UPM
The Biofore Company

UPM Progress Report 2011/2012 To the Leadership Declaration of the

BIODIVERSITY IN GOOD COMPANY
BUSINESS AND BIODIVERSITY INITIATIVE

UPM leads the integration of bio and forest industries into a new, sustainable and innovation-driven future. Our products are made of renewable raw materials and are recyclable. UPM consists of three Business Groups: Energy and pulp, Paper, and Engineered materials. The Group employs around 22,000 people and it has production plants in 17 countries. UPM's annual sales exceed EUR 10 billion. UPM's shares are listed on the Helsinki stock exchange. UPM – The Biofore Company – www.upm.com

UPM
The Biofore Company

LEADERSHIP DECLARATION

All signatory companies acknowledge and support the three objectives of the international “Convention on Biological Diversity”:

1. Conservation of biological diversity
2. Sustainable use of its components
3. Fair and equitable sharing of the benefits that arise out of the utilization of genetic resources and commit themselves to:

1. Analyzing corporate activities with regard to their impacts on biological diversity;
2. Including the protection of biological diversity within their environmental management system;
3. Appointing a responsible individual within the company to steer all activities in the biodiversity sector and report to the Management Board;
4. Defining realistic, measurable objectives that are monitored and adjusted every two to three years;
5. Publishing activities and achievements in the biodiversity sector in the company’s annual, environmental, and/or corporate social responsibility report;
6. Informing suppliers about the company’s biodiversity objectives and integrating suppliers accordingly and step by step;
7. Exploring the potential for cooperation with scientific institutions, non-governmental organizations (NGOs) and/or governmental institutions with the aim of deepening dialogue and continuously improving the corporate management system vis-à-vis the biodiversity domain.

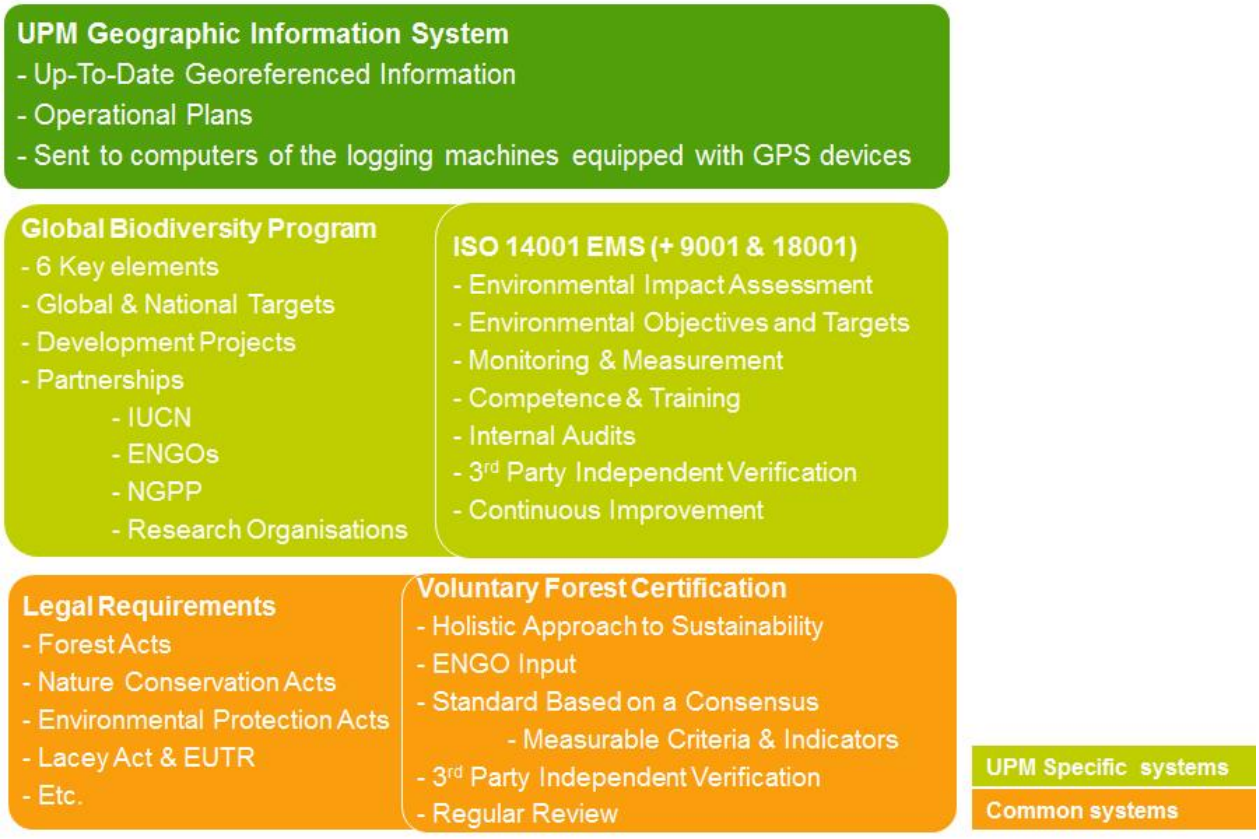
To demonstrate ongoing commitment, member companies will provide the Initiative with a progress report every two years.

UPM's commitment to

1. Analyzing corporate activities with regard to their impacts on biological diversity

UPM business is based on natural, renewable and recyclable raw materials. Wood is the most important raw material for UPM and the annual wood consumption is nearly 30 million m^3. Therefore wood sourcing and forestry are the main areas of UPM's business which have an impact on biodiversity.

Due diligence in UPM forestry operations is managed through a hierarchical approach with respect to regulations, starting with legislation (Forest Act, Nature Protection Act etc.), the Environmental Management System under ISO 14001, Forest Certification schemes and, finally, the UPM Global Biodiversity Programme. This is further enhanced by operational instructions, the continuous training of personnel and development activities. Biodiversity is addressed at all levels of UPM's due diligence system as is described in the picture below.



Picture 1. UPM Sustainable Forestry in a Nutshell

The Geographic Information System (GIS) is a geo-referenced database covering natural resources, including forests and waters. All essential data and information is stored in the system, including information about existing statutory protection areas, habitats of high biodiversity and other sensitive areas. The GIS forms a foundation for sustainable forestry.

UPM wood sourcing and forestry is underpinned by an ISO 14001 certified environmental management system. The ISO 14001 system is based on an analysis of environmental aspects where significant environmental impacts, including those of biodiversity, are identified and measures created for their control and mitigation.

In line with the requirements of the ISO 14001 standard environmental objectives and targets are established in order to ensure continual improvement.

UPM regards forest certification as an excellent tool for promoting sustainable forestry. UPM promotes all credible forest certification schemes, including the two major international schemes, PEFC™ and FSC®. UPM strives to increase the use of certified fibre and has set a company level target of reaching 85% certified wood raw material by 2020, see http://www.upm.com/EN/RESPONSIBILITY/Principles-and-Performance/Targets/Pages/default.aspx

UPM owns c. 1.2 million hectares of forest land in Finland, UK, Uruguay and USA. All these forests are certified under FSC and/or PEFC. The different elements of sustainability are addressed in forest certification standards, e.g. PEFC Finland, see the picture below. Biodiversity is an essential element of all forest certification standards.

STANDARD SECTION	STATUTORY LEVEL CRITERIA	HIGHER LEVEL CRITERIA
Governance of forest management	1	-
Promoting wood production	14	2, 3, 4, 6, 7 , 8
Safeguarding biodiversity	9, 12	10, 11, 13, 15, 16
New use modes of forests	-	2, 5, 27
Water protection	20	17, 18, 19
Safeguarding workers' welfare	23	21, 22
Safeguarding the needs of local population	26	24, 25, 27, 28, 29
Criteria in total	7 pc	22 pc

A higher commitment to sustainability shown in the last column. The same structure can be found in all forest certification schemes with a slightly differing weights.

Economic sustainability
Environmental sustainability
Socio-cultural sustainability

Picture 2. Aspects of sustainability in PEFC Finland.

Since forest certification standards vary in scope and emphasis from country to country UPM has developed a global biodiversity programme to ensure that biodiversity is adequately addressed. The UPM Global Biodiversity Programme is based on promoting six key elements vital to any forest ecosystem, each with global targets:

Key element	Global target
Native tree species	Maintain and promote native tree species and their natural composition.

Deadwood	Manage deadwood quality and quantity to enhance biodiversity.
Valuable habitats	Protect valuable habitats and manage them for their biodiversity value.
Forest structure	Manage variation in forest structure at landscape and stand level.
Water resources	Maintain open water bodies and wetlands, secure high water quality.
Natural forests	Implement plan for remnants of natural forests.

The UPM Global Biodiversity Programme is implemented in all UPM owned forests and the best practice it defines is promoted in wood sourcing. The Implementation of the UPM Global Biodiversity Programme was reviewed by IUCN (International Union for Conservation of Nature) in 2012 in Finland and UK. The Programme will be further developed according to recommendations received of IUCN.

For more information see http://www.upm.com/EN/RESPONSIBILITY/Forests/Biodiversity/Pages/default.aspx

2. Including the protection of biological diversity within their environmental management system

UPM has certified ISO 14001 systems covering all wood sourcing and forestry business as well as all production units from sawmills to pulp and paper mills. Environmental aspects are analysed, significant environmental impacts identified and the means for their management are put in place.

The UPM approach to forestry and wood sourcing is described previously and the same approach applies to the mills. Mill sites themselves can provide various habitats for a number of species.

As a result of environmental mitigation waste water emissions from the mills have decreased remarkably due to improved management and purification techniques, resulting in improved biodiversity in mills receiving waters. In studies[1], community structures indicating improved ecological status are evident.

Protection of biodiversity calls for a long term commitment. Over time UPM has taken the following steps:

Year	Action
1996	Environment Policy established when UPM-Kymmene was formed, including • commitment to economic, ecological and social sustainability • Environmental impact assessment
1996	Instructions for forest regeneration • Promotion of broadleaved trees + other tree species with marginal economic value • Promotion of retention trees and securing deadwood • Water protection including buffer zones • Valuable habitats, set aside areas (herb-rich forests, scrubland, natural mires)
1996	Geographic Information System (GIS) in forestry • Essential tool for higher level management of natural resources including

[1] E.g. Aaltonen, E-K. & Kalliolinna, M. 2011, Anttila-Huhtinen, M. 2010, Flinders, C.A., Minshall, G.W., Ragsdale, R.L. & Hall, T.J. 2009

	biodiversity
1998	ISO 14001 in forestry and wood sourcing
2001	EMAS in forestry and wood sourcing
1997 - 2001	Survey and evaluation of the key biotopes on company properties • 20 000 conservation sites were found. 8 000 protected by Forest Act, the remaining 12 000 protected by UPM decision. • The survey is an on-going activity and today the figure exceeds 30 000 sites and more than 100 000 hectares.
1998	Biodiversity Program for company forests in Finland
1998	Environmental guidelines for wood sourcing
1999	Finnish Forest Certification System (later PEFC), UPM being a member in the group responsible for drawing the 1st forest certification standard for Finland.
2002	Land donation (560 ha) for Repovesi National park and establishing the adjacent Griffin Forest, the largest private protection area in Finland (1400 ha).
2005	Generic Chain of Custody meeting the requirements of both FSC and PEFC
2006	UPM Global Biodiversity Programme
2010	UPM an active member of the standardization group of Finnish FSC
2011	UPM owned forests certified under FSC in Finland (c. 394'000 ha)
2012	FSC Group Certification in Finland
2012	Review of UPM Global Biodiversity Programme by IUCN in Finland and UK

3. Appointing a responsible individual within the company to steer all activities in the biodiversity sector and report to the Management Board

UPM Environment is a global function of UPM, headed by a Vice President, and responsible for all environmental issues in support of UPMs business groups. UPM Environment supports environmental excellence in sourcing, production and markets.. In addition each UPM business area's production units and mills have personnel responsible for management of environmental issues on site. Total number of personnel in UPM Environment is 35 persons, with an additional 60 environmental specialists in the mills, i.e. 95 staff in all.

UPM Environment specialists holding the major responsibility for biodiversity are divided in the following areas:

- Sustainable Forestry, responsible for wood Sourcing and forestry businesses including biodiversity related issues: one manager and eight subordinates.
- Sustainable Plantations, responsible for sustainable plantations including biodiversity related issues: one manager and three subordinates.
- Sustainable Timber, responsible for timber businesses and R&D regarding sustainable forestry and biodiversity.
- Sustainable Energy, responsible for energy businesses including biodiversity related issues, e.g. EIA's in new wind power sites.

4. Defining realistic, measurable objectives that are monitored and adjusted every two to three years

UPM's responsibility principles are accompanied by operational targets that create the framework of responsibility for all company operations.

Each target identifies the baseline and sets the direction for further improving the company's performance in the coming years.

The principles and respective targets recognise and highlight areas where we have the most impact on our stakeholders. The targets were created in co-operation with UPM's business areas to ensure that they are in line with operational strategies. The UPM responsibility targets can be found in: http://www.upm.com/EN/RESPONSIBILITY/Documents/UPM-Responsibility-targets-2011.pdf

In the following table UPM's key environmental responsibility areas, targets and achievements in 2012 are presented.

Key area of responsibility	Target	Achievement 2012
PRODUCTS Taking care of the entire lifecycle	• Environmental management systems certified in 100% of production units (continuous) • Environmental declarations for all product groups (continuous) • 25% growth in the share of eco-labeled products by 2020[1)]	• A few small production sites are not yet certified • Environmental product declaration developed for UPM ProFi • Increase of eco-labeled sales in line with the target
CLIMATE Creating climate solutions	• 15% reduction in fossil CO2 emissions by 2020[1)]	• Small improvement in 2012, but not enough to be in line with the target
WATER Using water responsibly	• 15% reduction in waste water volume by 2020[2)] • 20% reduction in COD load by 2020[2)]	• Wastewater volume decreased, but not enough to be totally in line with the target. • Reduction in COD load in line with the target.
FOREST Keeping forests full of life	• Maintain high share of certified fibre 85% • 100% coverage of chains-of-custody (continuous)	• Development of certified fibre share in line with the target • A few small recently acquired/established production sites are not yet certified
WASTE Reduce, reuse and recycle	• 40% reduction in waste to landfill by 2020	• Reduction in landfill waste in line with the target.

Environmental targets: from 2008 levels
[1)] Includes paper, timber, plywood, pulp and label
[2)] Numerical targets relevant for pulp and paper production

UPM has developed a global biodiversity programme which is based on promoting six key elements vital to any forest ecosystem with attached global targets:

Key element	Global target
Native tree species	Maintain and promote native tree species and their natural composition.
Deadwood	Manage deadwood quality and quantity to enhance biodiversity.
Valuable habitats	Protect valuable habitats and manage them for their biodiversity value.

Forest structure	Manage variation in forest structure at landscape and stand level.
Water resources	Maintain open water bodies and wetlands, secure high water quality.
Natural forests	Implement plan for remnants of natural forests.

Native tree species are keystone species in any forest ecosystem for all other forest dwelling species. Deadwood is a scarce resource in commercial forests due to the harvesting activities and therefore important for many endangered species. Valuable habitats are typically small in size and important for specialised species, e.g. amphibians. Variation in forest structure (tree species and age classes) on a stand and landscape level result in more habitats and higher species diversity. Open water bodies and wetlands are preserved with their subsequent biodiversity. UPM does not have any forestry activities in, or source timber from naturally intact forests.

The Programme was reviewed by specialists from IUCN in 2012. One of the conclusions of the specialists was that a monitoring system should be improved though their statement about implementation and the Programme itself was very positive. In 2013 UPM will develop the Biodiversity Programme further according to the recommendations of IUCN including the monitoring system.

UPMs Global Biodiversity Programme is also implemented through projects which are typically run in cooperation with research organisations and/or ENGO's and other stakeholders. Examples of the projects are presented in the UPM Responsibility web site, see http://www.upm.com/EN/RESPONSIBILITY/Forests/Biodiversity/Pages/default.aspx

An example not presented in the UPM www-pages is cooperation between UPM, the Finnish Museum of Natural History and the Finnish Osprey Foundation on protection of Ospreys (*Pandion haliaetus*) in Finland.

Ospreys are suffering from the lack of suitable trees for building their huge nests and this is the most critical factor limiting an increase in their population. Therefore UPM builds 5-10 new platforms for Osprey nests every year. In addition UPM has mapped all the Osprey nests on its lands and drawn instructions for ensuring successful nesting of Ospreys in commercial forests.

UPM has been funding research project of the Finnish Museum of Natural History where Ospreys are equipped with GPS-trackers to study their migration routes, spatial use and over wintering behavior. The Finnish Osprey Foundation is another partner in this project and responsible for the practical field work.

The results of these activities so far indicate that

- Ospreys favour platforms and most of the Osprey nests are built on platforms.
- Finnish osprey population has increased
- Knowledge of migration routes and winter areas has increased.

5. Publishing activities and achievements in the biodiversity sector in the company's annual, environmental, and/or corporate social responsibility report

UPM does not publish a separate environmental and corporate responsibility report but has integrated this information into its Annual Report since 2007. UPM environmental and corporate social responsibility issues can be found in the UPM Annual Report, see pages 36 – 53 http://www.upm.com/EN/INVESTORS/Documents/UPMAnnualReport2012.pdf.

UPM reports activities and achievements in biodiversity in the company's annual report (produced in accordance with the Global Reporting Initiative), web pages as well as many other reporting initiatives, such as Forest Footprint Disclosure and Dow Jones Sustainability Index.

In 2010 UPM was awarded as "Best in Class" by Storebrand SRI for its environmental and social performance and as a result UPM qualified for investment in Storebrand Investments' SRI-mandates.

UPM Forest Life is an online interactive online platform used by customers, stakeholders and educators. Since its launch UPM Forest Life has had more than 1.5 million visitors from 190 countries. The UPM Forest Life website has received the Favorite Website Award (FWA) as "Site of the Day" on April 28th 2011. Using well established criteria, the FWA is evaluating and showcasing websites which use cutting edge technology, together with inspirational ideas, that lead the way for future generations.

In 2012 UPM was listed as the only forestry and paper company worldwide in the Dow Jones Sustainability Indexes. UPM was further recognised as Supersector Leader in basic materials sector of the Dow Jones Sustainability Indexes. Concerning biodiversity UPM was assessed as the best company within the sector receiving a full score from the DJSI evaluators.

In 2013, the "Biodiversity in Good Company" initiative in Germany was singled out as the official project of the UN Decade Office for Biodiversity by the German Federal Ministry for the Environment.

UPMs Forest Life is an interactive education online platform for customers and stakeholders. Since its launch in UPM Forest Life has had more than 1.5 million visitors from 190 countries.

The comprehensive reporting including our annual report can be found here http://www.upm.com/EN/RESPONSIBILITY/Pages/default.aspx + its subpages.

6. Informing suppliers about the company's biodiversity objectives and integrating suppliers accordingly and step by step

Due diligence in UPM forestry operations is managed through a hierarchical approach with respect to regulations, starting with legislation (Forest Act, Nature Protection Act etc.), the Environmental Management System under ISO 14001, Forest Certification schemes and, finally, the UPM Global Biodiversity Programme. This is further enhanced by operational instructions, the continuous training of personnel and development activities.

Timber to the UPM mills is sourced from three different types of forests and managed by the tools indicated in the table below.

Management category	ISO 14001	Geographic Information System (GIS)	Forest certification	Controlled wood/Chain of Custody	UPM Global-Biodiversity Programme
UPM owned forests	Covers all operations	100 %	100 % PEFC and/or FSC	100 %	100 %
UPM managed forests as an asset management service	Covers all operations	Majority of the estates	91% PEFC and/or FSC	100 %	Promoted
UPM wood sourcing area	Covers all operations	When applicable	Majority under PEFC and/or FSC	100 %	Promoted

ISO 14001 is a cross cutting Environmental Management System (EMS) covering all timber sourcing of UPM. The key elements of UPM specific EMS are

- Environmental Impact Assessment of all operations including potential impacts on biodiversity
- Environmental Objectives and Targets set for each year
- Monitoring & Measurement
- Competence & Training
- Internal Audits
- 3rd Party Independent Verification
- Continuous Improvement

The Geographic Information System (GIS) is a geo-referenced database covering natural resources, including forests and waters. All essential data and information is stored in the system, including information about existing statutory protection areas, habitats of high biodiversity and other sensitive areas.

GIS is the most important tool when forestry operations are being planned. The GIS is always updated after operations have been carried out or when new information is acquired, e.g. data on occurrences of threatened species, important biotopes, protection areas etc.

Forest Certification is a voluntary system which is available to forest owners and subsequently to the other operators in the forestry business. Forest certification has

- Holistic approach to sustainability
- Input of Environmental Non-governmental Organisations (ENGOs)
- Standard typically based on a consensus with measurable Criteria & Indicators
- 3rd party independent verification
- Regular revision of the standards

Forest certification is however not currently available in all locations of UPM timber sourcing area. Therefore UPM has developed a “Model for controlling the origin of wood in UPM wood & biomass sourcing units”. This Model meets the requirements of PEFC (Programme for the Endorsement of Forest Certification schemes, http://www.pefc.org/) chain of custody and “Controlled Wood Standard” of FSC (Forest Stewardship Council, https://ic.fsc.org/). This model ensures that UPM sources no timber from

- Illegal sources
- Controversial sources
- High conservation value forests

UPM goes beyond these minimum requirements to ensure that all wood sourced by UPM originates from both legal and sustainable sources. To that end, UPM has developed and implemented “Rules and Guidelines”:

- “UPM Rules for wood sourcing and forestry activities” and “UPM Forest Certification Rules” are general and publicly available.
- “UPM Wood & Biomass Supplier Requirements” are enclosed as annexes in wood sourcing contracts in different countries.

By signing a wood sourcing contract, a supplier commits themselves to fulfil these guidelines. The guidelines also cover the UPM demands, to minimize the harmful impact of operations (harvesting and forest management) on biodiversity, water, soil and air. In case of non-compliance with this annex, contracts will be terminated and UPM has in fact done so in certain instances.

To proactively support suppliers in sustainable forestry and biodiversity conservation, UPM invests in collaboration and education. UPM's staff, are well trained with degrees in forestry or similar suitable subject. They therefore have an extensive knowledge of, for example, forest planning, soil and water protection, biodiversity, landscape management, wildlife control, cultural heritage and archaeology, meeting the varying conditions of different countries.

Training is an on-going exercise, since new needs continuously arise, e.g. FSC certification in Finland in 2011 and 2012. All field staff were trained to understand the requirements of the new FSC standard, including contractors and suppliers

In regions of “unspecified” risk UPM carries out audits at the suppliers and their upstream-suppliers. In Czech Republic and Hungary, the unspecified risk is drawn from a “Corruption Perceptions Index” by Transparency International and it is lower than 5.0 in these countries, see http://cpi.transparency.org/cpi2012/results/. In 2012 several audits have been carried out at suppliers in Czech Republic and Hungary to verify that the harvested volumes derive from legal sources and sustainably managed forests.

7. Exploring the potential for cooperation with scientific institutions, non-governmental organizations (NGOs) and/ or governmental institutions with the aim of deepening dialogue and continuously improving the corporate management system vis-à-vis the biodiversity domain

UPM’s stakeholder engagement with communities is founded on decades of close cooperation. In many cases the community has grown around UPM's operations over the years.

UPM actively seeks to maintain and develop good relations with its various stakeholders. The company’s key stakeholders are employees, customers, investors, suppliers, local communities, non-governmental organisations, media, governments and regulators.

UPM signed a partnership contract with the International Union for Conservation of Nature (IUCN) in the summer of 2012. The goal of the partnership is to evaluate the content and implementation of UPM's global biodiversity programme, and to develop it according to the conclusions reached during the evaluation. IUCN is the world's largest environmental organisation, with members in over 160 countries. These members include both government and non-governmental organisations.

Some of our other partners include the World Business Council for Sustainable Development (WBCSD) and The Forests Dialogue (TFD). The WBCSD is an organisation of forward-thinking companies that aims to create a sustainable future for business, society and the environment.

TFD is a civil society-driven, multi-stakeholder dialogue platform that aims at forging relationships and spurring collaborative action on the highest priority issues facing the world's forests. The founders of TFD are the World Bank, the WBCSD, the World Resources Institute and the WWF.

UPM and WWF have a long history of co-operation. Recently, this co-operation has been further consolidated and, by nature, it is on-going. UPM and WWF work together in a number of projects, both in Finland and internationally. These projects include

- WWF's Check Your Paper tool
- WWF's New Generation Plantations Project
- Cooperation to protect the Oder River Valley in Poland. UPM Raflatac supports WWF's valuable work in the Rivers for Life project.

Environment Online - ENO is a global virtual school that collaborates with schools from 150 countries. The goal of the school is to promote sustainable development around the world. Planting trees is one of the main activities the school performs in collaboration with its partners. UPM has been in co-operation with the ENO school for several years and has organised tree planting days for schools and schoolchildren around the globe.

Local environmental organisations perform hands-on conservation work at grassroots level. UPM also acts at the local level, and its representatives are part of local communities. Therefore, it is only logical that UPM's natural resource specialists collaborate with local environmental organisations.

Such partners include Aves Uruguay, The Central Finland Bird Club, The Finnish Association for Nature Conservation, The Royal Society for the Protection of Birds (UK), The Ornithological Society of Pori, Save Our Squirrels (UK), The Osprey Foundation, Bird Studies Canada and several research institutions.

For further information see http://www.upm.com/EN/RESPONSIBILITY/Forests/stakeholders/Pages/default.aspx

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