

1.

Dear audience,

First of all I am very grateful for the opportunity to express some views from the forest owners' side on this very important issue. I will try to comment on the possibilities of wood energy and specially give some remarks from the supply side of the raw material. I will speak on behalf of the European forest owners and CEPF, but have my main experiences from the Nordic forestry as a special advisor in the Norwegian Forest Owners' Federation. By the way, CEPF is representing forest owners' organisations in 23 European countries and in total around 16 million forest owners all over Europe.

By education I am not a forester, but an economist. My family roots are however in the forest. I have worked in ministries, private enterprises, as consultant in strategic communication and now in s'the forest owner organisation. I have also been heavily engaged in forest industry and in member companies in the organisations of our honourable colleagues CEPI and CEI-Bois.

2.

I would like to set the scene in pointing at our mission. How to combat climate change by using the advantages we have in forestry and the forest products. The whole value chain in forestry and the forest based industry represents the sustainable use of renewable resources. The potential use of reducing climate gas emissions by using renewable energy and producing products based on renewable raw materials. Without going deeper into that aspect I will postulate that the substitution effect of using forest products replacing non-renewables is far more important than the so-called sink effect. I will also postulate that the more we use forest products and the larger we make the carbon cycle the better for the climate.

Today we are discussing biomass and wood energy. In increasing the bio mass production possible options is also to use previous farm land and abandoned land. But we should always keep in mind a holistic perspective in combatting climate change. Important elements are also energy efficiency and other means to counter the factors changing the climate.

3.

And I will also state that whenever I talk about forest production and forestry I imply sustainable forest management.

When I postulate the positive effects of increasing the forest production I will always imply that we do this in a sustainable manner taking care of the bio diversity and the balance between economic, ecologic and social considerations.

I will also see certification as a tool for ensuring and promoting sustainable wood energy production.

Much is said and enormous amounts of documents are made covering climate change, bio energy, wood energy and forestry. I will however point at one document, the opinion paper from the European Economic and Social Committee of March this year. This paper sums up in an excellent way many of the most important sides of the topic wood as energy source in the enlarging Europe. I will also point at the forest owners wood energy views as expressed in the CEPF bio energy strategy. The strategy will soon be able on the CEPF web site.

I will in my presentation try to concentrate on some of the main concerns from the forest owners and will try not to repeat to much of the material written and the very good presentations already given today and those which will follow.

I would have liked to simplify the issue. But I will not.. And if we try to make it too simple, we may draw the wrong conclusions. I fear that some of the debate concerning wood energy have been misleading because some views may have been too one dimensional.

I will start by drawing your attention to aspects that I find very important in this issue. I will describe them by the following words

4.

Complex, dynamic, economic, logistic and relations

Complex: The issue of wood energy and raw material supply is complex. There is no simple way to grasp the whole problem or draw a single conclusion. The complexity involves energy markets and energy policy, the wood markets, the product markets, the variety of tree species and country conditions, the geographic and topographic differences and the various traditions, industrial history and political preferences – just to mention a few.

Dynamic: The dynamics of industry and economy is very often underestimated in political discussions. This is also the case in this issue. We must keep in mind that the development will not follow a linear path. In a complex market there is no straightforward relation between the change of one price and the effects on product markets and raw materials. I will come back to that.

Economic: Forestry is an economic activity – and a market driven activity. When we try to study the demand and supply of wood energy and wood as raw material for energy production we must always keep in mind that wood supply is dependent on viable economic conditions. For instance discussing the wood supply potential has little meaning if we do not specify the economic conditions. Under different set of prices for raw material and harvesting and transportation costs we will find quite different raw material potential. And the other way around: The biological potential in wood production is of little value if not validated with economic factors.

The economic factor also relates to the market economy. We have seldom seen effective ways of reserving raw materials for certain purposes without seeing this reflected in the market price of the raw material.

Politics: We can not discuss energy questions without realising that energy is politics and energy markets has always been political markets – to various degrees. In my opinion, politics and political influenced economic conditions is always present in every energy market – and the relation between markets.

Logistic: The logistic element is heavily present in all issues concerning forestry. This means logistic in harvesting, stocking and transporting. The effectiveness and cost of harvesting and transportation is utmost importance in every aspect in forestry and forest based industry. This also goes for the supply of raw materials to wood energy production and the production and distribution of energy products based on our renewable energy. The factor of distance is very important and means that parts of the supply will be effective in fewer larger plants and other wood energy sources could preferably be utilised in smaller energy production units dispersed over a large area – the so called short travelled energy.

Relations: My last element in this introduction is relations. When looking at the forest based industries and the wood energy complex, we truly find that all parts of the industry, all the markets of raw materials and products relates to each other in various degrees. We have to look at the whole complex in order to understand the wood energy issue. And there is both positive and negative relations to cope with. We also find that there are relations between different policy areas. We need effective infrastructure to be able to optimise wood energy.

5.

When we look at today's wood energy production we will find that the forest based industry already has a large bio energy production, but mostly connected to using their by-products in their main production lines as raw material for energy production. Most of the energy, heat and power, is self consumed driving the main production lines. But we find that some production units produce more energy than they can consume and sell the energy on the market. There is a potential for increasing the energy production connected to existing industry facilities.

This may be done in two ways. One is to effectively increase the energy production in plants not fully utilising the possibilities today. The other is to develop new energy products from residuals, that is diseased wood, small diameter thinning wood, stumps, branches etc. The third option is to increase energy production by new power plants located at the industrial sites based on additional raw materials.

6.

There is a considerable amount of raw materials today left in the woods. If we find effective and economic ways of harvesting, transporting and processing this renewable sources we will be able to considerably increase the energy production either located at today's industry sites or in new energy producing units.

As an illustration we have looked into the wood energy potential in the Nordic countries, and we have found:

7.

We have found a potential of more than doubling the wood energy from what we can call primary forest raw materials that means residues from the forest and wood delivered directly for energy production.

We also see a potential in increasing the energy production from industrial by-products, but this source is fairly well used already. I must add that this potential is based on some improvements of the economic conditions in the wood energy prices and the compensation for the raw materials. But the potential would have been much greater if we could predict more drastic changes in the economic framework for wood energy and the techniques and cost of harvesting and transportation.

Over all we find a potential of increasing the wood energy production by nearly 40 per cent. You will see from the table that the potential varies from country to country. You will find that Sweden and Finland has been better in exploiting the wood energy potential than Norway. I must admit that this among other things is related to a tradition of relatively cheap energy in Norway. Not so much as you could think of the present production of oil and gas, but from our traditional main energy source hydro electric power.

The potential is also connected to today's harvest.

At European level the opinion from the European Economic and Social Committee estimates that the annual increment is 560 million cubic meter and the fellings 350 million. 10 per cent of the growth is in protected areas or outside commercially exploited areas. In addition to the European production there is an net import of 25 million cubic meters.

8.

At European level the opinion from the European Economic and Social Committee estimates that the annual increment is 560 million cubic meter and the fellings 350 million. 10 per cent of the growth is in protected areas or outside commercially exploited areas.

One of the important sources among the 30 per cent growth still unexploited is unused low grade timber from thinnings.

The theoretical potential growth can never be harvested, since we also need some residues to remain in the forest. The Economic and Social Committee concludes however that we have an unused potential of 30 million cubic meters from thinnings and 70 million cubic meters from forest residues and stump.

When we look at the difference between theoretical growth and fellings we have a total difference of 210 million cubic meter – and the realistic potential is 100 million.

I will however remind you that such estimates heavily depends on the economic conditions. Changes in economic parameters may change the estimated potential dramatically.

9.

Sweden has put large efforts into using bio energy. And even if they now use most of today's production capacity in their forests, they are constantly working to increase their wood energy

production. (As you have heard from the presentation of the work in their energy commission When concentrating on the future in the forest in Sweden they manage to plan for even further increase in the growth by 15 – 20 percent. Some of the most important actions is to improve clearing and thinning, improving the long term forest care. This is an interesting effect. By improving the care of the young stand, you will be able to take out more material suited for energy purposes, and at the same time increasing the overall forest production. This is a vital point, since improving forest management to optimise wood energy may also increase other types of raw material.

10.

As in every aspect of forestry we must act in a long term perspective. The Swedish energy commission is setting up targets nearly 50 years in the future. In a time span like that we could further increase the Swedish wood energy production. This will imply increasing wood energy by one third in ten year time, but by two thirds in 50 years time.

11.

While Sweden's forest production is near all time high – and increasing – the Norwegian annual cut is very different. 130 years ago the forest production in Norway was higher than today. This was an overexploitation of the forest, but was due to very favourable economic conditions for the forestry. The net income from forestry was very high. Due to low harvesting costs they were able to harvest in areas that today will be considered as non economic forest areas.

I show this to illustrate the importance of economy in forestry. I will not go back to the 1870's. But we find today that the net margin between the price of raw material and the harvesting and transportation cost make large areas of forest non-economic to utilise. In Norway today bio energy fights en difficult economic conditions compared other energy sources.

This will be the case in more marginal areas, and in a mountainous area as Norway we have experienced that reduced wood prices has put areas out of production. The graph shows the annual cut for industrial purposes. The total cut including fire wood is around 50 per cent of the increment.

Unfortunately a rate of harvesting only 50 – 60 per cent of the increment is not a special case. This is near the average in Europe, as the opinion from the Economic and Social Committee confirms. The bad side is the low utilisation of the forest renewable resources. The good side is the very large potential for increasing the harvest, increasing the supply of raw material for wood energy production – and not reducing other forest based productions – if they in a reasonable way can be competitive in securing a price of raw material that will make the harvest economic viable.

12.

The reduction in harvesting has to do with the long term downwards trend in pulpwood prices. This has led to areas being passive, despite of an effective harvesting system.

13.

There is an obligation for the forest owners to be as effective as possible to ensure that forestry production will be competitive in an global economy.

14.

And the fact is that the development of productivity in forestry has been tremendous during the last 50 years. In 1950 a day's work in the forest produced less than two cubic meters of wood. Today the man-day production in the forest approaches 30 cubic meters.

15.

Logistics is a main factor in forestry, and not least in wood energy. We experience in to conflicting directions. Economy of scale in forest industry will increase the concentration to fewer, but larger plants. I predict that we will se an acceleration of this development in

Europe in the coming years. At the same time we experience increasing transportation costs and the need for cost cutting.

My opinion is that will lead to a development in two directions. The newer and larger forest industry plants will demand raw materials from areas around their premises, and will be willing to increase the price – to the neighbouring forest owners – for wood with effective logistics and low transportation costs.

The other direction will be the development of local wood energy plants supplying heat and some electricity to the local community – short travelled wood and energy. Short travel will reduce wood transportation costs and energy distribution costs, and in that way enabling small scale economics.

16.

By creating a “third market” for forest raw material – the wood energy market – we will increase the economy for the forest owners and in that way make more areas exploitable. This will bring forward a larger supply of all wood qualities – also for the saw mill industry and the paper and pulp industry. We find today that the demand for wood do not cover all the species and the qualities that the forest produces. This will lead to reduced economy in some areas. Increased demand for wood energy could, however, be targeted to qualities of presently low demand. New demand for all qualities in a forest could in this way bring back into active production forest holdings with low present activity due to economic reasons.

There is also important to create “new markets” for the industry. Wood energy could be a “third leg” also for the forest industry. We experience stagnating demand for traditional paper products in many regions of the world. We also see the need for restructuring the paper industry, closing plants and building new and more cost effective capacity – without over all excess supply to the market. Bio energy products – specially bio fuel – could be a new “leg” and a new branch for the paper industry in Europe – and also North America, Australia and Korea.

This requires however, among other things, the commercial development of the second generation bio fuels.

As an economist I have learned that if indirect benefits for the society are not reflected in the market price this will lead to lower production than optimal for the community. This also goes for the European community. The positive effects of forestry concerning environmental services and positive effect on climate change are not reflected in the market price. There is then strong theoretical economic support for the Commission to search for ways to balance the market insufficiencies. We find this insufficiencies both in the wood market and in the energy market, if I may recall my postulation of the energy markets as political markets. I will direct your attention to the many good reflections made in the opinion from the Economic and Social Committee.

I will also point at the fact that correcting the market conditions leading to under production of wood could be done in different ways. Some of them will uniquely target the forest production by supporting the management of young stands and the harvest operations. Other measure may to a larger extent influence the wood price and have a greater effect on the allocation of fibre.

As a forest owner view, however, we will have to use the market mechanism to allocate fibre to the different markets. The price and market mechanism is the only effective tool.

17.

A vital support for the development of wood energy production and the supply of raw material is to support research and development. This will have to cover the whole field from sustainable forest management and primary wood production, through harvesting and logistic techniques to the development of effective production of bio energy and transport bio fuel from wood and forest residues.

18.

I see that there will be problems – felt or reel – in other forest based industry segments when we broaden out the demand for forest raw materials in order to combat climate change and secure the utilisation of the forest as renewable sources. But we have to keep in mind that the present regime has led to decreasing use of the forests.

I would like to continue the good work in the whole value chain, to find viable economic solutions to today's dilemmas in the fibre business. We have to find those solutions in a market driven context, but in a market where we have to adjust the insufficiencies in market economy to fulfil environmental needs. I am sure that if we - open minded - work along the value chain, we will find solutions acceptable for all parties. For going back to my introduction, there are relations between all sectors and all issues.

We will find solutions, but there will be changes. The only unchanging fact is that there will be changes in the future.

19.

In Norway we have tried to involve all interested parties in setting common goals for the development of priority value chains. This has led to the valuable co-operation and joint efforts to reach common goals between forest owners, industry, trade, funds and government. I find that we already have embarked on the same voyage in the European community, and I am sure that we will find the common course.

20.

Let me conclude by coming to a very important question when we are going to realise our joint ambitious targets in the wood energy. Let us go to the question of mobilising the wood resources when only 50 – 60 per cent of the potential is activated today.

We must, however, distinguish between under utilisation due to the lack of profitability and forest holdings that should have been in more active use under the present or coming economic conditions.

There is the fact that the structure of forest holdings in Europe could be counter productive. When the average size is under five hectares we will need to look at ways to effectively organise the wood production despite an unfavourable property structure. Again I will point at solutions pointed out in the opinion from the Economic and Social Committee.

In the Nordic countries, and also in other countries in Europe, we have very positive experience from organising forest owners and organising economic activity in forest owners' co-operatives. In this way we may organise economic and technical effective forest management and harvesting activities despite a dispersed property structure.

There is a huge difference in making the forest owners themselves responsible through their own co-operation and co-operatives. This will combine economic activity by motivation and responsible long term sustainable management incorporated in family forestry.

21.

In Norway we have organised the forest owners in eight regional co-operatives covering all forest areas in Norway and representing 80 percent of the wood production in the country. In Sweden we find a similar organisation with four co-operatives and in Finland one forest owners' co-operative. In all the three countries we find engagement from the forest owners in the whole value chain and creating synergies together with industry.

22.

Let me finish by looking very optimistic at the possibilities to increase the wood energy production by enhancing the supply of wood to energy and other parts of the forest based industry.

The forest is full of possibilities and values. You will always be able to develop the values further in combining sustainable development with economic activity and creating a viable and sustainable economy along the value chain..

And if you want to be updated on European and Nordic forestry and forest based activities, please access the European CEPF web site and our common Nordic forest owners web site in English.

Thank you for your attention!