



Fact Sheet: Biodiversity in the Tourism Sector



Hotels and Tour Operators

The loss of biodiversity, alongside climate change is currently one of the largest and most important challenges. It is believed that the current rate of species extinction, due to human influences, is up to 1,000 times higher than the natural extinction rate. Many of the vital resources and services, which are underpinned by biodiversity, are provided to us by ecosystems that are at risk.

Companies use these ecosystem services and natural resources in various forms and thereby have a large impact on nature. Therefore, even by just considering economic reasons, companies depend on the conservation of biodiversity and a steady decline in biological diversity can become a risk for many businesses in the future. At the same time, a proactive approach to conserve biodiversity can create new business opportunities.

There is a close relationship between the tourism sector and biological diversity: Intact natural landscapes as well as biodiversity are not fixed assets of a company, but valuable, limited resources and basis for the core business of the tourism industry. Companies have plenty of direct and indirect opportunities to reduce their negative impacts on biological diversity and to promote its conservation.

Negative Impacts on Biodiversity

Scientists from all over the world agree that the main causes of the loss of biodiversity are:

- Degradation and destruction of ecosystems
- Overexploitation of natural resources
- Climate change
- Emissions/Pollution
- Invasive alien species

Whereas the reduction of emissions is a „traditional goal“ of environmental management systems and climate change increasingly taken into consideration via the reduction of energy consumption and greenhouse gases, other aspects are rarely considered. Therefore, this fact sheet places special emphasis on the degradation of ecosystems, overexploitation of natural resources and invasive alien species and describes direct and indirect opportunities for companies to take these aspects into account.

A comprehensive review of best environmental management practices in the tourism sector and a detailed description of measures to reduce emissions, energy and water consumption, the volume of waste as well as indicators and key data can be found in „EMAS Sectorial Reference Document for the Tourism Sector“ for download from:
http://susproc.jrc.ec.europa.eu/activities/emas/documents/TOURISM_BP_REF_DOC_2012j.pdf

Strategy/Management

The management provides the framework for continuous improvement of the company's biodiversity performance. Businesses and environmental auditors should try to answer the following questions:

- *Is there any person responsible for biodiversity/species protection/nature conservation issues?*
- *Have you systematically evaluated direct and indirect impacts on biodiversity?*
- *Do your environmental impact assessments explicitly include biodiversity?*
- *Do you run your business in or near a conservation area and/or in a biodiversity hotspot?*
- *Is your company committed to the protection of biodiversity in the tourism destination areas?*
- *Does your environmental or sustainability programme include biodiversity targets and measures?*
- *Can targets and measures be measured and verified?*
- *Are there significant monitoring key data and indicators?*
- *Does the employee training programme include biodiversity aspects?*
- *Is your company actively engaged in a national/European business and biodiversity initiative?*
- *Is there a strategy to involve local initiatives (Philosophy of Access and Benefit Sharing)?*

How many questions can your company answer with yes? Of course, a yes tells us nothing about the quality of the strategy or measure. Nevertheless, these findings are an important first step and show the need for action, in other words useful measures for the benefit of the company.

Access and Benefit Sharing (ABS; access to genetic resources and the fair and equitable sharing of the benefits arising from their utilisation) is mainly a topic of companies that use genetic resources and traditional knowledge for their products i.e. pharmaceutical and cosmetics industry. The tourism sector is highly dependent on intact landscapes and its maintenance and conservation – often using traditional methods - by the local people. Therefore, the targets of the ABS protocol, adopted in 2010 in Nagoya in Japan, should be taken into consideration. Download at: <http://www.cbd.int/abs/doc/protocol/nagoya-protocol-en.pdf>

The protection of biological diversity is a matter of local responsibility. Particularly, tour operators have significant influence on the development of tourism destinations and should use this influence and urge regional tourism organisations and authorities to protect biodiversity. For instance, they could initiate a “Round Table Biodiversity” for tourism officials and competing companies.

But where to begin? A travel organiser has many destinations in his programme. Destinations with biodiversity hotspots are given top priority. These are regions with a particular high concentration and diversity of characteristic species, populations and habitats. The tour operator can find out the hot spot locations via International Union for Nature Conservation (IUCN) <http://www.iucn.org/>, WWF <http://www.wwf.de/> or other environmental organisations.

Taking responsibility for an endangered plant or animal species or a regional ecosystem may considerably contribute to shape the destination and company profile and be an attractive marketing element - provided commitment and communication are both authentic.

Examples: Indicators for Strategy/Management:

- *Number of employees trained in biodiversity conservation issues*
- *Number of employees taking part in biodiversity volunteering activities*

Stakeholders

Biodiversity is a complex sphere of action, and the ecosystem services concept does not simplify the challenge for tourism companies to analyse the initial situation and influences. Scientific institutions, nature conservation authorities or environmental organisations provide expertise on biodiversity at the tourism destination, also on negative impacts of tourism services such as excursions, leisure offers, souvenirs and catering. Consultancy services provided by NGOs should be adequately remunerated.

Possible Measures:

- *Stakeholder-Mapping: Analysis of the relevant stakeholders as well as their potential contribution to promote biodiversity conservation within the company*
- *Co-operation with international/national/local organisations in the field of biodiversity*
- *Creation of transparent structures for stakeholder dialogue and the involvement of stakeholders*

The number of organisations is not an indicator revealing the quality of collaboration. However, it is difficult, to define an indicator for the quality of co-operations, projects, dialogues etc. Characteristics such as continuity of collaboration or degree of implementation of the expert recommendations might be an indication of the quality of collaboration.

With regard to EMAS, according to annex II.B5, involvement of stakeholders is necessary. To facilitate good and specific involvement, adequate structures must be created. Existing participation structures including transparent handling of stakeholder enquiries are therefore also considered as biodiversity indicators.

Company Premises and Properties

The EMAS environmental core indicator on biodiversity is use of land. Many organisations are not happy with this indicator because it reflects only part of the biological diversity, and for numerous enterprises has no significance as the negative impacts through land use for company offices are considered negligible. Therefore, land consumption should be considered as an indicator to be supplemented - according to negative impacts the company might have identified.

The consumption of land for hotel facilities and tourism infrastructures plays an important role, just as the location and design of these areas. In this context, compliance with legal requirements is crucial. Unfortunately, the list of illegally built hotels in protected areas is long. A tour operator, committed to conserving biodiversity, should not sign a contract with illegally built hotels, but exert influence and take action against the degradation of protected areas or “softening” of conservation categories and regulations.

A hotel or leisure park with naturally designed outdoor (garden) facilities can significantly contribute to the preservation of the local biological diversity.

Choice of Measures:

- *Native bushes and trees (standard fruit trees, hedges, forest etc.)*
- *Unfertilized flower or herb lawn, flower strips, low-nutrient meadows*
- *Sparsely vegetated areas such as gravel and marl soils, fallow land*
- *Dry stone walls, heaps of stones, wood piles, clumps of branches, dead wood*
- *Close to nature designed stagnant or running waters, (temporary) wetlands*
- *Conventionally greened facades (no „living walls with high water and fertiliser requirement)*
- *Biodiversity-friendly greened roofs*
- *Permeable roads and parking lots without sewer drainage*
- *Insect-friendly outside lighting*
- *Nesting aids, insect habitats*
- *Natural pest control favoured*

For many years, the Swiss Foundation Nature and Economy has certified close to nature designed premises and published best practice examples: <http://www.naturundwirtschaft.ch/>.

Near-natural design of areas pays off: Blooming meadows are easier to maintain than boring lawn. Natural rainwater management reduces costs in communities with a split waste water fee system. Roof and facade greening reduce the energy consumption for heating and cooling. Near-natural areas at the headquarters of tour operators improve employees' well-being and performance. Biodiversity-friendly hotel outdoor facilities offer excellent opportunities to get in contact with guests e.g. cooking course with edible wild herbs, educational plant trail or bird watching (bird-call) on site.

Most companies feel overburdened to carry out monitoring based on the IUCN Red List, and generally, this is not necessary. In conjunction with scientific institutions, conservation authorities or local environmental organisations, one or two key species suitable for long time monitoring of the biodiversity development at the company premises, can be selected. Generally, local NGOs have a great expertise and are able to monitor the species' development.

Payment for restoration and maintenance costs of eco-systems or species protection projects in compensation for built up areas are useful measures – not only as regards biodiversity, but also for economic reasons as tourism highly depends on intact landscape and nature.

Key Data and Indicators for Company Premises/Properties:

- *Percentage share of unsealed areas in relation to the total surface area of the company*
- *Percentage share of near-naturally designed company grounds in relation to the whole property*
- *Monitoring has been established: Key species identified, monitoring of development every 1- 2 years through competent staff/external persons*
- *Preservation or restoration of eco-systems in compensation for sealed areas e.g. reforestation, (financial) support of protected areas (percentage in relation to sealed areas)*

Procurement/Supply Chain

The service chain of tour operators is often more difficult to manage than that of hotels, and it is much more difficult to check suppliers and services if the destination is far away. This problem is not specific to tour operators, but almost all businesses face the same problem.

Holiday offers are composed of a range of products and services that might have severe negative effects on the biological diversity, e.g.

- Hotel or tourism infrastructure (leisure park, golf course, marina) located in a protected area or in non-protected biodiversity hotspot
- Leisure offers/excursions that contribute to the degradation of ecosystems e.g. excursions outside sign-posted trails, jeep excursions in regions of sand dunes or motor-boating in shallow waters ignoring the legally fixed distance to the shore (resp. flight initiation distance).
- Leisure offers that might disturb animal and plant species e.g. paragliding in mountainous regions, whale watching activities that do not respect UNEP/CMS criteria, wild animal safari ignoring relevant rules and safety distances, hiking in sensitive areas during the bird breeding seasons or tourist attractions with animals that are not kept in species appropriate husbandry conditions (e.g. dolphin shows, zoos where animals are kept in inappropriate conditions, circus with wild animals)
- Dishes made from endangered species resp. illegally purchased products (disregard of closed fishing or hunting seasons, shark-fin soup, turtle soup, bush meat, songbirds etc.)
- Dishes with products from animals that are being kept inappropriately. Animal welfare – also of farm animals – is an integral part of species protection
- Sewage discharge, scattered waste in the open countryside, or noise in sensitive regions
- Souvenirs, relating to endangered species or products that have been illegally purchased (see CITES-agreement)

Intolerable and immediately to be removed from the list of goods are products and services that do not comply with law and regulations: e.g. dishes or souvenirs made from ingredients that fall under species protection legislation, zoos/activities that violate the animal welfare act or excursions that do not respect the rules for nature observation.

In a first step, tour operators, hoteliers, or operators of tourism infrastructures may take following measures at management level:

- *Review of the most important products and services in terms of their impact and relation to biodiversity*
- *Identify products/services with worst impacts (significance test) and withdraw them from list of products or produce them according to standards of biodiversity-friendly production*
- *Inform suppliers and service providers that biodiversity conservation is one of the major goals of the company. Ask them what steps they intend to take to conserve biodiversity*
- *Integrate biodiversity aspects in further training measures for suppliers/service providers*
- *Include criteria for biodiversity conservation in the specifications for suppliers/service providers and verify their compliance*

Unfortunately, there is no check list for purchasing resp. product managers in order to avoid adverse impacts on biodiversity so far. Most of the existing 60 eco labels for hotels and tourism services include at least some nature conservation criteria as an important aspect of biodiversity conservation. Fair Trade Label und FSC include conservation aspects as well, and currently are integrating some more biodiversity criteria, but a comprehensive biodiversity label or standard does not exist (yet).

Labels and standards that ensure a certain environmental performance in the energy, water, waste, cleaning sectors also contribute to biodiversity conservation because the eco-labelled products and services are either resource-efficient or climate-friendly. The use of environmentally friendly products in the hotel or in the premises of the tour operator such as recycled paper, FSC certified paper, ecological detergents, eco-friendly insect repellents, eco-products and fair trade products also contribute to preserving biological diversity.

Key Data and Indicators for Procurement/Supply Chain:

- *Number of products/services tested in terms of their impacts on biodiversity (percentage of total number)*
- *Number of suppliers/service providers questioned about their biodiversity performance (percentage of total number)*
- *Suppliers/service providers trained in biodiversity (percentage of total number)*
- *Number of product/services with existing purchasing instructions in terms of biodiversity criteria*
- *Number of certified products/services (percentage of total volume)*

Medium and large travel organisers have confirmed that the development of useful criteria for suppliers and service providers is not the only challenge - also their verification. Therefore it is recommended to integrate biodiversity criteria into an internal audit system, which is well established in the company e.g. quality and safety audits.

As mentioned earlier under strategy/management, the training of employees is of great relevance to procurement, destination and product managers, because they decide whether the final product is biodiversity friendly or not. Purchasing managers should have a list of standards and labels taking into consideration biodiversity criteria or concrete parameters for excursions or other leisure activities. Of course, support from the management to prioritise these standards for suppliers and service providers and withstand the price pressure is crucial.

Logistics/Transport

Transport is a fundamental component of tourism. The negative environmental impacts of travelling are known as well as the possibility to offset carbon dioxide emissions. All measures that contribute to climate protection are beneficial for biodiversity conservation too. When selecting carbon offset projects, it is important to avoid the establishment of questionable tree monocultures and it is necessary to ensure that social standards as well as biodiversity conservation are included. Oro Verde and the Global Nature Fund jointly prepared guidelines summarising the most important aspects:

<http://www.globalnature.org/bausteine.net/f/7502/ForestCarbonGuidelines-GNFOroVerde-2011.pdf?fd=0>

A local bus operator transporting guests from the airport to the hotel or carries out a round-trip, is part of the service chain. Accidents, illegal dumping of waste oil or vehicle batteries in nature, formation of dust, noise or off-road activities may have negative impacts on biodiversity. Tour operators might oppose roads being built through a nature reserve or in eco-sensitive areas (e.g. TUI protests against a road project in Tanzania across the Serengeti National Park). Sea voyages can facilitate the introduction and spread of invasive alien species.

Possible Measures and Key Data for Logistics/Transport: see Procurement/Supply Chain

Product Design/End Product

The tourism end product consists of a large number of products and services, described in chapter Procurement/Supply Chain. Of course, the use of products, and with that the tourists, have a significant influence on biodiversity. Therefore, information and sensitisation of tourists with regard to their contribution to biodiversity conservation must not be neglected.

Tour operators should provide detailed information on sensitive eco-systems, plant and animal species as well as current environmental problems already in their travel catalogues, on the web and travel fairs. On-site, there are many more opportunities for tour operators, hotels, and leisure activity providers to call attention to biodiversity conservation issues. Today more and more tourists expect a certain level of commitment to the protection of nature, animals and plants of tour operators and destinations they visit (see TUI Travel Sustainability Survey 2010 in the annexe). The majority of tourists is grateful for practical hints, because they do not want their visits to harm the environment (see e.g. “TUI’s Little Guide to Preserving Species“ with information on illegal souvenirs <http://www.tui-group.com/en/sustainability/products/kundensensibilisierung>).

A biodiversity check of the end product by the local or regional nature conservation authority or environmental organisation before its commercialisation, may, to a great extent, minimize the risk to the company. However, with regard to eco-systems and species diversity, there are always complex and dynamic developments and negative impacts that may be ignored today, but might cause lasting damage to biodiversity in future.

Therefore, long-term monitoring of the biodiversity development at the tourism destination is all the more important. It is not necessary to check the whole IUCN Red List. Nature conservation authorities may chose a few but relevant key species to assess the biodiversity development. NGOs often serve as partners for the implementation of monitoring. Additionally, it makes sense to organise long-term monitoring at the tourism destination as a common task of all competing operators.

Useful Measures and Key Data/Indicators for Product Design/End Product:

- *End products assessed according to biodiversity criteria (percentage of the total number of products)*
- *Information on biodiversity in the travel catalogue/on the web/tourist brochures (e.g. number of destinations or products with relevant information, number of customers (tourists) reached)*
- *Customer survey questions on biodiversity (qualitative analysis)*
- *Analysis of customers feed-back (qualitative analysis)*
- *Long-term and gradually extended monitoring with the participation of experts (e.g. number of aspects that are examined)*

Marketing/Communication

Besides the obligation to inform the customer about the aspects of biodiversity and to positively influence his behaviour (see end product), the tour operator has many possibilities to communicate biodiversity and its value. Contrary to many of the challenges posed by climate change, biodiversity conservation is mainly a matter of concern at local level. Tourists may actively participate in conservation activities. Biodiversity triggers emotions; it is also a question what one would miss most.

It is desirable that a tour operator supports eco-system and biodiversity conservation projects – in a way to compensate for the biodiversity footprint, which cannot be prevented. NGOs and the public sector are constantly seeking financial support, particularly in times of limited resources. The promotion of biodiversity projects should be a “voluntary exercise”, and not affect continuous reduction of own negative impacts. Furthermore, the projects should fit to the company’s product range, and cooperation with an NGO or authority should be based on partnership. It is not purely a matter of purchasing a service.

Suspicion of green washing must and can be avoided. Cooperation and results must be communicated credibly, meaning in line with reality and not pretend they are a solution to every problem.

Useful Measures and Key Data/Indicators for Marketing/Communication:

- *Biodiversity conservation projects supported by the company (number of projects, quality of objectives, measures and results)*
- *Biodiversity conservation activities involving customers (number of activities, quality of objectives, measures and results)*
- *Fulfilment of GRI criteria for sustainability reporting*
- *Active involvement of stakeholders (e.g. nature conservation organisation) in environmental resp. sustainability reporting (number and quality of involvement)*
- *Biodiversity as a media communication issue (number of press releases and/or press trips, number of journalists involved...)*

Legal Compliance

Legal compliance in the field of environment is an important element of EMAS validation. ISO 14001 also demands the organisation to evaluate its compliance with legal requirements (§ 5.2.). Businesses across all sectors should be aware of laws and regulations relevant to biodiversity conservation.

These are primarily nature conservation acts such as the Birds and Habitats Directives at European level and its corresponding nature conservation act at national level. Of course, environmental legislation is also relevant to biodiversity conservation. Particularly important for businesses is the Environmental Liability Directive (ELD). An overview of the European and international nature conservation legislation is available at:

<http://www.business-biodiversity.eu/default.asp?Menu=140>

Tourism is an internationally operating business sector that means tour operators must comply with national and international legislation in the destination countries and beyond. Usually all countries have an ambitious legislation in terms of conservation of environment and nature, but often there is a lack of implementation – particularly with regard to aspects such as trash removal and sewage purification.

Useful Measures and Key Data/Indicators for Legal Compliance:

- *The company has an overview of the current legislation relevant to biodiversity. Employees are informed about relevant laws and regulations and have access to legal texts (collections of laws, access of the employees to legal database yes/no)*
- *Training of employees in the case of new legislation and amendments (number of qualified employees)*
- *The company requires from all suppliers/service providers a declaration that environmental and nature conservation legislation are respected (number of suppliers/service providers who have signed this declaration)*
- *Continuous increase in the number of suppliers/service providers holders of environmental management certification (percentage of the total number)*
- *Training of suppliers/service providers in legislation relevant to biodiversity (percentage of qualified suppliers and service providers)*

Publications, Studies, Links

European Business and Biodiversity Campaigning with current events, best practice examples and a knowledge base:
www.business-biodiversity.eu

EU Biodiversity Strategy

<http://ec.europa.eu/environment/nature/biodiversity/comm2006/2020.htm>

UN CBD Global Platform on Business and Biodiversity

<http://www.cbd.int/en/business/home>

Corporate Biodiversity Management Handbook

https://secure.bmu.de/fileadmin/bmu-import/files/english/pdf/application/pdf/handbuch_biodiversitaetsmanagement_bf_en.pdf

The Economics of Biodiversity and Ecosystem Services (TEEB)

<http://www.teebweb.org>

TEEB for Business

<http://www.teebweb.org/teeb-study-and-reports/main-reports/business-and-enterprise/>

TEEB: Nature and its role in the transition to green economy

<http://www.teebtest.org/wp-content/uploads/2012/10/Green-Economy-Report1.pdf>

Biodiversity in Good Company: Online-Handbuch Biodiversitäts-Management

<http://www.business-and-biodiversity.de/en/handbook/checklists.html?PHPSESSID=c89f812c561dca25c79fad5498a0cbe7>

Global Reporting Initiative:

Approach for Reporting on Ecosystem Services: Incorporating ecosystem services into an organization's performance disclosure <http://www.bipindicators.net/LinkClick.aspx?fileticket=s9Q16GObfEw%3D&tabid=155>

IUCN and ACCOR

Biodiversity: My hotel in action. Hotel Biodiversity Operational Guidelines

http://cmsdata.iucn.org/downloads/iucn_hotel_guide_final.pdf

World Tourism Organisation (UNWTO)

Tourism and Biodiversity – Achieving Common Goals Towards Sustainability

<http://pub.unwto.org/epages/Store.sf?ObjectPath=/Shops/Infoshop/Products/1505/SubProducts/1505-1>

Naturnahe Gestaltung von Firmengelände. Stiftung Natur und Wirtschaft, Schweiz

<http://www.naturundwirtschaft.ch>

EU Commission - EMAS Sectorial Reference Document for the Tourism Sector

http://susproc.jrc.ec.europa.eu/activities/emas/documents/TOURISM_BP_REF_DOC_2012j.pdf

TUI Travel Sustainability Survey 2010

<http://torc.linkbc.ca/torc/downs1/Sustainability%20Survey.pdf>

Oro Verde + GNF

Investing in forest carbon projects – Guidelines for companies and private investors

<http://www.globalnature.org/bausteine.net/f/7502/ForestCarbonGuidelines-GNFOroVerde-2011.pdf?fd=0>

IUCN, 2008. Biodiversity: My hotel in action; A guide to sustainable use of biological resources. Gland, Switzerland.

Available at: http://www.cmsdata.iucn.org/downloads/iucn_hotel_guide_final.pdf

Tour Operators Initiative for Sustainable Tourism Development, 2008. A practical guide to good practice; managing environmental and social issues in the accommodations sector. The Center for Environmental Leadership in Business, Conservation International. Washington, DC, USA.

Available at: <http://www.toinitiative.org/fileadmin/docs/publications/HotelGuideEnglish.pdf>

UNEP/CMS Criteria for Whale Watching

<http://www.cep.unep.org/meetings-events/regional-workshop-on-marine-mammal-watching-in-the-wider-caribbean-region/mmw-oct2011-overarching-principles-en.pdf>

WDCS (Whale and Dolphin Conservation Society) – Guidebook for Whale Watching

http://www.wdcs.org/submissions_bin/europewhalewatch.pdf

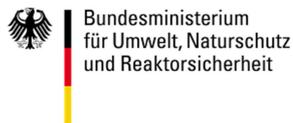
TUI criteria for sustainable Whale Watching – in cooperation with Sociedad Española de Catáceos and M.E.E.R. e.V.

http://www.tui-group.com/en/sustainability/env_management/biodiversity/projekte/whale_watching

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More information: www.business-biodiversity.eu

