



[About](#)

[Action](#)

[Docs](#)

[News](#)

[Videos](#)

[Research](#)

[Support](#)

[Contact](#)



## PRO BIOMASS LOBBYFACTS RESEARCH



### Research on the Pro Biomass Lobby

One way to assess the [relative lobby power](#) of the corporate sector versus the civil society sector (aside from spending levels) is to look at the numbers of lobbyists each sector deploys. In order to get a permanent access pass for the European Parliament, lobbyists have to be a member of the [EU transparency register](#). The pass is popular as it enables lobbyists to walk about the Parliament without invitation, approach MEPs and their assistants in corridors or bars, and to knock on their office doors. Registered companies and business trade associations holding EP passes (1118 organisations) declare 3042 EP passholders in total. More than 10% of all those organizations are connected to the pro biomass lobby.

Our pro biomass lobby research consists of the following 6 chapters:

- [pro-biomass-lobbyfacts-research-part-1-energy-companies](#)
- [pro-biomass-lobbyfacts-research-part-2-politicians-and-officials](#)
- [pro-biomass-lobbyfacts-research-part-3-scientists](#)
- [pro-biomass-lobbyfacts-research-part-4-consultants-and-lobbyists](#)
- [pro-biomass-lobbyfacts-research-part-5-certifications-and-subsidies](#)
- [pro-biomass-lobbyfacts-research-part-6-banks-and-investors](#)
- [follow-the-money-research-on-biomass-and-the-pro-biomass-lobby](#)



### Energy Companies

publishing data: [2019-11-04-edsp-eco-pro-biomass-lobbyfacts-research-part-1-energy-companies-english.pdf](#)

action: switch your energy company campaign: [2019-11-14-thefab-onderzoeksrapport-biomassavrije-energieleveranciers.pdf](#)

Three energy giants made the decision to build brand new coal-fired power stations in the Netherlands in 2008. However, soon regrets about the decision arose. In 2011, RWE CEO [Peter Terium said](#) that he would not build the coal-fired power station in

Eemshaven "with the knowledge of today". The construction was nevertheless continued, after which the coal-fired power stations were put into operation in 2015 (RWE and Engie) and 2016 (Uniper).

On November 4, 2019, [Follow the Money published](#) an article in which they demonstrated with confidential internal memos from 2006 that the energy suppliers indeed relied on their lobby, but that this lobby failed due to the wrong assumption of the electricity companies that they had many more years of free CO2 rights. As a result, only 15 percent of emissions would actually have to be paid. In 2013, however, the government decided ([as was to be expected](#)) to stop distributing free CO2 allowances to electricity companies. Whereas coal-fired power stations previously received 85 percent of their CO2 allowances for free, they now had to pay for the whole amount since 2013. This wrong estimate had a huge influence on the profitability of the power stations. When coal is burned to generate electricity, an average of 798 grams of CO2 per kWh is released. When burning natural gas, this is less than half: an average of 396 grams of CO2 per kWh. [As extensively measured by science](#) and [brought into the news](#), burning woody biomass releases three times more CO2 per kWh hour than burning gas. The burning of woody biomass even produces one and a half times more CO2 emissions than the burning of coal.

Despite these poor prospects, billions of euros have been added to coal-fired power stations in the Netherlands in recent years. Uniper and Engie each built a new coal-fired power station on the Second Maasvlakte, which required an investment of around 1.7 billion euros each. RWE built a gigantic power station in Eemshaven in Groningen, which cost around 3.5 billion euros.

[Uniper has filed a claim for damages](#) with the government (which we as citizens will pay through taxes) of EUR 850 million (half of the costs of building the plant). Also in Gelderland there is a great fear within the municipality and the province of a claim for damages from Veolia if the Province would choose to close the plant. RWE saw the storm coming early on and has fully committed itself to the [pro-biomass lobby](#) and has been [very successful with that](#). In addition to the Amer power plant, where they have been burning woody biomass since 2001 [and have had a gigantic wood pellet factory built in Georgia \(America\)](#) to massively plunder the forests there, they have recently also switched [to burning biomass](#) in the Groningen Eemshaven. This means that the company receives billions in subsidy, again at the expense of our health, nature, the environment and our future. [RWE Director Peter-Paul Schouwenberg](#) is the mastermind behind the coal to biomass burning conversion scheme.

RWE does not appear to be the only one to use the pro-biomass lobby on a large scale. According to the lobbyfacts database, the 5 largest energy suppliers in the Netherlands appear to spend millions every year to realize biomass burning in the Netherlands.

...

## LobbyFacts Database

[LobbyFacts](#) is a project of the [Corporate Europe Observatory](#) and [LobbyControl](#) and collects information from official sources including [the EU transparency register](#). The LobbyFacts database indicates over 120 organizations involved in the paid pro biomass lobby in European institutions with a total amount [between 33 and 39 million euro's annually](#). Examples of organizations involved in the pro-biomass lobby in the Netherlands:

- [Uniper](#) (E-ON), according to the lobby monitor, spends nearly half a million euros a year on lobbying activities in the European Union alone and has 3 full-time lobbyists at work. On top of that the costs for the extra lobbyists and lobbying activities in the Netherlands are added.

- **Vattenfall** (Nuon), according to the lobby monitor, spends nearly one million euros a year on lobbying activities in the European Union alone and has 4 full-time lobbyists at work. On top of that the costs for the extra lobbyists and lobbying activities in the Netherlands are added.
- **RWE** (Essent) has 5 full-time lobbyists at work and spends at least one million euros a year on lobbying activities in the European Union alone. The Dutch directors of the RWE are among the most active pro biomass lobbyists in the Netherlands, sit on several pro biomass lobby committees and initiatives and sponsor pro biomass reports.
- **Veolia** has 6 full-time lobbyists at work and spends nearly a million euros a year on lobbying activities in the European Union alone. On top of that the costs for the extra lobbyists and lobbying activities in the Netherlands are added.
- **ENGIE** (GDF SUEZ/Electrabel) has 11 full-time lobbyists at work and spends more than two million euros a year on lobbying activities in the European Union alone. On top of that the costs for the extra lobbyists and lobbying activities in the Netherlands are added.

In addition to the organizations lobbying in European institutions we have identified nearly 200 organizations actively lobbying in the Netherlands to promote the burning of woody biomass for energy generation, many of whom are involved in the paid pro-biomass lobby. Both the Dutch government and the [European Union](#) pay millions of euros per year (from our own tax money) to the pro-biomass lobby activities. Pro-biomass lobbying activities of the Netherlands and the European Union include: ADBE, AEBIOM, BBE, Bioenergie Realisatie Koepel, Biomass 2040, Biomass Policies, Biomass Trade Centers, BioTrade2020Plus, BioWKK, DIA-CORE, EUBCE, EUBIA, EUBIONET, IEA Bioenergy, IPBBE, PELLCERT, Platform Bio-energie, Platform Duurzame Grondstoffen, Platform Groene Grondstoffen, Platform Hout in Nederland, Projectbureau Duurzame Energie, S2Biom, SBP. We will return to this in detail in parts 2 and 4 of this study.

A notable lobbying issue concerns the [Sustainable Biomass Program \(SBP\)](#) certification for biomass for energy production initiated by the Netherlands in 2013. The SBP certification was intended to guarantee that the supply of biomass along the entire supply chain is processed in a sustainable manner. [According to the SBP LobbyFacts](#), the SBP program that is used by the Dutch government to reassure politicians and citizens biomass is sustainable, hasn't even spent ten thousand euros a year to get this program under the attention of the European Union. Less surprising therefore is that almost [the entire board of the SBP program](#) consists of people who have a financial interest in burning woody biomass for energy generation, including the Dutch president of the RWE. [Peter-Paul Schouwenberg](#) (Manager Biobased Economy of RWE Essent) is, together with a number of other RWE Essent directors, the driving force from the energy industry that has ensured that the use of woody biomass for generating energy worldwide on a gigantic scale has been possible and accepted. [Click this link to read more...](#)

...

## Politicians & Officials

Expected publishing data: april 2020 [processing]



## ... Scientists

publishing data: [2019-11-22-edsp-eco-pro-biomass-lobbyfacts-research-part-3-scientists-martin-junginger-english.pdf](#)

action: we will start contacting student associations from the Utrecht University to inform them about our findings and ask them to contact the faculty staff of the Copernicus Institute to demand an end to the paid pro-biomass lobbying and stop damaging their reputation.

The Netherlands have several universities that have been closely involved with and dependent on paid pro-biomass lobbying activities for many years. The Dutch government and the European Union provide millions in subsidies and together with companies that have financial interest in harvesting, transporting, processing, trading or burning woody biomass, they produce many of the pro-biomass reports that the universities have been generating for more than ten years. Researchers, professors and the [directors](#) of the relevant institutes, [\(former\) members](#) of the [House of Representatives](#), [ministers](#) and officials from the institutes, are paid directly or indirectly through biomass projects that are allocated by the same companies, [government](#) and the European Union. We discuss this in part two of our lobby facts research. This article focuses on the Copernicus Institute of Utrecht University. Other institutes are discussed in the following chapters of part three.

[The Copernicus Institute](#) was prepared by committees [headed by Klaas van Egmond](#) and Margreeth de Boer, and was founded in 2001. Wim Turkenburg was the scientific director of this institute from the very start and was also the driving force behind the founding of the [Utrecht Center for Energy Research](#) (UCE) of which he was also the scientific director. The formation of UCE was aimed at realizing more cooperation in the Utrecht region and making better use of research funding. Klaas van Egmond was responsible for the founding of the Utrecht Center for Earth and Sustainability (UCAD) of which Jacqueline Cramer became the director in early 2011 and which merged the UCE and UCAD into the [Utrecht Sustainability Institute](#) (USI).

## Trust in Science

At the beginning of 1999, Klaas van Egmond is still director of the National Institute for Public Health and the Environment (RIVM) and Trouw publishes an interview in which an employee accuses the institute of '[lies and deceit](#)' and accuses the service of generating unfounded reports aimed at keeping politics satisfied. According to the employee, it is an attitude most environmental institutions are guilty of by conducting joint studies and agreeing jointly which models and parameters are used and by protecting themselves by silencing critics.



Van Egmond confirmed this by responding that it was politics who wanted RIVM to include economic and sociological factors in its models. The outcomes of those models become uncertain because of that; you cannot blame RIVM for that, he claimed. If politicians want it that way, then they can get those uncertainties. Professor Pier Vellinga stated that it was a bit more

complicated than that. According to him, almost all knowledge in the Netherlands would be concentrated in national institutions that report directly to The Hague without consulting counter-expertise. The disadvantage is that it is very difficult for outsiders to participate in the discussion. The decision-making is consistent internally, but people are often deaf to other sounds. These institutions exhibit a certain slowness in their response to a changing world. As a result, if that internal flow is wrong, or if there are uncertainties, politics are on the wrong track.

Jacqueline Cramer was a minister at the beginning of 2010 when it became known that the Netherlands Environmental Assessment Agency (PBL) had made a sloppy mistake in the IPCC's climate report and she said she would **"no longer accept any mistakes"**. Turkenburg responded that he did not understand Cramers' zero error requirement and said: *"Before she became a minister, she was a scientist here at the Copernicus Institute of which I am now the director. She must know that mistakes are common in science."*

The Copernicus Institute of the University of Utrecht was sharply criticized in 2015 after the Royal Netherlands Academy of Sciences (KNAW) questions the principles of the Institute in the vision document **"Biofuel and wood as energy sources - effect on greenhouse emissions"**. Since 2017 the KNAW has been warning that the burning of woody biomass for energy purposes does not contribute to solving climate problems and would actually aggravate them. The authors of the vision document **relied on** scientific publications from 'the most renowned, independent experts at home and abroad'. **Turkenburg** and **Faaij**, who consider themselves to be the founders of the Copernicus Institute's assumptions on the usefulness of burning woody biomass, could not or did not wish to provide substantive arguments for arriving at a different opinion.

On September 12, 2018, **Klaas van Egmond raised the alarm** and said that the large companies had too much power and that they misused it with a disastrous effect on the major issue of our time, the climate problem. The promises of the large companies would be systematically violated and those involved who would like to tackle the problems (such as at the time with the palm oil plantations) were called back by the shareholders who wanted to keep making profits. Van Egmond accused the companies of deliberately trying to delay the much needed changes.



*Quote from 2018 by Klaas van Egmond: The whole of The Hague is talking about the Paris climate targets, but this way we will never achieve them – the aim is about CO2 emissions being halved in eleven years. Of course, muddling along can be the choice in a parliamentary democracy. This is a choice they can make, but then at least be honest about it and stop moaning about the future and the lives of our grandchildren. (...) Civilizations do not perish because they do not see the problem coming, but because the older invested generation refrains the younger from adapting on time.*

On November 19, 2019, the members of the **National Federation Against Biomass Centers** ([www-the-fab.org](http://www-the-fab.org)) were invited to the talk show **"Warehouse de Zwijger - Biomass: from promise to culprit"**. On the podium, Mr van Egmond stood opposed to a colleague from the University of Utrecht who argued for the burning of woody biomass. The thrust of his story was clear (click on image 2 above to watch the YouTube video): Burning biomass is not a good idea for the climate, biodiversity and fertility of the soil and it is naive to think that politics will make laws to force companies to use biomass in a sustainable way. You especially don't have to expect anything from the companies themselves. The use of woody biomass not only stops the energy

transition, it makes the problem worse and it is disastrous for our future.

One thing we question about Mr. van Egmond's story is the time when he finally chooses to express his opinion so clearly and publicly. We have analyzed thousands of documents and news items and have come across Mr van Egmond very often, but never in the context in which he expresses his views on woody biomass so clearly. Mr. van Egmond said he was worried about the climate and the future. We regret that in the last ten years he has not publicly expressed his views to oppose those of Mr Turkenburg, Faaij and Junginger.

...

## The Scientists

**Wim Turkenburg** is not only a professor at Utrecht University and the former director of the Copernicus Institute. He is also the owner of a [consultancy](#) firm and a member of a number of advisory committees, all in the field of bioenergy and biomaterials. He also regularly communicates about energy issues in public media. Turkenburg, his [consultancy firm](#) and his colleagues are allied directly to [a number of organizations](#) in the paid pro-biomass lobby. In 2015, the KNAW have already pointed towards the [lobby and conflicts of interest](#) between the members of the Copernicus Institute and the energy companies.



*Quotation from 2016 by Wim Turkenburg: The first framework to arrive at sustainability criteria for the development and application of biofuels was developed by 'the club in Utrecht' [Copernicus Institute] under the leadership of colleague André Faaij, grafted on a paper by me 1996 (...) They formed the foundation of the later so-called 'Cramer criteria' for sustainable biomass.*

In addition to lobbying for the large-scale burning of woody biomass for energy generation (preferably by sponsor RWE Essent), Turkenburg also has a passion in the same category. He and Faaij are strong proponents of the [Carbon Capture & Storage](#) (CCS) principle. Turkenburg has been involved in the development of the first tests with CCS since the early 90s and in September 1996 he received the [Greenman Award](#) for his contribution to research. In 1997 he was involved in the extensive [CO2 Capture, Transport and Storage](#) (CATO) project with a budget of 25 million euros and a duration of 5 years. Since then, Turkenburg and Faaij have been lobbying hard to get [their ideas](#) on the market. As a result, they are responsible, among other things, for the construction of the [three newest coal-fired power stations](#) approved by [their colleague and then Minister Jacqueline Cramer](#) (even in 2019 there is [plenty of lobbying](#) throughout the institute).

*Quote from 2017 by Jacqueline Cramer: They will be the cleanest power plants in the world with the possibility of storing CO2 and co-firing biomass. (...) By that time, emission allowances will be so high that the power stations will do everything they can to reduce CO2 emissions for economic reasons.*

However, the [costs for CCS](#) turned out to be so high that the development and application of CCS [did not prove to be a feasible solution](#). However, [closing the plants was not an option](#), despite the additional CO2 emissions that are the result.

...

[André Faaij](#) is a professor at the University of Groningen and previously worked for the Copernicus Institute (Utrecht University) and is now scientific director at ECN (part of TNO). At the beginning of 2015, he stated in a [Trouw article](#) that he found the [KNAW's critical publication](#) about co-firing biomass in power plants of "kindergarten level". The KNAW indicated that Faaij is part of a [small group of self-proclaimed experts](#) who have [all kinds of ties with stakeholders](#), making it difficult for science to speak.



The KNAW has no financial interests and is independent. Faaij is often associated with the [organizations involved in the paid pro-biomass lobby](#) and until three years ago he regularly sought publicity with his vision and lobby. In 2019 he operates more in the background and leaves the discussion to Martin Junginger.

*Quote from 2008 by Andre Faaij (member of the Cramer Commission): The Netherlands have a leading position in this field, partly because it has taken the initiative for the Cramer framework with sustainability requirements for biomass. The committee was chaired by a colleague at the Copernicus Institute, Jacqueline Cramer, now Minister of VROM, and was very pleasant to work with. Our group has certainly laid the foundation for the work. Before the committee was even set up, we looked at what criteria had to be developed, where they could be linked to existing conventions or certification, and how a route towards concrete indicators and implementation could be set up. We are now conducting exciting research for FAO in this area, and we advise parties such as UNCTAD (UN Trade Commission), UNEP, OECD and IEA. Another highlight in this area, since 2004, is our leadership (with Essent) of a work group of the International Energy Agency in the field of sustainable international trade in biomass.*

When the government announced in 2001 that, with natural gas revenues, it wanted to give a substantial injection to strengthening the knowledge infrastructure in the Netherlands, Turkenburg saw opportunities for [NW&S, UCE and the Copernicus Institute](#) that had just been set up. This is how the idea arises of setting up a large national clean fossil program. In addition to UCE, no fewer than nineteen organizations participate in the program: energy companies (Shell, Gasterra, EBN, NAM), universities (three departments of Utrecht University, Leiden University, University of Twente, TU Delft), research institutions (KEMA, ECN, two departments) from TNO), consultancy firms (Ecofys, Geochemie Research BV) and environmental organizations (Stichting Natuur en Milieu, Greenpeace, Wereld Natuurfonds). The clean fossil program forms the basis for further cooperation in the pro-biomass lobby of the Copernicus Institute and has been active to date.

In 2002, the Copernicus Institute started the FAIR Biotrade project of Essent (RWE) to convert the [Essent Green Gold Label \(GGL\)](#) into a certification system (SBP) for the worldwide trade in biomass. Essent (RWE) has been burning woody biomass at the Cuijk power plant since 1999, expanded it extensively to the Amer power plant in 2001 and has been making woody biomass a global trading product at a rapid pace. Faaij wrote multiple research papers on the Essent GGL project in [January 2003](#) and in [January](#) and [March 2004](#). These were followed up at the [beginning of 2005](#) by another study and later



that year by a [more extensive study](#) in collaboration between the Copernicus Institute, Wageningen University, ECN, Kema and Alterra. In 2006, this resulted in the [Cramer criteria](#) for [large-scale global biomass production and trade](#).

Cramer lobbied [the criteria into The Hague](#) government chambers so Essent (RWE) could start a global production and trade in biomass. This was received with protest. Several members of the House of Representatives [rejected the proposed directive as being without obligation](#) and demanded stricter guarantees and conditions for the future subsidies that Cramer intended to provide for the production of biomass. They insisted on more control and sanctions to guarantee sustainability. Cramer ignored all criticism. According to her, the business community would be wary of using 'wrong' biomass and of being publicly disgraced. In her view, this would be enough motivation for companies to cooperate with sustainable criteria. She also spoke of a first step. Together with the producers, Cramer wanted to ensure that the criteria were "practically feasible". After that we can do check ups, she said. However, she did not state that she was in a conflict of interest because her own research institute had determined the criteria that resulted from a close and paid collaboration with RWE Essent.

Within [argumentation theory](#) and [Critical Thinking](#) there is an agreement that an argument based on an unjustified authority by definition has no value. We call it a fallacy: an argument that may sound nice but cannot be included in a serious discussion because it is false or invalid. With an argumentation it is important to assess whether there is a valid and valuable source. The source must be an authority. A prerequisite for [a valid appeal to authority is that the authority is objective](#). For that reason, referring to your own authority is generally not entitled and financial interest also has a negative effect on objectivity. In the foregoing it is shown that both cases are involved.

...

[Martin Junginger](#) is one of the top five scientists involved in the paid pro-biomass lobby in the Netherlands. He is in Wim Turkenburg's "club in Utrecht" and is an old student and disciple of Professor [André Faaij](#). Junginger was a [member of the advisory board](#) of the [controversial Sustainable Biomass Program](#) (SBP) and advises the government on biomass issues, among other things as a [member of the Corbey Commission](#)<sup>[1]</sup>. Between 2013-2018 he was the leader of the pro-biomass lobby organization IEA Bioenergy Task 40 ([www.bioenergytrade.org](http://www.bioenergytrade.org)). His work includes mapping the international trade in biomass and biofuels (with a special focus on wood pellets) and identifying limitations and opportunities for the trade in bioenergy.



He led a large number of EU-funded [pro-biomass lobby projects](#), such as Biotrade2020 +, BioS Sustain and the TKI-BBE funded BioLogikN project. Previous projects funded by the EU included Pellets @ las, EUBIONETIII, Re-shaping, DiaCore and SolidStandards. He is also a member of the Good Fuels sustainability advisory board. This is a Dutch company that develops liquid biofuels for heavy transport and shipment.

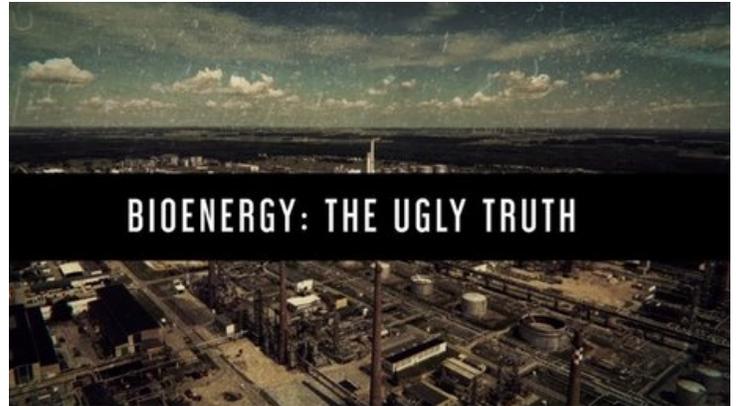
<sup>[1]</sup> The Corbey Commission, lead by Dorrette Corbey, advised the government about the sustainability of biomass burning.

*Quote from 2017 from Junginger: I would also like to mention my academic mentors. Wim [Turkenburg -red], my promotion with you has been a while ago, but I have gained a lot of academic skills with you. I am happy to be able to succeed you as a professor in the Energy & Resources group. André [Faaij] - one thing is certain: I would not have been here today without you. It all started eighteen years ago with a graduation study into the availability of agricultural and forestry residues in Thailand, and since then I have been a fan of bio-based.*

At the end of 2016, Junginger explained to anyone who wanted to hear that bioenergy could achieve [a significant CO2 emission reduction of 80-90%](#) compared to the combustion of natural gas and coal. [Thanks to his advice](#), several municipalities in the Netherlands have issued permits for biomass power stations despite objections from local residents. In [April 2019, however, Junginger admitted](#) that more CO2 is released when burning wood than when burning coal. Last month (October 2019) he again stated that burning wood brings more CO2 into the atmosphere than coal, but continued his changed position with the question: "[but is it relevant?](#)" Junginger claims that [branches and top wood will decay within 5 to 20 years](#) if they are not burned as biomass and that the [same amount of CO2 is released](#).

*[1] The Corbey Commission, lead by Dorrette Corbey, advised the government about the sustainability of biomass burning.*

However, according to [EASAC scientists](#), Junginger does not take into account the fact that when biomass is harvested, transported and burned, much more CO2 is released and it happens a lot faster because of harvesting, transporting, processing and burning than when we let the forest decompose naturally. He also leaves out that there is less forest left to absorb CO2. Moreover, [recent studies](#) have shown that a great deal of CO2 is stored in the upper soil layer in forests and that forest management through the mechanical harvesting of branch and top timber with heavy machinery causes permanent damage to that top layer, [which leads to less CO2 absorption and storage](#).



Managed forests consist largely of forest with little variation. Managed forest for woody biomass consists mainly of a single tree species. [Research from August 2019](#) shows that forests with much variation absorb much more CO2 than forests with less variation. The research results from [a report from the beginning of November](#) 2019 show that up to 626 percent less CO2 uptake takes place in managed forests.

Sources:

[2019-11-05-sciencemag-degradation-and-forgone-removals-increase-the-carbon-impact-of-intact-forest-loss-by-626-percent-english.pdf](#)

[2019-08-22-bioenergy-serious-mismatches-continue-between-science-and-policy-in-forest-bioenergy-english.pdf](#)

[2019-08-12-virginia-commonwealth-university-structurally-complex-forests-better-at-carbon-sequestration-english.pdf](#)

[2019-07-25-wageningen-university-probos-soil-compaction-and-deformation-in-forest-exploitation-english.pdf](#)

[2019-06-11-frontiers-research-proforestation-mitigates-climate-change-and-serves-the-greatest-good-english.pdf](#)

[2012-11-08-bioenergy-mineral-soil-carbon-fluxes-in-forests-and-implications-for-carbon-balance-assessments-english.pdf](#)

From his reaction [in an interview this April](#), we conclude that Junginger seems to assume that we have 500 years instead of [a maximum of 11 years](#) to drastically reduce the CO2 content in the air. According to the IPCC, we will achieve the dreaded 1.5 degree global warming [within 10 to a maximum of 30 years](#). Junginger indicates in [an interview on 7 October 2019](#) this year that there is no consensus in science about this period, but acknowledges that he himself does not know what it would be. Nevertheless, he [is directly involved in](#) and therefore partly responsible for the decision not to record and count the CO2 emissions and [carbon debt](#) caused by the harvesting, transport, processing and burning of woody biomass. In the extensive interview of April 2019, Junginger also very easily ignores the [disappearance of biodiversity](#) and continues to systematically maintain in the media that the woody biomass that we burn in the Netherlands for the purpose of generating energy comes from sustainably managed forests. During an [inaugural lecture on 8 September 2017](#) for his colleagues from the University of

Utrecht, he said that the FSC requirements were so strict that it could be difficult to find enough wood that meets all these criteria.

*Quote from 2017 from Martin Junginger: We are currently sourcing a lot of wood to replace coal from pine tree plantations in the southeastern US. However, these plantations are not or hardly FSC certified because the local paper industry does not value this. This can of course change, but it takes a lot of time. Moreover, bioenergy is ultimately not the main market for this wood. That is why the motivation for landowners to certify their forest will remain limited.*



He is therefore aware that we in the Netherlands use biomass that does not come from sustainably managed forests. He then indicated in the same interview that he has no knowledge of the [extra particulate matter emissions](#) that are released with the burning of woody biomass, because of which [we die on average nine months earlier in the Netherlands](#). He simply refers to the RIVM for this matter.

Junginger publishes reports for various energy companies through the Copernicus Institute such as, [ENGIE \(GDF SUEZ / Electrabel\)](#), [RWE \(Essent\)](#). On various [documents and reports](#) from Junginger, the logos of the companies involved have been placed next to the logo of Utrecht University and above a number of reports that the financial contribution from Essent or the subsidy scheme for Energy and Innovation Biobased Economy has made the project possible. (See image 11 & 12)

At the end of 2018, the scientific pro-biomass lobby club of Junginger again wrote [an extensive lobby article in the NRC](#) in response to the growing protest sounds from Dutch and international scientists. The article has also been submitted on behalf of André Faaij, Johan Sanders, Patricia Osseweg and Gert-Jan Nabuurs.

In November 2019, [Junginger again sought publicity](#) with his usual pro-biomass lobbying story [after hundreds of researchers](#) had [sounded the alarm](#) for the umpteenth time in the last ten years and [with new research results](#) demonstrated that burning woody biomass for energy purposes was worse for the health, nature, the climate and therefore our future, than the burning of gas and coal. After Junginger has continuously tried to convince the world over the past twenty years that burning woody biomass is a brilliant idea for generating energy, he states in this last article that generating electricity by burning wood is not a good application for the use of woody biomass and it would surprise him if one more subsidy goes to it after 2024.

Junginger then tries to justify the burning of woody biomass by indicating that the extra nitrogen and particulate matter emissions aren't that bad. The reporter points out the latest research results and indicates that the large coal-fired power stations in the Netherlands emit several million kilos of nitrogen (nitrogen oxides and ammonia) and other particulate matter each year. The emissions from the hundreds of specialized

biomass power plants and installations that are still planned will supplement that. Moreover, the smaller power stations have far less strict emission standards, the reporter rightly states. Junginger can only admit that the RIVM has indeed rightly pointed to the possible risks to public health with regard to more than 600 planned (smaller) biomass plants in the Netherlands.

Junginger continues his story by indicating that the emissions caused by the transport of biomass with ships from America are better than expected and compares the transport of biomass with a ship over a distance of 10,000 km (America) with a 200 kilometers truck ride. As soon as the journalist questions Junginger's remark and contrasts it with [the findings of the EASAC scientific community](#), who thought it was a perverse policy, Junginger changes his story and replies that it would indeed be better if America were to use the biomass instead of exporting it. He concludes his reaction with an unrelated comment that logging also creates jobs in poor areas in southern North America.



In the Netherlands, the provinces [used to apply the requirement](#) that woody biomass must come within a radius of 100 kilometers from the biomass plant in order to still meet the sustainability requirements. Junginger finds that twice that distance is fine as well and has [tried to influence politicians](#) to try to revoke these sustainability requirements for biomass.

Junginger continues his pro-biomass lobbying attempt by indicating that it would all be okay with the quantities of biomass that we import every year and that we still have enough crooked trees and branches available for that 20-30 percent yearly in demand. Straight trees are not cut down for biomass production because that would be a shame; they can cut boards much better, according to Junginger, because that means more money. A [good number of research reports](#) from the past ten years, however, draw [the conclusion that entire trees are indeed felled and processed into woody biomass](#). In addition to these large number of reports from reputable organizations and agencies, [several videos and documentaries](#) have also been made in which it is clearly demonstrated that whole trees are indeed used for biomass production.

...

Junginger (and Faaij) and Peter-Paul Schouwenberg (RWE - Essent) have been working together [for more than ten years](#) to realize their vision of a global biomass trading empire. [Junginger](#) and [Schouwenberg](#) are members of several pro-biomass lobby organizations (Biotrade2020 +, BioS Sustain, TKI-BBE, BioLogikN, Pellets @ las, EUBIONETIII, Re-shaping, DiaCore and SolidStandards, etc.) and are among others the task leaders of the IEA Bioenergy Task 40 team that is responsible for setting up the worldwide production and trade of biomass.

[Peter-Paul Schouwenberg](#) (Manager Biobased Economy of RWE Essent) is, together with a number of other RWE Essent directors, the driving force from the energy industry that has ensured that the use of woody biomass for generating energy worldwide on a gigantic scale set up and accepted.

**IEA Bioenergy TASK 40**  
Sustainable International Bioenergy Trade - Securing Supply and Demand

**Task Leaders**

**Martin Junginger**  
(Copernicus Instituut)

**Peter-Paul Schouwenberg**  
(RWE - Essent)

He has been working for the [Provincial North Brabant Electricity Company](#) (PNEM) and the [Electricity Production Company South Netherlands](#) (EPZ) since 1986, which after a merger became Essent.

In 1999, RWE Essent opened the [first biomass plant in Cuijk](#). RWE (Essent) has fully committed to the [pro-biomass lobby](#) and has been [very successful](#). Since 2001 they have been burning woody biomass in the Amer power plant. In 2011, [RWE Essent had a gigantic wood pellet factory built in Georgia \(Southeastern USA\)](#), to [massively destroy the forests there](#). Also in the Groningen Eemshaven they have recently switched to [the burning of biomass](#). For this they receive substantial subsidies at the expense of our health, nature, the environment and our future.

[RWE \(Essent\) spends one million euros](#) per year on lobbying activities in the European Union and has 5 full-time lobbyists at work. This amount is not included in the costs that they make in the Netherlands for the pro-biomass lobby. The Dutch directors of RWE, who are among the most active pro-biomass lobbyists in the Netherlands, sit in various pro-biomass lobby committees and initiatives and finance pro-biomass reports written by Martin Junginger ([click on this link to view a zip file with multiple download these reports](#)).

In 2002, Schouwenberg became the head of purchasing biomass and presented the [Essent Green Gold Label](#)

certification for biomass that was set up in collaboration with [Peterson Bulk Logistics and Control Union Certifications](#).



Based on the fact that the import of biomass for electricity production was announced by a factor of seven between 2003 and 2005, and in 2007 around 80% of all biomass was imported, according to Essent and the Copernicus Institute. Essent was the largest biomass user in the Netherlands in 2004 and reported that around 30% of the biomass came from North America, 25% from Western Europe and 20% from Asia, the rest from Africa, Eastern Europe, Russia and South America. In 2002, Essent already had the plan to transfer it to the Sustainable Biomass Partnership / Platform (SBP) in preparation for their worldwide network for the trade in biomass. A remarkable fact concerns [the involvement of minister Jacqueline Cramer](#). In 2002, as director of her own sustainability institute (USI) in collaboration with the Copernicus Institute, she accepted the assignment from RWE Essent to transform RWE Essent's Green Gold Label into an Essent / RWE independent label (SBP) and to investigate whether it could be affiliated with the [Initiative Wood Pellet Buyers](#) (IWPB).

The construction for awarding the sustainability certificates is even more remarkable. Certiq is responsible for the granting of biomass certification for the energy companies and is a subsidiary of [network manager Tennet](#). [Certiq's board](#) only includes directors of energy companies, including Mr Schouwenberg from RWE Essent. Every element in the biomass chain, from certification, harvesting, production, trade, transport to incineration and obtaining subsidies, is imbued with conflicts of interest. And this is legal.

Schouwenberg is not only responsible for the realization of the [RWE Essent biomass program](#), but has also ensured that the major national and a number of international energy companies joined his initiative for a global trade in biomass. To realize that plan, he became [director of biomass trading at Duferco](#) in 2008

(revenues of 10 billion euros per year) and a year later the biomass manager of Nidera, where his plans with RWE Essent for a global bioenergy market caused a substantial expansion (in 2012 the company made a profit of 72 million euros with 17 billion euros generated in sales).

Schouwenberg is a board member of the Rotterdam Biomass Commodities Network (RBCN). The RBCN was founded in early 2010 by Ronald Zwart (also a director of RWE Essent) together with, among others, a director of Eneco. The RBCN was funded by the government through the Rotterdam Climate Initiative (RCI) and kicked off by Ruud Lubbers.

In March 2010, RWE Essent organized the first Biomass Trade and Power Conference where they presented their plans for a global economy in biomass. A month later, Schouwenberg presented the business case in which they also mentioned participating parties such as Drax, EON-UK (Uniper), Essent (RWE), and Electrabel (GDF SUEZ / ENGIE). Halfway through 2010, RWE / Essent presented their Business arrangement proposal for the global trade in biomass.

The same year a workgroup was launched called "Initiative for Wood Pellets Buyers" (IWPB). The IWPB was initiated by 6 companies (including Electrabel, Dong, Nuon, RWE / Essent / npower, Vattenfall, E.ON), all major buyers of wood pellets with the aim of importing wood pellets from abroad to burn them to generate electricity. The IWPB was later institutionalized as the Sustainable Biomass Partnership / Program (SBP).

RWE / Essent top officials have lobbied heavily in the following years and ultimately ensured that their plans were incorporated into the Energy Agreement. This was possible thanks to the support of Minister Cramer and the reports from the Copernicus Institute.

At the end of 2012, Dogwood Alliance published an extensive report that showed that the RWE Essent uses whole trees to annually produce the 750,000 tonnes of wood pellets at the wood pellet factory in Georgia (America), intended for the biomass plants in Europe. According to the 2013 SOMO report, the Netherlands has subsequently become one of the world's largest consumers of solid biomass for electricity and the center for the import of biomass for supplying the rest of North-West Europe.

The report shows that the vast majority - approximately 80% - of the biomass used for electricity production is imported into the Netherlands. The most important suppliers of biomass to the Netherlands in 2011 were the US (21%), Canada (18%), Russia and the Baltic States (11%), Southern Europe (10%), Western Europe (excluding the Netherlands - 5%), Oceania (2%), South Africa (1%) and other countries (11%, including small shipments from Brazil and Ghana). The largest consumers of solid biomass for electricity production in the Netherlands are the electricity companies RWE / Essent (727,073 tons per year), GDF Suez (452,168 t / y), Eneco (319,000 t / y), E.ON (200,000 t / y), EPZ (191,000 t / y) and Vattenfall / Nuon (56,664 t / y).

**A study carried out by the industrial wood pellet sector**

**Forest Sustainability and Carbon Balance of EU Importation of North American Forest Biomass for Bioenergy Production**

Study carried out by:    

With the collaboration of:

- Drax
- GDF SUEZ / Laborelec
- ESSENT NV
- E.ON Climate & Renewables
- Danish Energy Association
- Vattenfall AB

Study published in September 2013 and available on [www.aebiom.org](http://www.aebiom.org)

Reviewed by Dr. Martin Junginger, Utrecht University, Copernicus Institute

*This slide supplied by Fanny-Pomme Langue of AEBIOM*



Mid-2017, NRDC and Dogwood Alliance published [an even more extensive study](#) in which they voiced a damning judgment about the Sustainable Biomass Program (SBP) certification program of RWE Essent. The study also [cited a recent report from the European Commission](#) that validated NGOs' concerns and concluded that current EU imports of wood pellets from the Southeastern United States came from whole trees and other large-sized wood .

The report found that current E.U. imports from the southeast are dominated by wood pellets based on wood pulp (about 60 to 75 percent, mostly softwood) but also hardwood wood pulp. The European Commission's report also concluded that most of the wood that was checked did not meet the criteria to ensure a reduction in CO2 emissions. The same report confirmed that the increasing timber harvest causes direct and immediate losses of carbon stocks compared to the baseline and that additional harvests for wood pellets would degrade carbon stocks in the short term and that the long-term effects were uncertain.

Junginger was [a member of the Advisory Board](#) and is now a member of the Standards Committee of the controversial Sustainable Biomass Program (SBP). The SBP certification is intended to guarantee that the supply of biomass along the entire chain is processed in a sustainable manner, but was set up by RWE / Essent at the time. It is also a voluntary certificate and the vast majority of the SBP board has a financial interest in the production and / or burning of woody biomass including Schouwenberg from RWE Netherlands (see Figure 14).



According to [the SBP LobbyFacts\[1\]](#), the SBP program used by the Dutch government to assure politicians and citizens that biomass is sustainable has not even spent ten thousand euros per year to bring this program to the attention of the European Union.

The LobbyFacts database indicates that more than 120 organizations are involved in the paid pro-biomass lobby at European institutions with a total amount between [33 and 39 million euros per year](#). The lobbying costs that the relevant organizations spend in the Netherlands are added to this. The difference between €39 million to lobby the production and burning of woody biomass and only €10,000 to promote sustainability certification is enormous in our opinion. More than half of the SBP's budget is spent on the salaries of directors and the advisory group. We have not been able to determine which part of this is paid to Martin Junginger or the Copernicus Institute.

In 2011, [Greenpeace published a report](#) on the [destructive effect](#) of the production of [wood pellets for RWE Essent](#). [Dogwood Alliance wrote a report at the end of 2012](#) that shows that RWE Essent uses non-certified biomass from whole trees from South-East America for the [production of its wood pellets](#). Biofuelwatch has also written an [extensive and destructive report on RWE Essent](#). Junginger indicated in his [inaugural speech on 8 September 2017](#) that biomass from the southeastern US is still not, or hardly, certified. We find it ethically irresponsible and reprehensible that a scientist affiliated with the Copernicus Institute, which presents itself as an independent institute for sustainable development, engages in large-scale paid [greenwashing](#) for an organization such as RWE Essent that is demonstrably guilty of causing damage to our health, nature, the environment and therefore our future.

[Marc Londo](#) is the fifth scientist at the Copernicus Institute who presents himself as a paid pro-biomass lobby scientist in such a way that he has appropriated himself a prominent place in our research. In addition to his work as a scientist at the University of Utrecht and writing paid pro-biomass reports, he is also the strategist of the paid pro-biomass lobby organization the Dutch Association for Sustainable Energy (NVDE). According to [his October 2017 presentation](#), the NVDE has the following role: Primary advocacy through politics, ministries (primarily the Ministry of Economic Affairs), interest groups, media. (...) Active in all 'transition paths' from the Energy Agenda and many executive steering groups and committees. (...) Direct influence via lobby. (...) Overarching (transition) interest, strengthening policy coherence & cooperation between companies.



In an interview with Volkskrant in July 2018, Marc Londo gives [the following reaction](#) to the report that shows that the energy companies are involved in greenwashing on a large scale: Fortunately, despite all the deception, there is also a positive side to the story: greenwashing ensures that more and more people are becoming involved in sustainability.

At the end of 2019, Marc Londo is invited by Provincial Executive Jan van der Meer to announce his paid pro-biomass lobby story to the Provincial States members during the roundtable discussions on the use of biomass in the Province of Gelderland. Jan van der Meer, the deputy responsible for the current biomass policy in the Province, has confirmed that we have been advised by Martin Junginger of the Copernicus Institute for a long time. Before the roundtable discussions, we informed Jan van der Meer several times about [the paid pro-biomass lobbying practices of this institute](#). Nevertheless, Marc Londo's view and the contribution of the NVDE are presented to the Provincial Council members as independent. We have sent an [extensive response on February 14, 2020](#) to both the Provincial Executive and the Provincial Councilors. The Province has not responded to this.

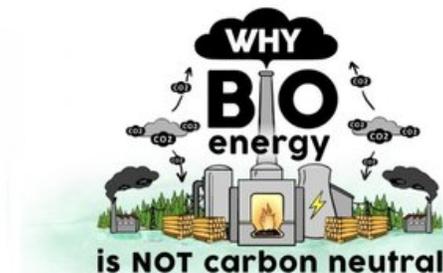
During the presentation for the Province of Gelderland, Marc Londo claimed that the CO<sub>2</sub> emissions released when burning woody biomass would be reabsorbed within ten years. [Several scientific studies](#) in recent years show that it takes decades for a tree to capture the same amount of CO<sub>2</sub>. In recent years, CE Delft has published [hundreds of paid pro-biomass lobby reports](#) and has made the news several times as a paid lobbyist for the energy companies. Even they have to admit in several [research reports](#) that it can take up to [100 years before the same amount of CO<sub>2</sub> is re-absorbed that was released during the burning of biomass](#): Deployment of biomass, provided that it meets sustainability criteria, fits the definition of climate neutrality because the CO<sub>2</sub> is 'short-cycle' when biomass is burned. This means that during the growth of the biomass, this CO<sub>2</sub> is extracted from the atmosphere, on a time scale of 100 years or less. Marc Londo uses the logos of both Utrecht University and the NVDE in his presentation. He works at the Copernicus Institute for Utrecht University and fulfills the function of [substantive strategist](#) for the NVDE. It has already been described above in his presentation from 2017 that the NVDE fulfills the lobby function for the energy world. Due to the multiple employees with dual functions in the same field, we can speak of very serious conflicts of interest in the results of the Copernicus Institute's research on energy generation.

To make matters worse, the same scientists of the Copernicus Institute (Utrecht University) also [produced the reports in 2007](#) that claimed the co-firing of palm oil for electricity production purposes by RWE/Essent & GDF SUEZ/Electrabel could in fact be done in a sustainable matter after the Dutch government tried to end the SDE subsidies [due to the deforestation issues](#) the production of palm oil caused in Indonesia. This resulted in massive deforestation with [disastrous consequences](#).

[2] LobbyFacts is a project by the [Corporate Europe Observatory](#) and [LobbyControl](#) and collects information from official sources, among which the [EU-transparency register](#).

## Conclusion

For decades there has been a conflict of interest in the science that is being practiced around the subject of energy. We have shown that financial incentives make it difficult for scientists to produce objective research results and that they are influenced by companies and politicians in their research methods. We also show that scientists hold additional positions for their own companies or alliances with stakeholders, which seriously jeopardize the objectivity of their research. In addition, we have shown that scientists go into politics and give priority to the interests of their own enterprise or the interests of the companies with which they collaborate in policy making.



Finally, we demonstrate that the sustainability programs that are responsible for guaranteeing the sustainability of the entire chain of biomass combustion consistently consist of prominent people from the energy sector and the biomass sector.

Every element in the biomass chain, from certification, harvesting, production, trade, transport to incineration and obtaining subsidies, is imbued with conflicts of interest. It is a shock to us that this is legal. We believe it is ethically irresponsible and reprehensible that scientists affiliated with the Copernicus Institute, which presents itself as an independent institute for sustainable development, engage in large-scale paid [greenwashing](#) for organizations such as RWE Essent who are demonstrably guilty of causing damage to our health, nature, the environment and therefore our future. Follow the Money has written 23 articles the past 5 years: <https://www.ftm.nl/dossier/wetenschap-op-bestelling>



## ... Consultants & Lobbyists

Expected publishing data: may 2020 [processing]

...  
**Navigant Netherlands B.V.** (Ecofys) is the largest energy and sustainability consulting team in the industry. They collaborate with utilities and energy companies, government and NGOs, large corporations, product manufacturers, and investors to help them thrive. Their clients include the world's 50 largest electric, water, and gas utilities; the 20 largest independent power generators; and the 20 largest gas distribution and pipeline companies. Navigant is one of the biggest Dutch pro biomass lobby

organizations with over 600 consultants, and 6 full-time lobbyists and [more than a million euro's spend on lobbying](#) and multiple pro biomass research papers written.

...

## Certification & Subsidies

Expected publishing data: [june 2020 \[processing\]](#)

...

## Banks & Investors

Expected publishing data: [july 2020 \[processing\]](#)

[2019-11-08-ngos-letter-to-rwe-financiers-on-the-risks-of-investing-in-biomass-english.pdf](#)

[2019-04-00-environmentalpaper-the-reputational-and-financial-risks-of-investing-in-forest-biomass-energy-english.pdf](#)

[2017-10-00-biofuelwatch-grangemouth-renewable-energy-biomass-power-station-an-unsustainable-high-risk-potential-investment-english.pdf](#)

[2013-11-20-pfpi-investor-letter-on-bioenergy-to-sec-undisclosed-investment-risks-from-biomass-power-english.pdf](#)

...

## Follow The Money (FTM) Biomass Research

<a href="#">All Follow the Money (FTM) articles with a biomass tag</a>
<a href="#">2019-11-04-ftm-uniper-wil-burgers-laten-opdraaien-voor-zijn-slechte-investering-dutch</a>
<a href="#">2019-04-11-ftm-de-schaamlap-van-shell-heet-staatsbosbeheer-dutch</a>
<a href="#">2019-03-08-ftm-maak-de-energietransitie-publiek-en-rechtvaardig-dutch</a>
<a href="#">2018-11-09-ftm-de-zin-en-onzin-van-warmtenetten-dutch</a>
<a href="#">2018-09-11-ftm-met-de-poten-in-de-bestuursmodder-de-ftm-senatorendatabase-dutch</a>
<a href="#">2018-09-08-ftm-dubbele-petten-senatoren-dutch</a>
<a href="#">2018-06-17-ftm-de-dreiging-van-het-energy-charter-treaty-miljardenclaims-remmen-klimaatbeleid-dutch</a>
<a href="#">2017-03-22-ftm-bos-als-brandstof-voor-onze-kolencentrales-dutch</a>
<a href="#">2017-03-01-ftm-nederland-vraagt-europa-om-ambitieuw-klimaatbeleid-maar-vergeet-naar-zichzelf-te-kijken-dutch</a>
<a href="#">2017-02-25-ftm-de-methode-jorritsma-als-zij-belt-wordt-er-opgenomen-dutch</a>
<a href="#">2016-10-06-ftm-de-schizofrenie-van-de-bijstooksubsidies-in-kolencentrales-dutch</a>
<a href="#">2016-06-15-ftm-verbranding-miljardensubsidies-kolencentrales-dutch</a>
<a href="#">2016-02-11-ftm-miljardensubsidie-op-bijstoken-biomassa-staat-op-omvallen-dutch</a>
<a href="#">2016-02-11-ftm-bijstoken-biomassa-heeft-geen-haast-dutch</a>
<a href="#">2016-02-03-ftm-miljardensubsidie-op-bijstoken-biomassa-staat-op-omvallen-dutch</a>
<a href="#">2016-01-04-ftm-de-inefficiënte-verbranding-van-miljarden-belastinggeld-dutch</a>
<a href="#">2015-05-15-ftm-rommelen-met-groene-energie-dutch</a>
<a href="#">2015-02-06-ftm-biomassa-bijstoken-of-zonnepanelen-dutch</a>
<a href="#">2014-09-29-ftm-duurzame-energie-wordt-spotgoedkoop-dutch</a>

<a href="#">2014-02-03-ftm-nederland-aardgasvrij-15-jaar-plan-b-dutch</a>
<a href="#">2013-03-06-ftm-vvd-misrekent-zich-met-duurzame-energie-dutch</a>
<a href="#">2013-02-18-ftm-spotgoedkope-emissierechten-bedreigen-co2-reductie-dutch</a>
<a href="#">2013-02-06-ftm-viezerik-gdf-suez-wast-zich-groen-dutch</a>
<a href="#">2013-01-29-ftm-duurzaam-nederland-verder-weg-dan-ooit-dutch</a>
<a href="#">2012-10-17-ftm-met-kolencentrales-genoeg-groene-stroom-dutch</a>
<a href="#">2012-09-13-ftm-nieuwe-coalitie-moet-verder-kijken-dan-kolenlobby-dutch</a>



---

All Research Papers on Deforestation & Woody Biomass  
<https://biomassmurder.org/research/index.html>

We have collected and read all the research reports and official documents from the past decades and have started to make summaries for each subject and published the summaries on the following pages:

[Biomass Research Abbreviations](#)

[Biomass Research Availability](#)

[Biomass Research Biodiversity](#)

[Biomass Research Carbon Dioxide](#)

[Biomass Research Certification](#)

[Biomass Research Ecotoxicity](#)

[Biomass Research Health Risks](#)

[Biomass Research Legal](#)

[Biomass Research Lobby Facts](#)

[Biomass Research LULUCF](#)

[Biomass Research Solutions](#)

[Biomass Research Subsidies](#)

[Biomass Research Sustainability](#)

[Biomass Research Whole Trees](#)

[READ MORE](#)

---

<b>ACTION</b>	<b>INFO</b>	<b>RESEARCH</b>	<b>CONTACT</b>
Petitions	About	Biodiversity	Email
E-mail campaigns	Action	Carbon Dioxide	Facebook
Legal Cases	Documents	Certification	Youtube
Donate	News Items	Ecotoxicity	Twitter
Become our Patreon	Videos	Health Risks	Linkedin
How can we support you?	Research	Legal	Patreon
Support Us	Support	Solutions	Google
Join Us	Our Team	Subsidies	EDSP ECO
Support our Partners	Legal	Sustainability	Our Headquarters
Our other Projects	Statutes	Whole Trees	All Associates