

Proceedings Barents Forest Forum

October 15-17, 2019



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Table of contents

1. Introduction	3
2. Participants	3
3. Pre-conference workshop October 15	3
3.1. Workshop method	4
3.2. Outcome and way forward	4
4. Main conference October 16	5
4.1. Theme session I: The forest in the bioeconomy – opportunities of a biobased society	5
Keynote	5
Country specific talks	6
Panel session	7
4.2. Lunch-talks	7
4.3. Theme session II: The forest in the bioeconomy – challenges and drivers in the transformation	7
Keynote	7
Country specific talks	8
Panel session	9
4.4. Final conclusions of the conference and the way forward	9
4.4. Workshop on report: The forest in the emerging bioeconomy in the north	9
5. Excursions October 17	10
5.1. Bioeconomy in the urban region	10
5.2. Bioeconomy in the region of Västerbotten	10
Appendix I – Agenda Barents Forest Forum	
Appendix II – Chair’s summary	

1. Introduction

Under the Euro-Artic Council, the scope of the Barents Forest Sector Network (BFSN) is to centre its activities on forest and forest sector related initiatives with a particular focus on sharing information and launching activities in the Barents region. During the period 2017 to 2019, Sweden held the chairmanship in the Euro-Artic Council, subsequently also in the BFSN, through the Swedish Forest Agency. Swedish University of Agricultural Sciences (SLU) as a regular member of the group supported the Swedish chairmanship with an expert on bioeconomy.

As part of the final activities under the Swedish chairmanship, the BFSN decided to arrange a final conference. SLU was asked to lead the organisation of the conference and the research network – Forest Bioeconomy Network (ForBioeconomy) at SLU assisted in the organisation. A steering committee with representatives from Swedish Forest Agency and SLU was formed to support the project. Funds was provided by the Swedish Forest Agency and the County Administrative Board in Västerbotten.

The conference aimed at reaching a wide audience of interest organisations, government officials and researchers from the Barents countries, however the organisers welcomed any participant that had an interest in forest in the Barents region.

The theme of the conference was “The Barents region in a biobased future”, and the conference took place over three days – 15-17 October, in Umeå, Sweden, and the venue was within SLU’s premises at the university campus in Umeå. The conference consisted of the pre-conference workshop, the main conference, and the excursion. Information on the conference, the agenda, recording of presentations, and PowerPoints are found at <https://www.slu.se/bff2019>.

2. Participants

As mentioned above, the conference was threefold with a pre-conference workshop, main conference, excursions. Bilateral and BFSN meetings was also arranged in connection with the conference. The number of participants varied between the different sections. All in all, 132 persons attended the Barents Forest Forum in some capacity. A majority, from Sweden, 83, 18 from Finland, 13 from Russia, 11 from Norway and 7 participants from various countries outside of the Barents Region. The conference offered a travel grant for young people and 17 persons under the age of 30 where granted scholarship. In addition, 27 students from the Swedish University of Agricultural Sciences. In total, the number of participants under the age of 30 was 44, 33% of the participants. Their age and education degree varied from still in high school to PhD students and Post Docs. Remaining participants came from different walks of life, 47 from Universities and Institutes from all Barents Countries, 21 from non-governmental organizations and 20 held a governmental, policymaking position in the Barents Region.

3. Pre-conference workshop October 15

During the Swedish chairmanship of BFSN, issues connected to the future of the forest sector were discussed. In relation to those discussions, the conference organisers proposed a workshop on the topics of future education, equal opportunities and labour supply. The focus on the workshop was for, and with young persons from the region.

The workshop was facilitated by DARESAY and a recently graduated forestry master student. To enable young persons from each of the four Barents countries to attend the workshop, the conference organizers issued scholarships to persons between the age of 18-30. Funds for the scholarships were provided by the County Administrative Board of Västerbotten. About 70 people participated in the workshop.

3.1. Workshop method

The workshop was led by three facilitators – two from the company DARESAY (Fredrik Johansson and Filip Hammarberg), and one from SLU (Lina Arnesson-Ceder). The workshop consisted of different sessions – one for each theme of the workshop (education, equal opportunities, and labour supply). Each session started with a short presentation by people working with the theme within their profession. The participants were first asked to individually consider what is working within the theme and write it down on a post it and later present within their groups. The post-it notes were then mounted on a wall and the group sorted the notes. Next, the participants discussed the posted problems, and the work was concluded by the participants voting for the most important problems (using coloured dots). Next, the problems with the most dots were discussed in the groups, and the three most important ones were presented by the group. This process was then repeated for each of the themes. During the last session, the groups were given specific issues from the different themes and to focus on possible solutions.

3.2. Outcome and way forward

The workshop was carried out mostly in small groups, where participants were divided into five main groups. Two groups consisted of mostly young persons, and three groups of persons from different forest non-governmental organisations and governmental officials.

The workshop began with a welcome speech on behalf of the Forestry Faculty at SLU, represented by Ola Carlén (SLU, Sweden). He briefly described the problems of recruiting students to the Forestry master program at SLU, the declining number of students, and what measures that are taken to increase the interest of forest-related education in Sweden. He was followed by Herman Sundqvist (Swedish Forest Agency), who spoke on the importance of the three topics for the pre-conference workshop. Each participant was asked to share what they felt was positive within the forestry sector, what is already working related to the topic of the workshop and what is moving us forward in the forest sector.

First, the future education in forestry was discussed, and the topic was introduced by Bjørn Helge Bjørnstad (Forestry Extension Institute, Norway). He described briefly the problems of recruitment to forest-related programs in Norway, and how they work to change this trend. Hereafter, the group moved to separate discussions.

To introduce the second topic on equal opportunities, Elin Olofsson (SCA, Sweden) discussed the challenges of female and male working environment in the forestry sector. She also spoke of the challenges we face in society due to gender. Again, the group broke up into smaller working groups for separate discussions.

The last item of the workshop was the labour supply on the forest market. Fredrik Gunnarsson (Swedish Forest Agency, Sweden), spoke on the international work that is carried out on attempting to attract young persons to work in forest-related organisations. One final group discussion took place.

The pre-conference workshop was concluded by a discussion on solutions to the problems posted during the workshop.

The results from the workshop will be concluded in a report that will be published during the spring of 2020. The Norwegian chairmanship announced during the conference that these issues are continued priorities during their chairmanship 2019 – 2021.

4. Main conference October 16

The main conference consisted of invited speakers in two sessions with different themes. The first session aimed at providing positive examples and opportunities in the biobased society, while the other session aimed at discussing challenges and drivers towards transforming our society to becoming more biobased.

The conference was moderated by Malin Winberg (professional moderator and journalist).

The conference was opened by welcome speeches from Camilla Widmark (SLU, and ForBioeconomy) and Staffan Norin (Swedish Forest Agency, Sweden). Official welcome to Västerbotten and to the conference was then given by Magdalena Andersson (County Governor, County Administrative Board of Västerbotten) emphasising the uniqueness of the Barents region by presenting the exhibition and the results of the photo competition within the Barents region. Herman Sundqvist (Swedish Forest Agency, Sweden) also welcomed the participants to Umeå, and Västerbotten. He welcomed the discussion on the forest in the future society, especially emphasising societal challenges like climate change. The final welcome speakers were Göran Ståhl (Faculty of Forest Sciences, SLU) and he welcomed the participants to SLU, with a short description the “longest” university in Sweden, and the research conducted at SLU.

4.1. Theme session I: The forest in the bioeconomy – opportunities of a biobased society

Recordings and powerpoint from the session are found on www.slu.se/bff2019. Below the keynote and the country-specific talks are summarized. For detailed program, please see the attachment I.

Keynote

The theme – opportunities of a biobased society – was introduced by keynote speaker Sverker Danielsson (Swedish Forest Industries Federation), with the title “Forest in Bioeconomy Transformation”. He began by reminding the audience of the Swedish climate vision for 2045; to be one of the first fossil-free welfare states in the world and how the forest play an important role in the growth of the global bioeconomy. The fact that forests bind carbon dioxide that is stored timber-based products. Essential for the development of the carbon-neutral society, is that the whole tree is used for sustainable products, especially as a carbon binder. Through using lignin, cellulose and hemicellulose in new products like textile, lightweight materials, bioplastics, biofuels, smart packages and medical products the entire log is utilised. The product portfolio is constantly changing, and new ways of using timber components constantly developing. Considering the increasing demand of forests for many different purposes, digitalisation is considered a game changer, as more detailed information about the forest composition and the effect of management of the forest landscape is vital for a future sustainable use of the forest.

Country specific talks

Finland initiated the country specific talks with Tanja Lepistö, (Finish Forest Center) presenting on “Sustainable bioeconomy in Finnish Lapland: Multiple use of forests”. Tanja began by describing the Finnish Forest Centre’s responsibilities in promoting sustainable forestry through e.g., forest management planning, guidance and education, as well as supervising forest law regulations. Next, Tanja described the EU-financed program “Smart Artic Forest Network” in which understanding of forest management, natural products and ecotourism is developed. The forest management in the northern part of Finland is based on a deep respect for the artic nature, and multiple use of forests. In this region, apart from productive forest land, the nature conservation is rather large, with somewhat 27 % of the forest land protected. With the second largest amount of foreign overnight stays in Finland, Tanja Lepistö also pointed at the importance of tourism in the region. Apart from reindeer herding, there are also somewhat 55 companies focused on non-wood products operating in Lapland. This multiple forest use requires active management on different levels: natural resource planning on governmental level, regional forest programs, and practical development work on the local and regional level.

Norway continued the session with a talk on “Foods of Norway – from wood to feed” by Gro Steine, (Foods of Norway, NMBU). The aim of the Foods of Norway project is to find ways of feeding fish and farm animals using sustainable new ingredients. Apart from climate change, the disruption of feed supply chains will become a key issue to solve in the future. One solution explored to this future issue is to increase the amount of feed to for instance farm animals. The challenge is how to find protein sources, especially for the aquacultural industry. One solution would be to use trees as a feeding resource. By extracting lignin from the cellulose, processing it via fermentation and dehydration, the yeast can be extracted and used for feed. Results prove that the yeast as a protein source has a good taste, and positive health effects, with a rather high concentration of protein (50-60 %). From trials with fish, the results show high growth performance and improved fish health, and further trials with piglets showcase the same results. Additionally, the piglets also show improved digestive function and reduced diarrhea. Gro Steine concluded that the use of timber for feed is a new industry and optimizing the input and output factors economically is the next step.

Third speaker in the session was Natalia Demidova (Northern Forestry Research Institute, SevNIILKh) offering the view of the forest importance in the Russian bioeconomy development. In North-West Russia, the production of timber and biofuels is one of the pillars in developing forest bioeconomy. This is followed by increasing responsibility for producers, together with measures to improve the attraction to invest in forests. To support the strategy, priorities in forest management is important, e.g., increasing the economic return by improving species composition and the quality of growing forests by intensive thinning of young and middle-aged stands and construction of forest roads. Reduction of illegal timber flow together with investments in forestry, like modern sawmills and paper production are equally important. The non-timber forest goods are also part of the prospects for the future bioeconomy, like increasing harvesting of wild berries and mushrooms. Apart from production of biofuels and timber, the Russian Federation has put forward a biotechnology development program that among other things, develop biopharmaceuticals, biomedicine, and environmental biotechnology. Pre-requisites' for the biotechnological development are forestry clusters with both private and public actors, research funding and research development. One example of development in these clusters are fast-growing species to maximise the use of forest biomass.

Ending the session, Herman Sundqvist (Swedish Forest Agency), continued discussing the development of forests and land use in Sweden and the challenges for the bioeconomy transformation. The Swedish forestry sector has always logged wood, and it has been an important part of the Swedish economy for a long time. One major contributor to this development was the extensive river system, especially in the north, with large river and tributary streams that could be used to transport

the logs from rural areas to the coast. The intensive logging resulted in a poor forest tradition in Sweden, which was acknowledged at the turn of the 20th century and resulted in the first forest law and large-scale reforestation. The effect can be illustrated by a graph showing that the amount of growing stock has more than doubled from 1923 to today. This has been made possible despite the annual felling having simultaneously increased. The productivity of harvesting forests has developed since 1950's when most logging was made by hand, using a horse to transport timber to the nearest water stream. Today, harvest is carried out by one-grip harvesters. The cost of harvesting is high resulting in the challenge to continue receiving value from each harvested log. The next technical leap is presently taking place; the digitalisation with laser scanning and visualisation of forest management. With improved planning, detecting soil compositions and natural resources, the harvest and management can be even more efficient. This raises questions to what the role of forest is, and forestry in climate change; what is the role of forests in a bioeconomy and what are the implications for biological diversity when moving away from fossil-based resources? However, we need new capacity and competence to manage the transition. Sweden has launched a national forest program emphasising the use of the forest in bioeconomy and that forests will have an important role in the future bioeconomy.

Panel session

The panel session consisted of the speakers in the session – Sverker Danielsson (Swedish Forest Industries Federation), Tanja Lepistö (Smart Arctic Forest Network), Gro Steine (Foods of Norway NMBU), Natalia Demidova (Northern Forestry Research Institute, SevNIILKh), and Herman Sundqvist (Swedish Forest Agency). Additionally, Lina Arnesson-Ceder (facilitator pre-conference workshop, and SLU) and Mika Risonnen, one of the young representatives that participated in the pre-conference workshop, also made up the panel.

During the panel session, the speakers from the panel answered questions in conjunction to their talks, and to discuss the results from the pre-conference workshop on education, equal opportunities and labour supply.

4.2. Lunch-talks

During the lunch-session, the conference participants were offered presentations of SLU activities. One lunch station, the participants listened to research on remote-sensing, GIS and the decision support system for forest management, Heureka. The other lunch station provided talks on salmon migration and how forest fires affect small mammal communities.

4.3. Theme session II: The forest in the bioeconomy – challenges and drivers in the transformation

Keynote

The second session on the theme challenges and drivers of bioeconomy transformation, Pekka Leskinen (European Forest Institute) gave a talk on Climate change mitigation as a driver towards bioeconomy. The problem of climate change originated with the increasing human well-being, but to the cost of overconsumption of natural resource which also led to negative environmental impact. The most critical issue is global warming, and how to meet the 1.5 degrees increased temperature by 2100. A combination of measures must be taken to reach this goal, e.g., transforming to emission free industry combined with increasing carbon sink sources. The forest fills an important function as carbon sinks, and in the northern part of Europe, especially in the Barents region. The forest can contribute with climate substitutions, by reducing carbon emissions. For instance, building with wood

instead of building in concrete would decrease the carbon emissions. To achieve climate benefit by using wood in a product, two factors are important: (1) climate substitution effect on the product level should be decent, and a sufficiently high volume on the market, otherwise the substitution effect on the market is close to zero. Textile industry based on wooden materials are too small today to contribute to the climate substitution, while for sawn wood the markets is large enough to have substitution effect. In summary, wood-based products contribute to climate change mitigation, but there has to be a balance between sinks and bioeconomy. Further, for bioeconomy it is important to consider the circularity of products and to create better product portfolios for the future mitigation. More knowledge is needed on climate impacts, and the relation to sustainability, especially of textile, packaging and chemicals.

Country specific talks

The country specific talks were introduced by Hannele Arvonen (Sveaskog), discussing how Sveaskog AB is driving the development towards bioeconomy. As Sweden's largest forest owner (14 %), they are instrumental in developing the forest-based bioeconomy. With full governmental ownership, Sveaskog's mission, apart from sustainable and profitable forest management, is to be responsible for nature conservation tasks by e.g., ecoparks, but also for providing recreation settings (e.g. for hunting and fishing), as well as wind-power plant investments. The company is also committing to increasing the value of wood by utilizing all parts of the tree and the entire value chain, developing pulpwood, biofuels and sawn timber. The talk was concluded by emphasising that to succeed, it is crucial to reduce risk and create additional forest values for all stakeholders.

The next country specific talk posted the question "What is going on in the wooden building industry in Finland", given by Anu Nurkkala (Finnish Forest Centre). In Finland, there is a governmental program for wood buildings, and a separate bioeconomy strategy where forests play an important part. There are several projects all over Finland to promote the versatile use of wood in building industry, e.g., wooden buildings, bridges, insulation material, interior and furniture. The challenges for the building industry are the lack of knowledge of wood constructions, but also fire regulations. The industry needs a new way of thinking, especially when it comes to high-level prefabrication to assemble on site. According to the projects in Finland, wood constructions have a positive impact on the environment – both when it comes to climate mitigation and replacing fossil-based products. Results also show positive impacts on human health as well as creating attractive residential areas. Carbon storage of a building is extensive – a 150 m² building stores about 90 000 kg carbon – approximately equal to driving 560 000 km by car.

The third talk identified potentials from new forest-based products in Norway and was presented by Vegard Salte Flatval, SØA (Economics Norway). The presentation discussed the added value in new products from pulpwood and by-products from sawmills. In Norway, there is a close link between economic cycles of forestry and logging operations, the manufactures of paper and paper products, and manufactures of wood and wood products. If the market goes down in any of these sectors, the rest tend to follow. The forestry sector has a rather stable added value to the Norwegian economy. The forest value chain has been more international lately, especially the sawn wood. Norway today harvest about half of the yearly growth. Four bottle necks are identified for the application of forest biomass: technology, feedstock, capital and labour as well as market demand. Existing technology facilitate, however, there is a need for further development to reduce costs. Capital is needed to develop the forestry sector further, varying between companies, however. Labour for forestry sector are difficult to recruit in Norway, but the when found they tend to highly educated. Market demand for green and greener products are growing globally and it should justify investments in green sectors. The talk was concluded by discussing the potential implications for increasing demand on main products from the Norwegian forest sector. Historical data on wood chips, sawn wood and pulpwood show an increasing net export for all three sectors, with pulpwood being the largest.

The final country specific talk discussed the Russian approach to overcome challenges on the road to forest bioeconomy, offered by Andrei Iugov (All-Russian Research Institute for Silviculture and Mechanization of Forestry, VNIILM). The Russian forest sector faces challenges of increasing efficiency of forest restoration, efficient use, and protection of forests together with the challenge to overcome the conflict between economic, environmental and social demands on the forest. Additionally, climate change mitigation and adaptation need further research and be implemented in Russian forest policy. Further challenges for the Russian forestry sector are to secure investments in the forestry sector to overcome the isolation of the forest sector on the road to a green economy. Among the solutions presented are political recognition and support for the bioeconomy transformation. Further research is also needed together with stronger societal communication on green economy. Innovation solutions, e.g., intensive sustainable forest management, are also an important part of the solution and support the bioeconomy transformation. Furthermore, presidential grants have been issued, especially for social awareness campaigns on the importance of forests. To increase capacity-building, e.g., young persons are educated in forestry schools, junior forest contests are issued, and forestry specialists are continuously educated. Yet another area contributing to the solutions for Russian bioeconomy is that the forest role in climate mitigation and adaptation and the forest's role in fulfilling the sustainability goals are high on the Russian policy agenda.

Panel session

The session ended with a panel session, this time with high-level panel representatives. Johanna Buchert (LUKE, Finland), Frode Lyssandræ (Norwegian Ministry of Agriculture and Food, Norway), Vladimir Dmitriev (Science and International Cooperation, Federal Forestry Agency of Russia, Russia), and Herman Sundqvist (Swedish Forest Agency, Sweden) participated in a discussion lead by the moderator Malin Winberg. Questions from the audience was posted via email. The theme of the panel discussion was to reflect on the presentations put forward during the day, and on the future forest management in a sustainable bio-based society.

4.4. Final conclusions of the conference and the way forward

The conference was closed by final conclusions. First Magdalena Andersson (County governor of Västerbotten) presented the Barents Regional Council which Västerbotten is chair between 2019 and 2021.

The Swedish chairman of the Barents Forest Sector Network – Staffan Norin (Swedish Forest Agency) – turned the chairmanship of the network over Norway, where after Frode Lyssandræ (Norwegian Ministry of Agriculture and Food) explained the priorities of the Norwegian chairmanship. The focus being on areas of health, people-to-people contact and knowledge to build a stronger and more resilient Barents region. The forest-based bioeconomy and climate change action plan will be a continued priority in the next 2 years. Knowledge on how to engage the forestry sector in the transition to a low-carbon society is another strategy put forward by Norway.

The conference was closed with a summary by Herman Sundqvist (Swedish Forest Agency) reflecting over the conference day as well as presenting the recommendations of the future work in the Barents Forest Sector network. The chairs summary is found in appendix I in full length.

4.4. Workshop on report: The forest in the emerging bioeconomy in the north

The BFSN also concluded that there is a need for greater knowledge on the forest and bioeconomy in the region. For this purpose, a report was initiated before the conference. During the final hour of the

conference, all participants were welcomed to participate in a workshop on the contents of the report. During the workshop, discussions on topics to include in the report was put forward, together with representation from each country in the Barents region. The plan is to present the report in spring 2020.

5. Excursions October 17

The objective of the excursions was to enable discussions of practical examples of the forest role in the emerging bioeconomy in the region of Västerbotten, visiting companies and universities active in the forest-based sector. A total of 50 persons participated in the excursions. The detailed program is found in attachment III, as well as on www.slu.se/bff2019.

5.1. Bioeconomy in the urban region

This excursion took place in the urban region of Umeå city and discussed the importance of forest innovations importance in the urban regional development. First, the excursion participants visited Komatsu Forest and the production of forest machines. The “Skogstekniska klustret” (a collaboration of local technical forest-related organization) also gave a presentation of the collaboration in the region. The discussion focused on the importance of technical advancement in the development of a biobased society.

Next, the excursion visited the School of Architecture, at Umeå University, to discuss building in wood. Three teachers presented the focus of the architecture school and the bachelor program, to promote building with wood. The visit ended by a presentation of tall-wooden buildings in Umeå by a private company (Rikshem), followed by a visit to one of their newly build apartment complex in Umeå, with a wooden structure.

The excursion ended in the forest, where participants meet “Skogen i skolan” (approx. Forest in School). A brief presentation on their function as a complement to education of children was followed by pedagogic exercises.

5.2. Bioeconomy in the region of Västerbotten

The regional excursion aimed at discussing the local societies and how they face the bioeconomy transformation. Innovation, sustainability, knowledge exchange and forest ecosystem services were in focus. The excursion began by a 45-minute-long bus-ride toward Vindeln, a neighbouring municipality Umeå. The first stop was with the company Vimek who produced small-sized forest machines, discussing technical innovation in a rural area and what challenges that they face, outside the urban area.

Next, the excursion visited a SLU research station, discussing research infrastructure and field experiments. The group discussed among other things, climate research via a high tower equipped sensor. The group then moved to Granö, a society close to Vindeln and a hotel facility called Granö Beckasin discussing ecotourism and the challenges and opportunities of rural area and the closeness to nature.

The excursion ended in Vindeln at the Hotell Forsen with a presentation and discussion on the formation of a biosphere area – the Vindel river – Juhtatdahka biosphere area, that was formed in 2019.

Appendix I – Agenda Barents Forest Forum



Barents Forest Forum 2019

October 15-17, 2019, Swedish University of Agricultural Sciences, Umeå, Sweden

The Barents region in a bio-based future

Welcome to a conference on the multiple-functions the forest plays in a future bioeconomy. Over the course of three days, participants from industry, forest stakeholders, policy, research and development, and education will discuss the forest in a bio-based future in Northern Europe, with a particular focus on the Barents region.

The conference commences with a workshop focused on labour supply, equal opportunities and education. The conference continues with high-level practice-oriented presentations with focus on examples from Finland, Norway, Russia and Sweden. There will be opportunities for networking and practical demonstrations in forest-related excursions. The conference is open to all.

For more information, see www.slu.se/BFF2019.

The Barents Forest Forum is a cooperation platform for forest sector stakeholders in the Barents region and is organized by the Swedish University of Agricultural Sciences and Swedish Forestry Agency as one of the key events during the Swedish chairmanship of the Barents Forest Sector Network.

Program

October 15		
Pre-conference activities		
13.30 – 14.00	Coffee and registration	
14.00 – 18.00	<p>Pre-conference workshop Working for a future forest sector Perspectives of education, equal opportunities, expectations of future employers, and labour supply.</p> <p>Facilitators: Fredrik Johansson <i>Business Director</i> & Filip Hammarberg <i>Designer</i>, Daresay & Lina Arnesson Ceder <i>Project Manager</i>, Swedish University of Agricultural Sciences</p> <p>Introductions by: Camilla Widmark <i>Network coordinator ForBioeconomy</i>, & <i>Head of Department of Forest Economics</i>, Swedish University of Agricultural Sciences</p> <p>Herman Sundqvist, <i>Director-General</i>, Swedish Forestry Agency</p> <p>Ola Carlén <i>Program Director of studies</i>, Swedish University of Agricultural Sciences</p> <p>Bjørn Helge Bjørnstad, <i>Project Coordinator</i>, Forestry Extension Institute, Norway</p> <p>Elin Olofsson <i>Business Developer</i>, SCA</p> <p>Fredrik Gunnarsson <i>Head of the Labor Market Commission Unit</i>, Swedish Forestry Agency</p>	
18.00 – 20.00	Open reception	

Description of workshop

The aim of the workshop is to discuss future forest sector from a labour perspective, emphasising perspectives of young people in the region. Topics that will be covered during the workshop are education (focusing on forest-related education), equal opportunities, expectations on employers and on employees, and challenges of labour supply in the forest sector. The workshop will be led by a facilitator to ensure an interactive and broad discussion between high-level representatives of forest sector, in a broad sense, and young people from the four Barents countries. During the workshop, participants will be given opportunity to share experiences from respective countries and engage in in-depth discussions. The goal is to be able to reach a list of items – challenges and opportunities – that can be used in future work of the Barents Forest Sectors Network. The output from the workshop will also be further discussed during the second day of the conference.

Program Barents Forest Forum 2019

October 16 - Conference	
8.00	Registration
8.30 – 9.00	<p>Welcome session and opening speeches</p> <p>Moderators: Staffan Norin <i>Deputy Director-General, Head of the North Region, Swedish Forestry Agency</i></p> <p>Camilla Widmark <i>Network coordinator ForBioeconomy, & Head of Department of Forest Economics, Swedish University of Agricultural Sciences</i></p> <p>Speakers: Magdalena Andersson, <i>County Governor, County Administrative Board of Västerbotten</i></p> <p>Herman Sundqvist, <i>Director-General, Swedish Forestry Agency</i></p> <p>Göran Ståhl, <i>Dean, Faculty of Forest Sciences, Swedish University of Agricultural Sciences</i></p>
Session I: The forest in the bioeconomy – opportunities of a bio-based society Moderator: Malin Winberg, Moderator and Journalist	
9.00	<p>Keynote: Forest in the bioeconomy transformation – where are we currently, and what opportunities lie ahead of us (tentative title) Sverker Danielsson, Program manager, Mistra Digital Forests, <i>Swedish Forest Industries Federation</i></p>
09:30	Break for coffee
10.00 - 11.00	<p>Country-specific talks of the theme of the session:</p> <p>Finland Tanja Lepistö <i>Project Manager, Smart Arctic Forest Network, Finish Forest Center</i></p> <p>Norway Foods of Norway - from wood to feed Gro Steine <i>Centre Coordinator, Foods of Norway, NMBU</i></p> <p>Russia Natalia Demidova <i>Deputy Director, Northern Forestry Research Institute, SevNIILKh</i></p> <p>Sweden Herman Sundqvist, <i>Director-General, Swedish Forestry Agency</i></p>
11.00	Panel discussion:

Program Barents Forest Forum 2019

	Perspectives on bioeconomy and forests, labour supply, education and equal opportunities.
11.30 – 13.30	Lunch and “walk-about” Two lunch-stations
Session II: The forest in the bioeconomy – challenges and drivers in the transformation Moderator: Malin Winberg, Moderator and Journalist	
13.30	Keynote: Climate change mitigation as driver towards bioeconomy Pekka Leskinen <i>Head of Bioeconomy Programme, European Forest Institute (EFI)</i>
14.00	Country-specific talks of the theme of the session: Finland What is going on in wooden building industry in Finland Anu Nurkkala <i>Project Manager, Finnish Forest Centre</i> Norway Identifying potentials from new forest-based products in Norway Maja Tofteng and Vegard Salte Flatval <i>Senior Economists, Economics Norway</i> Russia Andrei Iugov <i>Head of sector, All-Russian Research Institute for Silviculture and Mechanization of Forestry, VNIILM</i> Sweden Hannele Arvonnen <i>President and CEO, Sveaskog</i>
15.00	Break for coffee
15.30	Panel discussion Panel consisting of high-level representatives of forest sector, together with speakers of session II reflect on the discussions of the day. Representatives Johanna Buchert <i>President and CEO, Natural Resources Institute Finland (LUKE), Finland</i> Frode Lyssandræ <i>Director, Norwegian Ministry of Agriculture and Food, Norway</i> Vladimir Dmitriev <i>Head of Department, Science and International Cooperation, Federal Forestry Agency of Russia</i> Herman Sundqvist <i>Director-General, Swedish Forestry Agency, Sweden</i>

Program Barents Forest Forum 2019

Session III: Conclusions and onwards	
16.00	<p>Barents Regional Council Magdalena Andersson, <i>County Governor, County Administrative Board of Västerbotten</i></p> <p>Staffan Norin, <i>Deputy Director-General, Head of the North Region, Swedish Forestry Agency</i> and Frode Lyssandræ, <i>Director, Norwegian Ministry of Agriculture and Food</i></p> <p>Conclusion Herman Sundqvist, <i>Director-General, Swedish Forestry Agency</i></p>
16.30 – 18.00	<p>Workshop on report “The forest in the emerging bioeconomy in northern Europe” Open workshop for all participants and the purpose is to discuss an outline of a report on forests and bioeconomy to verify content of the report and discuss policy implications. Presentations and discussions lead by the author team: Knut Øistad, Pekka Leskinen, Maria Solokova, and Camilla Widmark</p>
19.30	Conference dinner (Masters of Ceremony, Staffan Norin & Camilla Widmark)

October 17

Practical experiences of bioeconomy and sustainability in Sweden – excursions

Participants choose one excursion. There are two alternatives to choose from, of which one will be translated to/from Russian (Alternative 1).

Alternative 1: LANGUAGE	BIOECONOMY IN THE URBAN REGION English and Russian
	<p>Pick-up at Elite Mimer Hotel, Kungsgaten 75) at 8.00</p> <p>This excursion aims to develop understanding of how the urban area close to Umeå city is considering bioeconomy transformation in their day-to-day activities. We will combine outdoor visits in an urban forest area with indoor discussions on topics like innovation, sustainability, wood building and bioenergy. The excursion will be held in English with translation to/from Russian.</p> <p>Please note that <u>parts</u> of the excursion take place outdoors.</p> <p>Approx. time schedule: excursion starts at 8.00 and ends by 15.15 at airport (and 15.30 downtown).</p>
Alternative 2: LANGUAGE	BIOECONOMY IN THE REGION OF VÄSTERBOTTEN English
	<p>Pick-up at Elite Mimer Hotel, Kungsgaten 75) at 7.45</p> <p>The second excursion focuses on the region of Västerbotten. The aim is to discuss how local societies in connection to the urban area are facing challenges of bioeconomy transformation. Innovation, sustainability, knowledge exchange, forest ecosystem services and wooden buildings are examples of topics that will be covered through visits and short talks on the bus. The excursion starts in the city centre of Umeå and will take us on a journey through forest landscape, passing Vindel River, going back by coastal area of Västerbotten (approx. 250 km). The excursion will be held only in English.</p> <p>Please note that <u>parts</u> of the excursion take place outdoors.</p> <p>Approx. time schedule starts at 7.45 and ends by 17.45 by the airport (and 18.00 downtown Umeå)</p>

Appendix II – Chair’s summary

Education, the future workforce, equal opportunities, Bio economy - Challenges and opportunities

CHAIR'S SUMMARY: THE BARENTS FOREST FORUM 2019
– THE BARENTS REGION IN A BIOBASED FUTURE

Education

Interest to apply for professional level education in forestry is declining. One reason for the declining interest is that the sector does not appear attractive enough to young people because of the lack of competitive employment opportunities compared to other sectors. Educational institutions need to broaden the career opportunities of forest education. To be attractive education programmes need to have a more comprehensive approach, including the input from stakeholders like businesses, research and policy makers. Programmes must also be multidisciplinary in order to tackle global challenges such as climate change.

In order to retain the current workforce and ensure skills are updated and fit to use there is also a need to provide good opportunities for professionals for continuous capacity building.

Recommendation

The BFSN should

Facilitate the sharing of perspectives and knowledge on forest education and capacity building

The future workforce

The forest sector is getting more diversified and multi-sided sector. This offers new opportunities for providing new forest-based services and products. At the same time employment in traditional forestry, focussing on timber production will most likely continue to decline. The existing workforce will be critical for achieving effective and sustainable management of forests. When preparing the workforce for future demands we should consider the current trends with regard to digitalization, new entrepreneurship, seasonality of forest work and the innovative nature of the forest sector.

At the same time the ageing workforce combined with continued urbanization make it both more urgent and difficult to attract the talent needed for the future. Forestry needs to find solutions to retain existing workforce and attract new high potential workers in a more competitive labour market in the future. This requires long-term plans, based on a thorough assessment of current skills and age profiles and identification of current and future skills needs.

Recommendation

The BFSN should

foster increased cooperation in the region to get experience on how to facilitate mapping on future labour needs and to develop strategies to ensure a skilled workforce for the future. This could include data collection, educational programmes etc.

exchange experience on approaches to challenges and solutions with regard to digitalization, entrepreneurship and the seasonality of forest work etc.

Equal opportunities

It has been increasingly recognized that forestry is not about trees and forest but about people. Forestry therefore needs both men and women. Awareness of this fact and of the what contributions women could and should make to forestry is still low among male foresters. Forestry continues to be a “men’s world”, in spite of the progress towards more participation of women that has been made over the last decades, major imbalances persist. Overall the share of women in the workforce continue to be rather low. While there are signs of improvement women are still strongly underrepresented in management and decision making. Women will be needed in the workforce, for the forest sector to be competitive and attract young people to enter the sector. A sustainable sector needs sustainable people.

Recommendations

The BFSN should

- promote the collection of data and case studies into specific aspects of women’s involvement in forestry
- disseminate information about national experiences, in particular successful measures and good practices to foster equal opportunities including gender, age, nationality etc,

Forest bioeconomy - Challenges and opportunities

The Barents region is a stronghold for forest-based innovations and technical development in many sectors, for example food, medicine, construction etc. Bioeconomy provides us with the opportunities to develop these sectors. Further development has the potential to contribute to solutions for major global issues.

To seek consensus between environmental, economic and social aspects and increase the understanding of trade-offs between these is a prerequisite to advance the transition. Forest will make an important contribution but will not be enough for every purpose. We need more scientific evidence on the role of forest in the transition to a circular bio economy, including its role in climate change mitigation.

There is need to improve the awareness of what forest can contribute in terms of new products, services and solutions. Hence there is a need to shift focus away from bioenergy alone.

Digitalisation is a game changer as it offers new tools to improve efficiency in the forest value chains and may also open avenues for the development of new products, services and jobs.

Recommendation.

The BFSN should

Raise awareness and facilitate exchange of experience and cutting-edge technology and solutions

Foster science/policy dialogues in its activities for example by increasing cooperation with relevant research networks.