Norwegian Forests

Policy and Resources
Forestry in Norway

Norway has long traditions in forestry and forest management, and for using wood in construction and as a source of energy. Sawn wood and round wood have been important exports for more than 500 years. During the 20th century, pulp and paper have become the most important forest products for export.

Stretched along the western side of the Scandinavian Peninsula, approximately one fourth of the surface area of Norway lies north of the Arctic Circle. The long coastline has an Atlantic, humid climate, while the inland climate is continental.

Forest and wooded land cover 12 million hectares and constitute 38 per cent of the land area in Norway. The most important species are Norway spruce (47 per cent), Scots pine (33 per cent) and birch (18 per cent). Approximately 90 per cent of harvesting is fully mechanised.

Approximately 88 per cent - that is 120,000 properties - of the forest area is privately owned. 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 activity. The average size of clear-cuttings is estimated to be 1.4 hectares.

During the last 80 years the annual harvest has been considerably lower than the annual increment, resulting in both growing stock and annual increment exceeding twice the level documented by the first National Forest Inventory in the 1930’s. The annual increment in Norway is now 25 million m³. Under sustainable forest management, there is a potential to increase the annual harvest level significantly.
Policy Instruments for Sustainable Forest Management

A wide range of measures, including legislation, taxation, economic support schemes, research, extension services and administrative procedures, support the implementation of forest policy.

The current Forestry Act was authorized by the Parliament in 2005 and came into force in 2006. Its main objectives are to promote sustainable management of forest resources with a view to promotion of local and national economic development, and to secure biological diversity, consideration for the landscape, outdoor recreation and the cultural values associated with the forest. The Forestry Act applies to all categories of ownership.

National Forest Inventories providing information on forestry resources have been an important pre-condition for the development of forest policy since 1930.

A regulation under the Forestry act requires forest owners to set aside between 4 and 40 per cent of the revenues from harvested timber into a government administered fund, The Forest Trust Fund. This fund was established to secure long term investment in sustainable forestry. The Forest Trust Fund is the property of the forest owners, but the use of the fund is regulated allowing only for specific purposes such as planting, road building, management planning, non-commercial thinning and other activities. When used, the money is treated as income for the forest owner. A part of it is, however, exempt from taxation.

In addition to the tax relief granted through the Forest Trust Fund, economic support is given for a similar range of activities that support sustainable forestry. The economic support, which is locally administered, was increased in 2007. Special attention is directed to areas with relatively low utilization of forest resources due to sparsely developed forestry infrastructure, including coastal areas in western, mid and northern parts of Norway.
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 since 1957 has been stated in law. Motorised recreational activities are generally prohibited off-road.

Many people use the forest for recreational activities, both traditional and modern. The public has a right to walk anywhere in forests, pick berries and mushrooms for their own consumption, and collect dry wood 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 many people in Norway. Landowners hold exclusive rights to hunting and fishing on their land. In lakes, rivers and streams public fishing licenses are widely available. Norway is a large country with a small population, lots of uncultivated terrain, and with rich hunting opportunities. There are large numbers of moose, wild reindeer, deer, hare, grouse and other large woodland fowl in the forests and mountains. Hunting requires permission from the landowner.
An important element of the Norwegian policy on Climate Change

Forests contribute significantly to reducing the net emissions of greenhouse gases in Norway. A huge amount of carbon is stored in biomass and soil. Carbon sequestration in our forests as a result of growing stock increment equals 50 per cent of the total annual human induced greenhouse gas emissions in the country.

As a follow up to the UNFCCC (United Nations Framework Convention on Climate Change) and the Kyoto protocol, The Norwegian Government presented a white paper on climate change policy in June 2007. This paper forms the basis for the Government’s selection and decision of sector specific targets, including targets for the forest and agricultural sectors, and measures to be implemented in the national climate change policy. A long term goal of the white paper is for Norway to reduce greenhouse gas emissions by 30 per cent compared to 1990 levels by 2020. A further goal is that Norway will be carbon neutral by 2050 by reducing global greenhouse gas emissions at a level corresponding to national emissions.

The paper recognizes the important role of forests in combating climate change. It is a goal to maintain a high level of wood production in order to further increase carbon sequestration in forests. Among the actions to be taken is the facilitation of increased planting and forest management aimed at increasing forest production.
Promotion of Wood and Bioenergy

The Wood-based Innovation Scheme aims to increase the awareness and use of wood by stimulating innovation and market orientation in the wood industries. The main goal during the last 10 years has been to increase use of wood and profitability for the forest sector, thus increasing the contribution from the forest sector towards a more sustainable production and consumption. Creating a greater interest in the use of wood among architects and builders etc. are also important topics.

The programme puts special effort on three areas: Industrial building, Wood products and Innovation systems. A part of the programme is jointly coordinated with the Research Council of Norway.

The Norwegian forests represent the largest potential for supply of raw material for production of bioenergy. The production of bioenergy could be more than doubled by increased harvesting for energy purposes. To stimulate farmers and forest owners to produce, use and supply the market with bio energy, both as solid fuel and heating solutions, the Bioenergy Scheme was established in 2003. With increased attention on climate change and the role of forests as a source of carbon neutral energy, the budget of the programme has been increased over the last years. The aim is to reduce the use of fossil fuels, diversify the energy supply and to provide a basis for economic development in rural areas. The goal is to establish activity in all parts of the country. The most important measures under the programme are investment support, aid to pilot projects and capacity building.
Norwegian forest policy promotes sustainable management of the forest resources, emphasising economic development as well as environmental values. This is reflected in the Forestry Act.

Protection and enhancement of biodiversity is thus an integral part of forest policy and the main principle has been to maintain biodiversity in all forests. Important areas for biodiversity are registered and mapped when making forest inventories for management plans. These registrations are carried out in accordance with scientifically sound methodologies.

The area of strictly protected forest has increased over the last years. There are three main categories of protected areas in Norway, stated in the Nature Conservation Act: National parks, forest reserves and protected landscapes. 1.7 per cent of the total forest area is protected as forest reserves or in national parks.

In addition to the general protection of forests provided by regulations under the Forestry Act, and the areas set aside under the Nature Conservation Act, there are administrative protection areas and protective forest. The main functions of the protective forest, which cover 28 per cent of the forested area, are to protect natural resources and infrastructure against natural hazards.
The Living Forests Standard and forest certification

The Living Forest Standard is a national standard for sustainable forest management in Norway. The concept was established in 1998, when forest performance level standards for sustainable forest management in Norway were agreed on. Stakeholders in forest management and the forest industry, environmental and outdoor recreation organisations, trade unions and consumer interests then reached a consensus for the first time in Norway on standards for sustainable forest management.

A revision in 2006 resulted in revised requirements and rules which describe what the forest owner must do to achieve the goals set by Living Forests. Requirements may be a clarification of statutory obligations on the managers of forest holdings in general. They may be requirements for planning or documentation at the holding level, or specific requirements for harvesting and forest management.

The standard has a permanent council called the Living Forests Council. The Council shall help to foster communication and trust among the parties during the period between revisions and serve as a formal forum for clarifying any disagreements on the interpretation of the consensus.

The ISO 14001 certification system in combination with the Living Forests Standard is applied to practically all commercial forestry in Norway. By certifying the forestry through the forest owners associations, the challenge of certifying small forest properties has been overcome without making the costs unbearable for the individual forest owners. The system is accepted under the Pan-European Forest Certification umbrella system and endorsed by the PEFC (Programme for the Endorsement of Forest Certification Schemes).
Forest management plans

Forest management plans are important tools for the forest owners in their efforts to manage the forest property actively and in a sustainable manner.

Forest management planning includes carrying out forest inventories, listing forest and environmental resources on the property, and producing a plan for the management of these. The plans provide the forest owners with information on the forest resources as well as the importance of environmental considerations.

Inventories of environmental values incorporated in the forest management planning process are publicly accessible. The forest owner must ensure that all activities in the forest are carried out in compliance with statutes and regulations. Under the Forestry Act, the forest owner must have an overall view of the environmental values in his or her own forest and pay regard to them when carrying out all activities in the forest.
Facts and Figures

Land-use categories in Norway
Per cent of total land area

- Forest: 39%
- Open ground: 17%
- Other areas: 12%
- Bogs/wetlands: 7%
- Agriculture: 3%
- Built-up: 1%

Source: The Norwegian Forest and Landscape Institute and SSB

Forest ownership by area (%)

- Private individual ownership: 78%
- Other private: 12%
- Commons: 3%
- Public (governmental and municipal): 7%

Source: The Norwegian Forest and Landscape Institute and SSB

The forested area of Norway

<table>
<thead>
<tr>
<th>Type of Forest</th>
<th>Area, km²</th>
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<tbody>
<tr>
<td>Coniferous forest</td>
<td>87,000</td>
</tr>
<tr>
<td>Other wooded land</td>
<td>49,000</td>
</tr>
<tr>
<td>Broadleaved forest</td>
<td>20,000</td>
</tr>
<tr>
<td>Mixed forest</td>
<td>18,000</td>
</tr>
<tr>
<td>Other wooded land</td>
<td>33,000</td>
</tr>
</tbody>
</table>

Source: The Norwegian Forest and Landscape Institute

Status for forest certification, ISO 14001

<table>
<thead>
<tr>
<th>Number of forest owners</th>
<th>Total certified forest area (hectares)</th>
<th>Amount of certified timber (m³)</th>
</tr>
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<tr>
<td>43,797</td>
<td>9,231,700</td>
<td>6,346,400</td>
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</tbody>
</table>

Source: PEFC Norway

Distribution of tree species

- Norway spruce (Picea abies): 80%
- Scots pine (Pinus sylvestris): 70%
- Broadleaved species: 60%
- Other tree species: 50%

Source: The Norwegian Forest and Landscape Institute and SSB

Annual increment and harvest, million m³


Source: The Norwegian Forest and Landscape Institute

Annual increment and harvest (commercial roundwood removals)
Useful web addresses

Governmental
www.regjeringen.dep.no/Lmd
www.slf.dep.no

Research
www.skogoglandskap.no
www.umb.no

Environmental information
www.miljostatus.no
www.dirnat.no

Geographical information
www.statkart.no

Statistics
www.ssb.no
www.skogoglandskap.no

Forest certification
www.levendeskog.no
www.pefcnorge.org

Fishing / hunting
Inatur.no
Statskog.no