

**UPM Forest
EMAS Environmental statement 2004**



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MESSAGE FROM THE CHIEF FORESTER

The Forest Division is responsible for procuring wood for UPM's mills in Finland and for managing Group-owned forests. The Division's activities have an impact on the biodiversity of forests, for instance, through emissions caused by operations. The most significant impacts arise from harvesting operations.

Environmental management is an integrated part of the Forest Division's management system, which is used to control and steer wood procurement and forest management with the aim of continuous improvement of operations.

The objective of this statement is to give a clear and comprehensive picture of Forest Division's environmental activities. We also take this opportunity to report measures taken by us regarding environmental protection over the past few years. Besides the figures for 2004, the statement provides longer term data reflecting the changes that have taken place.

It is a pleasure to note that despite difficult harvesting conditions in 2004, the Forest Division achieved the majority of its environmental goals and the quality of harvesting operations remained at the level of previous years.

UPM supports the objectives of the Forest Biodiversity Programme for Southern Finland (METSU). The programme aims at finding new conservation methods and promoting the conservation of forest ecosystems, habitats of special importance for threatened species and distinctive structural features in managed forests. The METSU programme is based on voluntariness and strives to increase the public approval of nature conservation.

Extensive environmental management measures in commercial forests play an important role in the conservation of forest habitats, now more so than ever. New research findings on how such environmental measures can help secure natural biodiversity are highly encouraging.

I hope this report will serve its purpose, and any feedback you may have is appreciated. You can find our contact information at the end of the report in Appendix V.

May 2005

Hannu Vainio

Vice President and Chief Forester



UPM FOREST

UPM is one of the world's leading forest products companies. It focuses on printing papers, converting materials and wood products. The Group has production units in 16 countries and employs approximately 33,500 people.

UPM Forest is the Group's Forest Division that is responsible for supplying UPM's Finnish mills with wood and for managing the Group's own forests in

UPM Forest's wood procurement regions and districts 2004



Finland. The Forest Division's head office is located in Valkeakoski. The field organisation has been divided into four procurement regions and further into 13 districts. The organisation also comprises an import unit and a tree nursery. In 2002, a Land Use Unit was incorporated into the Forest Division to manage the Group's land holdings.

PERSONNEL

At the end of 2004, the Forest Division employed 705 salaried employees and 486 workers, most of whom were forest workers. The salaried employees are mostly forest professionals who are responsible for purchasing wood and planning and supervising harvesting, transportation and forest management operations.

The actual harvesting and forest management work is carried out by forestry contractors and forest workers. The transportation of wood is handled by haulage contractors. These contractors operate independently, but the Forest Division provides training for them and their operators in matters such as quality and the environment and supervises the quality of their work.

The number of forestry and haulage contractors and their operators at the end of 2004 was 1,691, bringing the total number of people employed by the Forest Division to 2,882.

OCCUPATIONAL HEALTH AND SAFETY

The Forest Division provides occupational health care for its salaried employees and workers, including initial and regular health checks. Salaried employees and workers also benefit from activities aimed at maintaining and promoting their working capacity and well-being at work.

The number of accidents at work remained at the previous years' level for salaried employees and workers alike. In 2004, the proportion of absences due to accidents at work was 0.64% of the total number of working days for workers and 0.08% for salaried employees.

TRAINING

The Forest Division spent 1.1 million euros on training in 2004. Training days totalled 7,200, from which less than two thirds concerned salaried employees. Forest workers were offered 1,000 training days and contractors and their operators 1,700 days. The distribution of the training days was 6.4 days per salaried employee, 2.1 days per forest worker and 1.0 day per contractor or operator.

The training focused on the main activities of the Forest Division, i.e. forestry and wood harvesting. 29% of the training days were clearly linked to environmental issues, with topics rang-

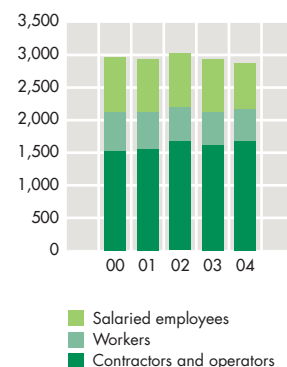
ing from environmental management in commercial forests to forest certification and the Forest Act. Within the METSO biodiversity programme, the personnel received training in various issues, such as birdlife.

The qualification in nature management is a study module of 3 to 4 credits and focusing on environmental forestry. It comprises the study material, preparatory training sessions and a final exam for testing the degree requirements. The number of exams leading to a qualification in nature management taken in 2004 was 226, and so far a total of 1,248 members of the Forest Division's personnel have taken the exam. The Forestry Development Centre Tapio is responsible for the organisation of the exams and the approval of the completed courses. The objective is that by the end of 2005, all UPM's salaried employees, contractors and forest workers operating in the field will have taken the exam.

CONTRACT PARTNERS

The Forest Division requires its forestry and haulage contractors and other contract partners to operate in accordance with the principles of sustainable development and monitors the origin of the wood that it receives. The contract partners have to be responsible and reliable and follow national legislation and statutory regulations.

Forest Division's personnel 2000-2004





The contractors and other contract partners are chosen in accordance with the Forest Division's Operating and Environmental Policy. The contractors must meet the following requirements relating to environmental management:

1. Know the Forest Division's operating principles and operational guidelines and commit themselves and their personnel to complying with them.
2. Meet social commitments as far as their company and their personnel are concerned.
3. Take care of their personnel's competence.
4. Take care of the state of their equipment also in terms of environmental standards.
5. Provide appropriate waste management practices.

WOOD PROCUREMENT

In 2004, the Forest Division supplied the Group's 29 Finnish mills with 22 million m³ of wood, which corresponds to almost a third of all wood used by the Finnish forest products industry. Another 2.2 million m³ of wood were supplied to the Group's associated mills and other external mills, bringing the total volume of wood procured by the Forest Division to 26.3 million m³. The

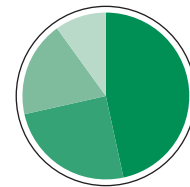
Forest Division also supplied 1,380 GWh worth of energy wood, consisting of logging residues and stumps, to the Group's power plants.

The Group sourced 70% of its wood from private forests, 2% from state forests and 8% from its own forests. The remaining 20% were imported, mainly from Russia.

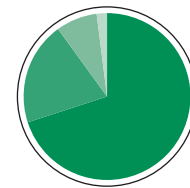
The Forest Division has created a system for tracing the wood all the way from the forest to the mill gate. This system can also be used for other purposes, such as monitoring the proportion of wood raw material coming from certified forests. In case of purchases through other companies, the origin of wood is monitored via contracts.

The majority of imported wood originates from Russia. Import wood suppliers are required to meet environmental commitments and they are chosen based on long-term commercial relationships, reliability and environmental awareness. A specific method has been developed for the Chain of Custody management of imported wood. For further information on this method, see page 18 or www.upm-kymmene.com/tracingimports. A specific system is being developed for tracing the origin of wood purchased from other countries.

Deliveries per mill type



Origin of wood



IMPACTS OF WOOD PROCUREMENT ON THE ENVIRONMENT

WOOD PROCUREMENT PROCESS

The Forest Division's mission is to procure all wood needed by the Group's Finnish mills. The wood is procured in company forests, privately-owned forests, state and institutional forests, from other forest product companies and from abroad. Privately-owned forests are by far the most important raw material source.

In private forests, wood is purchased either through standing sales (90%) or by roadside sales. In standing sales, UPM handles the harvesting operations. In roadside sales, the seller is responsible for harvesting the wood and transporting it to the roadside. The Forest Division concludes 30,000 to 40,000 wood transactions with private forest owners each year. In addition to standing sales, the Forest Division is responsible for harvesting operations in company forests.

The majority (97%) of the logging operations are performed mechanically, only a small part being carried out manually. After felling, the wood is transported to the roadside or to the shore by forwarders. From the roadside stocks, the wood is transported to mills, stations or piers to be stacked.

Wood purchased from the state, from

other forest product companies or from abroad is delivered to long-distance transport depots or to the mills. Chips form a large percentage of all wood delivered to the mills.

NATURE MANAGEMENT IN COMMERCIAL FORESTS

Nature management in commercial forests includes the environmental guidelines that have to be taken into consideration in managing commercial forests, the actions developed for achieving other targets related to wood production and any restrictions on use. Due to its versatile objectives and its large area of application, nature management has a significant bearing on the environment.

Nature management in commercial forests covers the following areas:

- Preserving natural biodiversity
- Protecting waters
- Protecting landscape
- Safeguarding multiple use
- Fostering the forests' cultural values

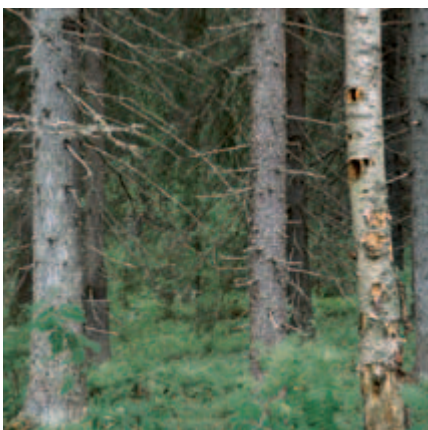
The Forest Division follows the nature management guidelines established for the Group's own forests and fosters their implementation in areas covered by forest service contracts as well as in other privately-owned forests.

UPM's guidelines for nature management in commercial forests are as follows:

1. The harvesting methods and silvicultural techniques to be used on each site are chosen in order to ensure optimum forest management.
2. Ecologically valuable sites are maintained in their natural state and the forest's biodiversity is fostered when managing commercial forests.
3. Poorly productive and non-productive land is left untouched.
4. No chemical pesticides are used in the Group's forests. Fungi and insect pests are primarily controlled by silvicultural methods and biological treatments.
5. Restricted forest fertilisation operations may be carried out in accordance with specific instructions.
6. The quality of nature management at the Forest Division's felling sites is being monitored.
7. Nature management is constantly being improved based on experience and research data.

HARVESTING

In 2004, the Forest Division harvested 12.1 million m³ of wood in company forests and private-owned forests.





UPM has been monitoring the nature quality of its harvesting operations since 1993. In the beginning, an in-house method was used for assessments, but since 1997 audits have been carried out using a method developed by the Forestry Development Centre Tapio. In private forests, the nature quality audits have been carried out by the Forest Centres and in Group forests by Tapio.

The audits are performed on a certain number of the Forest Division's felling sites, these being chosen randomly each year. They assess the preservation of ecologically valuable sites, the number and quality of retention trees and the degree to which water

protection and the landscape have been taken into consideration. The assessments are made based on measurements and visual evaluation using a four-point scale.

The results of the audits show that the quality of the Forest Division's harvesting operations has remained on the previous years' level in company forests as well as in private forests and that no deterioration of the quality was found despite the difficult harvesting conditions of a rainy summer. The quality of the harvesting operations was better in private forests compared to company forests. The objective is to further improve the quality of harvesting and to focus more intensively on quality as-

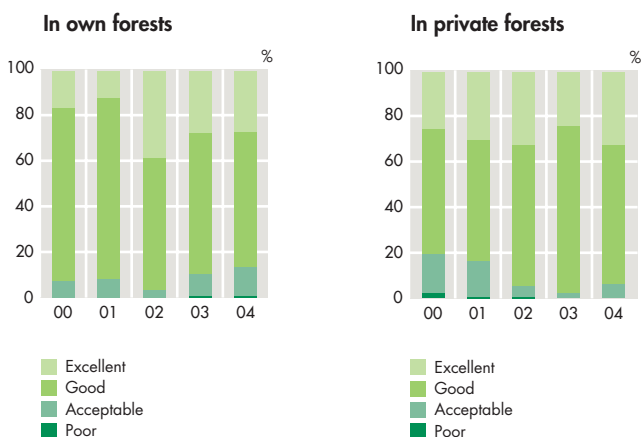
essment in internal auditing.

UPM Forest has drawn up energy wood harvesting instructions which are being used by the Forestry Development Centre Tapio to assess the energy wood harvesting sites. The first audit of the energy wood harvesting operations took place in 2004. The method is similar to that used for assessing nature quality and is being developed further.

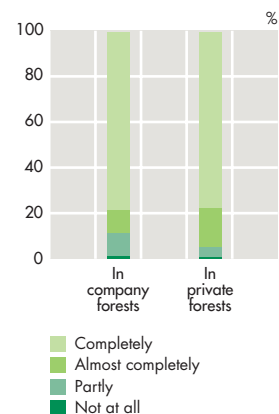
COMPANY FORESTS

UPM owns 920,000 hectares of forestry land in Finland. 770,000 hectares of this area are in commercial use. The forest holdings consist of 6,400 forest estates. Forest manage-

Nature quality in felling operations 2000–2004



Conservation of ecologically valuable sites 2004





ment plans have been drawn up for the Group's forests based on field inventories. Various types of data have been collected for each stand compartment: habitat, tree stock, required management and felling operations, ecological values and use restrictions. This data has been saved in the Forest Division's geographical information system which is updated with information on completed harvesting and management operations and with annual growth estimates. The system also contains information on the conservation programmes and areas established in Finland, the sites included in the EU's Natura 2000 network and groundwater areas.

At the end of 2004, the volume of growing stock in the Group's forests was 91 million m³ and the annual growth about 4 million m³. The planned level of sustainable felling amounted to 2.1 million m³, thinnings accounting for 53% and regeneration fellings for 47%. The actual felling volumes vary according to annual needs.

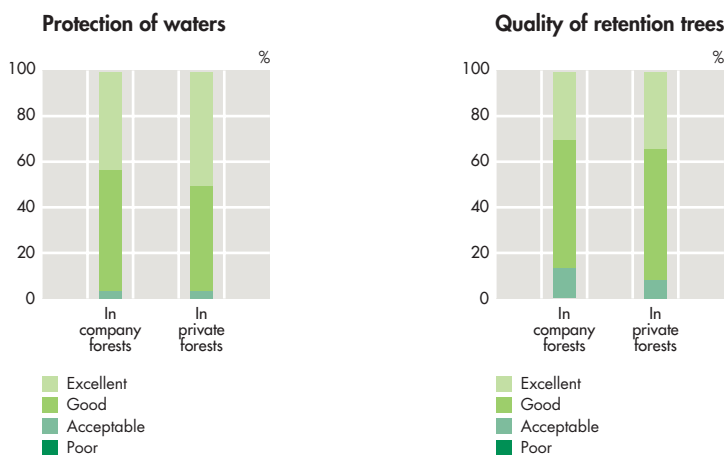
Based on the forest data, a forest management plan including the required felling and management operations has been drawn up for the Group's forests for a period of 50 years. The planned level of sustainable felling is revised every five years.

Forests that are mature for regeneration felling are regenerated either natu-

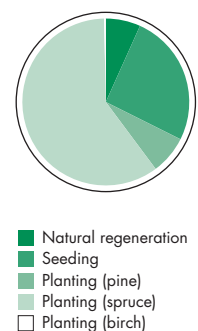
rally or by cultivation, with the aim of producing good quality saplings fast and economically. Forest cultivation is exclusively based on Finnish species that have not been genetically modified. The species and the regeneration method are chosen according to each habitat. Each year, about 0.4% of the total area is regenerated. The Group's tree nursery located in Joroinen has an annual output of over 10 million seedlings destined for its own forests and for forests covered by a service contract.

The Group has leased the hunting rights in its forests mainly to local hunting associations, which are also responsible for game management and the su-

Nature quality in felling operations 2004



Forest regeneration 2004





pervision of the hunting activities in the leased area. In addition to this, the Forest Division supervises all hunting activities in the Group's forests.

TREE NURSERY

The Forest Division's tree nursery was established in Joroinen in 1981. In 2004, it produced 11 million seedlings to cater for the needs of the Group's forests and those of its forest service contract customers. The seedlings produced by the nursery are used to regenerate approximately 6,000 hectares of forests each year.

The amount of chemical pesticides used at the nursery varies from year to year, primarily according to the occurrence of pests and diseases. As a general rule, the amount of chemical pesticides has decreased with the increase of chemical-free control methods. Good nursery hygiene has also contributed to reducing the use of chemical pesticides.

The soil and groundwater analyses conducted at the nursery show that the pesticide residues are generally below the limits of detection and the groundwater at the nursery area meets the requirements for good quality household water.

TRANSPORTATION

The wood volume transported in 2004 to the Group's mills totalled 22 million m³, more than half of which

was transported by the Forest Division itself.

The Forest Division governs its wood transport operations by using calculating and guidance models that are mainly geared to minimising transport costs. Successful planning enables timely deliveries to cater for the mills' needs while also reducing the number of transports, energy consumption and the emissions.

The Forest Division uses all available forms of transport. The bulk (76%) of wood was delivered to the mills by contract hauliers on timber trucks. Long haul transports were by rail or water. The optimisation of the transport operations also includes multipoint transports by timber trucks. They accounted for 15% of all transports and did not show any significant growth compared to the previous year. The proportion of multipoint transports can no longer be substantially increased.

Road transport accounted for 66% of all domestic transports, rail transport for 28% and water transport for 6%. The share of floating was 62%, vessel transport making up the remainder. Water transports are mainly used in the Vuoksi water system.

Imported wood was transported for 23% by road, for 46% by rail and for 31% by water.

IMPACTS OF LAND USE ON THE ENVIRONMENT

UPM Forest's Land Use unit is responsible for zoning the Group's lands, for land transactions, soil and peat extraction as well as exploring and leasing sites that are suitable for these purposes. Soil and peat extraction operations are planned and implemented in compliance with the laws, decrees and statutory regulations in force and take into account the relevant ecological, conservational and recreational values that are either statutory or based on the Group's own decision.

The extraction of soil on Group-owned lands is carried out in a way that minimises the negative impacts on nature and landscape. As a general rule,

the soil permits are applied for by the parties carrying out the extraction work and the related assessments of environmental impacts are also their responsibility. Deposits are being used economically and cost-efficiently, taking social development needs into consideration. The activities must not have a detrimental impact on residents or the environment.

In peat production, special attention is paid to environmental protection during production using various means, such as constructing water clarification systems and flood protection structures. Once the production on a site has ended, particular attention is paid to finish-

ing and post-treatment operations to make sure the site is adequate for forestry purposes or otherwise provides an environment where organisms can function as naturally as possible.

The areas in the Group's forests that present soil problems have been identified and the data concerning them has been entered in the geographical information system. These sites are altogether 45, and they are former nurseries, shooting ranges, sites related to floating and landfills. When performing any action around these sites, the means for avoiding or minimising negative environmental impacts are studied in advance.

EMISSIONS

The machines, trucks and equipment used in wood procurement and forestry operations consume energy, which results in emissions being released into the atmosphere. The fuel consumption and emission values were calculated using a model developed by Metsäteho Oy. These calculations include emissions from harvesting, transportation, forestry operations and personnel commuting to and from work.

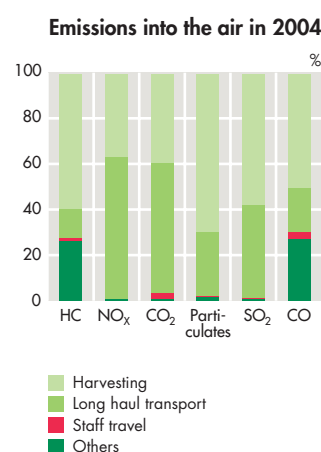
In 2004, 97% of the fuel used by the Forest Division was diesel oil, 39% of which was used for wood harvesting and 60% for long haul transport. 48% of the hydraulic oils and 65% of the chain oils used were biodegradable.

The majority of the emissions into the air were carbon dioxide (CO₂), released by the Forest Division's operations in the amount of approximately 145,000 tonnes in 2004. Most of the

carbon dioxide emissions were caused by wood harvesting and long haul transport. Most (57%) of the sulphur dioxide (SO₂) emissions were caused by harvesting operations, and most (63%) of the nitrogen oxide (NO_x) emissions by long haul transport.

The share of the sulphur, nitrogen, carbon dioxide, hydrocarbon (HC), carbon monoxide (CO) and particulate emissions caused by the Forest Division's operations in the overall emissions of Finnish road and water transport varied between 0.2 and 1.9% in 2004.

There were no significant changes in the total emissions between 2001 and 2004. The Forest Division's goal is to monitor the development of the emissions and to participate in co-operation projects aimed at developing methods for calculating the actual emissions.



The emissions caused by the Forest Division's operations are restricted by transportation management and by monitoring the emissions from the equipment that is being used.

ENVIRONMENTAL MANAGEMENT SYSTEMS

ISO 9001

The management system in place in the Forest Division incorporates a certified ISO 9001 quality system. The operating manual is documented in the Forest Division's Lotus Notes system to be accessible for all salaried employees. The aim of the ISO 9001 quality system is to ensure efficient overall management of the processes, procedures and resources to meet the customers' requirements and improve the efficiency of the organisation.

DNV Certification Oy/Ab granted UPM Forest the ISO 9001 and ISO 14 001 certifications for wood procurement and forest management for the first time on 7 September 1998. The certifications are renewed every three years.

Operations are also monitored and developed through internal audits. The follow-up results and proposals for development are reviewed annually by the Forest Division's management.

ISO 14001

The Forest Division's management system also incorporates an ISO 14001 environmental management system that is accessible to all personnel. The ISO 14001 certification attests that the Forest Division's environmental management system meets the standard's

requirements. The environmental management system is based on continuous improvement and on meeting statutory requirements.

As required by the ISO 14001 certification, the Forest Division has analysed all its environmental impacts and related aspects and is committed to the achievement of its environmental objectives and targets via the management system.

This system helps the Forest Division to better manage the environmental impacts of its operations and to show a good level of performance in environmental management. Internal and external audits ensure that the environmental management system is implemented and maintained correctly.

EMAS

EMAS is an eco-management and audit scheme intended for industry and requiring the organisations to continuously improve their operations. Under this scheme, organisations also have the obligation to issue information on their policies, programmes, environmental management system and performance. These aspects must be included in an environmental statement, the contents of which are verified by a third party.

In 1999, UPM Forest was admitted by the Finnish Environment Centre to

participate in the testing of the European Union's EMAS regulation as a wood supplier. This decision was based on the environmental statement issued by the Forest Division in 1998.

The revised EMAS regulation entered into force on 27 April 2001 and UPM Forest was transferred from the test register to the actual register on 29 June 2001 under the registration number FIN-000038.

FOREST CERTIFICATION

Forest certification is a voluntary method for showing compliance with the principles of sustainable development in forestry. A total of 95% of Finland's forests have been certified according to the national certification system (FFCS). FFCS is a forest certification standard endorsed by the international PEFC council. All UPM's forests are certified.

CHAIN OF CUSTODY MANAGEMENT FOR WOOD

UPM has implemented an uninterrupted Chain of Custody management system for tracing the wood raw material all the way from forest to the end product. Audited by an independent third party, this system helps UPM to show that its raw material comes from well managed forests. The system also indicates how great a proportion of all the wood delivered to the production units originates from certified forests. UPM's Chain of Custody management system is certified according to the international PEFC standard.



UPM FOREST'S OPERATING AND ENVIRONMENTAL POLICY



Environmental protection and management are an integral part of UPM's operations. The Group takes its share of responsibility for preserving the environment and for following the principles of sustainable development. UPM has been selected for the Dow Jones sustainability indexes DJSI World and DJSI STOXX.

UPM aims to minimise the burden on nature and on the environment in the choice of energy sources and manufacturing processes and in product development. The Group's Environmental Policy (Appendix II) aims to contribute

to the reduction of negative environmental impacts throughout the products' entire life-cycle.

The Forest Division has its own Operating and Environmental Policy based on UPM's Environmental Policy, the International Chamber of Commerce's Business Charter for Sustainable Development and the criteria for sustainable forestry in Europe approved by the European ministers for forestry in Helsinki in 1993 (Appendix I).

The Forest Division's environmental goals are defined according to the Environmental Policy and the significant

environmental aspects, which are:

- the impact of the operations on biodiversity
- the impact of the emissions from the operations on soil, water, aquatic ecology and air.

THE FOREST DIVISION HAS DEFINED THREE ENVIRONMENTAL GOALS FOR ITS ACTIVITIES:

1. Improvement of the operations with a view to preserving biodiversity, recognition and protection of ecologically valuable sites and application of the best practices in forest management and wood procurement.
2. Reduction of detrimental environmental impacts and, in particular, control of emissions into the soil, water, the aquatic ecology and the air.
3. Increased co-operation with stakeholder groups.

UPM FOREST'S COMMITMENTS:

- The International Chamber of Commerce's Principles of sustainable development (1990)
- European criteria for sustainable forest management (1993)
- Finnish forest certification criteria (FFCS;1997)
- Criteria for the collection of organic products (1999)

FULFILMENT OF ENVIRONMENTAL TARGETS IN 2004

TRANSPORTATION

Target: To reduce airborne emissions caused by transport

Indicator: Increase in the share of multipoint transports and variations in the share of different transport modes (percentage points/year)

Fulfilment: The share of multipoint transports increased by 0.1 percentage points and accounted for 15.0% of total transports. The share of rail transport decreased from the previous year by 1.7 percentage points (14.5% of all transports), the share of water transports decreased by 0.3 percentage points (6.8% of all transports) while the total volume of wood transported increased by 2.5%.

HARVESTING

Target: No poor harvesting quality.

Indicator: To increase the number of certified management systems in subcontractor companies. Follow-up results concerning the quality of thinning operations. Results of the audits concerning the nature quality in fellings – poor quality less than 1% and acceptable quality less than 10%. Standing reserves in Group forests and in private forests.

Fulfilment: In 2004 new management system certificates were granted to 12 contracting companies and certification was initiated with 13 new con-

tractors, due to be completed by the end of 2005. The quality of thinning operations were not totally met. In private forests, the requirements concerning the nature quality of fellings were met, with 0% of the sites rated as poor and 7% rated as acceptable. The target concerning standing reserves was achieved in full.

COMPANY FORESTS

Target: To enhance environmental quality.

Indicator: Nature quality assessment made by Tapio: poor (less than 1%) and acceptable (less than 10%). Standing reserves in Group forests. The results from internal quality audits of the felling sites are used as additional information.

Fulfilment: The target set for nature quality in company forests was not achieved: 1% of the sites were rated as poor and 13% as acceptable. The target set for standing reserves was well achieved.

LAND USE

Target: To integrate land use into the management system.

Indicator: Integration of land use in the certified quality and environmental management system, results of the internal and external audits.

Fulfilment: Land use was integrated into the certified quality and environmental management system.

PERSONNEL

Target: To improve environmental know-how.

Indicator: Number of nature management exams taken in 2004.

Fulfilment: During the year, 226 nature management exams were taken.

PROCUREMENT

Target: To promote forest nature management in private forests.

Indicator: The allocations granted to forest owners with UPM's contribution, the measures taken by them under the Metso programme and the WWF heritage forests established by them.

Fulfilment: Forest owners were encouraged to submit their forest sites for inclusion into the nature value trading scheme. No decisions are available yet. No new heritage forests were established with our contribution in 2004.

STAKEHOLDER CO-OPERATION

Target: To improve co-operation and reduce conflicts.

Indicator: Meetings and joint projects with regional Environment Centres, Forest Centres, municipal zoning, construction and environmental authorities and NGO's.

Fulfilment: Stakeholder co-operation was versatile and furthered the fulfilment of environmental targets, but conflicts could still not totally be avoided.



ENVIRONMENTAL NON-CONFORMITIES AND STAKEHOLDER FEEDBACK



All environmental non-conformities, whether detected internally or reported by stakeholders and auditors, are entered into the Forest Division's management system. Non-conformities are incidents where the Group's guidelines, commitments or policies have not been complied with. Analysing the reasons for these non-conformities, implementing corrective actions and assessing procedures so as to minimise future non-conformities are part of the continuous improvement of operations.

In 2004, six environmental non-conformities were detected. Most of them were related to the demarcation of particularly valuable habitats under the Forest Act. The audits conducted in co-operation with the environmental authorities stated that the changes caused to the specific features of these sites by felling operations were of minor importance at most. Two of the non-conformities were detected internally and four were based on external observations.

The Forest Division regularly monitors the satisfaction of both mill and forest customers through feedback and periodic surveys. Based on the mill customer survey, a relatively high level of customer satisfaction was sustained in 2004, although the number of com-

plaints about timber quality increased from the previous year, amounting to 3,000.

Forest customers gave mostly positive feedback on quality, but it has to be noted that the quality feedback system was not fully in use. Feedback on quality from forest customers has also been collected through customer surveys and customer events.

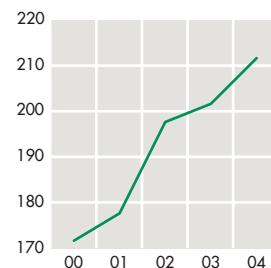
The Forest Division constantly receives feedback from within the Group and from external parties, such as customers and other stakeholders. In 2004, it received 212 enquiries concerning forests and the forest environment from 18 different countries – mainly from the UK, Germany, Finland and the USA. The number of enquiries has increased continuously since 1995.

The issues that most interested the Group's marketing staff and customers were forest certification, the protection of old-growth forests, the origin of wood and imported wood. Each year, most of the enquiries focus on a limited number of topics. During the past few years, forest certification has been the most interesting topic with a 25% share of all questions asked.

Private citizens also showed interest in the logging plans made for sites located near built-up areas. UPM has

made efforts to encourage the participation of local residents in issues relating to forests adjacent to built-up areas which have recreational value and features of landscape importance.

Number of customer enquiries 2000–2004



CURRENT TOPICS

METSO BIODIVERSITY PROGRAMME

In autumn 2002, the Finnish Government approved the Metso Committee's proposal for an action plan aimed at preserving the biological diversity of forests in Southern Finland, the western part of the province of Oulu and south-western Lapland. This programme, named the Forest Biodiversity Programme for Southern Finland (METSO), supplements Finland's National Forest Programme 2010. The biodiversity action programme contains 17 measures, which support each other. It is run jointly by the Ministry of the Environment and the Ministry of Agriculture and Forestry. UPM supports the targets of the METSO programme and participates actively in various projects under the programme.

The programme aims at promoting the conservation of forest ecosystems, habitats of special importance to threatened species and distinctive structural features of the forests. The measures are geared towards creating new types of areas and area networks for maintaining forest biodiversity and improving the level of conservation in the existing conservation areas as cost-efficiently as possible. The programme also wishes to enhance the vitality of rural areas by developing eco-tourism, for example.

New conservation tools are being developed based on the forest owners' voluntary commitment. A number of important areas are included in the programme: developing nature management in commercial forests, increasing the versatility of training and forest planning, creating new co-operation networks, improving the quality of conservation areas through restoration, introducing new financial support schemes and developing biodiversity research.

On UPM's initiative, the forestry research and development company Metsäteho organised, in 2004, a nation-wide forest management and birdlife training project in co-operation with BirdLife Finland, Sääksisäätiö (Foundation for Osprey) and the Hunters' Central Organisation in Finland. This project was run under the METSO programme and complemented the forest management and birdlife guide drawn up in co-operation with the organisations involved. It aimed at highlighting the benefits of nature management practices in commercial forests for birds. UPM actively took part in planning and implementing the training.

UPM is involved in the METSO co-operation network project for Häme. UPM wants to contribute to the development of the conservation biological criteria defined for the METSO pro-

gramme by comparing them with the Group's own criteria for identifying conservation areas in its forests.

In co-operation with Metsähallitus, UPM participates in a project for restoring a conservation area in Repovesi. The aim is to implement active measures to increase the conservation values of selected swamp and forest areas.

UPM is also involved in a biodiversity study supporting the targets of the METSO programme and conducted in its own forest in co-operation with various research organisms.

UPM'S FOREST BIODIVERSITY STRATEGY

UPM has established a biodiversity strategy for its own forests in Finland. This strategy encompasses a comparative study between natural-state and commercial forests and a gap analysis based on the results. Targets have been set and measures implemented to foster biodiversity in commercial forests while ensuring efficient wood production.

The biodiversity strategy is implemented by following the principles of nature management, developing the environmental guidelines in forest management and participating in various development projects. Completed and on-going work includes projects on a





number of topics: nature value inventory, creation of a regional planning model, habitat and species-specific projects and a study for developing biodiversity-enhancing approaches.

UPM's actions under the biodiversity strategy include a project for identifying ecologically valuable sites in its own forests. After the project was completed in 2001, new protection areas have been added into the Forest Division's own geographical information system as they have been identified during normal forest planning operations and when updating relevant compartment data. The number of protected sites at the end of 2004 was 21,900, in addition to which the Group has decided, on its own initiative, to give conservation status to a number of extensive forest areas excluded from official conservation programmes.

UPM has been developing a forest planning model that defines the ecological targets for its own forests. With its regional environmental targets, forest planning is an appropriate tool to be used in the Group's more extensive forest areas. UPM has continued to develop the planning model in pilot areas where inventories of the ecologically valuable sites have previously been made.

In 2003, a special esker landscape project was started to secure the habi-

tats of species occurring in esker forests. Measures include making inventories of valuable esker vegetation, performing treatments on valuable occurrence sites and establishing map squares for monitoring the impacts of the treatments. To create high-temperature environments, small-scale prescribed burns have also been practised on esker slopes. The project will be continued to develop guidelines for treating and managing esker forests. Other habitat-specific projects are also being started.

The biodiversity-enhancing approach is also developed to meet the single species' habitat requirements. Species-specific projects include, for example, monitoring the capercaillie (*Tetrao urogallus*) leks, reviving the eastern pasque flower (*Pulsatilla patens*) and drafting new instructions for treating the osprey's (*Pandion haliaetus*) nest environment jointly by UPM and the osprey foundation Sääksisäätiö.

UPM has conducted species studies in its own forests to investigate the impacts of nature management practices in commercial forests. These impacts are both short- and long-term. As the new targets and the means for achieving them only became available in the 1990's, it has only been possible to measure the short-term impacts.

The first results of the completed

studies and on-going follow-up processes are encouraging. The Group has studied the vegetation in small aquatic systems and the species of beetle occurring in artificial snags and on burned sites. The vegetation study showed that the protected small aquatic systems in commercial forests relatively often shelter even species that have been classified as threatened. The beetle inventories carried out show that a diversity of species, including threatened species, can be found in commercial forests too. The first results available on the ecological impacts of nature management practices in commercial forests would suggest that the methods introduced have positive impacts, also in the longer term, and that these methods are worth developing.

UPM wants to support the voluntary protection of forests. The Group has given financial support to the WWF's heritage forest campaign aimed at promoting voluntary protection initiatives among the forest owners.

UPM's forests are protected under legislation or by use restrictions as defined by the Group itself. The proportion of such forests is about 12% (according to the international definition of forest).

During the past two decades, the Group has exchanged or sold approximately 15,000 hectares of its forests.

These forests are reserved for conservation purposes.

REPOVESI NATIONAL PARK

The Repovesi National Park and UPM's private conservation area named "Griffin Forest" were established in Valkeala in 2003. The establishment of the national park became possible when UPM's general meeting approved the proposal of the Board of Directors to donate about 560 hectares of its land to the State. In conjunction with the creation of the national park, a land area of approximately 1,400 hectares bordering on the national park was given conservation status under the Nature Conservation Act on the Group's initiative.

The Griffin Forest conservation area owned by UPM and the Repovesi National Park form a functional entity, managed and used under the guidance of the Griffin Forest administrative committee. The committee includes representatives from UPM, Metsähallitus and the local Environment Centre.

The management and use plan set up for the Repovesi area in 2004 aims at governing the area's sustainable use and promoting its conservation goals.

The recreational use of the Repovesi area has significantly increased since the establishment of a national park was decided. The area's hiking trails and service structures have been developed to meet the needs of the growing numbers of visitors. A study was carried out in 2004 to find out which species of birds and bracket fungi occurred in Re-

povesi. As far as the bracket fungi are concerned, the area proved to be more valuable than expected. UPM and Metsähallitus are involved in the EU's MetsäLife project to enhance the Repovesi area's conservation value by restoring previously treated swamp and forest sites. This project is carried out under the METSO biodiversity programme.

FOREST CERTIFICATION

In 2002–2003, the Finnish Forest Certification System (FFCS) was updated based on practical experience and the latest research data, using the previously introduced forest certification requirements as a starting point. The revised requirement came into force in the beginning of 2005.

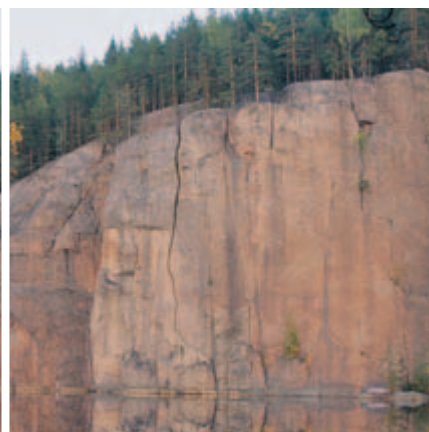
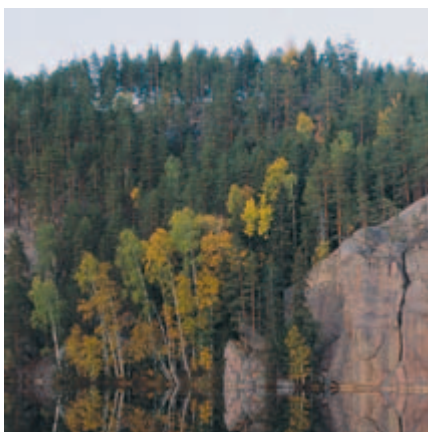
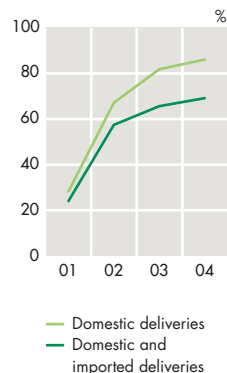
In 2004, UPM started parallel field testing of forest certification schemes in Finland, the UK and Canada. Comparisons are made between national forest certification systems and the international PEFC and FSC systems to develop the systems further and give them wider acceptance and to increase the use of certified wood raw material at a global level. WWF participates in the project as an observer.

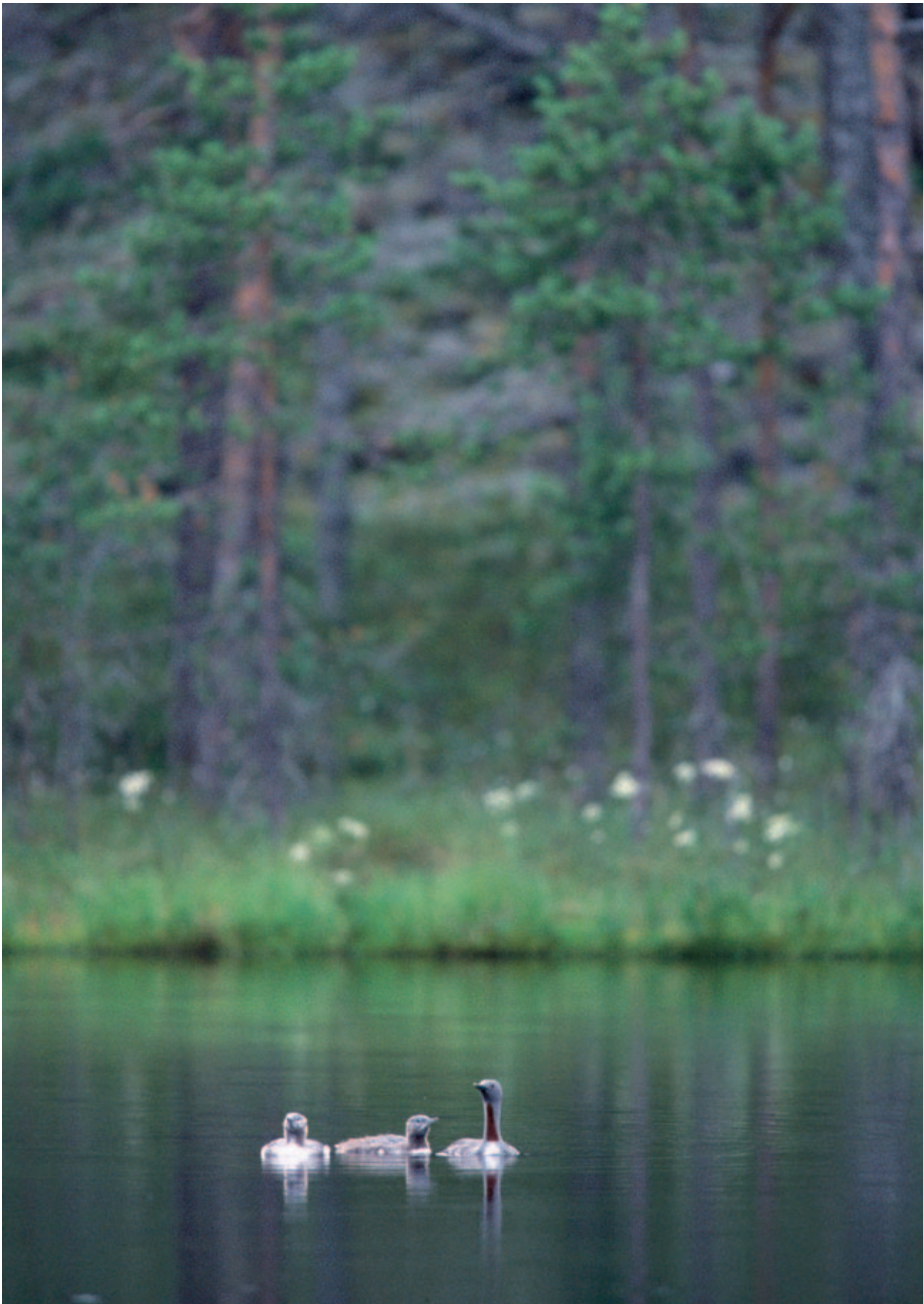
UPM has established guidelines for international forest certification (Appendix III).

TRACING RUSSIAN WOOD IMPORTS

The Forest Division has been tracing Russian wood imports since 1996 via

Share of certified wood in 2001–2004







an information system comprising a database and a GIS mapping programme, statements of origin provided by the wood suppliers, audits carried out in the forest and results saved into the database. The Chain of Custody system is being developed to give even more accurate information about the supply chain and origin of the wood. The system consists of three phases:

- Suppliers are required to provide a statement of the origin of the wood.
- Deliveries are monitored through the Forest Division's information system.
- On-site audits are carried out by the Forest Division.

If any deficiencies or non-compliances are detected during the audits, UPM has the right to suspend the acceptance of wood deliveries. There have already been cases where UPM has been forced to use this right.

In 2004, UPM audited 145 felling sites in Russia. Two major and 29 minor non-conformities were identified, and proposals for corrective action have already been made.

In Russia, UPM has a sawmill located in Pestovo and a plywood and veneer mill in Chudovo. A Chain of Custody system similar to the one in use for wood imported from Russia is currently being developed for the wood procurement operations of these mills.

UPM's wood procurement operations in Russia are restructured to form a separate country organisation as of 1 June, 2005.

FOREST-DERIVED ENERGY

The Forest Division also supplies wood raw material to the Group's power plants. The use of renewable fuels reduces the Group's emissions burden in energy production, thus improving the environmental friendliness of the products. Renewable fuels, particularly wood-derived energy sources, play an increasingly important role in the fuel supply of UPM's power plants.

Procurement of energy wood supports the Forest Division's commercial wood procurement operations and is part of the timber sales service offering. The procurement of energy wood aims at promoting sustainable development. Methods are being developed to improve fuel quality and to promote the economical and technical conditions for energy wood deliveries, harvesting and producing wood while also managing the environmental impacts and other consequential impacts. Energy wood harvesting is all about the intensified recovery of wood, as it ensures that small-diameter wood, branches, tops and stumps are also utilised. UPM uses the best available means and methods for wood energy harvesting.

UPM revised its energy wood harvesting guidelines in 2004. These guidelines have been drawn up by applying the best available information, by making use of research data and by constantly co-operating with experts. UPM continuously develops the methods and equipment related to its opera-

tions in view of their impacts on wood production capacity, biological diversity, nutrient leaching and other consequential impacts,

The objectives of managing the consequential impacts are:

- To secure the initial development of new tree generations.
- To secure the wood production capacity in the long term.
- To secure biological diversity.
- To minimise nutrient leaching and other detrimental environmental impacts.
- To enable the mechanical control of root rot.
- To create appropriate conditions for new operational models in forestry.

The volume of energy wood supplied in 2004 was 1.1 million m³, worth about 1,380 GWh of energy. This amount was a third greater than in the previous year, and it is expected that energy wood deliveries will continue to increase over the coming years.



ENVIRONMENTAL TARGETS FOR 2005

TRANSPORTATION

Target: To reduce airborne emissions caused by transport.

Indicators: Proportion of multipoint transports, changes in the shares of transport methods, report on opportunities offered by fleet monitoring and emissions measurement.

HARVESTING

Target: No poor harvesting quality.

Measures and indicators: To increase the number of certified management systems in subcontractor companies. Follow-up results concerning the quality of thinning operations. Results of the nature quality audits in fellings. Standing reserves in Group forests and in private forests.

OWN FORESTS

Target: To enhance environmental quality.

Measures and indicators: Results of the nature quality audits: target level, poor quality less than 1%, acceptable quality less than 10%. 7-month standing reserves covering the winter season.

LAND USE

Target: Non-timber values guidelines.

Measures and indicators: Written guidelines established in co-operation with the Group and concerning the use and sale of non-renewable natural resources.

PERSONNEL

Target: To improve environmental know-how.

Measures and indicators: Nature management exams by the end of 2005. Environmental training on energy wood for energy wood harvesters and other

concerned parties. Drawing up a new environmental guide.

PROCUREMENT

Target: To promote forest nature management in private forests.

Indicator: Information material, environmental allocations granted to forest owners with UPM's contribution, measures carried out to implement the Metso programme and WWF heritage forests established.

STAKEHOLDER CO-OPERATION

Target: To improve co-operation and reduce conflicts.

Measures and indicators: Meetings and joint projects with regional Environment Centres, Forest Centres, research facilities, municipal zoning, construction and environmental authorities and NGO's.

APPENDICES

Appendix I

UPM FOREST'S OPERATING AND ENVIRONMENTAL POLICY

1 General principles

The majority of UPM's production is based on a renewable resource, wood. In accordance with its environmental policy, the Group uses its own initiative and actively takes care of environmental protection and management in all its activities.

UPM Forest is responsible for the procurement of wood raw material for the Group's domestic mills and for the utilisation and management of Group owned forests in Finland. The Forest Division takes its share of responsibility for preserving the environment and for following the principles of sustainable development. The aim in forest management and in wood procurement is to minimise the load on nature and the environment. Biodiversity and the functions of the forest ecosystem are maintained in accordance with international and nationally approved principles.

The Forest Division observes the legislation and statutory regulations of respective countries.

2 Wood procurement

In all its operations, the Forest Division takes into consideration the economic, ecological and social sustainability of forest utilisation. The Forest Division requires that its external suppliers operate according to the principles of sustainable development and monitors the origin of the wood it receives. The Forest Division does not fell or accept wood which originates from statutory protected forests, forest areas included in nature conservation programmes or sites which have been notified by the authorities to be excluded from felling.

3 Company forests

The Forest Division manages and utilises the Group's own forests so that

they produce high-quality wood in an effective, sustainable and economical manner. The Forest Division also takes into account other forest-related ecological, cultural and social values as well as the environmental impacts of forestry.

4 Implementation of the environmental policy

The management of the Forest Division annually reviews operations and the level of environmental protection. The management also establishes operational and environmental objectives, and monitors their implementation on an annual basis. The Forest Division's head office, procurement regions and districts set targets for achieving these objectives and they are realised as part of the planning, implementation and monitoring of all operations.

5 Development

The Forest Division continuously improves its operations, environmental protection and the quality of environmental management. The Forest Division actively co-operates with the authorities, researchers, customers and other interested groups in order to take account of the latest information available. The Forest Division trains its personnel and contractors to ensure they are all familiar with the Division's operating principles and objectives related to wood procurement, forest management and the environment, and also that they are committed to following them.

6 Environmental communication

The Forest Division, on its own initiative, openly communicates on environmental issues with employees, customers and other interest groups. The Forest Division's operational and environmental policy is available at all Forest Division offices.

Appendix II

UPM'S ENVIRONMENTAL POLICY

UPM recognises the sustainable use of natural resources and environmental protection and management as a true prerequisite for sustainable economic growth, as well as for the well-being of people and society. In all parts of our activity, we aim to minimise the burden on nature and the environment, whether through direct or indirect effects, as far as raw material, production or other parts of products' life cycle are concerned.

1 Environmental protection and organisation

Corporate governance and leadership are based on the company values of openness, trust and initiative. To take responsibility for all business decisions and actions is a prerequisite for a competitive and profitable business. Environmental care is an integral part of this responsibility. This policy is implemented throughout the company at all levels and in all activities.

All business units on divisional and operational levels are responsible for ensuring that both targets set within the Group and statutory regulations and other obligations laid down by relevant organisations are met. Management systems in accordance with relevant international standards are used whenever applicable.

2 Our people – a key resource

Environmental affairs are an inherent part of the work of our employees.

They are given both professional and general training in environmental matters. The aim is to develop everyone's ability to understand the general debate on environmental matters and readiness to take part in it, both in and out of work.

3 Production and supporting operations

Competitiveness in quality and costs are important factors when developing our products and their production processes. In addition, important objectives are the efficient use of raw materials and energy, the recycleability of our products as raw material, and the possibility to utilise our products and by-products for their energy content or other end-use.

The majority of UPM's production is based on a renewable resource, wood. The Group is committed to forest management and forest harvesting practices based on the principles of sustainable development.

Our aim is to minimise the environmental load of the whole production chain. Best available techniques (BAT) and measures are used when changing and renewing production processes.

4 Communication

UPM communicates environment related matters with its stakeholders in a reliable, open and timely manner. Communications are carried out using different media according to the needs of the target group.

5 Development

Environmental legislation, stakeholders' expectations, and know-how on best available techniques will continue to develop. UPM will take account of these developments in its own operations.

The Group will actively encourage its partners to carry out their businesses in an environmentally responsible manner.

The Board of Directors of UPM-Kymmene Corporation has approved the Environmental policy on 18. September 2002.

Appendix III

UPM'S FOREST CERTIFICATION GUIDELINES

The Group

Through forest certification, UPM seeks to prove to its customers that the wood raw material it uses originates from well managed forests.

The choice of the forest certification system must be based on local conditions and is decided case by case in each country.

The system must fulfil the following requirements:

1. The standard applied in the forest certification process is based on the principles of sustainable forest management. In Europe this refers to the six criteria of the Helsinki process.
2. An internationally accepted accreditation procedure exists to approve the certifying organisations.
3. The standard applied is agreed upon by the different interested parties concerned through co-operation in an open, consensus-seeking process on a national level.
4. The forest certification system is cost-efficient.
5. The participation of the forest industry and other forest owners is appropriate to the administration of the system.

Appendix IV

EUROPEAN CRITERIA FOR SUSTAINABLE FOREST MANAGEMENT

1. Maintenance and appropriate enhancement of forest resources and their contribution to global carbon cycles.

2. Maintenance of the health and vitality of the forest's ecosystem.
3. Maintenance and appropriate enhancement of the productive functions of forests (wood and non-wood).
4. Maintenance, conservation and appropriate enhancement of biodiversity in forest ecosystems.
5. Maintenance and appropriate enhancement of protective functions in forest management.
6. Maintenance of other social, economic and cultural functions and conditions.

Appendix V

CONTACT PERSONS FOR ENVIRONMENTAL MANAGEMENT

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DNV CERTIFICATION Oy/Ab (FIN-V-002) verified this information 9.6.2005.



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