Forestry Sector and Biodiversity Conservation
Best Practice Benchmarking

Outcome of a workshop by the European Union Business and Biodiversity Platform
Background

The EU B@B Platform has been working with the selected sectors to benchmark best practices in each sector with regard to the conservation of biodiversity.

This document is the outcome of the EU B@B Platform sectoral workshops which were held at the European Commission premises in Brussels on September 13 (Food Supply and Extractive industry), September 14 (Agriculture and Forestry) and September 15 (Finance and Tourism). These workshops aimed to present and discuss case studies linked to the Sectoral Guidance document, and to present and discuss benchmarking methodologies towards designing the European Business and Biodiversity Award.

This Sectoral Guidance document includes examples of best-practice guidance concerning the main risks, responsibilities and opportunities for companies in relation to nature and biodiversity conservation. It has been built upon existing guidelines and handbooks previously produced with business organisations and private companies, as well as other relevant materials. It also takes account of the EU nature legislation, notably biodiversity-relevant EU agreements and directives.

This Sectoral Guidance Document is meant to provide companies with tools and methods, guidance and best practices already implemented to help them introduce biodiversity conservation into their strategies and operations.
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1. Introduction

1.1. The EU Business and Biodiversity Platform (B@B)

Safeguarding biodiversity is integral to sustainable development, competitiveness, economic growth and employment and is therefore important for business. In order to strengthen the link between the business sector and biodiversity conservation, the European Commission set up the EU Business and Biodiversity Platform (B@B)\(^1\). This is a unique facility where businesses can come together to share their experiences and best practices, learn from their peers, and voice their needs and concerns to the European Commission.

The specific objectives of this technical platform are:

- To facilitate a business and biodiversity initiative.
- To help businesses find solutions to adjust their activities to ensure a fair income and sustainable growth, while providing benefits for biodiversity and ecosystems
- To give visibility through the implementation of an award scheme, acknowledging the good practice of the best performing businesses.

1.2. This document

This working document is a product of the B@B Platform for businesses in the forest sector. This document has been discussed during the forest sector workshop on September 14, 2010 in Brussels and has been further developed based on the inputs received from the participants in this event. The workshop has facilitated the process of gathering information and knowledge exchange with various stakeholders from the forest sector. Enriched with the deliberations of that workshop, plus further cases and analytical work, this working document aims to provide a practical tool to assist companies in incorporating biodiversity into their activities, whilst also contributing to their business sustainability.

Section 2 of this document presents an overview of the linkages between the forest sector and biodiversity. Section 3 describes 9 cases\(^2\) of how companies in the forest sector incorporate biodiversity concerns in their operations. For clarity on the definitions, used as a frame of reference for the case studies, we provide those for biodiversity, ecosystems and ecosystems services\(^3\). Biodiversity is the variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems, and the ecological complexes of which they are part; this includes diversity within species, between species, and of ecosystems. An ecosystem is a community of plants, animals and smaller organisms that live, feed, reproduce and interact in the same area or environment. An ecosystem service is a service people obtain from the environment. Ecosystem services are the transformation of natural assets (soil, plants and animals, air and water) into things that we value. They include provisioning services such as food and water; regulating services, for example, flood and disease control; cultural services such as spiritual, recreational, and cultural benefits; or supporting services like nutrient cycling that maintain the conditions for life on Earth. Ecosystem ‘goods’ include food, medicinal plants, construction materials, tourism and recreation, and wild genes for domestic plants and animals.

1.3. The case studies

The cases studies range from certification or labeling to adaptation to climate change and wetland management, mainly from a European perspective, but one example is from South Africa. The set

\(^1\) http://ec.europa.eu/environment/biodiversity/business/index_en.html
\(^2\) The information about the cases has been obtained from various sources, including the companies involved. Whilst we have no reason to doubt the validity of the information, IUCN was not in a position to independently verify the content of the case studies. IUCN can therefore not guarantee the quality or validity of the information. Publication of the case studies in this working document does not mean an endorsement of the company or the case by IUCN.
\(^3\) www.iucn.org
of case studies presented in section 3 is by no means a comprehensive overview of how forest related companies are nowadays integrating biodiversity best practices into their operations. To be comprehensive, one would need to take into account the enormous diversity that exists in the forest related business community and in particular assess:

- Different sub-sectors.
- Regional differences (economic, political and ecological).
- Differences in the size of the company and in the scale of its operations.
- The nature of the biodiversity related activities and the different tools that are being used.

To reflect a little on the diversity presented in this working document, a quick inventory of the 8 case studies according to their 'key element' is presented in the table below.

<table>
<thead>
<tr>
<th>Key element</th>
<th>Case study</th>
</tr>
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<tbody>
<tr>
<td>'Do no harm' – avoiding damage</td>
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<td>Compensation and offsetting</td>
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<tr>
<td>Other</td>
<td>2, 5</td>
</tr>
</tbody>
</table>

Without pretending to present a comprehensive picture, we hope that the case studies are a source of inspiration and ideas, to spark further discussion and inputs as a follow-up to the September workshop and beyond in the context of the B@B platform. Key in raising awareness for business and biodiversity best practices is to engage local forest stakeholders in the exchange of knowledge and experiences at EU level. It is important to note that the situation for forests and biodiversity and resulting best practices for business are specific for different regions in Europe.

2. The forest sector and biodiversity

Forests cover about a third of the European Union land area and roughly 30% of the world's land area. For the past 20 years, deforestation has continued globally. However, while Europe has experienced intensive deforestation at different times in its history, the opposite is currently occurring in many EU Member States. Data on the total area of forest in Europe now show an expansion in forest cover in the last 30 years. This is largely due to the abandonment of agricultural land together with reforestation programmes and decreasing grazing pressure, which have led to large-scale conversion of former agricultural land into forested land. However, even if the forest areas are increasing, there are still problems with natural forest biodiversity loss.

Biologically diverse forests are of huge importance to European society – this is clear from an environmental perspective, but also from a social and economic one. From an environmental perspective, forests are home to the largest number of vertebrates on the continent, and provide a habitat for thousands of different species of plants, insects and invertebrates. In addition to biodiversity conservation, biologically diverse forests also provide important ecosystem services, protecting soils, preventing erosion, and regulating freshwater supplies and climate. From a social perspective, forest-based raw materials, goods and services are an important basis for economic recovery and "green growth" in rural areas. Forests also have important social and cultural functions, including recreation, tourism and inspirational values.

Socio-economic benefits

While EU forest owners estimate their number at 16 million, about 350,000 people are directly employed in forest management. The main income from most forest holdings depends on wood
production. Primary forest-based industries (FBI) provide sawn wood, wood-based panels, pulp for paper, firewood as well as forest chips and bark for bio-energy, accounting for more than 2 million jobs, often in rural small and medium enterprises, and a €300 billion turnover.*

Wood supports a large downstream value chain including industries such as furniture, construction, printing and packaging. The forest sector provides around 8% of the total added value from manufacturing. The economic importance of the sector in rural areas is very high as sustainably managed forests build the backbone of the provision of wood to the FBI. Forest based raw materials, goods and services can also be one of the most important bases for economic recovery and "green growth" in rural areas.

Forests also play important social and cultural functions, including through recreation, inspiration for the arts and for mythology, and through religion.

**Forests as carbon sinks**

Forests are an essential link in the global carbon cycle because of their capacity to remove CO₂ from the atmosphere and to store it in their biomass and soil thus acting as a sink. Their growth counteracts rising GHG concentrations in the atmosphere.

**Ecosystem services**

In addition to mitigating climate change, biologically diverse forests also provide important ecosystem services, protecting soils, preventing erosion, and regulating freshwater supplies. As mentioned above, they also play an important role for recreation and leisure services, securing our landscape and natural heritage as well as protection against natural disasters.

**Benefits of integrating biodiversity in business operations**

Forests, and the biodiversity in them, provide businesses with numerous benefits or "ecosystem services". Failing to make the connection between biodiversity and the bottom line poses several risks:

- Operational, e.g. logging operations can be stopped if the habitat of species protected by law is disturbed.
- Regulatory and legal, e.g. companies and staff members can be prosecuted if laws or regulations relating to biodiversity are broken.
- Reputation, e.g. campaigns.
- Product sales and marketing, e.g. the loss of the right to use eco-labels or forest certification labels such as FSC and PEFC on products if operations do not meet requirements, including for biodiversity.
- Business financing, e.g. investor analyses nowadays often include biodiversity questions, the Dow Jones sustainability index questionnaire is one example, where active companies receive higher ratings.

Conversely, companies who make that link can create real business opportunities, such as market access or price premiums for products of a defined high environmental quality. This is especially true for the pulp and paper industry, the building industry and the cork industry.

Through developing sustainable forest management and wood harvesting practices, the industry has a unique possibility to make a significant positive impact on biodiversity by promoting it as part of every-day operations. There are also possibilities in forest plantations (8% of Europe’s forest area) through good design (increase species and structural diversity, developing native woodland along riparian zones) and management practices (control of invasive species, protecting valuable habitats) that support the habitats of natural biodiversity.

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To ensure that forests continue to provide these services, it is essential that they are managed in a sustainable manner, avoiding ecosystem degradation and promoting the conservation of biodiversity. Biologically diverse forests improve forest resilience and adaptive capacity. Forests are an essential link in the global carbon cycle because of their capacity to remove CO$_2$ from the atmosphere and to store it in their biomass and soil thus acting as a sink. Their growth counteracts rising GHG concentrations in the atmosphere.

**Changing role of forests**

For a long time, forests have primarily been managed or established for the supply of wood and timber. During the past decades, the role of forests as a provider of a wider range of goods and services has become more important and it is likely that demands on forests will continue to become stronger and spatially more diversified. For example, demands on forests as a resource for bio energy is likely to grow. Production of wood and other traditional forest resources will have to be balanced with other kinds of goods and services from the forest ecosystems, including biodiversity conservation.

In addition, competition between different types of land use (agriculture, infrastructure, housing, recreation, etc) will continue to rise. This may also affect the area available for forests, although the pressure on forest land will vary greatly from region to region. Europe must develop frameworks capable of addressing and balancing these demands to create optimal forest landscapes in the future while conserving biodiversity. These frameworks need to be flexible and responsive to the local context and needs and they need to recognize the role of forest owners in providing the forest goods and services. Payment for Ecosystem Services (PES) schemes will become more important mechanisms to support the management of forest goods and services.

Forests have a vital role in protecting biodiversity in Europe. Despite political commitment and some progress on the ground, Europe is struggling to halt the loss of biodiversity.

### 3. Case studies

#### 3.1. Case study 1: SiyaQhubeka forests and new generation plantations – South Africa

**Company:** Mondi ([www.mondigroup.com](http://www.mondigroup.com))

Mondi is a leading international paper and packaging group with operations across 31 countries and an average of 31,000 employees.

**Objectives**

**Aim**

Restore functionality to the iSiminagaliso Wetland in a way that satisfies all interested and affected parties.

**Background and rationale**

Upon privatisation of South Africa’s extensive plantation forests in 2004, Mondi successfully bid for the plantations on the Western shores of Lake St. Lucia in Northern KwaZulu-Natal, South Africa, resulting in the formation of SiyaQhubeka Forests (Pty) Ltd. SiyaQhubeka Forests (SQF) is a partnership between Mondi and its black empowerment partners, the government and local communities and was the first commercial organization to delineate an accurate 120 km ‘eco-boundary’ line between a World Heritage Site (iSimangaliso Wetland Park) and a forestry plantation.

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7 Based on information provided by: Tanya Patterson, Mondi, Email: tanya.patterson@mondigroup.com
Lake St. Lucia is one of the largest estuarine systems on the African continent and is recognized for its historical background, its significant natural resources, many of which have considerable scientific value, its considerable natural beauty, and as a popular tourist destination.

Lake St. Lucia is the Mkuze River estuary but receives its water from a number of other smaller rivers and streams. Its associated wetland and marine environments cover an area of just under 290,000 hectares and have long been regarded as having major importance for nature conservation and tourism.

As the only remaining coastal wilderness in the country, the area is vulnerable to disturbances from several quarters, particularly from development along the Western periphery of the park. The Western shores of the lake contain extensive High Conservation Value wetlands and are a major potential for conservation and tourism. Historically, plantation forests on these shores were of particular concern as they reduced freshwater flow into the lake (especially relevant in the dry season when salinity levels in the lake escalate), impacting negatively on the biodiversity resources of the lake.

At the turn of the century, a study of the plantation forests on the Western shores of the lake showed that some portions of this land comprised areas of conservation-worthy natural communities and wetlands, while other areas were well suited for commercial afforestation without causing significant impacts on the Park itself. The study proposed two primary zones: a Commercial Afforestation Zone and a Natural Zone comprising conservation-worthy natural communities and incorrectly sited plantations restored to their natural states. This latter area, now known as the iSimangaliso Wetland Park, is the most important protected coastal area in the country and is listed as a World Heritage site.

Criteria for land to be included in the Natural Zone included the presence of important biological communities, water source areas and wetlands, while soil most suited for afforestation was included in the Commercial Afforestation Zone. The study suggested that a boundary following natural features would best satisfy these aims. The solution ultimately adopted by Mondi was to use soil augurs to separate broad soil groupings (essentially separating dryland soils and wetland or hydromorphic soils).

Based on a scientific ecosystem assessment and following a participative approach involving Mondi, SQF, the government, environmental NGOs and the Park Authority, the agreed positioning of the eco-boundary line recognized the importance and functionality of the extensive wetland systems for Lake St. Lucia.

The eco-boundary agreement paved the way for the transfer of 9,000 hectares (4,500 allocated to Mondi) of commercial state plantations with significant potential conservation value to the iSimangaliso Wetland Park and the official inclusion of 14,200 hectares of SQF’s commercial landholdings and associated natural ecosystems into the Park on the Western shores of Lake St. Lucia. The transferred land has now been rehabilitated to functioning wetlands and grasslands and the SQF commercial areas including important wetlands, forests, grasslands and ecological networks have extended the habitat for a wide range of species in the iSimangaliso Wetland Park.

Expectations - Benefits to biodiversity and the company
The agreement has brought about a significant addition of conservation-worthy land to the iSimangaliso Wetland Park World Heritage Site and successfully delineated and protected important natural communities, water source areas and wetlands.

Partners

Stakeholders involved
Mondi, SiyaQhubeka Forests, the South African government, iSimangaliso Wetland Park authority, environmental NGOs

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8 A soil augur is a certain type of soil sampler
Outputs

Achieved benefits for the company and for biodiversity
This land has now largely been rehabilitated to wetlands and grasslands, restoring soil and water conditions and encouraging biodiversity. SQF’s plantation areas including associated wetlands, natural forests and key ecological networks have now become part of the iSimangaliso Wetland Park, and form the buffer between the Park, local communities and commercial farming areas, extending habitat that allows for species such as elephant, rhinoceros, buffalo, cheetah and other game to roam freely within the commercial forestry area, transforming a long history of passionate dispute between local forestry operations and environmentalists into a true partnership. As a result, iSimangaliso Wetland Park gained 9,000 hectares (4,500 hectares of Mondi land) to be returned to high conservation value (HCV) ecosystems.

Other sustainability benefits (economical, environmental, social)
The integration of local communities and small growers in the plantation model and the engagement of local communities have raised the levels of skills, education and viable small businesses in the area.

Small and medium enterprise development in the Zululand region has been stimulated through SQF’s activities. SQF has identified and implemented small business initiatives such as honey production, nursery production and firewood collection.

Business opportunities for the local communities have also been provided through timber farming support schemes to grow and manage commercial plantation trees under the guidance of Mondi.

Innovation
Mondi’s participation in global and local initiatives to improve intensely managed planted forests (such as the SQF and the iSimangaliso Wetland case described above) has enhanced existing forestry practices, resulting in a new generation of highly productive plantation forests (New Generation Plantations), which address economic, social and environmental issues more equitably.

Describe the win-win situation
New Generation Plantations support wealth creating industries, sustained livelihoods particularly in rural areas and provide a range of social and environmental benefits while at the same time ensuring highly productive plantations well into the future.

SQF, Mondi and the government have successfully integrated local communities and small growers in the plantation model, transforming long-standing conflicts into partnership by generating cooperation between business, NGOs and government in a sustainable ‘win-win’ solution that has set new conservation norms for commercial forestry plantations. Today, both the plantations and the park are thriving enterprises, animals are free to roam in the plantations, wetland areas have been restored to functionality and trust levels are high.

Lessons learned
- The benefits and value of engagement with and cooperation between key local and national stakeholders.
- The long lasting repercussions and benefits that have the potential to result from such a partnership.
- The power of environmental NGOs.
- The importance of using solid and reliable science to identify the key issues (water) and to solve the conflicts.
- The success, effectiveness and speediness with which ecosystems make a recovery and return to functionality.
Recommendations

Applicability
The New Generation Plantation concept provides a model for managing plantations situated in areas with constrained resources while still maintaining key biological services and resources. It is a commercial model for any plantation forest in the world where there is a conflict between fibre source, development and biological services.

Follow-up

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3.2. Case study 2: Holm oak (*Quercus ilex*) provenance trial at Herdade do Esporão – Portugal

Company: Esporão S.A. (www.esporao.com)

Objectives

Aim
To assess the genetic variability between Portuguese populations of Holm oak (*Quercus ilex*) and compare the adaptability and growth rate of these populations with other populations which are located at the edge of its natural range.

Background and rationale
In the face of climate change, research and trials are required to understand the performance of different genetic provenances of forest species.

Expectations - Benefits to biodiversity and the company
Holm oak is the main forest species at Herdade do Esporão (Central-South Portugal) and this is therefore a priority species to assess its adaptability to climate change.

Partners
Instituto Superior de Agronomía (www.isa.utl.pt)

Outputs

- Scientific publications with the trial results.
- Provide the landowner with decision making tools to plan both investments and management activities in the forest.
- Increase knowledge about the species ecology and adaptive capacity.

Recommendations

- A validation of the Portuguese official regions of provenances.

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Based on information provided by: Filipa Gouveia, Directora-Geral, AmBioDiv – Valor Natural. Ambiente, Natureza e Sustentabilidade, Lda : ambiodiv@ambiodiv.com
To provide contribution to the EUFORGEN - European Forest Genetic Resources Programme.

3.3. Case study 3: Terney Les, Terney Wood Products Facility – Russia

Company: Terney Wood Products Facility

Objectives

Aim
To improve the efficiency and utilization of waste at the Terney Lec sawmill complex while exploring how to promote rural development.

Background and rationale
An analysis/evaluation was implemented for the better utilization of wood waste in the Terney Wood Products facility (further to be designated ‘Terney Les’). On an annual basis the Mill was assigned a very large fine from the Russian Federation government for covering the ground with sawdust and wood chips, residuals from the sawmill complex.

As a result of the analysis/evaluation an initiative was presented to Terney Les. Terney created a contractual agreement with the nearby village of Terney, situated 10 km from Terney Les mill complex. Terney Les paid technical experts to recondition the central heating plant for the village of Terney (population approximately 8,500) to accept a large range of wood waste – sawdust, limbs, wood chips, and other various-sized waste products from the mill process. Terney Les purchased two trucks and paid drivers and labour on the ground to load the trucks with the wood waste. The village of Terney heated and provided hot water to all of the town’s inhabitants for the entire heating season from wood waste produced at Terney Les, the balance of which came from the waste on the ground the first year. The village of Terney paid nothing to Terney Les for the biomass and consequently did not have to pay for fuel to heat the village. In the past, Terney purchased expensive coal that contained high levels of arsenic, a known carcinogen. Terney was able to provide heat and hot water to the entire village from its central heating plant at a cost of 0.00 Euros. The money that Terney formerly used to purchase coal was now diverted to other things in the town, such as needed repairs to buildings and public transport improvements. Because Terney Les disposed of the waste they normally dumped adjacent to their mill, the fines assigned by the Russian Federation were minimal.

Partners

Stakeholders involved
Village of Terney, Administrators from Terney Les

Outputs

Achieved benefits for the company and for biodiversity

- Sustainable energy production for heating and hot water supply of the village.
- Sustainable use of forest resources.

Other sustainability benefits (economical, environmental, social)
The inhabitants of the village have energy at low costs and improved health conditions.

Innovation
The use of a wide range of biomass waste products from Terney Les in a local heating plant. Terney Les took a risk to innovate by envisioning the transport of waste biomass to Terney village.

Describe the win-win situation

Based on information provided by Richard Aishton, IUCN. Richard.aishton@iucn.org
At the end of the heating season, Terney Les calculated that the amount it formerly paid in fines on an annual basis was greater than the cost of labour and transport to take the waste biomass to the village of Terney.

**Lessons learned**
Local official buy-in is required, as well as full cooperation from other sectors, in this case Terney Les. The cooperation linkage was provided by the combination of data from other existing projects and experience of the team implementing the analysis. Lesson: hard data from completed projects + experience in analysis of wood conversion potential + skill in explaining facts to decision makers = project implementation (or not).

**Recommendations**

**Applicability**
Whenever large wood production facilities exist, there is the likelihood of waste materials. This fact can be used to identify potential geographical sites for further analysis.

**Follow-up**
Terney Les and Terney village have agreed to continue to provide data about biomass production/usage. They are also being considered as model projects for other similar arrangements in the Russian Far East (RFE).

**3.4. Case study 4: Protection of the state forest through use, Ebrach – Bavaria, Germany**

**Company:** Bayerische Staatsforsten, Bavarian, State Forest Agency

**Objectives**

**Aim**

- Awareness raising for the value of the forest land for nature and biodiversity protection for all involved stakeholders.
- Recognition of the Ebrach Forest Agency as a competent partner in nature and biodiversity protection.

**Background and rationale**
The forest service Ebrach is responsible for the protection of diversity of one of Germany's most important broadleaf forest areas. The protection of biodiversity is central to the nature conservation concept. This includes 480 beetle species, which have a key role, as they secure the survival of many other species. The Ebrach integration concept ('Protection through use') combines protection of biodiversity with use of the forest.

The Bavarian State Forest Service is certified according to the PEFC (Programme for Endorsement of Forest Certification Schemes) standard.

The availability of living and dead wood is of vital importance to biodiversity protection. There is a network system which excludes certain forest areas from use and creates extensive management in others. The part of the forest which is not used contains forest reserves, ‘stepping stones’, wet and dry areas and transition zones, covering in total 997 hectares, which is equal to 6% of the forest.

The areas that are not used guarantee biodiversity conservation and establish corridors and stepping stones as part of the network. The stepping stones consist of forests that are not used for commercial purposes or areas that are under extensive management.

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11 Based on information provided by: Ulrich Mergner, Forstbetriebsleiter, BAYERISCHE STAATSFORSTEN, Forstbetrieb Ebrach. Email: ulrich.mergner@baysf.de
In addition to non-use forest, 3,824 hectares of the forest are under extensive management, which consist mainly of old and young forest land. There are requirements for the amount of dead wood and the maintenance of old growth trees and in all cases the protection of nature and biodiversity is carefully monitored.

The non-use and extensive managed areas lead to a loss of income, but is a voluntary contribution to the international year of biodiversity. Next steps foreseen are cooperation with nature protection organizations to follow up on protection measures.

The sustainability concept "Protection through use" consists of two components 1) increasing the structural diversity of the commercial forest areas and 2) protecting species populations in connected forest reserves, and has integrated and embedded the objectives for nature and biodiversity protection in the timber production activities with concrete operational measures. Examples of these measures are: leaving dead trees and branches in the forest, mother trees are protected; young trees are kept under low management intensity.

The State Forest Agency strategy focuses on:

1. Protection of the beech-broadleaf character of the 'Steigerwald'
   - Use of single trees, without logging complete areas.
   - Forest regeneration through rejuvenating indigenous species.
   - Integrate broadleaf species in pine forests in addition to natural beech renewal.
   - Protect biodiversity through conservation of forests as well as other habitats.

2. Protection of social functions
   - Improve the biodiversity functions and ensure conservation of nature, landscape, water provision.
   - Support research and education.
   - Fundraise for social functions of forest.

3. Strengthening the financial situation
   - High value timber based on close to nature forestry.
   - Reduce human interaction by increasing natural processes.
   - Hunting deer for financing forest renewal.
   - Reduce activities with low financial support.
   - Increase the financial flows from additional activities.

**Partners**

**Stakeholders involved**
The Bavarian State Forest Agency is open to collaboration with all interested parties, no matter what their background is. The objective is to have a regular dialogue concerning nature protection themes.

**Outputs**

**Achieved benefits for the company and for biodiversity**
Protection of biodiversity, and increasing resilience, for factors, such as climate change impacts and secure future supply of timber and maintain important tree species as 'mother trees'. The concept increases the quality of the forest resources by bringing the forest back to its natural development process.

**Other sustainability benefits (economic, environmental, social)**
Maintenance of the natural landscape and no pesticides are used in the forest. During logging activities, soil, vegetation and trees are treated with care, to reduce the harm to the existing forest biodiversity. The use of paint to mark trees is limited and used as invisibly as possible. No hunting is allowed for red list species and birds, and lead free ammunition is used.

The biodiversity protection programme will at first reduce the timber production and change the tree species composition, but in the medium and long-term, the improvement of soil composition, to capture more water and nitrogen and the three growth will have a positive impact and increase the supply of timber.

The forest and its exploitation cannot build on an economic analysis of the protection of the ecological value of the forest, as many of the elements involved (habitats for species, clean water, CO2 sequestration, protection against floods, recreation space) cannot be quantified easily. This has implications for the economic value of the timber operations.

Describe the win-win situation
Biodiversity protection goes hand in hand with sustainable forest management and increased supply of timber.

Lessons learned
The protection of forest areas is not in conflict with the use objectives. Sustainable use goes hand in hand with increasing the biodiversity value of the forest.

Recommendations

Applicability
It is important that all employees of the forest service identify with and understand the new concept for protection and use and are committed to implement it in their daily practices.

Follow-up
Establish closer collaboration with parties interested in the "protection through use" concept.

3.5. Case study 5: Valuation of local ecosystem services; the role of the cork oak montado\textsuperscript{12} – Portugal\textsuperscript{13}


Objectives

Aims

- To explore the link between ecosystem services (ES) and the spatial/temporal dynamics at the local level;
- To understand the impacts on ecosystem services of land management practices in the case study area throughout the years;
- To assess, at the local level, the most relevant ecosystem services for the case study area, as well as for other areas with similar scale and characteristics. Qualify identified ecosystem services as ‘Public or Private Goods and Services’;
- Focusing on ecosystem services that provide ‘Public Goods and Services’, to assess the relationship between agroforestry management (coupled or not with a certification scheme, e.g. Forest Stewardship Council) and the status and trend of selected ES. Specific questions: Do certain land use types have a higher number of or better ES? Is a cork oak montado better than a Eucalyptus plantation?

\textsuperscript{12} A montado is an open cork oak woodlands
\textsuperscript{13} Based on information provided by: Paulo Bessa, CORTICEIRA AMORIM, S.G.P.S., S.A. e-mail: paulo.bessa@corticeira.amorim.com
• ES valuation: exploring the various methods and their constraints and taking into account the existence of market value or non-market value. Some values (whenever possible and only for public or semi-public services/goods) will be given for the case-study area.

Partners

Stakeholders involved

- Quercus - Associação Nacional de Conservação da Natureza (www.quercus.pt)
- WWF Portugal (www.wwf.pt)
- Herdade da Machoqueira do Grou, CRL

Outputs

Achieved benefits for the company and for biodiversity

The achieved outputs are:

• The establishment of a relationship between land use and the ecosystem goods and services provided at a local/property scale.
• A matrix to assess who benefits from the public goods provided by ecosystem goods and services at a local/property scale.
• Formulation of a Framework for Rural Properties Evaluation, which gives a score to each ecosystem good and/or service based on the established variables and the management indicators to monitor.
• An Economic Value Matrix, where according to the property characteristics and the available data an economic valuation of each ecosystem good and/or service is performed whenever possible.

With these results it is possible to demonstrate the relative importance of each land use in a property beyond the traditional harvested goods and services. Other revenue possibilities are provided to the landowner, as well as decision making tools to plan both investments and management activities.

Other sustainability benefits (economical, environmental, social)
It is expected to demonstrate that the cork oak montado can provide several ecosystem goods and services while the cork is still harvested, which gives landowners an incentive to invest in good forest management practices. In this way, better cork will be produced and the landowner can harvest or exploit other goods and services without compromising cork production.

Recommendations

Applicability
This project is the kick-start to a broader implementation of the methodology and of the matrixes generated through the project in other properties.

Follow-up
Gathering more data will deliver more accurate information to perform the economic valuation.
3.6. Case study 6: The Cork Mark – International

**Company:** C.E.Liège, The European Cork Confederation (http://www.celiege.com/).

Founded in 1987, the Confederation represents the entire European Cork Industry from production to manufacturing and distribution of cork products.

**Name of the Project:** The Cork Mark

**Objectives**

**Aim**
The Cork Mark is an international symbol that identifies cork products or products with cork. It intends to offer the consumer unmistakable guarantees about the quality and origin of cork.

**Background and rationale**
Cork is a material that comes from the bark of the cork oak tree, which is peeled each 9 years without damage to the trees. This makes every tree a renewable resource of raw materials, preserving the integrity of cork oak forests. The cork is then used in a high range of different products worldwide, mainly cork stoppers. 86% of cork production worldwide comes from Europe. 70% or 250,000 tons per year goes into the production of wine stoppers production. By buying this material we are supporting an economic activity which is essential to maintain this anthropogenic ecosystem called montado.

**Expectations – Benefits to biodiversity and the company**
The Cork Mark gives the guarantee of the material and its sustainable production, harvesting and process. Therefore, it promotes the sustainable management of the cork sector while protecting biodiversity.

To be able to have a Cork Mark, the cork sector stakeholders have to be certified, and CE.Liège has created two international codes which combine the conclusions of the European-funded “Quercus” project with the concerns of the cork sector. These codes, the International Code of Cork Oak Management and Harvesting Practices (ICCOMHP) and the International Code of Cork Stopper Manufacturing Practice (ICCSMP), are attributed by an independent body through an accreditation system called SYSTECODE, which have become the international reference for stakeholders in the cork sector.

It also works as a communication tool, particularly important in countries without this ecosystem and consequently not familiarized with the advantages of using cork, either due to uniqueness of the material or its environmental benefits, particularly for biodiversity.

Additionally, by using the cork mark the consumer is able to differentiate this cork from other materials like plastic and aluminum, with a much higher carbon footprint.

**Partners**

**Stakeholders involved**
The Cork Mark project was created by the European Cork Federation (C.E.Liège) together with the European Forestry Commission of the Food and Agriculture Organization and in partnership with cork oak associations, NGOs and public administrations.

**C.E.Liège members include:**

- APCOR
- AECORK

14 Case study provided by the European Landowners’ Organisation (ELO). Contact: Darius Movaghar at legalaffairs@elo.org
• FEDACOR
• FFSL
• DEUTSCHER KORK-VERBAND e.V
• Cork Industry Federation
• ISOCO
• ASSOLEGNO DELLA FEDERLEGNO ARREDOASECOR

C.E.Liège partners include:

• Instituto del Corcho, la Madera y el Carbón – IPROCOR
• Direcção Geral das Actidades Economicas – DGAE
• Stazione Sperimentale del Sughero
• Direcção Geral dos Recursos Florestais
• Centro Tecnológico da Cortiça
• Instituto Catalã del Suro
• Fundación Andaluza del Alcornoque y el Corcho – FALCOR

Outputs

Achieved benefits for the company and for biodiversity
Cork oak forests play a key role in the conservation of biodiversity. They contain high levels of plant and animal diversity and the sustainable harvesting of cork helps the montado survive. The Cork Mark is an important tool to promote their sustainable use.

Other sustainability benefits (economical, environmental, social)
Cork oak landscapes are particularly well adapted to the harsh Mediterranean climate and soil conditions and play a vital role in carbon sequestration and soil conservation. Without cork forests many areas could suffer from desertification.

Cork oak forests are multifunctional forests and essential to the economic development of rural areas of Southern Europe with low economic potential. In addition to cork bark, which is the most important economic activity, these forests support various economic activities like livestock breeding, hunting, bee keeping and the production of edible mushrooms and truffles.

Established in the economically less favourable rural areas of Southern Europe, the cork industry is essential for the social sustenance of these areas, providing employment and assisting with the survival of local rural communities and their cultural heritage. More than 100,000 people in European cork-producing countries depend directly or indirectly on the cork industry.

Innovation
Wine bottles with a Cork Mark have been sealed with natural cork closures and manufactured to the strictest quality standards. Therefore, this symbol helps to distinguish and enhance the prestige of good wines, as well as helping consumers to make informed decisions.

The win-win situation
When promoting the use of cork we are supporting a valuable anthropogenic ecosystem that will not be maintained without this economic activity.

Lessons learned
The cork is a material that is natural, renewable and totally recyclable.

Apart from its environmental advantages, the cork stopper offers physical, mechanical and chemical properties compatible with the requirements of the modern wine industry. For this reason, it is the seal that consumers prefer most, and an indicator of the quality of a wine. In fact, connoisseurs know that a good wine requires a cork stopper.

However, most consumers have little or no choice about the type of seal for the wine bottles that
they purchase. This illustrates that even with convincing arguments, cork stoppers suffer strong competition from alternative products. Therefore, consumers should be informed about the pros and cons of different materials used as bottle stoppers and they should be able to know and choose what type of stopper comes with the bottles they are buying.

**Recommendations**

**Applicability**

The Cork Mark and symbol are registered trademarks for different classes of products: for example agglomerated cork plank, cork stoppers and raw cork bark.

In the case of bottles, different application alternatives of the symbol have been developed. The objective is to offer the producer the choice of application that best suits his needs.

The use of the symbol is free of charge to the wine industry, although it is necessary to ask C.E. Liège for authorization, via its web site: [http://www.celiege.com/](http://www.celiege.com/)

**Follow-up**

The use of the Cork Mark is increasing both in Europe and worldwide. It can be found in Australia, New Zealand, United States of America, Switzerland, Bulgaria, Canada, Chile and Argentina. Since the use of cork is directly linked to the conservation of the montado and its associated biodiversity, the increasing number of users is really good news for our flora and fauna.

3.7. Case study 7: Biomass procurement guidelines – Austria

**Objectives**

**Description**

Procurement guidelines for the purchasing of forest biomass for energy have been developed to minimize negative impacts on the forest ecosystem in the following ways:

- Site selection to maintain nutrient balance and avoid soil degradation or acidification.
- Timing to favour dry periods and reduce habitat for pest development.
- Leave part of the biomass on site to maintain site fertility and habitat for deadwood inhabiting species.
- Protect and maintain valuable habitats.
- Create buffer zones that protect watercourses, valuable habitats, standing and fallen deadwood, retention trees, the forest edge and cultural features.
- Stacking and transport planned to avoid sensitive sites.
- Meet all other environmental requirements of wood harvesting operations.

**Background and rationale**

Large quantities of harvesting residues left in the forest are the by-product of normal timber harvesting operations. These residues offer potential as biomass for sustainable biofuels and a new source of income for the forest owner and harvesting contractors. Forest biomass can take the form of branches, tops, stumps and small tree thinnings. The demand on forests as a source of biomass for energy is growing and careful consideration of suitable sites and harvesting methods is necessary to avoid damage to biological diversity and ecological conditions.

**Partners**

The guidelines are (potentially) being used by forest owners, forest managers, contractors, logging and transport companies and the biomass buyer.

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15 Published in 2009: ‘Sharing experiences, promoting biodiversity in the European Pulp and Paper Industry’ by CEPI and Eurosíte
Outputs

The guidelines minimize the impact of biomass harvesting on the habitats of forest species. For example, existing deadwood standing or on the ground is left untouched and the habitat of birds, fungi and insects is preserved. Forest biomass harvesting is also one method through which to keep the forest healthy and free of pests and diseases.

Recommendations

Biomass harvesting can be combined with the harvesting of timber. Good planning minimizes disturbance to the forest and its wildlife. It also provides a new source of income for the forest owner, creates jobs for contractors and potential resources for further ecosystem improvements.

3.8. Case study 8: Restoration of forest and forest covered mires16 – Finland17

Objectives

Aim
As part of a Forest Life project, forests and forest-covered mires were restored with the support of the EU Life – Nature fund. Another project objective was to spread information about ecological restoration, and thus to promote a favourable attitude towards ecological restoration of forests.

Rationale
Natural forest-covered mires have become scarce especially in Southern and Western Finland, and very few of them are situated in conservation areas. Forest-covered mires provide a habitat for a number of bird, insect and cryptogam species. Mires that today belong to conservation areas but used to be commercial forests often contain drainage ditches that were constructed to facilitate exploitation. Through the restoration of the hydrology of drained mires, the natural features of mires, such as the formation of peat and typical mire species, can be recovered.

Background
Ecological restoration works were carried out in forests and mires to speed up the recovery of the structure of natural boreal forests and of the hydrology of natural forest-covered mires. The work was carried out in 34 Natura 2000 sites and included former commercially managed forests. Key steps in the project included:

- Land acquisition of 290 hectares of land by the state for conservation purposes.
- Training in ecological restoration for 300 forest workers.
- Inventories of the habitat structure in each area and assessments of the need for restoration measures in forests and forest-covered mires.
- Damming and filling of drainage ditches.
- In mature forests, promoting deadwood by felling, girdling and blowing up trees.
- Providing aspen deadwood to support species of beetles and polypores18 that depend on the aspen.
- Controlled burning to attract beetles, including threatened species, and to promote structural diversity in young forests managed initially for commercial conifers.
- Hundreds of hectares of sunny esker habitats were recovered by small-scale controlled burning, by making small clearings and by increasing decaying wood.
- Large clumps of coniferous trees were felled or girdled around broadleaved trees in young forests to favour growth through increased light and promote structural diversity.

16 Mires are areas of wet, swampy ground, such as bogs and marshes
17 Published in 2009: 'Sharing experiences, promoting biodiversity in the European Pulp and Paper Industry' by CEPI and Eurosite
18 A type of fungus
• Promoting White-backed Woodpecker habitat by removing spruces and small rowans from deciduous forests in order to increase the amount of light in them. Decaying wood was increased by both girdling and felling birches.
• Restoring unused logging roads that fragment conservation areas by felling trees across them, ripping the surface with an excavator to encourage tree regeneration and shaping the soil to fit the landform.

Partners

Forest owners, forest and protected area managers, and forest workers are participating in this initiative.

The project was part of The Forest Biodiversity Programme for Southern Finland (METSO-programme). The objective of METSO is to secure a favourable level of conservation of forested habitats and endangered species, i.e. the habitats and structural features of forests that are important for the species. Metsähallitus was responsible for the execution of the Forest Life project with its partners, the University of Joensuu, the Finnish Defence Force (Karelia Brigade), WWF Finland and UPM-Kymmene.

www.metsa.fi/forest-life; matti.maatta@metsa.fi; timo.lehesvirta@upm-kymmene.com.

Outputs

The main results are:

• Deadwood creation in an area of over 2700 ha.
• Controlled burns in an area of more than 350 ha.
• Creation of 200 ha of White-backed Woodpecker habitat.
• Promotion of deciduous trees and a diverse forest structure in 2800 ha.
• Mire restoration over 400 ha:
  Drainage ditches of forest-covered mires on an area totalling around 400 ha on ten Natura 2000 sites were dammed and filled. Thus water will return to its natural course and the drained area will become a mire again.

Monitoring of the restored forests and mires will over the years reveal the detailed effects of the restoration. Besides ecological effects, the project also had a significant employment effect and trained over 300 forest workers.

3.9 Case study 9: Interdisciplinary development of a forest management plan focusing on the protection of beetles and bats in Special Areas of Conservation (Natura 2000) – Austria

Company: Österreichische Bundesforste AG, Pummergasse 10-12, AT-3002 Purkersdorf, Austrian State Forest Organization managing 860,000 hectares of natural resources

Objectives

Aim
The aim of the project is to establish a managerial basis for implementing and realizing protection and nature conservation measures of Annex II Species – namely of the Habitats Directive – embedded within the regular forest management planning an mapping. Thus adequate information about related habitats is needed to properly integrate them in the day-to-day forest management plans.

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19 Case study provided by Österreichische Bundesforste AG, Roland Kautz
Additionally, this information creates the basis for target-oriented cost planning of such nature protection activities, respectively reveals the opportunity costs in terms of non-extensively used habitats.

**Background and rationale**
Austrian forests were threatened by loss of various natural structures combined with the decline of species. Urgent coordinated action was needed. In 2006, Austrian Federal Forests Enterprise was the first forest enterprise in Europe to join Countdown 2010. The company created a biodiversity programme with the aim to enhance (semi-) natural developments in Austrian forests, to support special nature conservation activities, and to increase the number of ecologically valuable tree species. The program focused on the implementation of specific conservation projects for endangered species like the Grouse, the Hazel Dormouse, the Ural Owl, the Rosalia longicorn (*Rosalia alpina*), and for habitats such as meadows, forests as well as the renaturation of bogs and streams in Austrian forests.

In cooperation with NGOs and research institutions, the Enterprise also initiated various studies on the topic, for example, “Biomass and Biodiversity” or “Climate Change and Biodiversity”. To support a knowledge exchange between relevant stakeholders, specialized workshops were organized, for example, a workshop about “Large Carnivores” in Austria. To raise awareness about nature conservation, the Enterprise organized forest education walks, trained its foresters on biodiversity, published various brochures on the topic, and created guidelines on the protection of Alps or took steps for the protection of birds in the forests.

The Enterprise also supported Austrian national initiatives to protect biodiversity (see Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management).

According to the Sustainability Balanced Scorecard (SBSC) – used to measure the results of the biodiversity programme – the number of nature conservation activities in Austrian Federal Forests has increased from 180 in 2005 to 719 in 2009. The successful realization of the biodiversity programme was also possible thanks to the commitment of local forest district managers. For its research efforts in climate change and biodiversity, the Enterprise received the Austrian Climate Protection Award.

**Expectations**
Assuring the implementation of Natura 2000 as a contribution to biodiversity objectives in a State Forest Organization while balancing various stakes in forest ecosystems and integrating biodiversity objectives in the established forest management plans.

**Partners**
- Österreichische Bundesforste (Project Owner, project management)
- coopNatura – Consulting agency for ecology and nature protection
- Experts of the Natura 2000 community in Austria
- Rural commune of Senftenberg (Lower Austria)

**Outputs**
- Achieved benefits for the company and for biodiversity.
- Establishment of a Geographic Information System (GIS) and data-base system with relevant information on forest habitats and conservation needs and areas.
- Joint agreements on areas used for investigation in terms of forestry and zoological manner.
- Screening of target species and their habitat requirements.
- Screening of additional target species (*Xylobiont*).
• Interdisciplinary development of conservation and maintenance measures and cost-planning to quantify conservation activities for similar activities related to forest management.

Other sustainability benefits (economical, environmental, social)

• In line with the strategy implementation and controlling tool of the Sustainability Balanced Score Card (SBSC) where 15 indicators are measured on the three sustainability-dimensions (economy, ecology and society).

Innovation

• The innovation comes forward in the commitment of a forest owner/management entity to integrate biodiversity issues in daily forest management plans and performance.

The win-win situation

• The win-win situation is related both to the fact that all stakeholders involved (Forest Management/policy [commune] and Nature Conservation Agencies) jointly established a common understanding, language and way of thinking on how to (i) record, (ii) map, (iii) monitor and (iv) manage biodiversity-focused items and to integrate them in day-to-day forest management. To make this happen is a real innovation in this context.
• Lessons learned: The real lesson learned is that the realization of biodiversity activities by organizational systems is based on the fact that communication and mutual understanding of organizational thinking and behaviour can be aligned with the policy-related nature conservation objectives to be achieved. Therefore, the interdisciplinary integration of management principles in day-to-day performance is the secret of the long-term success or failure of such initiatives.

Recommendations

Applicability
Apart from the contents of the project, the establishment of a proper project organization (social network) and the attitude to jointly work in such an area with limited budgets and financial resources has to guarantee the basis for achieving biodiversity objectives. This is especially true in cases where sceptical concerns and behaviour towards Natura 2000 exist.

4. Follow-up on benchmarking best practices

As a follow-up, this show-case can be used as organizational competence/experience to roll-out similar small and medium-scaled biodiversity activities.

Benchmarking: towards the design of a European Business and Biodiversity Award

The aim of establishing an award for outstanding contributions to biodiversity by the forest sector is to discover the most innovative, ambitious and effective initiatives for biodiversity by the forest sector in Europe.

It is important to ensure that both large and small companies have an equal chance to win by making concrete improvements for the environment and biodiversity, as well as achieving economic and social growth. Therefore, different categories could be defined for different types of companies interested to submit their work as an outstanding example in Europe.

To develop the foundation and criteria for developing an award scheme for best performing companies in the forest sector in the EU, we refer to a number of existing examples and initiatives.
that could perhaps serve as a basis for a new award scheme unique to the EU and with clear added value in comparison to existing award schemes. The new award will show that there is no shortage of solid business ideas that can create jobs and growth and help address critical biodiversity challenges. This will help spread a positive message for business and biodiversity, and will make a significant positive contribution to the greening of the EU. Promoting the award will lead to sharing best practice to a wider audience.

**Existing initiatives, standards and awards**

- **SEBI 2010** – Streamlining European 2010 Biodiversity Indicators was launched in 2004. Its aim is to develop a European set of biodiversity indicators to assess and inform about progress towards the European 2010 targets.

- **Forest Stewardship Council (FSC)** – founded in 1993, FSC is an international non-government organization dedicated to promoting sustainable forest management through voluntary certification.

- **The Program for the Endorsement of Forest Certification (PEFC)** – founded in 1999, PEFC is an independent, non-profit, non-governmental organization which promotes sustainably managed forests through independent third party certification. PEFC is a global umbrella organization for the endorsement of national schemes. About 8% of the world’s forests are certified, of which two-thirds are certified to PEFC.

- **Integrated Biodiversity Assessment Tool (IBAT)**, www.ibatforbusiness.org – A partnership between BirdLife International, Conservation International, the International Union for Conservation of Nature and the United Nations Environment Programme World Conservation Monitoring Centre. It provides access to information about high-priority sites via online biodiversity maps to inform the implementation of corporate biodiversity policies and enhance environmental management systems.

- **The IUCN Red List of Threatened Species™** – The most comprehensive and objective approach for evaluating the conservation status of plant and animal species globally.

- **Green Business Awards UK** – The Green Business Awards celebrate excellence in green practice, strategy and products. They seek out and scrutinize the most innovative, ambitious and effective initiatives by UK business for achieving environmental sustainability and implementing smart business practice.

The above listed standards and assessment tools, provide a number of criteria that relate to the impacts on biodiversity and forests. To determine whether these criteria will be an effective foundation for evaluating proposals from companies to receive the award will have to be determined by further discussion with forest sector stakeholders and the European Commission.

The following list, which is not exhaustive, is a first overview of indicators for monitoring the success of business and biodiversity best practices:

**SEBI 2010**

SEBI 2010 measures progress on a number of indicators based on available information and resources. The ones that have implications for forests are:

- Status and trends of the components of biological diversity (selected species, threatened and protected species, selected biomes, ecosystems and habitats). This includes the red list index for European species.

- Ecosystem integrity and ecosystem goods and services – fragmentation of natural and semi-natural areas.

- Sustainable use of forest areas – growing stock, increment and fellings of forest, deadwood.

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20 http://biodiversity-chm.eea.europa.eu/information/indicator/F1090245995/
FSC

FSC describes how forests have to be managed to meet the social, economic, ecological, cultural and spiritual needs of present and future generations. It includes managerial aspects as well as environmental and social requirements. In fact, FSC rules are the strictest and FSC's social and environmental requirements the highest. The following principles are of interest for the award scheme:

- Reduction of environmental impact of logging activities and maintenance of the ecological functions and integrity of the forest.
- Appropriate and continuously updated management plan.
- Appropriate monitoring and assessment activities to assess the condition of the forest, management activities and their social and environmental impacts.
- Maintenance of High Conservation Value Forests (HCVFs) defined as environmental and social values that are considered to be of outstanding significance or critical importance.
- Plantations must contribute to reduce the pressures on and promote the restoration and conservation of natural forests.

PEFC

"Think global – act local" is at the heart of PEFC's governance system. The decentralized, "bottom-up" approach strengthens action on the ground and enables local stakeholders to participate in the core activities of forest certification at national level (www.pefc.org).

PEFC bases its Sustainability Benchmark on broad consensus by society, expressed in globally respected international and intergovernmental process and guidelines. The best practice standards promote environmentally sound, socially just, and economically viable management of our forests globally. The certification criteria to be used in PEFC endorsed and mutually recognized national or sub-national schemes in Europe are based on the current Pan-European Criteria for Sustainable Forest Management (www.foresteurope.org):

- Maintenance and appropriate enhancement of forest resources and their contribution to global carbon cycles.
- Maintenance of forest ecosystems’ health and vitality.
- Maintenance and encouragement of productive functions of forests (wood and non-wood).
- Maintenance, conservation and appropriate enhancement of biological diversity in forest ecosystems.
- Maintenance, conservation and appropriate enhancement of protective functions in forest management (notably soil and water).
- Maintenance of other socio-economic functions and conditions.

IBAT 21

IBAT for business facilitates access to information about high priority sites for conservation – namely protected areas and key biodiversity areas – to inform the implementation of corporate biodiversity policies and enhance environmental management systems. Incorporating IBAT within project planning processes at the earliest stages enables consideration of alternative projects or locations while such changes remain economically viable.

Management decisions that IBAT informs include:

- Screening potential investments.
- Sitting an operation in a given region.
- Developing action plans to manage biodiversity impacts.
- Assessing risks associated with potential sourcing regions.

21 https://www.ibatforbusiness.org/default.php?t=SubPageTemplate&r=iyb
• Reporting on corporate biodiversity performance.

IUCN Red List

The European Red List is a review of the conservation status of c. 6,000 European species (mammals, reptiles, amphibians, freshwater fishes, butterflies, dragonflies, and selected groups of beetles, molluscs, and vascular plants) according to IUCN regional Red Listing guidelines. It identifies those species that are threatened with extinction at the European level – so that appropriate conservation action can be taken to improve their status.

The threatened status of plants and animals is one of the most widely used indicators for assessing the condition of ecosystems and their biodiversity. It also provides an important tool in priority-setting exercises for species conservation.

Green Business Awards, UK

The Green Business Awards in the UK have a number of categories, and one of them is on land, water and ecology, which looks at how organizations impact on the health of the natural environment. This award will go to the organization that shows the greatest commitment to protecting, enhancing or remediating natural systems, either locally or at a distance. Key aspects that will be evaluated within this category are:

• Evidence of substantive actions and environmental benefits relating to the health and functioning of natural systems or species.
• Integration into broader planning.
• Top-level direction.

Key questions that need to be addressed for benchmarking

• What is required to be considered a biodiversity leader in the forest sector?
• How can we use the existing initiatives and standards for developing biodiversity benchmarks?
• How to measure the success and effective long-term commitment and implementation?
• Should climate change be a specific component of the biodiversity benchmark?
The European Union Business and Biodiversity Platform

The EU Business and Biodiversity Platform is a unique facility within the European Commission's Initiative where businesses can come together to share their experiences and best practices, learn from their peers, and voice their needs and concerns to the European Commission. The Platform aims to strengthen the link between the business sector and biodiversity conservation. The IUCN Regional Office for Pan-Europe, in partnership with PriceWaterhouseCoopers, ECNC, ELO and Blue4You, implements the B@B Platform which is funded by the European Commission. More information at http://ec.europa.eu/environment/biodiversity/business.

IUCN
IUCN, International Union for Conservation of Nature, helps the world find pragmatic solutions to our most pressing environment and development challenges. IUCN supports scientific research, manages field projects, and brings governments, NGOs, the UN and companies together to develop policy, laws and best practice. www.iucn.org

PriceWaterhouseCoopers
The French SBS practice (www.pwc.fr/dd), member of PricewaterhouseCoopers Advisory France and a part of PricewaterhouseCoopers Sustainable Business Solutions (SBS) network (www.pwc.com/sustainability) is dedicated to providing clients with environmental/sustainability advisory services.

ECNC
The ECNC-European Centre for Nature Conservation working for the conservation and sustainable use of Europe’s nature, biodiversity and landscapes, developing partnerships with organizations, institutes and businesses. www.ecnc.org

ELO
ELO, European landowners’ organization is committed to promoting a sustainable and prosperous countryside and to increasing awareness relating to environmental and agricultural issues. www.europeanlandowners.org

Blue4You
Blue4You is an agency specialising in online communication and development of dynamic applications. Blue4You gathers the strategic, technical and graphic expertise to create powerful institutional interactive campaigns. www.blue4you.com

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