

The involvement of the PBL and the Copernicus Institute in the paid pro palm oil biomass lobby

[2005-08-27-volkskrant-palmolie-verhit-gemoederen-in-milieudebat-dutch.pdf](#)

(...) the ingenious solutions which are found in the West for the environmental problem, seem to exacerbate the problems on the other side of the world. According to Milieudefensie, 3.9 million hectares of tropical rainforest in Indonesia disappear every year, or seven hectares per minute. Palm oil plantations, which have doubled in size in the last eight years, are said to be the main driver of this. Imports of palm oil from Malaysia have increased nine-fold over the past decade, while imports from Indonesia have doubled. A spokesman for energy company (RWE) Essent reports that the Claus power station in Maasbracht in Limburg already burns approximately two hundred thousand tons of the vegetable oil (...)

[2006-12-00-pccc-de-staat-van-het-klimaat-2006-dutch.pdf](#)

Written by, among others, Bart Strengers (MNP / PBL) and Wim Turkenburg (Utrecht University - Copernicus Institute) with conclusions such as (Named persons already knew what the consequences were in 2006):

The discussion can also be broadened to the socio-economic effects of large-scale biomass plantations at local level in developing countries, such as palm oil plantations in Indonesia. On the one hand, these plantations offer developing countries new opportunities for export, on the other hand, problems such as deforestation and displacement of local communities are lurking (...)

[2007-03-26-rwe-essent-mvo-verslag-een-krachtig-energiebedrijf-in-duurzaam-perspectief-2006-dutch.pdf](#)

Essent has co-fired palm oil in its power stations for the past two years (...) In the Netherlands, insufficient biomass is available to meet demand. That is why Essent imports the majority of this (...) Palm kernels, palm oil and palm oil derivatives come from Malaysia and Indonesia (...) Recently, questions have been raised about the sustainability of palm oil used by Essent (...). An independent committee, led by Professor [Kornelis] Blok of Utrecht University [Copernicus Institute], is investigating the possibilities for certification of palm oil.



[2007-05-00-university-utrecht-copernicus-institute-a-greenhouse-gas-balance-of-electricity-production-from-co-firing-palm-oil-english.pdf](#)

Written by Andre Faaij, Martin Junginger, Kornelis Blok and Wim Turkenburg of Utrecht University - Copernicus Institute, commissioned by RWE / Essent with conclusions such as:

When palm oil is produced on degraded land, reductions in greenhouse gas emissions of more than 100 percent can be achieved, indicating that oil palm plantations can serve as carbon sinks (...) If palm oil production takes place on previously degraded land, management of palm oil production is improved, or if the by-product palm fatty acid distillate is used for electricity production, criteria can be met and palm oil-based electricity can be considered sustainable when it comes to greenhouse gas emission.

[2008-07-00-university-utrecht-copernicus-institute-paid-pro-biomasslobby-drivers-of-land-use-change-and-the-role-of-palm-oil-production-in-indonesia-and-malaysia-english.pdf](#)

Written by Andre Faaij, Martin Junginger, Kornelis Blok and Wim Turkenburg of Utrecht University - Copernicus Institute, commissioned by BioX group BV with conclusions such as:

For Indonesia there are many interrelated and underlying causes that are responsible for this land use change. It has been shown that palm oil alone cannot explain the large loss in forest cover, but rather that a web of interrelated direct causes (including palm expansion in oil production) and underlying drivers are what's causing it. Important direct causes were found in logging, the expansion of palm oil and other agricultural production and forest fires (...)

[2010-01-00-pccc-de-staat-van-het-klimaat-2009-dutch.pdf](#)

Written by Bart Strengers (PBL) and Kornelis Blok and Wim Turkenburg (Utrecht University - Copernicus Institute), including conclusions such as:

According to the Environmental Assessment Agency (PBL) CO2 capture and storage and biomass for energy will have to play an important part in the Netherlands. The combination of these would even lead to negative emissions (...) Modern coal-fired power stations could meet the targets if more than 50% co-firing of biomass is implemented or if CO2 was captured on a large scale.

[2011-04-00-pccc-de-staat-van-het-klimaat-2010-dutch.pdf](#)

Written by Bart Strengers (PBL) and others, including conclusions such as:

(...) iedere nieuwe elektriciteitscentrale uitgerust met CO2-afvanginstallaties en vervolgens wordt die CO2 opgeslagen in de diepe ondergrond, zoals in lege gas- of olievelden of waterhoudende lagen. Daarnaast wordt grootschalig overgestapt op brandstoffen die afkomstig zijn van biomassa. Hierdoor ontstaat een situatie waarbij zelfs CO2 uit de atmosfeer wordt verwijderd: elektriciteitscentrales worden gestookt op biomassa waarna dit wordt opgeslagen in de ondergrond.

(...) Every new power plant [will be] equipped with CO2 capture technology and this CO2 is stored in the deep underground, subsequently, such as in empty gas or oil fields or water-bearing layers. In addition, there'll be a large-scale switch to fuels that are generated from biomass. This could even create a situation in which CO2 concentrations in the atmosphere go down: power plants fired with biomass, after which the CO2 is stored underground.



[2013-09-03-greenpeace-rspo-certifying-destruction-in-indonesia-english](#)

According to official maps from the Ministry of Forestry, Indonesia lost at least 1,240,000 hectares of forestcover in the 2009-2011 period, equivalent to 620,000 hectares per year (...) Indonesia's peatlands are one of the world's major carbon stocks, comparable in value with the Amazon rainforest (...) The RSPO wants its industry members to be leaders in sustainability, but current standards allow them to destroy forests (...) Despite discussing the need for a sustainable standard for years, the 2013 revision of the principles and criteria only offer voluntary guidelines to report greenhouse gas emissions from forest conversion (...)

(Similar voluntary guidelines can be found when it comes to the extraction of woody biomass in the southeast of North America and again, recently, in Estonia where RWE / Essent is also involved. Both areas are experiencing large-scale and disastrous deforestation.)

[2015-03-28-ftm-hoe-europees-biobrandstofbeleid-grote-schade-aanricht-dutch](#)

Figures from a study by the International Institute for Sustainable Development (IISD) and the Global Subsidies Initiative (GSI) tell us that palm oil processing for biofuels increased with 9500 percent between 2006 and 2012 (...) For this reason the Indonesian government decided to designate another 17,000,000 hectares of land to transform into palm oil plantations. (...) A good rendering of the predictions made by the Food & Agriculture Organization of the United Nations (FAO) tell us that in 2022 98 percent of the Indonesian rainforest will have disappeared due to the construction of monocultures such as palm oil plantations (...) Referring to various Case studies the independent research teams underscore that increasing palm oil production is devastating to millions of people, exotic species and the tropical rainforests they live in. "The relentless surge in demand for palm oil has proven to have irreversible consequences for people and the environment." This grave situation has been known for years. An independent UN expert team that monitors the compliance with the implementation of human rights has already sounded the alarm about the situation in Indonesia back in 2007 (...)

[2015-08-27-european-commission-land-use-change-impact-of-biofuels-consumed-in-the-eu-english.pdf](#)

Conventional raw materials for biodiesel have high land use change effects compared to direct emissions from the production process of biofuel, with very high emissions for palm oil (231 grams CO₂e per megajoule of biofuel consumed - gCO₂e / MJ). Drainage of peatlands in Indonesia and Malaysia play a major role in these land use change emissions for green oils. This is especially the case with palm oil: 69% of gross land use change emissions for palm oil are caused by such peat oxidation after land conversion.

[2016-01-12-gov-nl-pbl-greenhouse-gas-impact-of-bioenergy-pathways-english.pdf](#)

Written by Bart Strengers (PBL), among others, including 9 references to research by Andre Faaij and 8 by Martin Junginger, that offers us this conclusion (among others):

(...) Routes that achieve significantly higher emission reductions per hectare than others:...biodiesel from palm oil.

[2016-06-28-ftm-eu-biobrandstofbeleid-blijkt-een-farce-dutch](#)

Especially biodiesel derived from palm oil appears to be the culprit: it is a lot more harmful to the environment than fossil fuels and three times as much CO₂ is emitted in the process.

(These facts are the same when we compare woody biomass with gas)



[2017-12-21-ftm-hoe-palmolie-die-in-rotterdam-duurzaam-heet-in-azie-voor-klimaat-en-mensenrechtenschendingen-zorgt-dutch](#)

In one part of the world palm oil is associated with the grossest climate - and human rights violations. In another part of the world, importers are claiming that their palm oil is sustainably won. (...) It's hard to imagine there being an agricultural product associated with as much misery and wrongdoings as palm oil is. Just about every NGO - from Greenpeace to Amnesty International, from Milieudefensie (Friends of the Earth) to WWF - has warned about the devastating impacts of palm oil cultivation in countries around the equator on people and the environment. Nevertheless, the Netherlands is a major consumer (...) The sustainability label doesn't actually provide any guarantees for sustainability levels. RSPO can in no way deliver on the promise of sustainability. Therefore, in spite of nice-sounding reassurances and promises from the biofuel - and food industry, the rise in European demand for palm oil is bad news for the climate, since even when it comes to certified palm oil sustainability is in no way guaranteed. A spokesperson (of the paid pro-palm oil biomass lobby): "By disregarding all first-generation biofuels, you inhibit investments in the development and production of second-generation biofuels. Without the first generation, there would be no second generation."

(We see people from the pro-biomass lobby (among others, Andre Faaij, Martin Junginger and Bart Strengers) using this line of argumentation often.)

[2018-02-07-gov-nl-pbl-negatieve-emissies-technisch-potentieel-realistisch-potentieel-en-kosten-voor-nederland-dutch.pdf](#)

Written by Bart Strengers (PBL) and others, including conclusions such as (and references to paid pro-biomass lobbyist Wim Turkenburg of the Copernicus Institute):

The combination of bioenergy with CO2 capture and storage (BECCS), including CO2 capture in the biofuel production process, have by far the greatest potential for reaching negative emissions in the Netherlands. The future supply of sustainably produced biomass will be determinative. When biomass is burned in a power plant, a boiler or during the production of steel, 90 to 100% of the carbon in the biomass can be converted into negative emissions (99 to 110 ktonnes CO2 per PJ biomass). (...) It is argued by various experts (FluxEnergie 2015; Turkenburg 2015) and the electricity producers themselves (Staalduine 2018) that conversion is an option that should be considered, especially in light of the negative emissions discussion and given that, of the five coal-fired power stations, three have been operational for a very short time only (see Table 2.1). On top of that, RWE [Essent] aims to keep the Amer power plant in Geertruidenberg open until at least 2040 by switching to biomass completely, even if subsidies (for co-firing) biomass (for 60 PJ biomass per year with which 25 PJ electricity will be produced) will end in 2023. (...)

[2019-11-00-cn-borneo-is-burning-how-the-worlds-demand-for-palm-oil-is-driving-deforestation-in-indonesia-english](#)

Farmers are harvesting the land in the fastest way possible to take full advantage of the growing demand for palm oil (...) Not only are they burning the forest, they are also destroying the peatlands beneath it - the world's largest natural terrestrial carbon sink (...) Indonesia is experiencing a modern gold rush. In less than 20 years, palm oil exports have risen nearly 1500% to \$ 20.7 billion in 2017. It is now the country's largest export product. (...) Indonesia supplies more than half of the world's palm oil. Palm oil is increasingly used for biofuels, driven by climate policies that encourage the use of planet-friendly alternatives to oil and gas. (...) But in reality, palm oil biodiesel emits three times as much carbon as fossil fuel diesel when all environmental costs are taken into account, says the European Transport and Environment Federation referring to a 2016 Globiom study. Despite this, many countries are banking on biodiesel from palm oil to achieve their targets under the Paris climate agreement. (...) "It is now far beyond our control in Indonesia," said Tiur Rumondang, Indonesia Country Director for the Roundtable for Sustainable Palm Oil (RSPO). "I think it's because we're just growing them organically, without a very clear plan." The RSPO, a global sustainable certification body, was established in 2004 in response to growing criticism on the

palm oil industry. Indonesian biodiesel production is expected to increase by 43% to 8 billion liters in 2019, a USDA report says. The problem of palm oil is not just an Indonesian problem, but a problem of companies and consumers worldwide buying it.

History is now repeating itself, in this case with woody biomass. And here the sole responsibility lies with the companies, members of the Copernicus Institute and members of the PBL such as Bart Strengers and his colleagues arguing in favor of burning woody biomass for energy production.

Our Investigation

During our extensive research into the paid pro-biomass lobby in the Netherlands and the harmful effects of burning woody biomass on health, nature, climate and thus our future, we analysed [more than 1200 documents and research reports](#) and made a start compiling important data (summaries, quotes, findings, etc.) from the texts per subject. In addition to these hundreds of documents, we have also collected over 1700 news items and 25 videos published over the past 20 years:

[1200-documenten-tav-het-pbl-onderzoek-beschikbaarheid-duurzame-biomassa-en-toepassingsmogelijkheden-daarvan-in-nederland-dutch.pdf](#)

[1700-nieuwsberichten-tav-het-pbl-onderzoek-beschikbaarheid-duurzame-biomassa-en-toepassingsmogelijkheden-daarvan-in-nederland-dutch.pdf](#)

[25-videos-tav-het-pbl-onderzoek-beschikbaarheid-duurzame-biomassa-en-toepassingsmogelijkheden-daarvan-in-nederland-english.pdf](#)

The harmful impacts of burning woody biomass

We have analysed 50 documents and research reports from 2019, the most important and/or relevant information grouped per subject and provided summaries:

[climate-solutions-for-reducing-co2-emissions-and-sustainable-energy-generation-without-woody-biomass-english.pdf](#)

[2019-research-on-claims-whole-trees-are-used-to-produce-woody-biomass-for-energy-production-english.pdf](#)

[2019-research-on-the-sustainability-criteria-for-the-logging-and-burning-of-woody-biomass-english.pdf](#)

[2019-research-on-the-subsidies-for-the-logging-and-burning-of-woody-biomass-english.pdf](#)

[2019-research-on-the-lulucf-criteria-for-the-logging-and-burning-of-woody-biomass-english.pdf](#)

[2019-research-on-the-paid-lobbyfacts-for-the-logging-and-burning-of-woody-biomass-english.pdf](#)

[2019-research-on-the-laws-and-regulations-for-the-logging-and-burning-of-woody-biomass-english.pdf](#)

[2019-research-on-the-health-risks-caused-by-the-logging-and-burning-of-woody-biomass-english.pdf](#)

[2019-research-on-the-ecotoxicity-of-burning-woody-biomass-english.pdf](#)

[2019-research-on-the-certifications-required-for-sustainable-logging-and-burning-of-woody-biomass-english.pdf](#)

[2019-research-on-the-impact-of-logging-and-burning-of-woody-biomass-on-carbon-dioxide-emission-levels-english.pdf](#)

[2019-research-on-the-impact-of-logging-and-burning-of-woody-biomass-on-biodiversity-english.pdf](#)

[2019-research-on-the-availability-of-woody-biomass-english.pdf](#)

The following weblinks refer to the research pages per subject: [Availability](#), [Biodiversity](#), [Carbon dioxide](#), [Certification](#), [Ecotoxicity](#), [Health Risks](#), [Legal](#), [Lobby Facts](#), [LULUCF](#), [Solutions](#), [Subsidies](#), [Sustainability](#), [Whole trees](#)



The paid pro-biomass lobby

This research is part of an extensive study into the paid pro-biomass lobby activities in the Netherlands. The full study consists of the following 6 parts which are (or will be) published on the following website:

<https://www.biomassmurder.org/research/lobby-facts>

Part 1: [Energy companies](#)

Part 4: [Consultants and lobbyists](#)

Part 2: [Politicians and Officials](#)

Part 5: [Certification and subsidies](#)

Part 3: [Scientists](#)

Part 6: [Banks and investors](#)

We've provided three documents for the PBL investigation. This concerns the research report part 1 (energy companies) and 3 (scientists) and a document listing the top 400 people involved in the paid pro-biomass lobby:

[pro-biomassa-lobbyfeiten-onderzoek-deel-1-de-energiemaatschappijen-dutch.pdf](#)

[pro-biomassa-lobbyfeiten-onderzoek-deel-3-rwe-essent-en-de-wetenschappers-van-het-copernicus-instituut-dutch.pdf](#)

[top-400-betrokkenen-bij-de-betaalde-pro-biomassalobby-in-nederland-inbreng-pbl-onderzoek-tbv-advies-ser-mbt-biomassa-dutch.pdf](#)

The EDSP ECO Foundation is a non-profit organisation and works together with scientists and public & private organisations to develop innovative, durable and sustainable technologies and solutions for the transition towards a circular economy. With our research and project agency, we support organizations responsible for actions to protect the planet, end poverty or increase well-being. We offer support in the shape of building and managing websites, conducting extensive research, setting up and offering digital campaigns, connecting stakeholders, giving public speeches and interviews and developing and rolling out environmentally friendly solutions. In addition, we actively focus on politicians and companies that contribute to pollution and climate change.

We do not receive any subsidies or financial contributions from government or companies and we finance all our actions, investigations, lawsuits and multimedia campaigns ourselves. In 2020, we will file further lawsuits against government and industry to ensure that subsidies for burning woody biomass and deforestation are ended. Would you like to help us holding politicians and companies legally responsible and, through the court system, end this destructive policy once and for all? Please visit: www.biomassazaak.nl/en

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