

Transcript of the 'All change please!' podcast: How do we use wood sustainably?

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Introduction

Nadine Kreutzer:

Welcome everyone. I'm Nadine Kreutzer, presenter and journalist, and because we always talk about current research topics from Oeko-Institut, Mandy Schossig is of course at my side.

Mandy Schossig:

Hello from me too. I'm head of communications here at Oeko-Institut and I'm delighted to be here with you and with Nadine at my side. Nadine, can you remember the other day, I think it was in January, when the air in Berlin was really bad? Data from the German Federal Environment Agency showed that the air quality was really poor for a few days. And apart from the particulate matter from traffic and industry, it was probably mainly due to heating with wood and coal stoves as the weather was very cold. And you may remember from the past: back then, most of our homes were still heated with coal.

Nadine Kreutzer:

It always smelled very peculiar. But this particulate matter isn't just harmful to us humans. No, it's not good for the climate either. Today, however, we're not talking about coal, but primarily about wood. Wood is not only used for heating, but also for other purposes, such as furniture or paper. So let's take a look today at how can we use wood sustainably so that we protect the climate and the environment and, above all, achieve our climate targets.

Mandy Schossig:

Yes, that's why I invited Dr Klaus Hennenberg to the podcast. Klaus is a Senior Researcher in the Energy and Climate Division in our Darmstadt office. He researches sustainability criteria for biomass production and creates models and analyses for forests and the entire land use sector. Hello Klaus, great to have you here.

Nadine Kreutzer:

Hello Klaus.

Klaus Hennenberg:

Hello, thanks very much for the invitation. I'm pleased to be here.

Nadine Kreutzer:

Klaus, you seem to have always been interested in forests. You wrote your doctoral thesis on the forest in West Africa. That's interesting and prompts several questions. Why the forest in West Africa in particular? And were there any specific findings that you'd like to share with us?

Klaus Hennenberg:

Yes, that was very appealing. Going to Africa was exciting. And it's always a question of what options you have. There was a very attractive large-scale project that had just been advertised and I had the chance to work on it. And the exciting thing about Africa was the culture and the people – a completely different environment. And then you also have completely different ecosystems. Forest-savanna systems are strongly shaped by fire and that changes a lot of the patterns that we know here in Europe. For example, the forests there are in completely different locations than here because the fire pushes them to other locations. That was very exciting.



Mandy Schossig:

Yes, and today we also want to talk about forests, especially about the important raw material – wood – that it produces. As always, let's start with a brief overview of the topic.

Sound clip: a brief overview of the topic

Oak barrels, wooden houses and cardboard – it often happens that wood is used as a raw material; using it is popular. It is considered sustainable because it comes from trees, a natural and renewable resource. But how sustainable is our favourite wood if the trees are in increasingly poor condition or cannot grow back enough? Forests do not only provide wood; they are also important carbon sinks. Their sink capacity is included in all climate scenarios as an important component in achieving the carbon removal target in the land use sector of minus 40 million tonnes of CO_2 in 2045. But how much carbon can a forest sequester if its trees are felled? Does the stored carbon remain in the wood when it is turned into a table or paper? And how sustainable is it to heat with wood?

Status quo of wood use in Germany

Nadine Kreutzer:

Well, Klaus, let me ask you right away: How much wood do we use in Germany?

Klaus Hennenberg:

Around 130 million cubic metres of wood are used in Germany every year. This comes from various sources. On the one hand, there are quantities of waste wood, which are very convenient products. This accounts for around 40 percent of wood use; the remaining 60 percent comes from forests, i.e. directly felled wood. And over the last ten years, this has averaged around 55 million cubic metres of softwood and around 19 to 20 million cubic metres of hardwood. So, a total of around 75 million cubic metres per person.

Mandy Schossig:

Solid cubic metres, how much is that? What is that?

Klaus Hennenberg:

A solid cubic metre is one cubic metre of wood from the forest.

Mandy Schossig:

Okay, great. And what do we use all that wood for? Around one cubic metre of wood per person is quite a lot, isn't it?

Klaus Hennenberg:

Yes, it is in a global comparison. Approximately 4 billion cubic metres of wood are used worldwide and about 0.5 cubic metres per person, less than in Germany. The wood is used in various areas from construction to heating, paper and furniture.

And you have to differentiate between the wood you are using, whether it is softwood or hardwood. Softwood has a higher quality for construction timber. It is also used more in packaging and for paper. Hardwood, on the other hand, is of a lower quality and is used more for energy. In the first use – i.e. what the wood is sued for first when it leaves the forest – around 85 percent of coniferous wood (softwood) goes directly into material use. There are also sawmill by-products that are burned again.

But the opposite is true for hardwood. Only 25 percent of it is used as a material for the first time. This means that around 75 percent of the wood from hardwood is burned directly. In total, this means that around nine million cubic metres of coniferous wood is burned directly and around 13 to 14 million cubic metres of hardwood is used directly for energy. A significant amount goes directly into combustion, mainly in the form of split billets. Pellets are often mentioned, but pellets are more of a smaller segment and tend to come from very favourable product streams, from the sawmill industry and the main use is in firewood, which come directly from the forest.

Nadine Kreutzer:

Is this similar throughout Europe or is our wood use in Germany different to the rest of Europe?

Klaus Hennenberg:

The situation with wood use in other European countries is often similar, depending on the qualities involved.

Mandy Schossig:

How did this consumption develop? You've broken it down well. Has it always been like this, these ratios, or has something shifted?

Klaus Hennenberg:

Wood use in Germany increased quite sharply between 2000 and 2013-15. This was mainly due to a significant increase in wood use for energy purposes. It has roughly tripled, from 25 million cubic metres to 60 million cubic metres today. And that was in particular due to support instruments such as the German Renewable Energy Sources Act and support instruments for heating systems, which made it more attractive to use wood for energy.

Nadine Kreutzer:

And where exactly does our wood come from?

Klaus Hennenberg:

As I said, around 40 percent of the wood comes from recycled waste streams and around 60 percent from freshly felled wood.

Nadine Kreutzer:

From German forests?

Klaus Hennenberg:

A large proportion of the wood comes from German forests and around 20 percent is imported and exported, which largely balances itself out. There are years in which exports were higher than imports, such as in the extreme years of 2018 to 2022, when there was a lot of calamity wood. More was exported then. In previous years, when the dieback rates and wood removals were not too high in Germany. The balance was then in favour of imports.

Development of wood use

Mandy Schossig:

And when you say that we burn three times as much wood as we did ten years ago, how do you see things developing in the future? Will wood become even more important or do we also need alternatives?

Klaus Hennenberg:

The framework conditions in Germany are currently set in such a way that wood energy continues to be advantageous for consumers. There are still funding instruments that provide support. Wood is also categorised as a renewable energy in the German Building Energy Act and can be counted towards the replacement of fossil fuels, making it attractive for homeowners and for regional heating plans to use wood. It is therefore foreseeable that the pressure to utilise wood will continue to increase. At the same time, however, we have the problem that wood as a resource has already been used to a very large extent. A lot more wood cannot be mobilised from the forest, so it is foreseeable that we will also face shortages as the demand for wood for energy purposes increases.

Nadine Kreutzer:

You deal scientifically with the topic of wood; you conduct modelling on forests and evaluate data. And this is then reflected in these so-called projection reports. Perhaps you could explain that to us again. And what exactly can you take from them, also in terms of greenhouse gas emissions?

Klaus Hennenberg:

The projection reports are a Germany-wide greenhouse gas inventory for all sectors. The LULUCF sector – land use – is a separate sector and the forest is included in it. It reports on how much wood is regrown in the forest, how much carbon is stored, how much carbon is lost through logging, i.e. how much is lost at forest level. Then it also looks at how much of the harvested wood ends up in wood products, where the carbon continues to be stored or the wood is burned and CO_2 is then released. In principle, this entire carbon cycle is mapped there. Forests were still a significant sink up to 2017 and 2018.

This means that more wood was stored in the forests than was removed and released through natural mortality. In the years 2018 or 2022, when we had these severe drought events, spruce stands in particular died off very severely. Accordingly, a lot of carbon has been removed from the forest areas with these dead trees and the increased wood removals, has been lost, partly stored in wood products, but also partly burned.

And as a result, the balance of the forest has developed from a sink previously, i.e. carbon storage, to a source that releases more CO_2 from the forest than was stored. This is unfavourable for the greenhouse gas balance in Germany as a whole, because the German Federal Climate Action Act sets the target of achieving minus 25 million tonnes of CO_2 as a sink by 2030. And that includes the forest sink. And if that's gone, then it's more difficult.

Mandy Schossig:

Exactly. We'll come back to that in a bit more detail, because it's not that easy. Let's take a short break and look again at how we can use wood sustainably. What does the 'sustainable use' of wood actually mean?

Sustainable wood use

Klaus Hennenberg:

If wood is stored in durable wood products, meaning that the carbon that is available from the forest or from residual and waste materials is further stored in wood products, it is always an advantage. In other words, durable wood products plus cascading use, a high recycling rate and a reuse rate are positive. This also reduces the pressure on forest areas because less fresh wood is needed.

Another point is that if you use wood as a material, you have significantly higher substitution effects, because often the non-wood product, for example used in construction such as reinforced concrete, has higher CO_2 emissions than the use of wood and this then adds to the substitution, because not only is CO_2 from the wood stored, but CO_2 is also avoided in these products. So in terms of the overall balance, material wood utilisation is significantly better. If you make the switch to energy utilisation, you also have substitution effects compared to fossil fuels, but these are often smaller than with material use. However, you no longer have carbon sequestration, which makes the use of wood as an energy source less favourable overall.

Nadine Kreutzer:

That's an imbalance, isn't it? Can something be done about it?

Klaus Hennenberg:

Ultimately, it is a question of political decision-making. If you look at the cost structures, it is often more attractive to use wood for energy than for simpler material uses, such as chipboard or insulation materials. And if there was the political will to change this, other subsidy schemes could be used to try and influence the markets so that more of the wood that is currently used for energy goes into material use.

Mandy Schossig:

When you say that it is cheaper to utilise wood as an energy source than as a material, what exactly does that mean?

Klaus Hennenberg:

There are various support instruments for wood energy. On the one hand, there is the promotion of wood heating systems. This means that it is attractive for consumers to install a wood heating system instead of a heat pump because the cost structure is more favourable, at least in terms of purchase. It is also attractive to use wood energy because the VAT rate is low. It is seven percent. In addition, the German Building Energy Act provides for the possibility of achieving the 65 percent target for renewable energies with wood energy, which makes it attractive to use wood again. And thanks to this conglomeration of different support structures, it is often attractive for users to use wood energy.

In terms of material use – I'm thinking of glued laminated timber made of beech for construction timber or wood fibre boards or wood insulation materials – the support framework is not as developed, which makes it less attractive. It would therefore make sense to shift away from promoting wood energy and towards material use. At the same time, we see in the building sector – where firewood is frequently used – that continuous thermal insulation reduces the overall energy requirement. This automatically reduces the need for wood energy.

In other words, if we think about this in conjunction and do not promote new wood systems, but at the same time reduce the demand for wood energy due to the energy-efficient refurbishment of buildings, we will free up wood resources that we can increasingly use for material use without people even noticing that they are lacking wood. But if more timber plants are built at the same time, this use of wood for energy competes with material use. And then we run into this problem.

Mandy Schossig:

By 'wood systems,' do you mean systems that burn wood, so to speak?

Klaus Hennenberg:

Exactly, wood-fired heating systems. In other words, wood-burning stoves, pellet stoves or wood gasifiers.

Nadine Kreutzer:

And what do you think about wood as a raw material? For example, Professor Schellnhuber from Potsdam Institute for Climate Impact Research (PIK) has called for a transformation of construction using wood. What do you think about simply building an entire house or many new houses out of wood?

Klaus Hennenberg:

Timber construction is already very widespread. Almost every detached house has a roof truss made of wooden beams as standard. Interior fittings and staircases are also often made of wood. Wooden houses mean that, as far as possible, further elements are built from wood, such as the walls or the ceiling elements. And the more you use this timber construction method, the more wood is kept in the carbon sink. So that's very positive.

At the same time, you always have the question: where does the wood come from and what would happen if the wood was not harvested or was used in other areas? For example, if you take a cubic metre of wood from the forest, you have lost that cubic metre of wood. If you put it into the wood product, but the tree could still have lived in the forest and could have been expanded there, then the overall balance would not be that much better.

You always have to weigh things up: Is it advantageous to leave the wood in the forest to increase the sink capacity? Or is it advantageous to remove the wood and then convert it into durable products? In this interplay, however, energy use is always the least favourable use.

Wood as carbon storage

Mandy Schossig:

I think we'll take a short detour again and do some 'nerd talk' with you here before we get to energy use. You just mentioned that forests are part of climate protection plans as sinks and store CO_2 . Furniture or wood in the roof truss also stores carbon. Perhaps as a starting point: how much CO_2 is stored in a forest if wood is also removed from it? That's the interplay. Do you have some figures for us?

Klaus Hennenberg:

The condition of the forests is determined every five to ten years by means of forest inventories. A German national forest inventory is carried out every ten years, with an interim inventory carried out on a smaller number of areas after five years. In the federal forest inventory from 2002 to 2022, 80,000 individual areas were surveyed and trees were measured there to see how the forest looks

and how it has changed compared to the survey ten years ago. This is very detailed data that gives us a very good idea of how much growth has taken place in the period under consideration, how many trees have died, what the growth rates were and how high the stocks are in the areas.

And there are two periods in the most recent forest inventory from 2012 to 2022. One period is up to 2017, when we had very good conditions in the forest, very good growing conditions. The spruce trees, for example, also grew excellently and built up a lot on site. In the period from 2018 to 2022, however, we had severe drought events, beetle calamities, storm events and the spruce trees in particular hugely collapsed during this period.

The other tree species have also lost growth and experienced increased mortality rates, and as a result we've seen a sharp decline in forest carbon stores in this period, while in the previous period we had good increases in carbon sequestration. And the data from this forest inventory serves as the basis for this calculation.

Mandy Schossig:

Okay, so how much carbon is stored in the forest? My question again: Are there any hard facts? You say: ' CO_2 is stored in the forest?' Okay, but how much?

Klaus Hennenberg:

One thing is: how much is stored? One hectare of forest contains around 350 solid cubic metres and one solid cubic metre stores around one tonne of carbon as a rough estimate. That means an average of around 350 tonnes of carbon across Germany. What is particularly interesting, however, is the change in how much this carbon stock increases or decreases over time. Up to 2017, the increase in Germany as a whole was around 30 to 40 million tonnes of carbon stored by the forest in Germany. In the period from 2018 to 2022, we had carbon losses in the order of 25 million tonnes. This shows, therefore, that the forest has grown very poorly over this period, a lot has died off and this has also had a negative impact on our carbon footprint.

Nadine Kreutzer:

We've now talked a lot about CO_2 and the forest. Now let's get more specific. Klaus, if we cut down a beautiful trunk from a pine tree in Brandenburg. What CO_2 does it contain?

Klaus Hennenberg:

When a trunk is removed, there are different compartments. On the one hand, the root and base of the trunk and the crown wood, ideally everything thinner than seven centimetres, remain in the forest and rot there. This means that only part of the previously living tree, perhaps 60 or 70 percent of the wood, is removed and processed as wood. You have the bark that comes off, the sapwood comes off and some of the wood is used as a material – as sawn timber or as a raw material for paper – and some of the wood is used for energy purposes.

It can be said that of the pine that is felled, perhaps one half to two thirds of the wood that was previously in the forest can ultimately be used as material, depending on how it is utilised. It can also all be burned as before.

Mandy Schossig:

So, half of it. You explained to us earlier that one cubic metre stores one tonne of CO₂, right?

Klaus Hennenberg:



Exactly.

Mandy Schossig:

So, if we use the wood for construction, only half of the CO₂ will be stored?

Klaus Hennenberg:

Exactly, if you take wood from the forest and use it as timber, about half to two thirds of it ends up in the building and the other part is ultimately either oxidised on the surface by rotting or oxidised to CO_2 as a by-product in combustion. And this can be modelled again by running our forest model and looking at how the stocks change when the wood is removed or not removed. And compare this against the quantities of CO_2 that then go into long-term carbon storage. Then you can see whether forest use in one place is advantageous or whether it would be better to build up the stock.

Mandy Schossig:

And do young and old trees store the same amount of CO₂?

Klaus Hennenberg:

So the question is always about growth. Young trees generally grow faster across all tree species in the age classes from 20 to around 60 years. In the age class under 20 years, however, they grow relatively poorly until a stock has become established. And over 60 or 80 years of age, the trees begin to grow less strongly, i.e. store less CO_2 .

You always have to look at how old the stock is. What use can I expect to make of the wood? Is it more likely to be used as construction timber or firewood? Is the stock more stable? Will it be like a mixed deciduous forest, for example, which is in a good location and naturally belongs there? This would be less climate-sensitive or sensitive to climate change than a poorly stocked spruce stand. And you always have to weigh things up: Is it better to leave the wood on the site, let the trees continue to grow and keep the stock high? The older beech trees often still have good growth. Or is it better, if there is a spruce stand that has not been stocked, to cut it down and have the opportunity to use much of it for material and at the same time establish a new forest that is more climate-stable?

In principle, it's a yes and no answer. You always have to ask: What are the locations, what stocks are there, what trees are there, what use can be expected? And it is in this overall context that the decision should be made as to whether the stand should be utilised and what the wood can be used for.

Wood as an energy source

Nadine Kreutzer:

So, you're saying that it's definitely more sustainable to use wood instead of heating with it. And yet heating with wood is often described as carbon-neutral. What does that mean exactly? And is that true?

Klaus Hennenberg:

We at Oeko-Institut have been working very intensively on this for the last four or five years and have come to the conclusion that burning wood is not carbon-neutral. If we go back to the rules of greenhouse gas reporting in Germany or regulated worldwide by the IPCC, all the carbon that I take out of the forest is initially considered to be burned, as an emission, because it is a loss.

In the greenhouse gas balance, people often say: 'Yes, it's renewable and has just been fixed relatively quickly and I'm only burning as much as was stored.' And that is a fallacy, because the wood could have remained in the forest. That is one option.

The other option is: if I have harvested the wood, it doesn't mean that it automatically burns itself. I have it in my hands and I can use it for different things. If I can put the wood into long-term storage, then I have stored the CO_2 and my balance sheet is better. And if I now compare the burning of wood with the other options – leaving wood in the forest, building up a stock or using removed wood as a material instead of for energy – the burning of wood is always worse and therefore not carbon-neutral because I would have had this option of carbon storage.

Mandy Schossig:

So we're not allowed to light the fire on such a beautiful evening as this, when it's cold again outside?

Klaus Hennenberg:

Well, that's a question of what you're allowed to do. One question is the balance sheet; the other question is what does that mean politically and how do we deal with it. We have a lot of gas and oil heating systems in Germany and we're allowed to use them. We can also continue to use firewood. We just have to think about it: if we want to become decarbonised by 2045, then using wood for energy purposes is not the solution and it's also a future problem. We must prioritise the phasing-out of fossil fuels, natural gas, heating oil and coal, but we cannot replace these energy sources with wood. Firstly, because we have too little raw material, and secondly, because wood is ultimately not greenhouse gas neutral either, because we need the wood for the sink services in the forest and for storage in wood products. And any burning of wood is unfavourable in this respect.

Nadine Kreutzer:

We often hear the argument 'I've already got the wood and it's cheaper, so I might as well burn it.' What do you say to that? And how much does wood actually cost?

Klaus Hennenberg:

Wood is often cheaper to buy than fossil fuels. The fuel price for wood pellets, for example, was around 30 percent lower than for natural gas and heating oil in 2024. What's more, the purchase costs for wood heating systems are subsidised and therefore often also inexpensive. However, wood heating systems often have higher maintenance costs, including higher costs from the chimney sweep. That is one side of the coin.

The other side is that wood also has a carbon price. When the forester on the forest road sells his wood, it has a value of around 35 Euro per tonne of CO_2 stored in the wood. The current carbon price for natural gas and heating oil is around 55 Euro per tonne of CO_2 . When heating oil and natural gas used in buildings are incorporated in the EU's Emissions Trading System from 2027, the carbon price is expected to rise significantly. Also for natural gas and heating oil.

And we simply know that these prices are often coupled. As a result, the price of wood is very likely to rise, which means that this cheap source of wood energy will not last, but the price of wood for energy will very likely rise in the near future. And it is also possible that foresters will come up with the idea of joining forces with certification systems and paying for the carbon price for wood instead of selling it to firewood customers.

Mandy Schossig:

And to come back to the carbon footprint. We said that when you burn the wood, the CO_2 stored up to that point is also released. How does that compare to other fossil fuels, such as coal or gas?

The carbon balance of burning wood

Klaus Hennenberg:

The amount of CO_2 stored in wood can be converted to CO_2 per unit of energy, i.e. CO_2 per megajoule. For wood, this is approximately 100 grams of CO_2 per megajoule. For lignite, it is 120 grams of CO_2 per megajoule, for hard coal 80 grams and for natural gas around 60 grams per megajoule. This means that, purely in terms of the amount of CO_2 per storage and CO_2 per unit of energy, wood falls between lignite and hard coal. If the balance is changed in such a way that these combustion emissions from the wood are also included in the greenhouse gas balance, then the balance is of the same order of magnitude as coal.

Mandy Schossig:

And aren't wood and coal somehow the same thing, except that there's a million years between them? So, both store carbon that we shouldn't burn, that's what I'm understanding.

Klaus Hennenberg:

Yes, exactly. Both should not be burned if possible. But you have to differentiate between the fact that fossil fuels are very stable reservoirs in their geological deposits. They are not released on their own. With wood, on the other hand, we have the wood on the surface. We have it in the forests. It can happen that supplies dwindle due to climatic changes. Although some wood products are durable, they will still end up in landfill or be burned. These are more unstable carbon sinks, more temporary carbon sinks, and we should differentiate accordingly and place a strong emphasis on fossil fuels and leave them in the ground if we have no alternative.

Nevertheless, we should always look at alternatives, such as heat pumps powered by renewable electricity or reducing the need for energy by means of thermal insulation measures, and ultimately try to reduce the use of wood for energy purposes. But there is a clear focus: first fossil fuels and then wood for energy.

Nadine Kreutzer:

Why is the topic of heating with wood so hotly debated? What questions are still open?

Klaus Hennenberg:

On the one hand, there is always a scientific debate about whether or not CO_2 released from wood during combustion should be included in the balance. There is no scientific consensus on this. There are many studies – including ours – that clearly show it is necessary to include it. But there are also other opinions. That is one side.

The other side is on the more emotional side, wood is a favourite energy source among consumers. Many people appreciate the kind of warmth that wood heating systems generate. And they are used to using this type of energy. And often change is not easy to implement and people would like to stick with the energy use they're accustomed to. In the same way, many people want to stick with their gas heating or their combustion car. But that can't be the argument for not making a change.

Mandy Schossig:

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And I think that, of course, you still have to think about this issue. It was only through the many conversations with you and other colleagues that I realised that wood also stores carbon and that it is also released when it is burned. This myth of a renewable raw material is true on the one hand, but it also has limitations, as you have just explained.

Klaus Hennenberg:

I've had the same experience in my private life. When we published one of our studies and a friend read it, he came to me and said: 'It's a hassle. I installed a pellet heating system five years ago. That was probably the wrong decision.'

Mandy Schossig:

And what did you tell him?

Klaus Hennenberg:

Yes, in principle it wasn't the best decision.

Mandy Schossig:

Or a kind of transitional decision. What should we actually talk about, then, when it comes to using wood? We've just said that there are still a few unanswered questions, but what do you think is important when we're talking about the sustainable use of wood? (That's also the title of our podcast today.)

Klaus Hennenberg:

Wood use has many facets and wood comes from a wide variety of sources. If we start with the forest, we not only have wood as a raw material, we also have other ecosystem services, from the supply of wood to carbon storage, water retention during heavy rainfall, habitat for biodiversity, cooling effects on the landscape level and recreational space for people. And all of this has to be taken into account.

It's not just that we now have wood in the forest as a raw material for using as a material and for energy purposes, but also the other facets. And the second is that large parts of the wood also come from the residual and waste streams, where we then have the opportunity to use the raw material for a wide variety of purposes.

And when using wood, we ultimately have to consider all these facets and should not reduce it to just one facet, such as wood used for energy generation. We should not reduce it to just one facet, such as wood used for energy purposes, because that is GHG-neutral. Instead, we need to look at the whole range of sustainability requirements, including (as mentioned at the beginning) the fine particle pollution caused by burning wood, i.e. the air pollution that can be caused by using wood as an energy source. And it is only when you look at this entire canon of different aspects associated with wood and wood use, right through to forest management and ecosystem services, in this overall view, that it becomes clear or increasingly apparent where we should be heading.

Outlook, future wood use and conclusion

Nadine Kreutzer:

Do other countries look at this in a similar way to us or are there other innovative solutions where you say you can take a leaf out of your neighbour's book?

Klaus Hennenberg:

So, a fairly new piece of legislation at EU level is the Nature Restoration Regulation, according to which every Member State in Europe must fulfil increased diversity requirements. And forests will ultimately be one of the areas in which these increased diversity protection measures must take place. This means that less wood may be harvested from part of the forest area in order to protect diversity. At the same time, there will also be areas – such as coppice forests – which will have to be managed more. A little more wood can be harvested there, but that is not the main factor; rather, the extensification of forest areas will be a factor in achieving these overarching sustainability and diversity targets. Extensification means a reduced utilisation of the area.

Mandy Schossig:

Exactly, you had just mentioned this collection of different requirements for using wood. To summarise: What do you think is particularly important in this collection for the use of wood in the future?

Klaus Hennenberg:

So, we need an overall strategy for wood use, diversity protection, energy provision, material use and cascading use. And in my view, this requires a biomass strategy that clearly defines these goals for the stakeholders. Unfortunately, this process of developing a biomass strategy was terminated in the last legislative period in Germany and, as a result, it's not available now, but that would actually be the goal for us.

Nadine Kreutzer:

Then let's ask you the question we usually save for last right now, Klaus. If you were the German Chancellor, what would you do immediately to promote the sustainable use of wood? What would be your first official act?

Klaus Hennenberg:

In the first 100 days, I would adopt a national biomass strategy that aligns the use of wood with environmental and economic challenges in such a way that the various targets for forests, wood use and climate protection with biomass are well supported.

Nadine Kreutzer:

I'm definitely voting for Klaus.

Mandy Schossig:

We'd vote for you. Thank you very much, Klaus. We'll definitely take that with us on our way and think again about carbon and wood and heating, Nadine, won't we?

Nadine Kreutzer:

Yes, many thanks to our expert on the sustainable use of wood. We're definitely a lot smarter now. Let's look forward to the next episode together, Mandy. We're taking a look abroad, aren't we?

Mandy Schossig:

Yes, exactly. Next time it will be really positive and optimistic. We've always looked abroad here and there to see what other countries and people are doing. And now we want to do that across all topics. We'll look abroad together and collect examples of measures that are already successfully promoting

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climate protection. And then we will categorise what we can do in Germany. I'm looking forward to that.

Nadine Kreutzer:

That's it for today. Feel free to leave us a review if you like. Write to us if you have any questions or suggestions for an episode. You're always welcome to that. You can send us an email at: podcast@oeko.de.

Mandy Schossig:

Thank you very much and see you next time. Goodbye!

Klaus Hennenberg:

Goodbye! Thank you very much for the invitation.