



# EUROPEAN FORESTS AND CLIMATE CHANGE

SPECIAL REPORT | 25 JAN. - 2 FEB. 2018  
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Forests are Europe's biggest carbon sinks and forestry the sector with the greatest potential to remove carbon dioxide from the atmosphere in the quantities needed to meet the bloc's objectives under the Paris Agreement.

Can EU forests mitigate climate change? In this Special Report, EURACTIV looks at how the forestry sector can help meet the EU's goal of slashing net emissions by 40% by 2030, compared to 1990 levels.

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# Balancing emissions and removals from Europe's forests

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By Samuel White | EURACTIV.com



The EU contains 5% of the world's forests, covering around 40% of the bloc's land territory. [Stewart Black/Flickr]

EU policymakers face a big challenge to maximise the economic potential of Europe's forestry sector while balancing its carbon emissions and removals. But it's one they will have to rise to if the bloc is to meet its climate and energy targets.

Forests are Europe's biggest carbon sinks and forestry the sector with the greatest potential to remove carbon from the atmosphere in the quantities needed to meet the bloc's Paris Agreement target of slashing net emissions by 40% by 2030, compared to 1990 levels.

The EU contains 5% of the world's forests, covering around 40% of the bloc's land territory. Some 60% of EU

forests, defined as wooded areas of at least 0.5 hectares with a canopy cover of at least 10%, are privately owned. The remaining 40% is owned and managed by public authorities.

Forest area in Europe has expanded continuously over the last 60 years and now covers around 155 million hectares, equivalent to the area of France, Germany, Poland and the UK combined.

Between them, the EU's forests are capable of removing from the atmosphere and storing 10% of the bloc's 4.45 billion tonnes of annual carbon emissions.

Bioenergy currently represents 61% of the renewable energy consumed in the EU, with forest biomass making up 70% of all bioenergy. "The tremendous

work that remains to be done to get rid of fossil fuels leave space for all types of renewables, including bioenergy," the Secretary-General of the European Biomass Association (AEBIOM) Jean-Marc Jossart told EURACTIV.com.

And biomass is set to keep playing an important role in the EU's energy mix as countries seek more sustainable alternatives to fossil fuels.

## STRIKING THE BALANCE

To strike the balance between the climate benefits of carbon removals by forests and the economic and energy potential of the forestry sector, the European Commission proposed in 2016 a regulation on land use, land use change and forestry (known under the pithy acronym LULUCF).

For the first time, this regulation aimed to account for both emissions and removals of CO<sub>2</sub> from the atmosphere by the forestry sector, in order to include them in the EU's 2030 climate targets.

The LULUCF regulation, which includes both a so-called 'no-debit' provision, stipulating that emissions from forestry must not outweigh removals, and a flexibility clause to allow countries that exceed their targets to trade net carbon removals from forestry, was adopted by EU negotiators in December.

The European Parliament's LULUCF rapporteur Norbert Lins welcomed the vote in a statement, saying, "It is all

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about the right balance.”

“I do not want to put forests in a glass case. Forests need to be managed in a sustainable and active way providing timber for our bio-economy and climate change mitigation,” he stressed.

Member states will be encouraged to promote the use of harvested wood as a means of carbon capture and storage by accounting for it in their reporting on climate targets.

“We should keep in mind that, since we will not be able to completely stop our greenhouse gas emissions in industry but need to reduce them drastically, our forests need to remove more than they emit,” Lins said. “In this respect, the great performance of land use, land use change and forestry is fundamental and absolutely positive.”

### IS WOOD BIOMASS A CLIMATE-FRIENDLY FUEL?

But in blow to environmentalists, the LULUCF regulation also allowed the continued use of wood biomass as fuel for heating and electricity generation.

The issue of whether or not to burn wood for electricity came up again during a recent Parliament vote on the revised Renewable Energy Directive, which will govern the EU's renewables policy from 2021 to 2030.

Voting on 17 January, EU lawmakers agreed on a 35% renewable energy target by 2030, bumping up the Commission's original proposal of 27%. Parliament says this is justified by the falling cost of renewable energy and the fact that the bloc will already get 20% of its energy from renewable sources in 2020.

With forest biomass already the largest source of renewable energy, Green MEP Bas Eikhout stressed the need for tough sustainability criteria to ensure that the EU's renewable

energy drive does not incentivise unsustainable forest use.

“We say ‘don't burn whole trees,’” he said, adding that it should be up to the producer to prove that the wood they are selling to be burned as renewable biomass is not roundwood – the high quality wood from the main stems of trees – but comes from forest residues such as branches and tree tops, or industrial wastes such as sawdust.

### A COMPLEX EQUATION

Burning wood is seen as more environmentally friendly than burning fossil fuels because a tree's impact over its life cycle is carbon neutral: it cannot emit more carbon than it has absorbed in its life time and new growth can replace trees that are cut down, reabsorbing carbon from the atmosphere.

But Professor Jean-Pascal van Ypersele of the Earth and Life Institute at Belgium's Catholic University of Louvain stressed that it was not such a simple equation.

“Traditionally, wood wastes and residues have been valuable sources of bioenergy and using wood wastes and residues is a helpful way to reduce CO<sub>2</sub> by replacing fossil fuels without much reduction in the carbon storage in the forest,” said van Ypersele, a former vice chair of the United Nations Intergovernmental Panel on Climate Change (IPCC).

“However, when trees – which are different from wood residues – are cut deliberately to burn, the signs are that this adds carbon [to the atmosphere] for decades to centuries,” he said, during a visit to Brussels on 9 January with a group of climate scientists.

A rush to burn more wood would endanger the EU's ability to meet the Paris Agreement targets, he said, adding that the policy could also encourage deforestation in other countries, such as the US, as the EU looks for more wood to burn.

But for AEBIOM, the push-back against using wood biomass as a renewable energy source is largely based on a misunderstanding of the market for forest products.

The European bioenergy sector has developed hand in hand with other wood-based industries to use low value materials such as sawdust, mill residues, thinnings, low-quality wood, tops and limbs that would otherwise have gone to waste.

“We do not burn whole trees,” an AEBIOM representative stressed.

Environmental concerns aside, there appears to be no good economic reason to burn high quality timber, according to the association, as the market value of roundwood is far higher than that of wood used for energy.

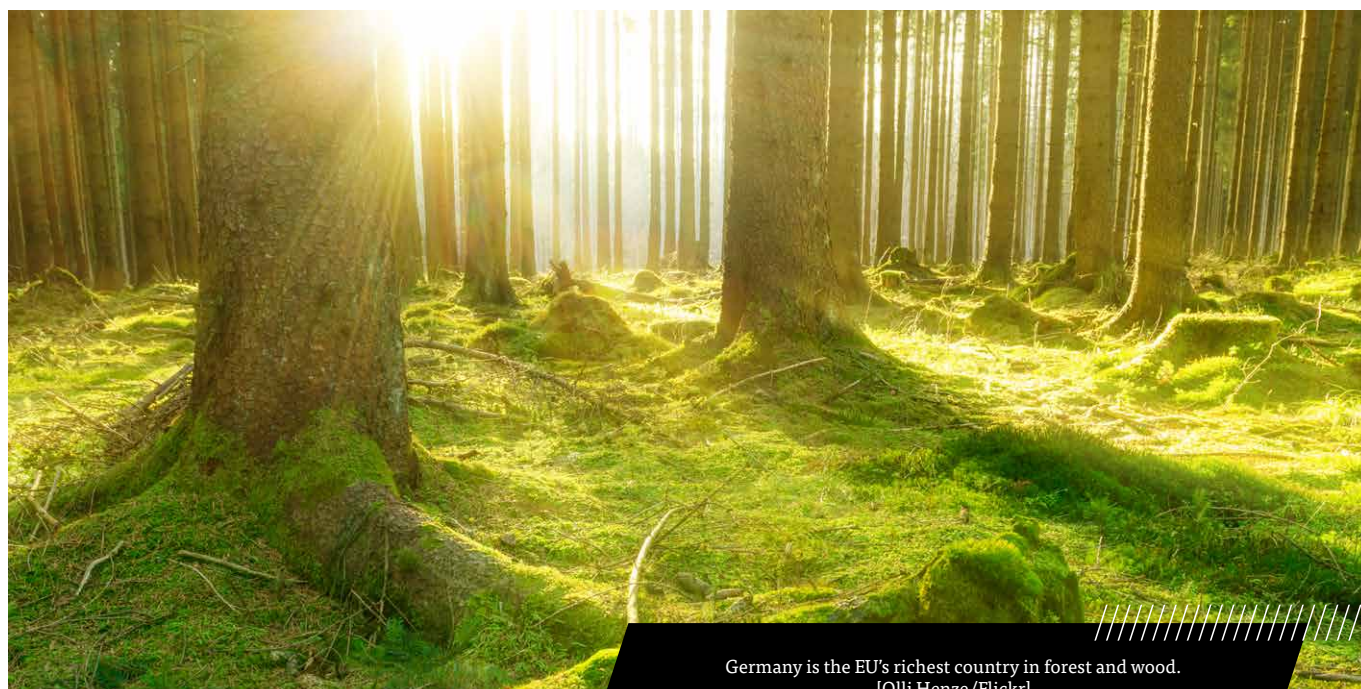
What is more, “according to Eurostat data, 95% of all biomass consumed in the EU is locally sourced” because of the impracticalities of transporting it long distances, the AEBIOM representative told EURACTIV.

Jossart added: “In many sectors, bioenergy is one of the few technically available renewable options to achieve the energy transition.”

# Wood from German forests as climate-neutral fuel?

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By Ama Lorenz | EURACTIV Germany / Translated by Alexandra Brzozowski



Germany is the EU's richest country in forest and wood.  
[Olli Henze/Flickr]

**G**ermany is the EU's richest country in forest and wood. According to European Commission plans, German forests are meant to be used much more as energy sources in the future.

One-third of Germany consists of forests. After years of so-called "acid rain", the German forest is doing well again, says the current Forest Report issued by the German government. Every year, it relieves the atmosphere of 120 million tons of carbon dioxide. This corresponds to 14 percent of German greenhouse gas emissions.

But the forest is not only an oxygen supplier, water filter, carbon

dioxide storage and habitat; it is also an economic factor. According to the German government, in 2014, around 125,000 German companies in the wood and timber industry generated sales of €178 billion.

## THE FOREST AS A FIREWOOD SUPPLIER

With a revised version of the Renewable Energy Directive, the Commission wants to allow the exploitation of timber to produce renewable energy. Environmental organizations and German climate researchers warn against it. The Commission proposal would call for

the timber industry to plant forests in order to then burn them industrially.

According to climate researchers, the exact opposite is recommended, because with this the environmental impact is increased and climate change is accelerated. When burning wood, more carbon dioxide per kilowatt-hour would be emitted than during coal combustion.

For Frank Walther, the EU's plans are incomprehensible. In Brandenburg, he manages one of the private forests that cover around 5.5 million hectares in Germany. Wood has always been burned, says Walther.

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“Even if the forestry is now reforesting elsewhere to industrially cultivate trees for firewood, neither the industry nor the EU can get around the facts that trees take decades to grow and extract carbon dioxide from the atmosphere. Even if they do it up to the declared goal of the Paris Agreement, we can agree that they probably contribute more to climate protection when they are in the shape of a living carbon dioxide storage, rather than in the shape of charred firewood in an industrial furnace.”

Intensification of wood burning as a contribution to renewable energies? Walther sees a completely different danger here: “In Germany, the forest is protected by the forest protection laws. Honestly, where would the wood really come from? From countries that are well away from us, so that we do not have to see the fatal clearing with our own eyes. Environmental associations too are warning that this would increase more timber exports from third countries or countries with limited legal requirements.”

“Actually, the EU should be clear about it that neither European timber reserves nor industrial new plantings are enough to make firewood a truly noticeable component of climate protection,” says Walther. “We, Europeans, cannot ruin the environment in other countries to live up to our commitments.”

### THE FOREST AS A CLIMATE PROTECTOR

If the tree trunks and stumps burned in the power plants should be added to the 2030 renewable energy targets, as proposed by the Commission, not only would it create false economic incentives for the forestry sector, but it would also distort the results of the measures to achieve the climate protection targets, climate experts warn. It is already foreseeable that Germany will not only miss the national climate target for 2020, but will also violate European requirements.

German forestry, however, could play an important role in climate protection. As part of building

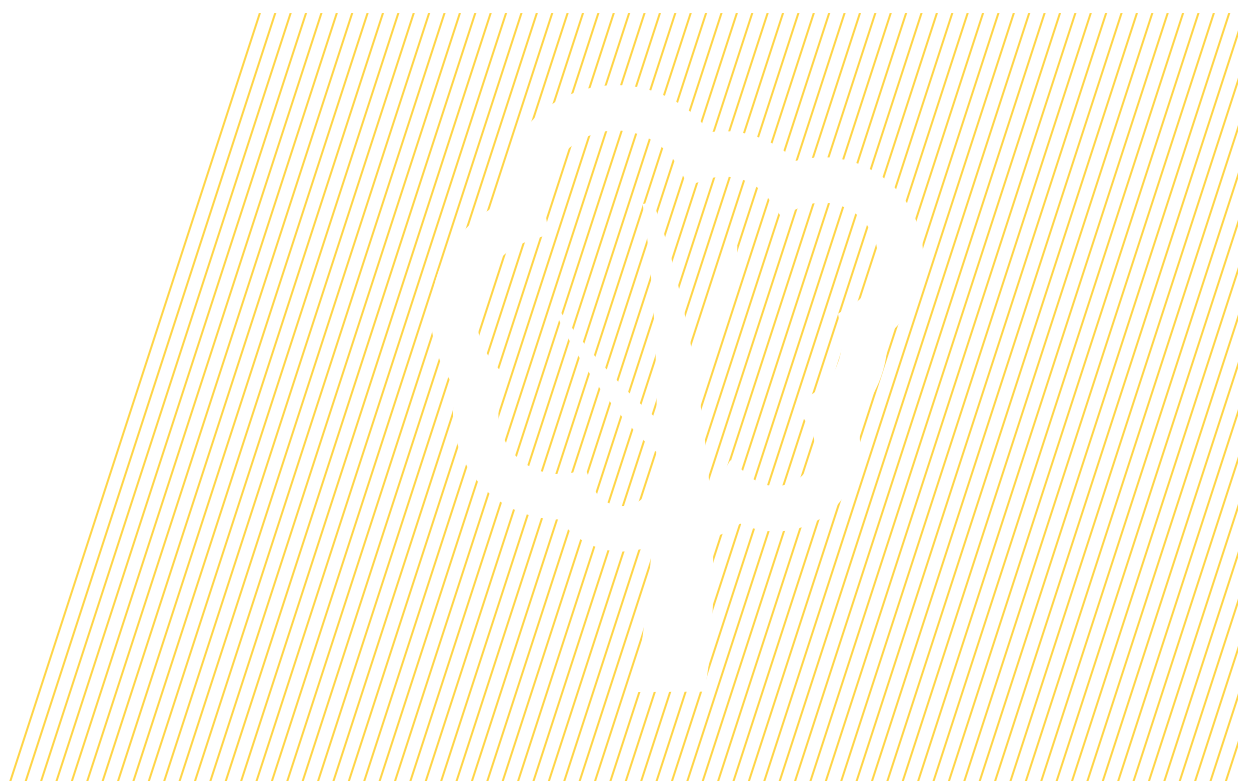
renovation or as a raw material in the furniture industry, wood can replace climate-damaging building materials.

Although the German Federal Research Institute for Rural Areas, Forestry and Fisheries agrees on that, the situation is not quite as dramatic.

“If we proceed from a clear cut [extensive removal of trees in a forrest] without reforestation, this type of wood recycling, of course, is harmful to the climate,” said Andreas Bolte of the Thünen Institute of Forest Ecosystems.

The Parliament has approved the Commission proposal but only wants to encourage the use of heat as environmentally harmful if better industrial use is not possible. In energy production, the burning of wood residues should therefore be given priority.

That does not go far enough for many environmental organisations. In the medium term, climate protection efforts and the classification of wood as a climate-neutral fuel will probably continue to fuel demand.



## INFOGRAPHIC

# Ecosystem services of EU forests

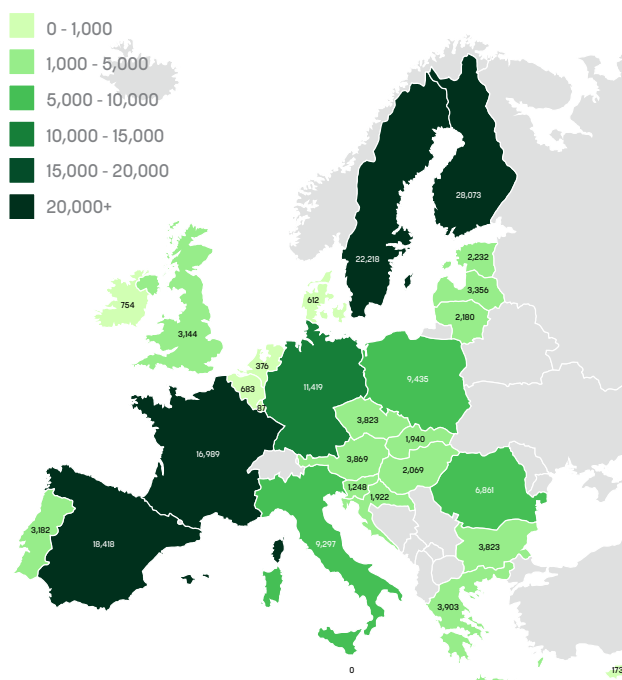
By Aymone Lamborelle and Samuel White | EURACTIV.com



Forests cover 40% of Europe's territory and provide a multitude of ecosystem services that contribute to the health of the environment and human wellbeing.

The EU contains about 5% of the world's forests, 60% of which are privately owned. European forests have expanded continuously over the last 60 years and now cover around 160 million hectares.

## MAP OF FOREST COVER (1,000 HECTARES)



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## FOREST ECOSYSTEMS

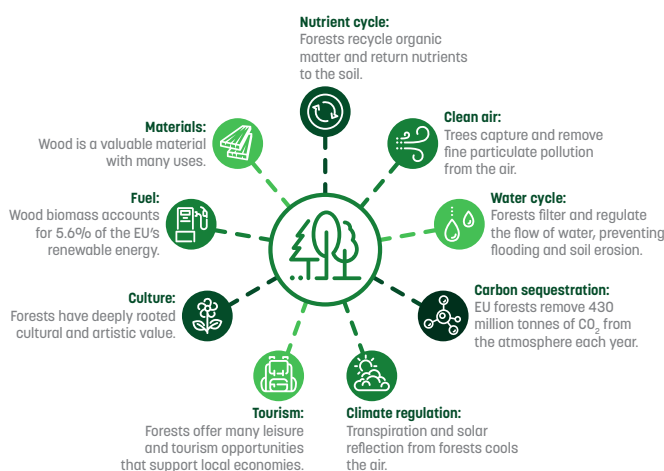
Forest ecosystems support biodiversity, economic and cultural activity, and human health. They provide habitats for many species protected by the EU nature laws and around a quarter of EU forests themselves are protected as part of the EU's Natura 2000 network.

This biodiversity, in the form of genetic diversity and species richness, enables forests to carry out the ecological processes and create the materials and physical structures that are so valuable to us.

Forests cover 40% of Europe's territory and provide a multitude of ecosystem services that contribute to the health of the environment and human wellbeing.

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## ECOSYSTEM SERVICES OF EU FORESTS



*Disclaimer: This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

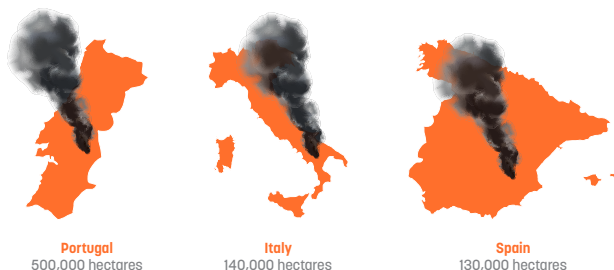
## SUSTAINABLE FOREST MANAGEMENT

Sustainable forest management is vital to ensure that forests continue to provide their ecosystem services while remaining resistant to threats such as forest fires and pests.

Forestry measures that support the goals of the EU Forest Strategy - protecting biodiversity and the environment, supporting forest-based industries and mitigating climate change - may be funded by the Common Agricultural Policy under rural development programmes.

## MANAGING FIRE RISK

2017 was a particularly severe wildfire season. The EU lost close to a million hectares of forest to fires, almost double the annual average.



For the period 2014-2020 about €1.7bn public spending is planned for prevention actions and €700m for restoration.

## INTERVIEW

# Forest owners boss: 'Sustainable forest management crucial to maintaining carbon cycle'

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By Samuel White | EURACTIV.com



Emma Berglund [CEPF]

**S**ustainable forest management is vital to ensure that Europe meets its climate and energy goals. But over-regulating forest bioenergy would damage the sector's economic performance and undermine its potential for climate change mitigation, Emma Berglund told EURACTIV in an interview.

*Emma Berglund is the secretary general of the Confederation of European Forest Owners (CEPF). She spoke to EURACTIV's Samuel White.*

**Trees are more or less Europe's only active carbon capture and storage system. What is their full potential for climate change mitigation and how can**

**this be maximised through good forest management?**

When we talk about forests in climate change mitigation and adaptation, we need to understand the full picture. The best long-term

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strategy to maximise their potential is to have a sustainable and active forest management strategy. So we can adapt the forest and make it more resilient and ensure it is healthy and vital.

At the same time, we can also keep the forest growing by harvesting the old trees and replacing them with faster-growing new trees that sequester more carbon. And then we can use these trees in long-lived products, like house building materials that store carbon for a long time, but also in products that replace more energy intensive or fossil-based products.

We usually talk about the three S's: sequestration, storage and substitution. When the trees are growing they sequester carbon, and this can be stored in standing forests or in wood products, and then wood can also be a substitute for fossil fuels. The problem with fossil fuels is that burning them releases new 'black' carbon into the atmosphere.

Forest ecosystems work in a green carbon cycle, and sustainable forest management is crucial in maintaining and enhancing this carbon cycle, as well as replacing fossil fuels.

**The European Parliament recently adopted sustainability criteria for forest biomass under the Renewable Energy Directive. Do you think these are helpful towards the EU's decarbonisation goals or do you feel they will hold forestry back, that it has the potential to go further?**

Generally, our worry is that it could hold the potential of forestry back. We fear it may add burdens and restrictions that would make it harder for forest owners to manage their forests and mobilise wood. And I think the debate around bioenergy is a very contagious issue that tends to be seen in black and white. But we do not see bioenergy demand as a threat to our forests.

We sometimes hear that higher bioenergy targets will mean we will cut down and destroy all our forests, but this is not at all how we see things in reality. Bioenergy does not drive the decisions of forest owners to harvest their trees; it is the high-value products that bring the biggest income and energy is just a side product. It helps to support the overall economic sustainability of the forest owners' operations but it is a relatively small factor.

The risk is that if we introduce new criteria for this side product, it could potentially place a big burden and a lot of restrictions on forest owners, which will undermine their main activity. Because they don't manage a tree differently depending on where the wood ends up.

**In what way are the criteria too complex?**

They should remain simple and operational. There were five criteria, two of which were not covered by the Commission's impact assessment, and the Parliament has added a sixth. Throughout the debate in Parliament, we have also seen attempts to introduce the 'cascading' principle into the legislation. This is completely unacceptable to us.

**Could you explain what cascading is and why you are opposed to it?**

We are not opposed to the principle as such. Cascading is the idea that you should use wood several times even as it decreases in value. It may first be used in a building, then it should be reused several times and only at the very end should it be incinerated for energy. It is a logical concept that is already used to a large extent in the forest sector.

After all, wood is a valuable resource so it makes economic sense to get the most value out of it. But regulating it in legislation would be

to dictate the market and tell forest owners where they must sell their wood. This is not a free market and it would have a distorting effect on prices.

So we agree that cascading is a good principle but it is not one that you can regulate for.

**You have said that forest biomass is a side product of high-quality wood production, but CEPF has recently been pushing for all types of wood, including the high-quality roundwood from tree trunks, to be classified as a sustainable renewable energy source. How can this be justified?**

This has been a bit of a communication challenge. We were very much against the proposal to exclude roundwood from the types of wood considered renewable under the Renewable Energy Directive. This is not because we now want to chop down and burn whole trees, it simply depends on where the forest owners are and the kinds of markets they have access to.

Normally I would say that the high-quality timber would always go to a sawmill, it would never go to bioenergy generation, no matter what. But when you get down to lower quality wood, bioenergy can be a valid option if the wood cannot be used by a sawmill, even if it looks like a normal, big tree trunk.

Another issue is smaller dimension trees and whether there should be a size limit for trees used for bioenergy. If you wanted to exclude roundwood above a certain diameter, you would have to go out into the forest and carefully measure every single tree before cutting it down.

Today it is already barely economically feasible for many forest owners to mobilise wood for bioenergy at all, so if we add further costs and complications they simply will not put

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it on the market, and then we will have problems meeting our targets.

**Moving on to the regulation on land use, land use change and forestry (LULUCF), could you explain your reaction to the Commission's proposed forest reference level and what it means for forest owners?**

The forest reference level is supposed to be a projection into the future, which is based on the harvest intensity of the past. The Commission proposed to take 1990 to 2009 as a reference period. There are also many other factors that come into play here but this is a big part of it.

We were very critical about using a past period to calculate a forest reference level for the future. We would prefer to see it based on the real potential of the forests because otherwise, it can be very arbitrary. For countries like Spain, for example, that have harvested very little new growth in the past it may even be beneficial to increase harvest rates to cut the risk of forest fires. So we do not see the benefit of basing this on past activity. And increasing harvest rates is not harmful for the climate as long as we stay within the sustainable harvest levels.

The proposal was adapted during the process and we think it has improved, but it is so complex we still don't really know what the outcome will be. As for its impact on the sector, we will have to wait and see.

**What would you see as a sustainable harvest level for new growth?**

I don't see this as what LULUCF should be about. Forest management and harvest levels are not even an EU competency. They should be driven by markets and long-term management planning. Depending on the age structure of certain forests the harvest

level may fluctuate. We want LULUCF to be purely an accounting framework, although we do fear it may go beyond that.

I would also add that it is not necessarily unsustainable to harvest 100% of new growth. Sometimes this may even be the most sustainable management strategy. It is not common practice but it is not necessarily unsustainable.

**Beyond energy generation and timber, are there any other sectors where you think industries could be looking to use more forest products? Is there anything the EU can do to push the forest bioeconomy?**

The bioeconomy is an interesting topic and a big opportunity for the forest sector. I see it as an opportunity to reach both climate targets and sustainable development goals, while bringing more value to the EU's rural areas.

Anything you can make from oil you can also make from wood. Technically it is possible. There are loads of opportunities in innovation and research, and the bioeconomy is also a way to reach many different goals at the same time.

Sixty-percent of EU forests are owned privately, mostly by families and small-scale owners, and we should understand how we can motivate these people to actively and sustainably manage their resources to mobilise what society needs in this period of transition. This is why I would stress that we should not burden them with too much legislation.

More broadly, forests are clearly an integral part of rural areas and they can help support economic activity in these areas and make rural areas attractive to live in. It is also important to ensure that the value of the forest bioeconomy is shared with the primary producers to strengthen rural development.

**Finally, wood is mankind's oldest fuel and it is currently the biggest form of renewable energy in Europe. Do you think we will still be burning forest biomass later in the century or do you see it as a transition fuel?**

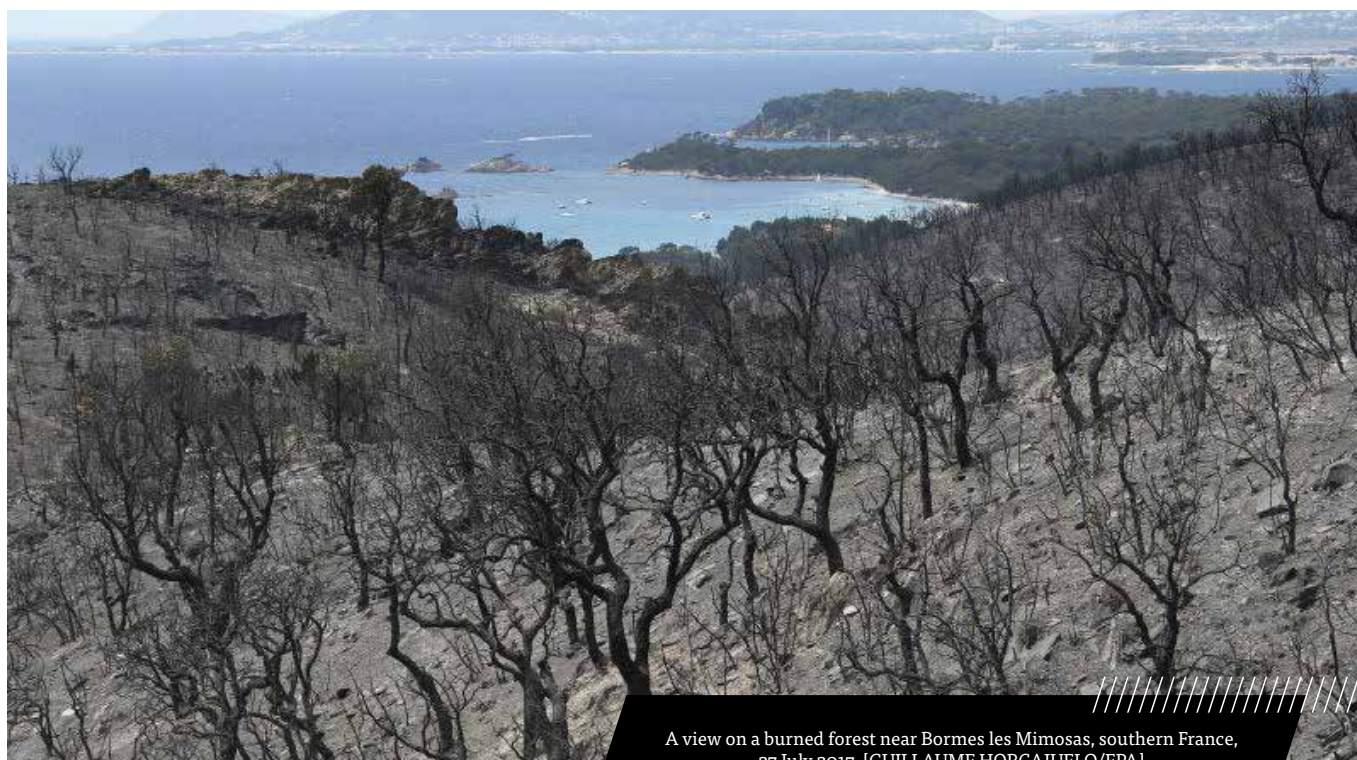
Probably, but not as much as we do now. In a sense it is a transition fuel: it is the main source of renewable energy and this will not be the case in the decades to come. Other types of renewable energy will continue to grow and will overtake forest biomass.

We are in a transition phase and we know we need it now to meet our targets. For forest owners, it provides an important side income, and to a certain extent, people in certain regions will always use wood to heat their homes.



# France to manage its 'carbon sink' for 2050 goal

By Aline Robert | EURACTIV.fr | Translated by Freya Kirk



A view on a burned forest near Bormes les Mimosas, southern France, 27 July 2017. [GUILLAUME HORCAJUELO/EPA]

Optimising the wood-energy sector is key for France to attain its objective of becoming carbon neutral in 2050. However, 60% of forests in the country are nowadays left unmanaged.

Thousands of oak, beech, birch, fir and other species of trees perform a major service for France on a daily basis. Forests absorb 12% to 14% of the country's CO<sub>2</sub> emissions, the main greenhouse gas blamed for global warming, making trees an invaluable "carbon sink".

Given the gradual increase in

the total surface of forests in France, encouraged by the low returns available from agriculture, their role in mitigating global warming increases by the same proportion.

In terms of the overall surface of forests, France is now ranked third in Europe, behind Germany and Sweden. The total area now is equivalent to its size in the 18th century.

This has logically affected CO<sub>2</sub> emissions. Moreover, according to the Institut géographique national (ING), a French public body responsible for producing and maintaining the country's geographical information,

France produces an additional 27 million cubic metres of wood per year [one cubic metre of wood = one tonne of carbon = 3,66 tonnes of CO<sub>2</sub>].

France cuts down around 61 million cubic metres, of which 53 million are actually used, accounting for losses in harvesting.

However, the situation is not as good as it might seem. Old and highly fragmented, French forests are poorly managed, barely exploited and highly exposed to risks because of their unmanaged density.

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### **MORE THAN HALF OF FORESTLAND LEFT TO ITSELF**

"The better managed forests are state-owned ones. These are the forests of the former kings of France, where they went hunting. However they represent only 10% of French forests", states Jean-Francois Dhôte, a researcher from the INRA, a state institute for agricultural science.

He deplores the fact that only 30 to 40% of French forests are exploited. Private forests, which represent 75% of silviculture, are managed haphazardly, if at all. The remaining 15% are administered by local councils, which do their best to look after the trees.

In contrast with the fairy tale notion of primary forests left to their own devices, forestry experts are worried by the 60% of trees left abandoned. The merest mushroom, an invasive insect, hurricane, fire or some other factor that could affect the temperature could destroy this irreplaceable "carbon sink" in just a few years.

France's ambitious goal of carbon neutrality by 2050 could become unachievable if its forests are unable to absorb emissions. To achieve zero net carbon emissions, forests and

agriculture are the only sectors capable of absorbing the residual carbon. From an environmental perspective, optimising their absorption capacity is therefore a priority.

Paradoxically, this environmental urgency has overcome the taboo on the exploitation of forests in France: the forestry sector has benefitted from major promotion and the introduction of new regulations, with a government decree in 2016. The ministry for ecological transition is also working on a larger and more ambitious strategy, which would encourage better exploitation of wood.

### **EVERY THIRD TREE ENDS UP AS FIREWOOD**

"There is really no point in importing wood in France!" states Cyril Brulez, a research fellow on territories and climate at the Institute for Climate Economics (I4CE), a Paris-based think tank. At present, the sector is far from capable of harvesting annual growth in its entirety.

Brulez, along with other experts on forestry, points out that wood exploitation is only legitimate if the forestland is subject to sustainable management principles, as defined at the Helsinki Conference in 1993, i.e. keeping the carbon balance of the forest constant by replacing every tree

cut down.

If one out of three trees in France ends up as firewood or pellets, the CO<sub>2</sub> they release on combustion will be offset by the emissions absorbed by trees as they grow.

"We need to encourage a structured approach to the use of wood: we need to find the right use for every type of tree. A good quality tree that can be used in building should not be used as fuel, or just its smaller branches in that case," says Cyril Brulez, who is working on strategies to improve the carbon balance of the forestry-wood sector.

Improving the performance of wood as fuel, and thus its capacity for substitution through optimised wood-burning facilities and ensuring that only very dry wood is used can improve the overall carbon balance, which is calculated using models.

Wood-energy has a very short lifespan, wood used in this sector then turned into wood pallets or paper has a shelf life of five to seven years, and the wood used for construction and furniture has an average shelf life of 40 years.

### **VALUING CO<sub>2</sub> AS AN INCENTIVE.**

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This explains the need to substitute materials: thick wood, which absorbs more carbon by cubic metre, should be used in construction, as the carbon will be stored for longer in this way. “We need to optimise forest management upstream by using the appropriate cuts and different varieties”, says Cyril Brulez.

Experiments are now underway to assess precisely the amount of carbon saved using cutting strategies that transform forests. From thickets, where the lack of sunlight due to the density slows down their growth, they are turned into timber forests, where even though there are fewer trees, they grow faster and end up taller.

In the Margeride region, because of the destruction of trees caused by heavy snowfall, a reforestation programme is underway. It is co-funded by the ERDF and La Poste, with the assistance of I4CE. The additional CO<sub>2</sub> that will be absorbed thanks to the project, will be measured, and then sold on the voluntary carbon market.

This is the type of financial incentive that could encourage change. At €5 per tonne, the price on the voluntary carbon market is low but not entirely insignificant and premiums are paid for certain projects because of the knock-on benefits they

generate in terms of employment, the environment, and biodiversity.

Among the NGOs, the price speculation on forestry land that could be generated is a concern that the CCFD, a Catholic humanitarian aid NGO pays particular attention to, in the event that the forestry sector attracts too great an interest.

“We need to be careful not to justify the action of polluters, and not to encourage the emission of other greenhouse gases: agriculture mostly produces methane and nitrous oxide emissions, which remain in the atmosphere for different lengths of time to CO<sub>2</sub>. They will not therefore be offset by forests which will absorb the CO<sub>2</sub>, whereas the methane will remain in the atmosphere”, says Anne-Laure Sablé, an expert working at CCFD.

She works on France’s initiative “4 per 1,000”, the aim of which is to optimise the absorption of carbon through the soil, including forest soil. “If you take a closer look at this issue in particular, you will see that the forest soil that absorbs the most CO<sub>2</sub> is that of a primeval forest”, she adds.

### WOOD FUEL AND SKYSCRAPERS A COMPATIBLE USE?

There is, however, less discussion about the wisdom of using wood as

fuel in France than in other countries. Environmental NGOs, backed by prominent climatologists, staunchly oppose the use of wood as fuel, arguing that burning wood instantly releases CO<sub>2</sub> that took decades to absorb.

Even if a new tree is planted afterwards, it will still take decades for the CO<sub>2</sub> to be re-absorbed again by the tree’s natural growth, they point out, saying this is a luxury humanity cannot afford if it wants to keep global warming under 2°C within the short timeframe of the Paris Agreement.

At FERN, the use of wood as fuel, which received a green light from the European Parliament in mid-January, during the revision of the Renewables Directive, is described as “absurd”, whilst WWF describes wood as “young coal”.

But their views do not seem to be widely shared, judging by the fledgling low-carbon construction sector in France, which focuses on the use of wood, even for buildings such as skyscrapers. This is an unrivalled opportunity to cut the CO<sub>2</sub> emissions of the construction sector: more than a dozen of high-rise buildings are currently under construction in France.

## OPINION

DISCLAIMER: All opinions in this column reflect the views of the author(s), not of EURACTIV.com PLC.

# Five reasons why the EU's bioenergy policy will backfire

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By Linde Zuidema



"The EU doesn't have a formal competence to adopt forest policies and it seems that because of this any progressive attempts to restrict support for the use of wood for energy in the RED have been held hostage." [Jakub Kocja/Flickr]

EU policymakers have failed to ensure that continuing support to wood burning for energy production will help fight climate change, for five main reasons, writes Linde Zuidema.

*Linde Zuidema is a bioenergy campaigner at the forests and rights NGO Fern.*

On January 17, Members of the European Parliament (MEPs) voted on the European Commissions' proposal for a Renewable Energy Directive for after 2020, including measures

relating to bioenergy sustainability.

The outcome defied the evidence of hundreds of scientists, the appeals of numerous NGOs, and the will of increasing numbers of EU citizens.

Bioenergy provides around 65% of the EU's renewable energy production. The previous Renewable Energy Directive (RED) has encouraged member states to burn 'forest biomass' for renewable energy since 2009, leading to it becoming the EU's biggest source of renewable energy.

But EU policymakers have failed to ensure that continuing the support for burning wood for energy will help

fight climate change. The five main reasons are the following:

Wood is a source of carbon, and burning wood leads to immediate CO<sub>2</sub> emissions (even more than burning coal). The scientific consensus that burning wood is not carbon neutral is now overwhelming. Trees do not grow back fast enough to compensate for these initial emissions, which means the wood is not generally a sensible alternative to fossil fuels. More than 800 scientists warned the EU that its climate strategy of burning

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wood could backfire, undermining its commitments to the Paris Agreement.

Using wood waste and residues – as opposed to burning trees – for energy does have some potential in reducing emissions compared to fossil fuels. However, the majority of MEPs have chosen to ignore science and vote against proposals that would avoid the harvesting of trees for bioenergy.

Instead, they yielded to the intense pressure exerted by the forestry and energy sectors, as well as those Member States – in particular, Finland and Sweden – who have a vested interest in maintaining the status quo by relying on intensive forestry to feed their burgeoning bioenergy industries.

The Parliament – which is normally known for its progressive stand on the climate and environmental issues – confirmed the Commission's approach to forest biomass sustainability, by relying on existing rules on Sustainable Forest Management and accounting for emissions from the land and forest sector (LULUCF).

Worse still, they even managed to considerably weaken them. The proposal is fundamentally flawed, as

it ignores that biomass is a limited resource and that encouraging wood use for energy can affect the storage of carbon in forests and wood-based products. You can cut down a tree from a sustainably managed forest, but that doesn't mean it is sustainable to burn that tree. Accounting for emissions from forest harvest as such doesn't prevent bioenergy leading to more net emissions. The approach simply allows for Business as Usual, and risks greenwashing the use of wood for energy.

With a weak sustainability policy, the use of wood for energy production is likely to increase. Member States have predicted increasing forest harvests for bioenergy will have a negative impact on forests' capacity to remove and store carbon from the atmosphere (and thus on their ability to compensate for the initial emissions). With limited biomass supplies domestically, it is also likely more wood will be imported from overseas. Both will contribute to climate change, instead of reducing emissions.

With these positions, the EU also sends out the worrying signal across the world that tearing down trees to burn them instead of coal is somehow

good for the climate. Countries such as Korea, China and Japan are already following the EU by shifting big coal installations to biomass, at a much larger scale.

A policy that encourages the use of wood for energy needs to start from the basic understanding that wood is a source of carbon and a limited resource.

But the EU doesn't have a formal competence to adopt forest policies and it seems that because of this any progressive attempts to restrict support for the use of wood for energy in the RED have been held hostage.

This is a missed opportunity. The debate shouldn't be about how forests are being managed, but what uses of wood should be encouraged for the sake of climate change mitigation, and therefore be exempt under EU state aid rules.

In the coming months, the EU will negotiate on this policy. We hope that policy-makers will act to, at the very least, limit biomass burning in large scale, inefficient power stations. The alternative of spending billions of taxpayers' euros (or pounds) to burn biomass in power plants cannot be justified.



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##### **Natalie Sarkic-Todd**

*Senior Director*

*Strategic Delivery & Marketing*

[natalie.sarkic-todd@euractiv.com](mailto:natalie.sarkic-todd@euractiv.com)

tel. +32 (0)2 788 36 63

##### **Daniela Vincenti**

*Editor-in-Chief*

[daniela.vincenti@euractiv.com](mailto:daniela.vincenti@euractiv.com)

tel. +32 (0)2 788 36 69