# Norwegian Forests



### Policy and Resources

#### Introduction

Norway's 4.5 mill people have a rich tradition of exploration, literature and fine arts related to forests, flowing from an exceptional interest in and respect for forests and natural environments. Stretched along the western side of the Scandinavian Peninsula, approximately one fourth of Norway's land lies north of the Arctic Circle.

In accordance with ancient rights of access, Norwegians are free to enter the private forests of others as long as they do not harm the forest or the land. The primary activities in these areas are hiking, cross-country skiing, and picking mushrooms, flowers, or wild berries.

Forest and other wooded land cover 39 per cent of the land area in Norway. Over the last 50 years, the annual volume of timber har vest ed has varied between 7 and 11 million m<sup>3</sup>, with a downward trend the last ten years. The forest sector contributes about 1.1 per cent of GDP, 1.6 per cent of the employment and 8.6 per cent of the export value not including oil and gas. Approximately 88 per cent of the forest area is in private ownership, divided among more than 120 000 properties. A wide range of measures, including legislation, taxation, economic support schemes, research, extension services, and administrative procedures are employed in implementing the forest policy. The Forest and Forest Protection Act from 1965, with amendments – most recently in 1997 – is the main legal framework for sustainable forest management in Norway.

The use of policy instruments in the forest sector is currently changing. Emphasis is put on the measures connected to the Norwegian Forest Trust Fund, which is private funds administered by the local forest authorities for long term investment in sustainable forest management. Expansion of the forest area is no longer a political goal: the existing forest area is to be the basis for future wood production. The scope of economic incentives is widened. Priority areas include the development of markets for bio energy and support to activities that stimulate the demand for wood products through better communication between different actors, information and product development.

The current national forest programme in Norway is referred to as the sum of policy activities including a white paper on forest policy, endorsed by the Parliament in 1999, county forest strategies and the government supported Living Forest Project in 1995-1998, as well as other policy and stakeholder activities. Due to developments in forest products markets, current changes in national forest policy, international requirements and other developments with influence on the forest sector, a new national forest programme process will be initiated. The preparatory phase alread y launched includes assessment on how elements and principles for national forest programmes, as defined by the Intergovernmental Panel on Forest, are reflected in recent and existing forest policy processes. The implementation of other forest related international commitments will also be included in the process.





### Forest legislation

Norway is currently preparing a new forestry act. It is expected that the environmental regulations will be updated based on new knowledge, especially within the field of biodiversity. Furthermore, it is a goal to improve the forest legislation with regard to application and enforcement, through simplification of the existing legislation. Results and guidelines from the international forest policy dialogue, in particular the United Nations forest process (IPF, IFF, UNFF) as well as the Ministerial Conference on the Protection of Forests in Europe (MCPFE) constitute an important basis for the new act. A committee with members representing forest owners, forest industry, employer- and labour interests as well as environmental NGOs has provided guidance to the Ministry of Agriculture through a transparent process.

The current forest legislation originally dates back to 1965, but has been amended and modernised several times since, most recently in 1997. Its main objectives are to promote forest production, afforestation and the protection of forest land while promoting the functions of forests as environment for plants and animals and as a source for recreation, hunting and fishing. The Forest Act applies to all categories of ownership, and is based on the fundamental principle of freedom with responsibility for the individual forest owner. The provisions include principles related to environmental and recreational considerations, forest road construction, forest management in areas of particular ecological value, protective functions, and the Forest Trust Fund.



### Wood promotion and bioenergy

In 2000 the Government launched a 5-year development programme aimed to increase the degree of domestic processing and use of wood products. The programme seeks to create conditions that promote wood as an environmentally friendly material with a wide range of applications and tap into the positive consumer attitude towards wood. Focus is also on the necessity to improve communication along the value chain from forest to market. The programme is established as a partnership between the public and the private sector. Forest owners and forest industry are practically and financially involved in the program in order to ensure successful implementation. C oncret e activities and projects are developed and several of these are now in the course of implementation.

It is an objective to increase the efficient generation and use of bio-energy from sustainably managed forest resources. The aim is to reduce the use of fossil fuels and to provide a basis for better utilisation of forest resources.





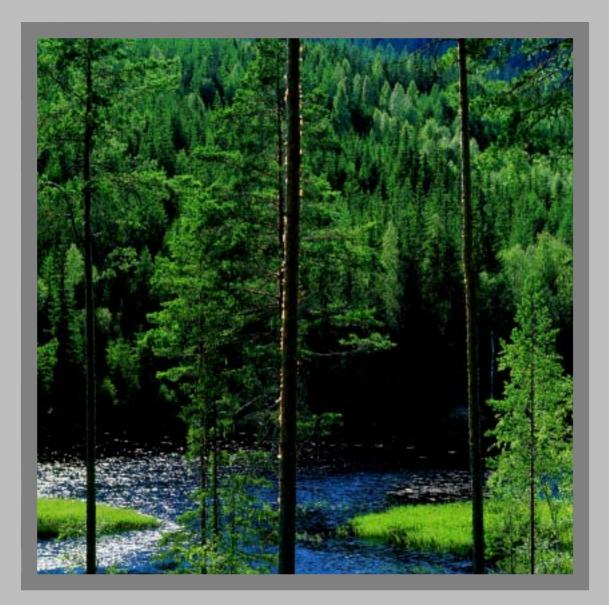
### Biodiversity

The project «Biodiversity in Forests», initiated in 1997, was mainly aimed at improving knowledge of forest biodiversity and achieving a better scientific basis for managing biodiversity in Norwegian forests. During 1997-2000 the project carried out extensive investigations on the distribution patterns and forest habitats of different organisms. The project was carried out by the Norwegian Forest Research Institute (*Skogforsk*), in coop eration with more than 100 colleagues from other research institutions, universities and forest inventory institutions.

Based on the project's results, a specific recording methodology has been developed, which can be incorporated into existing forest management planning systems.

The project has generated extensive knowledge, which will have an effect on future efforts within the forestry sector. For example, it has been shown that values associated with biodiversity are spread throughout the forested areas. Thus, the attempts at preserving a large share of biodiversity-related values in relatively small areas by defining key habitats may have a rather limited effect.





### Forest gene resources

Norway has only 19 native tree species, mostly broadleaves. The only native conifers are Norway spruce, Scots pine, yew and juniper. The forests are dominated by Norway spruce (*Picea abies*), Scots pine (*Pinus sylvestris*) and birch (*Betula pendula* and *Betula pubesœns*) and the commercial forestry is mainly focused on spruce and pine. Locally there are some demand for other species for the production of furniture and other special products.

The genetic resources of forest trees are mainly conserved *in situ* in nature conservation areas. *Piœa abies*, and to some extent *Pinus sylvestris* and *Picea sitchensis*, are also conserved *ex situ* in seed orchards and clone archives.

A national committee (Forest Gene Resource Committee) primarily aimed at providing guidance in forest gene resource management was established in 2001.



11



### Forest research

Forest research in Norway is conducted at different universities and institutions around the country. The two main actors are the Agricultural University of Norway and the Norwegian Forest Research Institute.

The Ministry of Agriculture provides most of the funding for forest research, while university education is organised under the responsibility of the Ministry of Education and Research. The Research Council of Norway plays a vital role in developing and implementing the country's national research strategy. It acts as a government adviser, a funding agency, and a co-ordinator of research.

The total allocation of public funds to forest research including forest industry research is estimated at 100 million NOK (about 15 million EURO) in 2002. Private funding to forest research carried out by universities and research institutions amounts to about 50 million NOK (about 7 million EURO), most of this research and development is carried out with support from the forest industry.

A part of the research is organised in R&D programmes, the two main programmes financed by the Ministry of Agriculture is a Wood development and innovation programme and a forest research programme covering environmental, economic and social aspects of forest management.



### An asset for the public

There is year-round access for the general public to non-cultivated land in Norway. Free access is an ancient public right, and has since 1957 been stated by law. Motorised recreational activities are generally prohibited off road.

A lot of people use the forest for recreational activities, both traditional and modern. The public has a right to walk anywhere in forests, berries and mushrooms may be picked, and dry wood may be collected for campfires during the period mid-September to mid-April.

There is a widely distributed web of marked walking-paths as well as prepared tracks for cross-country skiing to be used free of charge.

Hunting and fishing are important activities for a large number of people. Hunting and fishing rights are the property of the landowners. Fishing licenses are available, to some extent also hunting licences.



15



### Capacity-building and documentation

#### **Criteria and indicators**

A national set of criteria and indicators for sustainable forest management was developed in 1998. A broad range of stakeholders representing economic, environmental, social and cultural interests contributed to the result.

#### Certification

The ISO 14001 certification system in combination with the national forest performance level standards is applied to practically all commercial forestry in Norway. The system is accepted under the Pan European Forest Certification umbrella system and endorsed by the Pan European Forest Certification Council.

As long as the ISO 14001 system is accepted by the forest industries, there has been low interest among forest owners for developing or adapting to other certification systems.

There have been a few disputes over forestry practices in certified areas, also resulting in one suspended certificate. This might indicate that the certification system fulfils its functions.

#### Capacity-building and competence

A lot of efforts have been made to improve the competence of forest owners on sustainable forest management and forest certification. Focus has been on the forest performance level standards and on how to implement and apply them. By spring 2003 approximately 20 000 forest owners have been educated in these topics.



### The forest sector in general

Norway has long traditions in forestry and forest management, and for using wood in constructions and houses and as a source for energy. International trade has been a major element in the Norwegian forest sector since the first sawmills where established more than 400 years ago.

Approximately 88 per cent of the forest area is in private ownership, divided among about 120 000 properties. The majority of the forest holdings are farm- and family forests. Due to the ownership structure and specific terrain conditions, Norwegian forestry is diversified and characterised by small-scale operations/activities. The average size of clear-cuttings are estimated to be 1.4 hectares. Approximately 80 per cent of the harvesting is fully mechanised.

Due to a high demand for forest products, the annual removals exceeded the annual increment by the end of the 19<sup>th</sup> century. Once this situation was analysed, measures were introduced to restore the forest resources. At present, there is about twice as much standing volume in Norwegian forests as there was 80 years ago. The annual removal is less than 50 per cent of the total annual increment.

The forest industry used to be dominated by small-scale businesses. This is still partly the situation within the sawmill industry, but pulp and paper production has been heavily centralised during the last 30 years.



### Forest protection

There are several categories of protected forest areas in Norway.

National parks Forest reserves Administrative protection by Norwegian State Forests

#### **Protected areas**

Forest and other wooded land cover a total of 12 million hectares.

226 000 hectares, approximately 2 per cent of the total area, is protected through a network of strictly protected areas.

Forest protection is high on the political agenda, and it is expected that the area of protected forest land will be expanded the coming years.

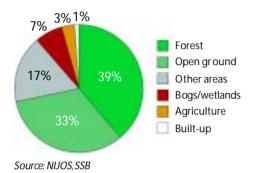
#### **Protective forest**

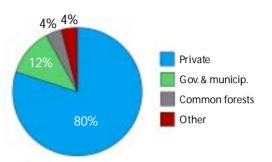
Protective forests cover approximately 3 million hectares, or 25 per cent of the forested area. The main function of these forests are to protect other natural resources and infrastructure against natural hazards and extreme climate conditions, as well as to protect soil and water. Harvesting within the defined limits of the protective forests is subject to special regulations.

## Facts and Figures

#### Land-use categories in Norway

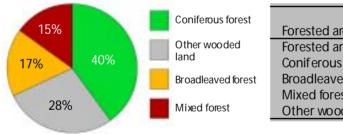
Per cent of total land area





**Forest ownership** 

#### The forested area of Norway



ŀ	Area, km²
Forested area & other wooded land	120.000
Forested area	87.000
Coniferous forest	49.000
Broadleaved forest	20.000
Mixed forest	18.000
Other wooded land	33.000

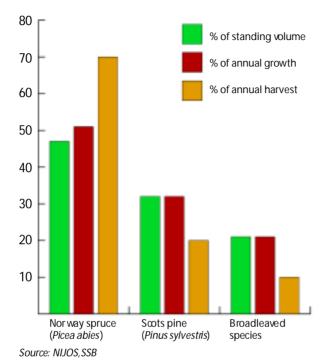
Source: NIJOS

#### Status for forest certification, ISO 14001

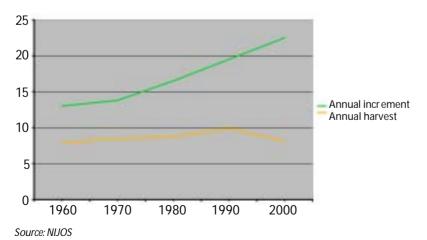
Number of forest owners	Total certified forest area (hectares)	Amount of certified timber (m <sup>3</sup> )
49.445	9.352.000	6.264.000

Source: PEFC Norway

#### **Distribution of tree species**



#### Annual increment and harvest, million m<sup>3</sup>



23

### Useful web addresses

Governmental www.odin.dep.no

Research www.skogforsk.no

Environmental information www.miljostatus.no Geographical information www.statkart.no

Statistics www.ssb.no www.nijos.no Forest certification www.levendeskog.no www.pefcnorge.org

Recreational information www.dirnat.no



