

Strategy plan 2018–2021

Nordic Forest Research (SNS)





Nordic Forest Research Strategy Plan

Nordic Forest Research (SNS) is a co-operating body under the Nordic Council of Ministers that strives to enhance benefits for the Nordic region and contribute to a sustainable society.

For the period 2018–2021 emphasis will be placed on the following strategic areas:

- Meeting the demands of sustainable forest management in a growing bioeconomy.
- Maintenance and increased utilisation of ecosystem services.
- Climate change adaptation and mitigation.

Five main tools will be used to address the strategic focus areas:

- Promoting and **funding** forest research collaborations and networking activities.
- Improve **gender equality and social inclusion**, ensuring that equality becomes a regular feature of work in the Nordic forest sector.
- Strengthen forest research and interdisciplinary **collaborations** in Nordic, as well as Nordic Baltic, European and international contexts.
- Provide **policy advice** to the Nordic countries and the Nordic Council of Ministers based on forest research.
- **Communicate** reliable, relevant and current research results and policy advice to other identified target groups.



TABLE OF CONTENTS

Nordic Forest Research	2
1 Introduction	4
1.1 Challenges for the forest sector from a Nordic perspective	4
1.2 Nordic Forest Research today	4
2 Vision and mission	5
3 Strategic focus areas	5
3.1 Strategic framework	5
3.2 Strategic focus areas of SNS for 2018-2021	7
4 Toolbox	9
4.1 Funding	9
4.2 Equality and social inclusion	9
4.3 Collaboration	10
4.4 Policy support (advice)	10
4.5 Communication	11
5 Results by 2021	11
Supporting material	13
Abbreviations	13



1 INTRODUCTION

1.1 Challenges for the forest sector from a Nordic perspective

Nordic forests span large geographical areas, and thus also cover a vast range of environmental conditions. Consequently, the make-up of the forests and forestry practices also vary, but there are long traditions of mutual respect, collaborative research and a commitment to sharing knowledge among Nordic foresters and forest researchers. The key components of SNS's mission are to encourage, coordinate and enhance Nordic research efforts, to raise the international profile of Nordic forest research, and to actively participate in European forest policy and research. The Nordic forest sector faces great challenges, but also exciting new opportunities. Increasing globalization, new international framework conditions, climatic and environmental changes, growing demands for biomass as a renewable resource and a focus on a development towards a sustainable bioeconomy with a circular economy approach are all imposing needs for greater knowledge and novel approaches. It is also essential to confront the economic challenges facing forestry by strengthening its competitiveness through research and innovation, not only in the Nordic region but in the Baltics and across Europe as well. These challenges are creating both threats and new possibilities for diversifying the forest product and service portfolio.

1.2 Nordic Forest Research today

Nordic Forest Research (SNS) is a co-operating body under the Nordic Council of Ministers that has been a unifying factor in Nordic forest research since its establishment in 1972. Its main objectives are to advance research in multiple, sustainable uses of forests and assist in counselling the Committee of Senior Officials for Fisheries and Aquaculture, Agriculture, Food and Forestry (ÅK-FJLS) and the Nordic Council of Ministers (NMR) regarding issues related to forests and forest research. SNS initiates and coordinates cooperative forest research activities, and contributes to benefits for the Nordic society and political cooperation both in the Nordic region and in neighbouring areas, by supporting networking and creating arenas for knowledge exchange about forests and forest management. SNS strives to create Nordic synergy within forest research, promote the development of new research fields, and strengthen the Nordic region's role in European and international research efforts. Furthermore, SNS continuously assesses the need for new research initiatives to address current issues, emerging challenges and future opportunities.



2 VISION AND MISSION

The Nordic region is an internationally leading region for research and cooperative initiatives addressing the multiple dimensions of sustainable forestry and use of forest resources. Nordic Forest Research's (SNS) mission is to enhance Nordic benefits and contribute to a sustainable society.

3 STRATEGIC FOCUS AREAS

3.1 Strategic framework

The strategic frameworks for identifying SNS's strategic areas have been based on the Nordic Council of Ministers co-operation programme for Fisheries and Aquaculture, Agriculture, Food and Forestry (FJLS co-operation programme), which outlines the two main Nordic political priorities for 2017-2020: developing the Nordic bioeconomy and sustainable food systems. It contributes to resolving challenges agreed on in the United Nations Global Sustainable Development Goals (SDGs) (Figure 1).



Figure 1. The 17 sustainable development goals of the United Nations.

The FJLS co-operation programme points out the following areas as most important for the Nordic collaboration: (1) sustainable management of biological resources; (2) increased resilience and reduced impact of primary production on climate; (3) one health, healthy animals and animal welfare; (4) healthy, secure food and good food habits; (5) innovation-promoting agencies and development of new products and services; (6) labelling systems and accredited production; and (7) diversified rural economies. In addition to the FJLS co-operation programme, the Nordic Forest Solutions (NFS) (Table 1) has been used for identifying the focus areas of SNS. In 2016, NMR established NFS as a strategy for the region and for their forthcoming work. NFS builds upon the Selfoss Declaration from 2008 and highlights the important challenges and promotes the solutions that forests can provide. Forests, and the associated various ecosystem services* are important parts of the solution to multiple goal challenges set up by the forestry ministers of the Nordic countries. The NFS emphasises the following policy areas as especially important for Nordic collaboration within forestry; (1) increased use of sustainably produced wood - drive towards bioeconomy; (2) reinforced social values; and (3) increased use and conservation of biodiversity.

*timber and wood related products, energy, biodiversity, climate change and adaptation, recreation and human health.

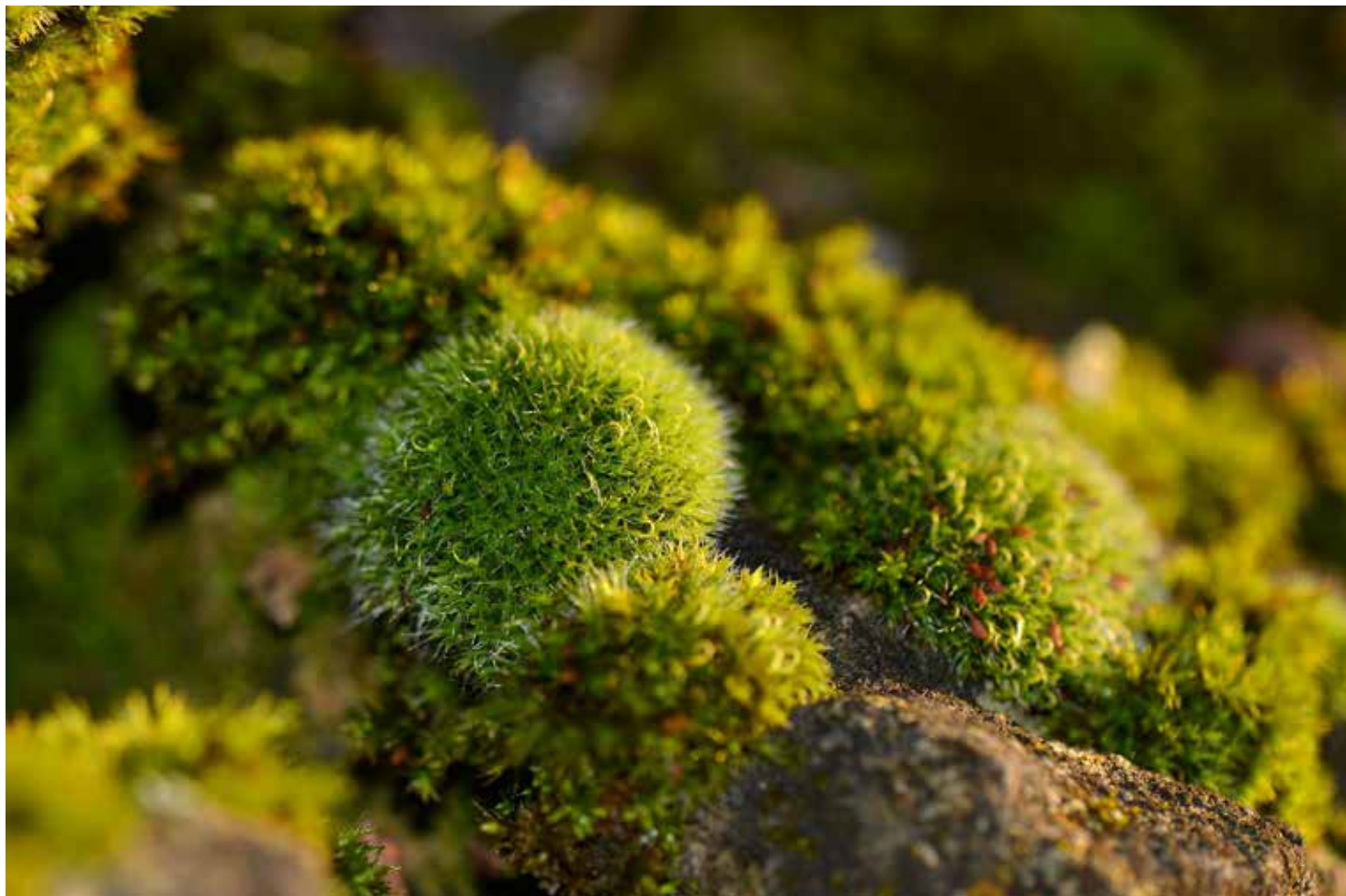


Table 1. A matrix from 'Nordic Forest Solutions' (NFS), highlighting challenges and contributions within the policy area goals pointed out in NFS, where the Nordic countries should aim to strengthen collaboration. Forest services are linked to relevant policy areas which can be used to help fulfil the policy area goals.

Nordic Forest Solutions

Ecosystem services		Policy Area I Increased use of sustainably produced wood – drive towards bioeconomy	Policy Area II Increased social benefits	Policy Area III Increased use and conservation of biodiversity
	Timber and wood-related products	<ul style="list-style-type: none"> • Effective biomass production in healthy and productive forests • Increase the use of sustainably produced wood in buildings and constructions • Stimulate innovative products from wood biomass 	<ul style="list-style-type: none"> • Stimulate jobs and spin-offs in rural areas 	<ul style="list-style-type: none"> • Forestry with high biodiversity • Knowledge-based management decision
		Develop and apply sustainable forest management methods Balanced approach to production and protection Attract young people to secure future competence		
	Energy	<ul style="list-style-type: none"> • Minimise the use of fossil fuel • Increase the use of sustainably produced wood-based energy 	<ul style="list-style-type: none"> • Better access to renewable energy • Local sourcing and production 	<ul style="list-style-type: none"> • Ensure balance between biomass removal and biodiversity conservation • Grow productive species without threat to biodiversity
		Sustainable wood-based energy as a part of the energy mix Resource efficiency		
	Biodiversity	<ul style="list-style-type: none"> • Bioprospecting (discover and commercialise new products based on biological resources) • Genetic diversity 	<ul style="list-style-type: none"> • Education and communication on the importance of biodiversity in forests 	<ul style="list-style-type: none"> • Safeguard biodiversity at all levels (genetic, local (α), diversity of habitats (β)- and landscape (γ))
		Combine protected and multi-purpose forests Contribute to international processes and goals for biodiversity		
	Climate change mitigation and adaptation	<ul style="list-style-type: none"> • Active forest management, develop forest resources and harvest wood products 	<ul style="list-style-type: none"> • Underline the potential and role of forests 	<ul style="list-style-type: none"> • Use biodiversity to ensure adaptation
		Advocate active and climate-smart forest management for mitigation and adaptation		
	Recreation/human health	<ul style="list-style-type: none"> • Contribute to healthier environment 	<ul style="list-style-type: none"> • Healthy forest within accessible distance • Green care • Urban forestry • Outdoor learning 	<ul style="list-style-type: none"> • Health products and bioactive substances • Landscape biodiversity
Institutional Capacity		Multi-purpose forests Right of public access		
		<ul style="list-style-type: none"> • Research and development • Innovation • Forest information • Forest data • Social capital • Forest law enforcement and governance • Dialogue processes 	<ul style="list-style-type: none"> • Cooperation models • Gender equality • Dialogue processes 	<ul style="list-style-type: none"> • Research and development • Innovation • Forest data • Forest information • Dialogue processes
		Aim at high institutional capacity Nordic social model (inclusive, participatory processes) Maintain robust long-term research Reliable and extensive data readily available National forest programmes		





3.2 Strategic focus areas of SNS for 2018-2021

The NFS, the co-operation programme and the SDGs are used as frameworks for the activities of SNS during the period. However, the following focus areas are especially important for the activities of SNS:

- Meeting the demands of sustainable forest management in a growing bioeconomy
- Maintaining and increasing utilisation of ecosystem services
- Climate change adaptation and mitigation

The SNS focus areas are well in line with many of the important challenges and strategies outlined in the NFS, FJLS co-operation programme and the SDGs. SNS highlights focus areas that are addressing the development of sustainable forestry adapted to meeting the demands in a growing bioeconomy, as well as maintaining and increasing the value of ecosystem services. Under the influence of climate change, smart solutions to mitigate the negative effects of changed environmental conditions will be of utmost importance. Other global challenges that will be increasingly important include increased consumption, urbanization, migration and digitization. Sustainable forest management methods must be developed, not only to increase biomass production or to preserve, and in some cases, restore biodiversity, but also to reinforce social benefits and to maintain and enhance ecosystem services derived from forests.

Facing climate change, it is important to obtain and manage forest ecosystems with the aim of increasing their resilience to a future of amplified biotic and abiotic stressors. In addition, SNS has a significant role to play for the Nordic collaboration and in the construction of institutional capacity within research and knowledge dissemination regarding forestry and the development of products and services. There are five main tools, each with several components, to address the three strategic focus areas of SNS during 2018-2021 (Table 2).



4 TOOLBOX

Strategic initiatives are essential for meeting the challenges faced by, and emerging opportunities for, the Nordic forest sector. These initiatives should build on research networks in the forest sector and both Nordic and European interdisciplinary cooperative activities. For these purposes, SNS will extend its position as a network-based organization with a highly scientific profile, and enhance connections between researchers, developers, compilers of information and policy-makers within the forest sector. In

Table 2. Plan for addressing SNS's strategic focus areas

Focus Areas of SNS			
		Meeting the demands of sustainable forest management in a growing bioeconomy	Maintenance and increased utilisation of ecosystem services
Tools	Funding	<ul style="list-style-type: none"> Funding research networks, projects, CARs with emphasis on the strategic focus areas. Funding PhD level education within the overall area of responsibility. Support collaborations in strategic research with the Nordic region's neighbouring areas, around the Baltic Sea and countries to the west and northeast. Fund specialization and division of work to optimize Nordic research and thus maximize Nordic benefit. 	
	Equality and social inclusion	<ul style="list-style-type: none"> SNS will actively work to improve equality in all aspects of its work. SNS will make gender equality a regular feature of work in the Nordic forest sector. All activities supported by SNS, as well as the board and the secretariat, are expected to achieve gender ratios within 40/60%. SNS promotes the participation of researchers of different nationalities in the networking activities. 	
	Collaboration	<ul style="list-style-type: none"> Coordinating and actively participating in macro-regional and European projects within the strategic focus areas. Being an initiator and stakeholder in Nordic inter-sectoral initiatives within ÅK-FJLS and the environmental sector, influencing orientations of important research initiatives. Initiating collaborative activities with the Nordic region's neighbours to the west and northeast, arctic efforts, and within the EU Strategy for the Baltic Sea Region (EUSBSR). Actively participating in cooperative European research initiatives (ERA-NET and others) and promoting the development of SNS-financed projects and networks into EU projects. Collaborating with EFINORD in the establishment and maintenance of northern European research networks (EFINORD-SNS networks) and projects within the EUSBSR. Collaborating with NKJ in creating and maintaining cross-sectoral networking activities (NKJ-SNS networks) within forestry and agriculture in a Nordic setting. Cooperating with NordGen Forest to encourage education and knowledge exchange within forest genetic resources in the Nordic countries (NordGen Forest-SNS scholarships). 	
	Policy Support/ Advice	<ul style="list-style-type: none"> Disseminating relevant, current and reliable results from activities funded by SNS and others to decision makers, thereby contributing to the development and implementation of sound policies, declarations, and other initiatives concerning sustainable forest management. Initiating politically relevant statements regarding strategic focus areas and new emerging themes. Participating in hearings, strategic arenas and agenda-setting fora for forest policy in the Nordic region. 	
	Communication	<ul style="list-style-type: none"> Developing existing and new meeting points for communication online, thus making SNS more widely known. Disseminating information about SNS activities and research results in appropriate formats for stakeholders within research, industry, and policy-making communities through conferences, websites, publications and social media. SNS will actively emphasize different aspects of equality and its importance for the Nordic forest sector in its communication activities. Organizing seminars, conferences and similar fora for gathering stakeholders, discussing trends, and identifying new values, products, and a Nordic identity within forestry. Developing the collaboration with, and dissemination of, the two SNS-supported scientific journals. 	



addition, SNS will strive to consolidate its position through interactions with other stakeholders within ÄK-FJLS. As described below, five main tools are (and will be) used to achieve these goals: funding, equality and social inclusion, collaborations, policy support or advice and communication.

4.1 Funding

Funding research networks, projects and Centres of Advanced Research (CARs) is a fundamental component of SNS's activities. The funding is primarily intended to foster Nordic benefits and synergies within forestry related research fields. The funding is also intended to promote cooperation between forest researchers in interdisciplinary activities for strengthening a cross-sectoral approach to future challenges. SNS will prioritize funding of activities aiming at decreasing the gap between research and applied forestry, facilitating the transfer of knowledge into practice.

4.2 Equality and social inclusion

The Nordic identity as an equal society is a challenge for the forest sector, and an important one since it can strengthen the Nordic identity of a modern society. Diversity regarding gender, culture, age, disciplines and hence experiences, can contribute to research in many ways. Innovative and well-functioning organisations with ability to recruit competence from the whole labour market, i.e. both men and women, all nationalities and ages, are essential for current and future competitiveness. Competitive forestry in the Nordic countries is of utmost importance for the development of a sustainable bio-economy and will inevitably enhance green growth. Gender aspects are a special issue within the field of equality and can serve as a model for the work with basic human values and rights. The work with gender has been shown to spill over into other equality aspects and will eventually result in a more creative and healthy work environment. The forest sector is generally conservative and traditional with male domination and a great equality improvement potential. SNS wants to involve people with all kinds of competences and backgrounds in research for a sustainable forestry and bioeconomy. An equal sector will be more attractive, competitive and will simplify social inclusion and integration of new citizens in the Nordic countries, as well as native and urbanized citizens with limited interaction with primary production. In order to contribute to a better use of human resources and increased attractiveness of the forest sector, SNS expects the Nordic collaboration activities to address this in all actions supported by SNS. SNS will actively work to improve equality and social inclusion, ensuring that equality becomes a regular feature of work in the Nordic forest sector.





4.3 Collaboration

SNS will work to strengthen collaborations that generate results and synergies that cannot be obtained by national efforts. An important goal is to maintain and enhance key characteristics, which include flexibility, coordination and long-term continuity. SNS will strive to maintain its effectiveness as a non-bureaucratic, highly professional organization. SNS will also increase the dialogue between different sectors. SNS will continue to support and coordinate research-based education in forests and forestry in the Nordic region, in collaboration with the Nordic Forestry, Veterinary and Agricultural University Network (NOVA). SNS will extend collaboration with a number of Nordic and North European research stakeholders and institutions, including North European Regional Office of the European Forest Institute (EFINORD), Nordic Joint Committee for Agricultural and Food Research (NKJ) and Nordic Genetic Resource Centre (NordGen). SNS will also continue to work actively within the EU Strategy for the Baltic Sea Region (EUSBSR) framework, advance Nordic and Baltic forest research, and enhance collaboration with neighbours of the Nordic region to the west, northeast and in the Arctic region. On European and international levels, SNS will continue to coordinate Nordic interests in EU framework programs, participate in relevant European Research Area Networks (ERA-NETs), and maintain continuous contact with relevant international organizations, such as the International Union of Forest Research Organizations (IUFRO) and the International Boreal Forest Research Association (IBFRA).

4.4 Policy support (advice)

A major part of the SNS mission is to link research and policy and to provide sound, policy relevant information to the Nordic countries and the Nordic Council of Ministers based on results from forest research, as well as from targeted statements. Maintaining visibility to officials and politicians, for example by arranging meetings and excursions, is essential. SNS also provides an arena for researchers and politicians to exchange views and ideas. Research findings with practical implications are communicated to decision-makers and officials in clear, targeted formats. Furthermore, SNS assists ÅK-FJLS and NMR by providing advice regarding issues related to forests and forest research, it creates awareness about current forestry issues, and suggests new priority areas for Nordic cooperation. Efforts will be made to maintain, and enhance, all of these activities in the coming years.

4.5 Communication

SNS promotes knowledge about sustainable forest management in the Nordic region and has a particular responsibility to communicate research results and policy advice to relevant target groups, including collaborating Nordic researchers, decision-makers, industrialists, and relevant authorities. SNS facilitates communication between researchers and policy-makers by providing numerous meeting places and information pipelines, including its funding of networking activities, but also through its web-site, newsletter and in social media. Furthermore, SNS should actively communicate the importance of



different aspects of equality within forestry. SNS has strong communication platforms in its two internationally established scientific journals (Scandinavian Journal of Forest Research and Wood Material Science and Engineering), which provide high-profile publishing outlets for Nordic researchers. SNS uses 'Policy Briefs' as a tool for communicating research outcomes and network activities on a popular scientific level to the public and the Nordic Council of Ministers. These briefs are excellent to spread research activities and results to a broad public audience.



5 RESULTS BY 2021

This section describes indicators that will be used for evaluation of the impact of SNS support and activities, which in turn is used in annual planning and future strategic work. In order to evaluate the integration of research and synergies for the Nordic forest sector three indicators have been identified.

5.1 Nordic participation

Projects initiated in the Nordic countries

Developing the Nordic bioeconomy through co-operation is one of the main goals of ÅK-FJLS co-operation programme and should therefore permeate all activities within SNS.

Goal:

- SNS will actively take part in Nordic inter-sectoral initiatives within ÅK-FJLS and the environmental sector, to promote sustainable economic growth in line with the SDGs.
- SNS will initiate and maintain cooperation with other organisations through supporting networks and research projects.

Projects outside of the Nordic region

SNS will promote joint Nordic forestry projects on relevant European and international levels to increase Nordic involvement and impact on international arenas.

Goal:

- SNS will work for bridging gaps between relevant European and Nordic projects by actively taking part in relevant ERA-NETs, maintaining contact with IUFRO, IBFRA and developing the EU strategy for the Baltic Sea Region (EUSBSR).



5.2 Export of Nordic based knowledge

Seminars, conferences, workshops

SNS aims at being a key facilitator of knowledge transfer within the Nordic countries for forests and cross-sectoral forestry related issues, with an emphasis on SNS focus areas. This is primarily achieved through funding of activities that strengthen the Nordic knowledge transfer infrastructure in the form of seminars, conferences and workshops.

Goal:

- Increased number of applications to all calls compared to the strategy period 2013-2017.
- SNS will be a key partner for interlinking projects initiated in the Nordic region.
- SNS will promote funding of networks aimed at integrating Nordic forest research with its European counterparts.

Improved dissemination of SNS funded research results

SNS will work to increase knowledge about SNS among Nordic forest researchers. SNS will deliver accurate and disseminated results of SNS funded projects to the Nordic Council of Ministers, Nordic citizens and to other policy makers.

Goal:

- All scientific results and publications in peer-reviewed papers from activities funded by SNS will be accessible on the SNS web page. The SNS web page will also present results from all funded activities in a popular scientific manner.
- SNS will be present in relevant social media and continuously work to disseminate SNS funded results and integrate people outside of the forest sector with information related to the focus areas.
- SNS will work to increase media attention about SNS activities by supporting projects with infrastructure such as press releases, dissemination of information and information material for seminars, conferences etc.



5.3 Development of Nordic forest research

Equality

To contribute to the Nordic identity as an equal society SNS will prioritize funding of activities dealing with different aspects of equality within forestry.

Goal:

- Make the Nordic forestry sector gender equal and to meet 40-60% gender equality.
- Increase diversity of applicants regarding nationality, disciplines and experience both from academia and stakeholders.

Educating and connecting PhD-students

Knowledge transfer to younger generations is key to progression over time, it is therefore a priority for SNS include young researchers in all funded activities.

Goal:

- At least 20% of the participants in all funded activities should be PhDs/ young researchers (researchers in the first 10 years of their research activity).
- SNS will fund at least two PhD courses within the NOVA-network per year.

Research and practice

SNS will prioritize funding of activities aiming at decreasing the gap between research and applied forestry, facilitating the transfer of research results into practice.

Goal:

- SNS supports applied research to a higher extent than during the period 2013–2017, in order to decrease the gap between research and applied forestry.



SUPPORTING MATERIAL

[ÅK-FJLS Co-operation Programme 2017-2020](#)

[Nordic Forest Solutions Roadmap](#)

[United Nations Sustainable Development Goals](#)



ABBREVIATIONS

CAR	Centre of Advanced Research
EFINORD	North European Regional Office of the European Forest Institute
ÅK-FJLS	Committee of Senior Officials for Fisheries and Aquaculture, Agriculture, Food and Forestry
ERA-NET	European Research Area Network
EUSBSR	EU Strategy for the Baltic Sea Region
IBFRA	International Boreal Forest Research Association
IUFRO	International Union of Forest Research Organizations
NEF	Nordic Energy Research
NFS	Nordic Forest Solutions
NKJ	Nordic Joint Committee for Agricultural and Food Research
NMR	Nordic Council of Ministers
NordGen	Nordic Genetic Resource Centre
NOVA	Nordic Forestry, Veterinary and Agricultural University Network
SDG	United Nations Global Sustainable Development Goals
SNS	Nordic Forest Research

SNS Nordic forest Research is financed by



**Nordiska
ministerrådet**

