UICN | French Committee

CORPORATE BIODIVERSITY
REPORTING AND INDICATORS

SITUATION ANALYSIS & RECOMMENDATIONS

Author: **Matthieu Thune-Delplanque**, Project Leader for Business and Biodiversity at the IUCN French Committee.

Coordination: **Florence Clap**, Programme Officer for Biodiversity Policies at the IUCN French Committee, **Thierry Hauchard**, President of the IUCN "Business & Biodiversity" Working Group for GSM and **Sébastien Moncorps**, Director of the IUCN French Committee.

We would like to thank the following contributors: **Vanessa Ardouvin** (Holcim), **Marie Aurenche** (IUCN French Committee), **Marc Barra** (Natureparif), **Violaine Berger** (World Business Council for Sustainable Development), **Gerard Bos** (IUCN Global Secretariat), **Elodie Bouzin** (Ciments Calcia), **Didier Collonge** (Lafarge), **Christine Delon-Salinson** (EDF), **Anissa Djamane** (WWF France), **Paul Estève** (IUCN French Committee), **Joël Houdet** (Synergiz), **Hélène Leriche** (Fondation Nicolas Hulot), **Barbara Livoreil** (Fondation pour la Recherche sur la Biodiversité), **Sophie Mambrini** (Veolia), **Marc Maury** (Fédération des Conservatoires d'espaces naturels), **Philippe Meunier** (GDF SUEZ), **Michel Mori** (Veolia), **Philippe Puydarrieux** (French Ministry of Ecology, Sustainable Development and Energy), **Elodie Russier-Decoster** (IUCN French Committee), **Emmanuelle Swynghedauw** (French Ministry of Foreign and European Affairs), **Anne-Cerise Tissot** (IUCN French Committee) **Claire Varret** (EDF).

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SUMMARY

Some companies are currently required by French legislation to include information on biodiversity in their reports. The aim is to inform their stakeholders about the company's relationship with biodiversity and the actions they undertake in this field. Biodiversity reporting documents therefore play an important role by acting as an interface between the private sector and their stakeholders, allowing them to gain a greater understanding of the company's commitment to biodiversity conservation.

On the other hand, we note that companies involved in this area have made efforts accordingly. However, these documents, varied in content, form and method, do not always allow environmental stakeholders to understand fully or easily the way companies act to take into account the biodiversity issues in their strategies and activities.

Companies also admit that they have difficulties writing their biodiversity reporting documents and would appreciate operational advice in order to help them progress in this reporting exercise that is expected of them.

This study is thus designed to improve companies' biodiversity reporting methodologies and approaches.

It starts off by clarifying the meaning of the expressions, "biodiversity reporting" and "biodiversity indicators". It then draws up an exhaustive list of the legal provisions that French companies should apply with regard to the communication of information on biodiversity. The study then discusses them main biodiversity reporting documents at different scales and the recommendations made to companies by certain international and national reference frameworks. In the last part of this document, the IUCN French Committee provides advice on how to write a high-quality biodiversity report. Applicable to all countries, legal contexts and industry sectors, it covers both the scope of biodiversity reporting documents and the subjects that should be dealt with.

This study was carried out in collaboration with the IUCN French Committee's "Business & Biodiversity" working group, which brings together its own members and its partners in the private sector.

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FOREWORD

Nature is the system that keeps us alive. The diversity of life must be conserved for its own sake, but also in order to ensure the sustainability of our developmental model, which is entirely dependent on biodiversity.
To achieve this, we must make radical changes in all cultural domains and all aspects of society, and in the field of the economy in particular. To meet this challenge, IUCN proposes nature-based solutions.

This vision stems from two characteristics of our developmental model:
> On the one hand, the predominance of means of production and consumption that destroys nature at a dangerously high pace, which is not slowing down;
> On the other, the underuse by citizens, governments, local authorities and companies of the potential of nature and the solutions that it can provide to help meet the global challenges posed by climate change, food security and economic and social development.

In order to begin making these changes, since 2008 the IUCN French Committee has formed several partnerships with major groups in the energy, environmental services and quarry sectors. It also created a "Business & Biodiversity" working group, bringing together members of the IUCN French Committee, their experts as well as IUCN's partners from the private sector.

By collaborating with companies, we can create and apply tools, regulations and standards allowing natural capital to be integrated into the core of the companies' activities. Created by this working group, which should be both congratulated and thanked, this study on reporting is a good illustration of this collaboration.
The objective of this study is to improve corporate biodiversity reporting documents. The IUCN French Committee can thus contribute to the dialogue required between stakeholders in nature conservation and the financial world. Biodiversity reporting is indeed the document in which companies inform their stakeholders about their links with biodiversity and the actions they carry out in its favour. It creates an area for contact and exchange between companies that want to make their commitment to biodiversity conservation credible and nature conservation stakeholders who want to learn more about the private sector's level of engagement and action in this field.

Therefore, we invite all companies, irrespective of their size or sector of activity, to use this document as a reference and to apply its recommendations.

Christophe Lefebvre
President of the IUCN French Committee

INTRODUCTION

OBJECTIVE OF THE STUDY

This study aims to improve the biodiversity reporting documents produced by companies and makes recommendations on how this should be done.

This objective addresses the expectations of the IUCN French Committee's members as well as those of IUCN's partners from the private sector:

> The members of the IUCN French Committee recognize the role that corporate reporting documents can play as an interface between nature conservation stakeholders and the private sector. Nevertheless, they note that, in their present state, these documents do not play this role properly. Their members would like certain information on biodiversity to be covered, which is still missing, or only dealt with partially. In parallel with this, they have observed the existence of best practices carried out by companies in their biodiversity reporting and hope that their practices will become generalized;

> The IUCN French Committee's partners from the private sector recognize that writing a biodiversity reporting document is not easy. On the one hand, this is because the complexity of the notion of biodiversity[1] makes it impossible to reduce it to a simple indicator, unlike climate change[2]. The difficulties are also due to the absence of any internationally recognized standards for accounting and reporting with regard to biodiversity, unlike in the case of greenhouse gas issues[3]. Therefore, the IUCN French Committee's partners would like to benefit from operational advice in order to carry out this exercise successfully;

> One expectation shared by the IUCN French Committee's members and partner companies concerns the need to provide companies with recommendations on the definition of the biodiversity indicators that should be included in the reporting documents.

Note

This study aims to improve the way in which the subject of biodiversity is dealt with by companies in their reporting documents. It gives high priority to reflection on biodiversity indicators as communication tools, which allow companies to disclose information to their stakeholders. Therefore, the study does not deal with the biodiversity indicators used by companies as internal management tools.

STRUCTURE OF THE STUDY

The first part of the study defines the terms used. It starts by providing a brief description of the history of non-financial reporting (1.1). It then proposes definitions for the expressions "biodiversity reporting" and "biodiversity reporting document" (1.2). Indeed, despite the fact that these terms are frequently used, they do not appear in the French legal system as such. On the other hand, there are numerous definitions describing an "indicator" and a "biodiversity indicator". So, it is important to go back over the characteristic functions of these tools and the role they play in a reporting document (1.3).

The second part provides an exhaustive list of the legal provisions that companies subject to French law have to apply with regard to the communication of information on biodiversity. There appears to be no binding provision on a global level (2.1). Soon, the European Union is going to include in its legal system the obligation for companies to divulge non-financial information (2.2). France, meanwhile, is a pioneer in this field. Indeed, at the start of the 21st century, it was one of the first States to make the communication of non-financial information obligatory for some companies. Then, 10 years later, it was the first to include biodiversity in the environmental issues to be dealt with (2.3).

The third part underlines the elements of the international and national context, which companies should bear in mind when writing their biodiversity reporting documents.

1 Biodiversity should be viewed as the diversity of genes, species and ecosystems. It evolves over time and in space. Scientific knowledge on biodiversity remains sketchy.
2 It is possible to refer to all greenhouse gas emissions using a common unit: the tonne of CO_2 equivalent.
3 The Greenhouse Gas Protocol (GHG Protocol) launched in 1998 by the World Business Council for Sustainable Development (WBCSD) and the World Resources Institutes (WRI).

To start with, it is a matter of ensuring a company's reports are in line with global, European and French reports (3.1). In particular, it is important that the indicators created and disclosed by French companies are able to deliver input to certain indicators defined in France within the framework of the National Biodiversity Strategy (Stratégie nationale pour la biodiversité, SNB).
Companies should also take into account the recommendations made by several international and national reference frameworks with regard to communications on biodiversity (3.2).
A comparison between these initiatives (the topics dealt with in other biodiversity reporting projects and the recommendations made by the reference frameworks) and the requirements of the French legal system, allows the limits of the latter to be identified (3.3).

The fourth and last part contains recommendations by the IUCN French Committee to companies for the preparation of their biodiversity reporting documents.

METHODOLOGY OF THE STUDY

These recommendations were drawn up in the following manner:

• The members and partners companies of the IUCN French Committee were consulted:

The IUCN French Committee followed an iterative consultation process with its members and was included in the recipients of the companies' non-financial reporting documents. It also called on its partner companies that draw up these documents. The IUCN French Committee's "Business & Biodiversity" working group, bringing together its members and partners, constituted a privileged area for consultation and discussion in order to draw up the recommendations.

Individual interviews were carried out with each of the members and partner companies in order to gather the following information:

> What information do members expect to see dealt with in companies' biodiversity reporting documents?

> What best practices, carried out by certain companies to prepare their biodiversity reporting documents, would it be a good idea to generalize?

> What difficulties do the IUCN French Committee's partner companies experience when drawing up their biodiversity reporting documents for their respective activities?

• An analysis of the companies' practices:

A reading of the reporting documents published to date has allowed the strengths of these documents to be identified (mention of the information that all companies should disclose, the adoption of demanding methodologies) as well as the points that require improvement.

• The consideration of contextual elements both globally and in France:

The recommendations are in line with the biodiversity reporting documents drawn up in France (*cf.*: 3.1) and taking into account the recommendations contained in international and national reference frameworks (*cf.*: 3.2).

Note

Within the context of the execution of this study, non-financial rating agencies were met, which include criteria on biodiversity in their company analyses. However, at their request, this document does not publish information on the methodologies they use to rate companies on this subject.

1. Contextual elements and definitions

1.1
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1.2
The biodiversity reporting document: different forms for multiple stakeholders
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1.3
Biodiversity indicators: the tools at the heart of biodiversity reporting
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Solid rock quarry operated by Lafarge at La Calmette (Gard) © E. Russier-Decoster

Electricity pylons in Avignon (Vaucluse) © F. Clap

1.1 HISTORY OF NON-FINANCIAL REPORTING

Until the 20th century, corporate reporting documents were virtually exclusively made up of financial information. Companies' communication of information on their activities was then essentially aimed at painting as accurate a picture as possible of their financial situation to their investors, who want precise information on the companies they supply capital to.

Starting in the middle of the 20th century, corporate reporting evolved as a result of two phenomena.
Firstly, the realization that companies' activities not only generate economic and financial results, but also non-financial ones (social and environmental impacts). Citizens and their governments then began to make new demands of companies: they expected them to reduce the negative impacts their activities had on the environment. They also wanted to be informed about these impacts and the efforts companies were making to mitigate them.

Secondly, an increasing number of companies became aware of the role that they could play in conserving and respecting the natural and social environment, of the benefits of doing this and the advantages for them of an open dialogue with their stakeholders on these subjects.
It is within this context that the concept of Corporate Social Responsibility (CSR) was born in the 1950s[4], and it was then rolled out in then 1990s. Linked to the notion of sustainable development for the private sector, the concept of CSR is defined by the European Commission as: *"the responsibility of enterprises for their impacts on society"*[5].

The conjunction of these two phenomena led to the appearance of a new type of reporting document: "non-financial reporting" documents. Published by companies, these documents contain information on social subjects (equality between men and women, health and safety of workers, etc.) and on the environment (biodiversity conservation, waste management, the fight against climate change, etc.).

The international authorities encouraged companies to send non-financial information to their stakeholders. In a communication of 2 July 2002[6], the Commission of the European Communities underlined the fact that, *"Transparency is a key element of the CSR debate as it helps businesses to improve their practices and behaviour; transparency also enables businesses and third parties to measures the results achieved."*
Ten years later, this issue remains relevant. The document produced after the Rio+20 conference held in June 2012, "The Future We Want"[7], again drew attention to the importance of disclosing non-financial information, a sign that there are still difficulties surrounding this exercise: *"We encourage industry, interested governments as well as relevant stakeholders (…) to develop models for best practice and facilitate action for the integration of sustainability reporting, taking into account the experiences of already existing frameworks (…)"*.

National governments have also promoted non-financial reporting practices. Starting in the 2000s, the legal and regulatory pressure affecting companies increased. Laws have been enacted making it obligatory for companies in France and other countries to publish non-financial information, on biodiversity in particular (*cf.* 2.3).

4 Bowen H. R., 1953. Social responsibility of the businessman, Harper and Row, New York.
5 European Commission, 2011a. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. A renewed EU Strategy 2011-14 for Corporate Social Responsibility.
6 European Commission, 2002. Communication from the European Commission of 2 July 2002 concerning Corporate Social Responsibility: A business contribution to Sustainable Development.
7 United Nations (UN), 2012. The Future We Want. Paragraph 47.

European pied flycatcher © A. Perthuis

1.2 THE BIODIVERSITY REPORTING DOCUMENT: DIFFERENT FORMS FOR MULTIPLE STAKEHOLDERS

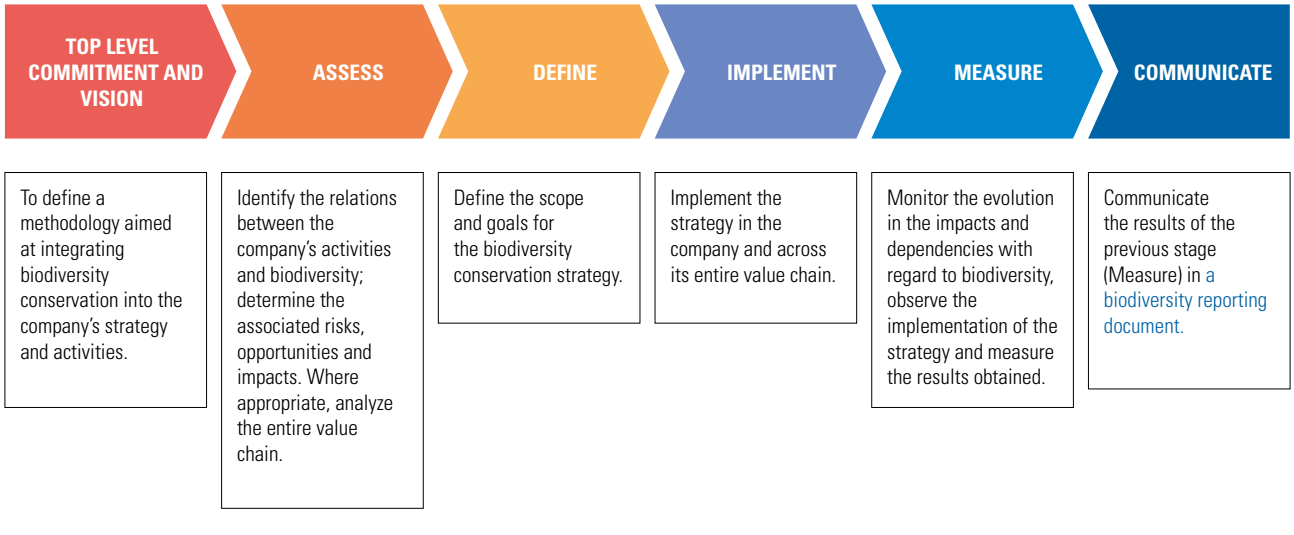
1.2.1 DEFINITION OF A BIODIVERSITY REPORTING DOCUMENT

The expression "reporting" is frequently used these days. It is used to describe:
> *"The operation consisting of a company reporting its activities";*
> *"The document analyzing the functioning of a company's activity in one or several fields, for a given period"* [8].

In this study, the term "reporting" will be used to describe the operation consisting of drawing up a report and the term "reporting document" will be used to refer to the document containing the results of this analysis.

The drawing up of a corporate biodiversity reporting document is not an end in itself. It is a stage in the management of a company's strategy to improve its relationship with the living world. This stage of reporting comes after a company's definition of a strategy that favours biodiversity, the implementation of the latter and the assessment of this implementation.

Figure 1: The role played by biodiversity reporting in the management of a company in favour of biodiversity



Based on: UN Global Compact and IUCN. 2012. *A Framework for Corporate Action on Biodiversity and Ecosystem Services.*

8 République française, 2006. *Journal officiel de la République française* [Official Gazette of the French Republic] No. 249 of 26 October 2006.

The tables below list the reporting documents prepared by companies subject to French law. It is stated that each of these documents must deal with biodiversity.

The management report: obligatory for all companies, its contents are legally defined.

THE MANAGEMENT REPORT	
This is the report by the management body (board of directors or directorate for limited companies) aimed at the general assembly for the approval of the annual accounts and/or the consolidated yearly accounts (financial year). Its contents are defined by law, notably in articles L225-100 and following of the Commercial Code[9].	
Which companies are concerned?	**Does the document have to mention biodiversity?**
All companies have to prepare a management report.	Yes, with regard to management reports written by listed companies and those who exceed certain thresholds: Article L225-102-1 of the Commercial Code includes biodiversity in the list of information to include in these organizations' management reports. No, management reports written by unlisted companies and those who do not exceed certain thresholds are not obliged to include biodiversity in their management reports.

The annual financial report: obligatory for all listed companies, its contents are legally defined.

THE ANNUAL FINANCIAL REPORT	
This report is filed with the Financial Markets Authority. Article L451-1-2 of the Monetary and Financial Code[10] and Article 222-3 of the General Regulation of the Financial Markets Authority (AMF)[11] give details of the contents of this report. It is made up of audited accounts and the statutory auditors' reports related thereto, the management report and the certificate of the person in charge of the annual financial report.	
Which companies are concerned?	**Does the document have to mention biodiversity?**
Obligatory for companies whose securities are admitted to trading on a regulated market of a State belonging to the European Economic Area (EEA).	Yes, the annual financial report must contain the management report that must mention biodiversity in the case of listed companies and those that exceed certain thresholds (*cf.* above):

9 French Commercial Code: http://www.legifrance.gouv.fr/affichCode.do?cidTexte=LEGITEXT000005634379.
10 French Monetary and Financial Code: http://www.legifrance.gouv.fr/affichCode.do?cidTexte=LEGITEXT000006072026.
11 General Regulations of the French Financial Markets Authority: http://www.amf-france.org

The reference document: optional for listed companies, its contents are defined by the Financial Markets Authority (AMF).

THE REFERENCE DOCUMENT

This report is filed with the Financial Markets Authority.
This is an official document that allows *"investors to receive all the information required to judge the activity, the financial situation, the results and the company's perspectives. Indeed, it contains all the legal, economic, financial and accounting information supporting an exhaustive presentation of a company for a given financial year"*[12].
Its contents are set by instructions from AMF[13].
It can take the form of an annual financial report sent to shareholders or a specific document established at another time of the year, generally for the needs of a financial operation.

Which companies are concerned?	Does the document have to mention biodiversity?
Optional for companies whose securities are admitted to trading on a regulated market or a multilateral negotiation system.	If the reference document takes the form of an annual financial report, it must include the management report, which in turn must mention biodiversity. If the reference document takes the form of a different document, it does not have to mention biodiversity[14].

Voluntary reporting documents (and, marginally, events), their names are very variable and their contents are freely fixed by the reporting company.

SUSTAINABLE DEVELOPMENT REPORT / CSR REPORT / ENVIRONMENT REPORT / BIODIVERSITY REPORT/ WEB PAGE DEVOTED TO BIODIVERSITY / BIODIVERSITY JOURNAL / ROAD SHOWS[15]

These documents are voluntary, independent or integrated into other reports.

Which companies are concerned?	Does the document have to mention biodiversity?
All companies can decide voluntarily to produce these documents and supporting material.	Their contents are set freely by the issuing company, which can decide to include information on biodiversity in the documents.

In this study, the term "biodiversity reporting document" will be used to refer to the various "reporting documents" or parts of "reporting documents" published by companies and containing information on biodiversity, both obligatory information and information provided voluntarily.

The coastline of Belle-Ile-en-Mer (Morbihan) © O. Cavrois

12 Observatoire communication financière, 2012. *Cadre et pratiques de communication financière. [Financial communication: framework and practices].*
13 Article 9 of: Autorité des marchés financiers, 2005. *AMF Instruction No. 2005-11 on the information to disseminate when making an offer of securities to the public or admitting a company to trading in financial securities on a regulated market.*
14 There is no obligation regarding the information on *"any environmental issues that may affect the issuer's utilization of the tangible fixed assets"*: Annex 1 of Commission Regulation (EC) No. 809/2004 of 29 April 2004.
15 Marketing campaign during which the company directors meet the investors. They mainly communicate their results, their markets, and their strategy and answer the investors' questions. During these meetings, non-financial subjects such as biodiversity can be addressed.

1.2.2 A DOCUMENT THAT ACTS AS AN INTERFACE BETWEEN A COMPANY AND ITS STAKEHOLDERS

Biodiversity reporting is the means by which a company discloses information on biodiversity to its stakeholders. It creates an area for contact and exchange between a company and the public with different motivations and expectations. For these stakeholders, a biodiversity reporting document is a multipurpose text.

THE PURPOSES OF BIODIVERSITY REPORTING FOR THE COMPANY PREPARING THE REPORT:

• To respond to a legal obligation:

Restricted up until the start of the 2000s to purely financial subjects, in 2001 the disclosure of information by unlisted companies in France expanded to include the non-financial field. With regard to biodiversity, from 2002 the dissemination of information was required implicitly and then mentioned explicitly starting in 2012: some companies are required to communicate information each year on the *"measures taken to conserve or develop biodiversity"* (*cf.*: 2.3 for a complete history of the implementation of the French legal and regulatory system, and its contents).

• To make its commitment to biodiversity conservation credible:

A growing number of companies consider their social integration as a major commitment and are concerned that their activities appear legitimate[16] to all their stakeholders. The non-financial reporting document, and notably the biodiversity reporting document, constitutes a key element in the process of legitimizing companies. Indeed, the biodiversity reporting document makes it possible to pass from the declaration of commitment to biodiversity conservation to the proof of the implementation of the latter. It is through transparent accountability to their stakeholders about the impacts and dependencies of their activities, the steps taken with regard to biodiversity, progress made, difficulties found and expected changes that companies can make their action credible and show their commitment to the conservation of the living world.

Urban pond in the commune of Villeneuve-d'Ascq (Nord) © G. Lemoine

Important work remains to be done by companies in order to ensure the legitimacy, notably with their internal stakeholders. Indeed, according to a study published in 2013[17], only 40% of employees are satisfied with their company's approach to biodiversity conservation. This is the environmental subject companies are rated lowest for (the prevention of pollution and sustainable use of resources being the ones they are rated highest for).

• To ensure financial benefits:

Lending credibility to their biodiversity conservation actions is essential for a company, since today its investors have more access to non-financial criteria lists, some of which include information on biodiversity, in order to help them choose the projects they invest in.

The production of a high-quality biodiversity reporting document is thus potentially a financial issue for companies, since this document may be used by credit rating agencies in order to determine their level of responsibility with regard to biodiversity (*cf.*: the paragraphs below on investors and credit rating agencies).

THE PURPOSES OF NON-FINANCIAL REPORTING FOR COMPANIES' STAKEHOLDERS

• Investors:

Two incentives explain investors' growing interest in the information contained in non-financial reporting documents, and in information on biodiversity in particular. Firstly, investors are concerned about anything that could have a specific effect on the calculation of the financial value (private or public companies, States or local authorities) and what could, as a result,

16 Defined as "a generalized perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values, beliefs and definitions", Suchman M. C., 1995. "Managing legitimacy: strategic and institutional approaches", *Academy of Management Review*, Vol. 20, No. 3.

17 Diag 26000, 2013. *Analyse des résultats de l'enquête DIAG 26 000. Perception des pratiques de Responsabilité Sociétale des Organisations.*

affect their solvability. However, if companies do not take biodiversity into account, this generates risks that may affect the calculation of their financial value:
> Damage to the brand image;
> Lower rating on listed company financial markets;
> Loss of sites' market value;
> Risk of criminal proceedings;
> Challenging the right to exercise their activity;
> Consumer boycotts and campaigns by associations;
> Degradation of a natural resource such as river water;
> Fines and complaints by third parties for environmental damage and future responsibilities[18].

Next, some investors want to make so-called "socially responsible" investments (SRI). They expect to select their investments, not only on the basis of purely financial criteria, but equally taking into account non-financial criteria, which they would like to promote (environmental, social and governance criteria).

• Non-financial credit rating agencies:

Whether it be to assess the how risky their investment is or to identify the projects that correspond to the criteria they wish to promote, investors call on non-financial credit rating agencies[19], who evaluate the level borrowers' level of social and environmental responsibility. Non-financial reporting documents written by borrowers constitute a privileged source of information for credit rating agencies that only have access to external documents to allocate their rating.

Credit rating agencies also offer requested ratings, in other words assessments that address the demands of a company that wishes to benefit from a diagnosis in a specific field. Within the context of these assessments, reporting documents play a less crucial role because the rating agencies can use internal documents and interviews in order to calculate their rating.

• Business partners:

Equally concerned by what can threaten a company's activity, the latter's business partners (suppliers, clients, subcontractors) may also be interested in gaining access to information on the company's performance with regard to biodiversity before signing a business partnership.

• Consumers:

Consumers' expectations of companies are also becoming increasingly demanding. More and more consumers are demanding information on companies' commitments and actions with regard to environmental conservation in general, and notably in favour of biodiversity. In some sectors of activity studied (those the most dependent on natural resources), the consumers' expectations are considerable: in 2013, 87% of consumers wanted to be better informed about how companies selling beauty products obtain ingredients of natural origin, and 84% of them are prepared to boycott the companies if they do not adopt environmentally-friendly practices in the supply and manufacturing processes[20]. The publication by companies of transparent information on biodiversity is a factor that can allow them to stand out from their competitors. It is likely to attract and gain the loyalty of this new clientele that wants to take into account a company's environmental conduct when making a buying decision.

• Governments:

Governments are interested in companies' performance in the field of biodiversity conservation, in the initiatives they undertake in this area and in the results they obtain. Companies' disclosure of information on this performance notably provides governments and their administrations with elements both on the means used by companies and their achievements with regard to the regulations in force. It also allows the legal system applied to be amended, either in order to address any that have been detected or, on the contrary, in order to develop and promote certain best practices.

• Environmental conservation associations:

The associations are interested in reporting documents because they allow them to gain a global vision of the links that each company has with biodiversity (impacts and dependencies), of their level of commitment and their actions in favour of biodiversity.

18 These risks are identified in the document: French Ministry of Ecology, Sustainable Development and Energy, Orée, EpE, UICN, 2005. *La biodiversité, un atout pour vos sites d'entreprise.*
19 The following study by Novethic gives an overview of credit rating agencies: Novethic, 2011. *Panorama des agences de notation extra-financière.*
20 Union for Ethical BioTrade (UEBT), 2013. *Biodiversity Barometer* 2013. Biodiversity awareness around the world.

1.3 BIODIVERSITY INDICATORS: THE TOOLS AT THE HEART OF BIODIVERSITY REPORTING

Otter at the Hunawir Stork and Otter Reintroduction Centre (Haut-Rhin) © S. Richier

1.3.1 DEFINITION OF A BIODIVERSITY INDICATOR

WHAT IS AN INDICATOR?

Whilst numerous definitions for the term indicators can be found in the literature (in the fields of biodiversity, the environment and sustainable development), most of them are based on the same meaning. Within the framework of its work on biodiversity indicators[21], the IUCN French Committee proposes using the definition given by the European Environmental Agency[22]:

"An indicator is a measure, generally quantitative, that can be used to illustrate and communicate complex phenomena simply, including trends and progress over time."

This definition sums up the main functions (quantification, communication, simplification and monitoring progress over time) generally attributed to indicators[23]. They allow us to recall why indicators are so often used in reporting documents and how they contribute to their objectives.

> "An indicator is a measure, generally quantitative" (quantification)

Indicators are measurements (in other words a standard unit used to express a size, a quantity or a degree), or values based on measurements. They offer quantified, objective information, describing a situation from an objective point of view. The quantification provided by the indicators (if it is based on a transparent scientific method) reinforces the credibility of biodiversity reporting documents.

> "That can be used to illustrate and communicate" (communication)

The word "indicator" derives from the Latin verb 'indicare' meaning to point out or to show phenomena. These are information and communication tools, which can be interpreted easily by stakeholders, allowing them to engage in dialogue and exchange information on the issues they are dealing with. They constitute a bridge between the fields of science (guarantee of the quality of the indicator) and business (defining the need, the objective of the indicator): *"it is a hybrid object that originates in a contract of confidence between scientific demands and the limitations of action"*[24]. Due to this simplification of the communication process, they may still *"not always respond precisely to the scientific demands of revealing causal relations"*[25].

This communication function is particularly relevant for reporting documents whose main objective consists of conveying information on companies to their stakeholders. The easy to interpret form of the indicators is also particularly appropriate for those documents aimed at a wide cross-section of the public.

21 See the report by the IUCN French Committee on biodiversity indicators for local authorities: IUCN French Committee, 2014, *Indicateurs de biodiversité pour les collectivités territoriales - Cadre de réflexion et d'analyse pour les territoires* (publication pending).

22 *"An indicator is a measure, generally quantitative, that can be used to illustrate and communicate complex phenomena simply, including trends and progress over time."* (European Environment Agency, 2005).

23 Main sources: ATEN, 2011. Indicateurs de biodiversité: *Pour quoi faire? Comment faire?* 50 p. Espaces naturels, No. 33.; CBD, 2013. *Identification, Monitoring, Indicators and Assessments: Introduction.*; Couvet D. et al., 2005. *Les indicateurs de biodiversité.* In Barbault, R. & Chevassus-au-Louis, B. *Biodiversité et changements globaux: Enjeux de société et défis pour la recherche;* European Environment Agency, 1999. *Environmental indicators: Typology and overview.* Copenhagen, 19 p. EEA Technical report, n°25/1999.; Levrel H., 2007. *Quels indicateurs pour la gestion de la biodiversité? Institut français de la biodiversité;* OECD, 1993. OECD *Core set of indicators for environmental performance reviews: A synthesis report by the Group of the State of the Environment.* Paris. Environment monographs, No. 83.; Biodiversity Indicators Partnership, 2011. *Guidance for National Biodiversity Indicator Development and Use.*

24 ATEN, 2011. *Ibid.*

25 OCDE, 1993. *Ibid.*

> "Communicate complex environmental phenomena simply" (simplification)

Indicators are summaries of complex information: they allow phenomena to be quantified and simplified in an intelligible manner so that complex realities can be understood, since they are multifactorial. They measure one aspect, chosen in accordance with its relevance and the availability of data. They have a synthetic meaning, with a greater scope than the information directly linked to the value of the parameter of the observed elements. For example, a person's body temperature is an indicator of a far more complex reality: their state of health. However, this meaning is contextual: the interpretation of the value attributed to an indicator depends on the object or the issue studied. The Biodiversity Indicators Partnership[26] gives the following example: the surface area of a forest can be interpreted as an indicator describing the multiple, more complex realities as the evolution in the availability of forest resources, progress in forest conservation, the intensity of the threats facing forest ecosystems, etc.

Biodiversity reporting documents are hard to write because of:
> The complexity of the notion of biodiversity;
> The large number of sites on which some companies carry out their activities;
> The quantity and the diversity of actions implemented by companies in favour of biodiversity.

These subjects cannot be treated exhaustively. However, the use of indicators, due to their functions of simplification and summarization, enables indirect communication on subjects that are hard to deal with.

> "Including trends and progress over time" (monitoring progress over time)

Indicators are designed for periodically observing the evolution in one or several phenomena.

Companies are not expected to depict their approach to biodiversity conservation as being beyond reproach. On the other hand, they should show that they are trying to make progress. The use of the same indicator for several years to describe an impact or an achievement allows companies to succeed in this exercise (for example, proving the reduction in impervious surfaces, the increase in the number of sites benefiting from action plans or the rise in the number of partnerships with nature conservation organizations).

WHAT IS A BIODIVERSITY INDICATOR?

We can apply the generic definition of a biodiversity indicator in the following manner:
A biodiversity indicator is a measure, generally quantitative, that can be used to illustrate and communicate complex phenomena concerning biodiversity simply, including trends and progress over time.

The field of application of biodiversity indicators thus covers more aspects than simply direct measures and biodiversity strictly speaking (species abundance, diversity, habitats, etc.): impacts and dependencies on biodiversity as well as actions in favour of nature conservation can also be assessed by biodiversity indicators.

1.3.2 THE QUALITY CRITERIA OF AN INDICATOR

Numerous international, European and French initiatives deal with the issue of the creation of indicators, whether they be non-financial, environmental or biodiversity indicators. Each of these initiatives is accompanied by its own set of quality criteria, aimed at helping the users of the indicators establish the latter.

Indicators that deal with the creation of non-financial indicators include:
> The GRI guidelines for sustainable development reporting[27]:
> The framework of the European Federation of Financial Analysts Societies (EFFAS) and the Society of Investment Professionals in Germany (DVFA) for the integration of non-financial information into financial analysis and business credit ratings[28];

26 Created in 2007, in 2010 this partnership developed a set of global biodiversity indicators (*cf.*: 3.1.1).
27 Global Reporting Initiative (GRI), 2013. G4 *Sustainability Reporting Guidelines*. See the description of the GRI on page 37.
28 EFFAS and DVFA, 2010. *KPIs for ESG. A Guideline for Integration of ESG into Financial Analysis and Corporate Valuation.*

> The UNCTAD guidelines on corporate responsibility indicators in annual reports[29]; UNCTAD;
> The Agenda 21 procedure[30].

Initiatives dealing with the issue of creating environmental indicators include:
> OECD core set of indicators for environmental performance reviews[31];
> The Community eco-management and audit scheme (EMAS)[32].

Initiatives that cover the subject of the definition of biodiversity indicators include:
> Biodiversity Indicators Partnership for 2010 (BIP 2010)[33];
> The Streamlining European Biodiversity Indicators process - SEBI 2010 launched by the European Environment Agency[34];
> The French Biodiversity Strategy 2011-2020 (SNB 2011-2010)[35] and the scientific assessment by the Fondation pour la Recherche sur la Biodiversité (FRB) of the SNB's 27 biodiversity indicators[36].

Despite the apparent diversity of the quality criteria proposed, each of the five common denominators in the criteria generally adopted or recommended can be summed up succinctly:
> Simple: the indicators must be formulated clearly and eloquently. It must be easy to understand and interpret, to present and communicate (for educational purposes);
> Relevant: the indicator has a pertinent relationship with the phenomenon it describes: they both always change in the same way, proportionally, the indicator measures the phenomenon with a low margin of error or uncertainty, it cannot be affected by biases or variables not taken into account in its calculation and it is only very slightly or not at all influenced by imprecise measures or errors;
> Easy to measure: if calculations are required to obtain the indicator, they must be simple and well explained. It must also be based on data that exist, are available, of high quality and regularly updated;
> Consistent: the indicators from different reporting initiatives (carried out on international, regional and French levels), must be consistent in order to allow the indicators on lower levels to deliver input to the indicators on the higher levels;
> Operational: if the indicator is used as a decision-making tool, it must be adapted and used as a guide for decision-making and action.

The summarizing exercise that allowed the quality criteria to be brought together under a single term can be found in Appendix I.

The set of indicators as a whole can also be revealing, in other words it must give a global vision of the assessed situation and its evolution

These quality criteria can be used:
> To assess the existing indicators in order to improve them or strengthen them with other indicators;
> To create new indicators.

1.3.3 TYPOLOGY ELEMENTS OF ENVIRONMENTAL INDICATORS

Within the framework of its work on biodiversity indicators, the IUCN French Committee uses the typology established by the European Environment Agency[37]. Compared with other typologies, it has the advantage of not associating environmental indicators with one of the three components of the "Pressure-State-Response" (PSR) analytical framework proposed by OECD in 1993[38]. Indeed, this model was not designed as a typology to structure sets of indicators (39) but instead to highlight interactions between human activities and the environment. Since the indicators are contextual, a single measure can be used in several categories of the PSR framework[40].

29 The United Nations Conference on Trade and Development (UNCTAD), 2008. *Guidance on Corporate Social Responsibility indicators in Annual Reports.* United Nations.
30 French Ministry of Ecology, Sustainable Development and Energy, 2011. *De la stratégie à l'évaluation: des clés pour réussir un Agenda 21 local. Référentiel pour l'évaluation des projets territoriaux de développement durable* [From Strategy to Evaluation: the Keys to a Successful Agenda 21 Programme. Reference Database for the Assessment of Regional Sustainable Development Projects].
31 OECD, 1993. *Ibid.*
32 *Regulation (EC) No. 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation by organizations in a Community eco-management and audit scheme (EMAS), repealing Regulation (EC) No. 761/2001 and Commission Decisions 2001/681/EC and 2006/193/EC.*
33 Biodiversity Indicators Partnership, 2011. *Ibid.*
34 European Environment Agency, 2007. *Halting the loss of biodiversity by 2010: proposal for a first set of indicators to monitor progress in Europe.* EEA Technical report, No. 11.
35 (ONB), 2011. *Stratégie nationale pour la biodiversité 2011-2020: Quels indicateurs retenir?* Interim document.
36 The FRB website: http://www.fondationbiodiversite.fr/les-programmes-frb/evaluation-scientifique-des-indicateurs.
37 European Environment Agency, 1999, *Ibid.*
38 OECD, 1993. *Ibid.*
39 ATEN, 2011. *Ibid.*
40 If we look again at the example given by the Biodiversity Indicators Partnership, forest area can be used as an indicator both for the level of habitat degradation (pressure), of the appropriate size of habitats for forest species (status) or the efficiency of policies aimed at curbing deforestation (response).

The European Environment Agency's methodology for the environment distinguishes between four types of environmental indicators, classified in accordance with the subject that is being assessed:

• Descriptive indicators (Type A)

Descriptive indicators are also sometimes known as state of the environment indicators. Most sets of environmental indicators currently used by nations and international bodies belong to this broad category (*cf.*: 3.1). It encompasses all the indicators that describe the actual situation, whether this be the state of the environment itself, the state of the socio-economic context, the state of dependencies and pressures exerted or, on the contrary, the state of actions implemented in favour of the environment.

The descriptive indicators can be classified into "resources", "achievements" and "results" indicators:

> The resources indicators measure the financial and human resources mobilized by the company.
> The achievements indicators measure what the company accomplishes thanks to the resources it mobilizes.
> The results indicators measure the qualitative and quantitative changes resulting from the achievements.

• Performance indicators (Type B)

The descriptive indicators (Type A) reflect a situation or a phenomenon as it is, without referring to how the situation should be. In contrast, performance indicators measure the distance between the current environmental situation and the desired situation (target). This category includes efficacy indicators (comparison of results obtained with the expected results, i.e. the objectives set), efficiency indicators (comparison of the results obtained with the resources used) and quality indicators (of the product).

• Environmental efficiency indicators[41] (Type C)

These indicators measure the natural resources used and the emissions and pollution generated by human activities per unit of desired output. A nation's environmental efficiency can for example be described in terms of the level of emissions and waste generated per unit of Gross Domestic Product (GDP).

• Total welfare indicators (Type D)

The go beyond the field of the environment strictly speaking to assess the welfare of societies and the sustainability of the man-nature system. These indicators include the 'Green GDP'[42] the Index of Sustainable Economic Welfare (ISEW), the Genuine Progress Indicator (GPI), Genuine Savings Indicator (GSI), etc.

1.3.4 THE DIFFERENT ROLES ASSIGNED TO ENVIRONMENTAL INDICATORS AND THEIR LIMITS

Environmental indicators are used by numerous stakeholders (States, local authorities, companies, NGOs, research institutes, etc.) for different purposes. In particular, they can help:

> To provide information on the state of the environment and on the negative impacts it suffers by means of reliable reference frameworks in order to reveal the gravity of the situation (descriptive role) and guide decision-makers in establishing priorities for action and in defining the objectives to attain (prescriptive role);

> To monitor and assess the effects of policies in order to improve continuously the efficacy of the environmental policies implemented (decision and adaptive management through self-assessment) and the integration of environmental issues into other policies, in particular sectorial ones;

> To communicate and raise the public's and decision-makers' awareness of environmental issues and problems;

> To draw up reports on the state of the environment, to report the interrelations between stakeholders and the environment, to report the impact of policies implemented as well as the involvement of stakeholders in environmental conservation (this is the case of indicators that are included in the reporting documents).

41 "Eco-efficiency". *Cf.:* United Nations (UN), 2003. *A Manual for the Preparers and Users of Eco-efficiency Indicators.* United Nations Conference on Trade and Development.
42 Level H., 2007. *Ibid.*

In companies, indicators are used to address different requirements. A typology of the uses of environmental information can be generated in accordance with the company's three interdependent subsystems[43].

Figure 2: The different uses of environmental information

	Production system[44]: for each activity	Organization system[45]: for piloting activities and projects	Institutional system[46]: for Communication with external stakeholders / Non-financial reporting
USES OF ENVIRONMENTAL INFORMATION	> Production: methodologies, technological conformity; > Supplies: environmental assessment of raw materials and suppliers; > Research and development: Eco-design approach to designing products > Accounting: monitoring of environmental expenditure.	> Through the "environment" or "sustainable development" service, the project teams or the leaders; > Typically through an environmental management system involving the collection, management and diffusion of environmental information.	> Communication on the company's environmental performance.

Based on: Houdet J., 2010. Entreprises, biodiversité et services écosystémiques. Quelles interactions et stratégies? Quelles comptabilités? Thesis. AgroParisTech.

Like all tools, indicators have their limitations. Firstly, these are complex tools that are not sufficient on their own and cannot provide information on all subjects, in particular because all areas are not suited to the use of quantitative information. Next, in order to obtain an overview of a problem, several indicators are often required. Then there are two possible choices: either to use a composite indicator or to create a coherent set of several indicators. It is the second choice that is generally made within the framework of biodiversity policies (*cf.*: 3.1). However, since they are too numerous, they *"generate an information saturation phenomenon"*, leading to *"doubts about the appropriate behaviour"* and causing *"inaction"*[47]. Moreover, the question of the technical and financial feasibility of their calculation also arises.

REMEMBER

It is advisable:

> To define and target requirements, expectations and demands properly in the context within which the indicators will be used;
> To choose a limited number of indicators linked to targeted objectives and also guarantee their quality (simplicity, reliability, feasibility criteria, etc.);
> To replace and interpret the indicators within the appropriate context (ecological, geographical, social, economic, etc.);
> To accompany the indicators with information on the methodology making it possible to calculate them and understand the reasoning that underlies their definition.

43 Houdet J., 2010. Entreprises, biodiversité et services écosystémiques. Quelles interactions et stratégies? Quelles comptabilités? Thesis. AgroParisTech.
44 This is the system that combines *"human and technical resources, methods and standards, flows of material and energy, professional skills, and cooperation in the workplace"* in order to produce the goods or the service sold by a company. (Houdet J., 2010)
45 It indicates *"the work organization schemes that condition the maintenance and evolution of the production system". It allows companies to "solve problems and decide on their behaviour". (Ibid.)*
46 This system corresponds to a *"meeting place between companies and society (…). It is the interface between stakeholders, and shareholders in particular, the Government (…), employees – citizens and society in all the diversity of its values and influences (…). (Ibid.)*
47 ATEN, 2011. *Ibid.*

2. Situation analysis of the legal provisions

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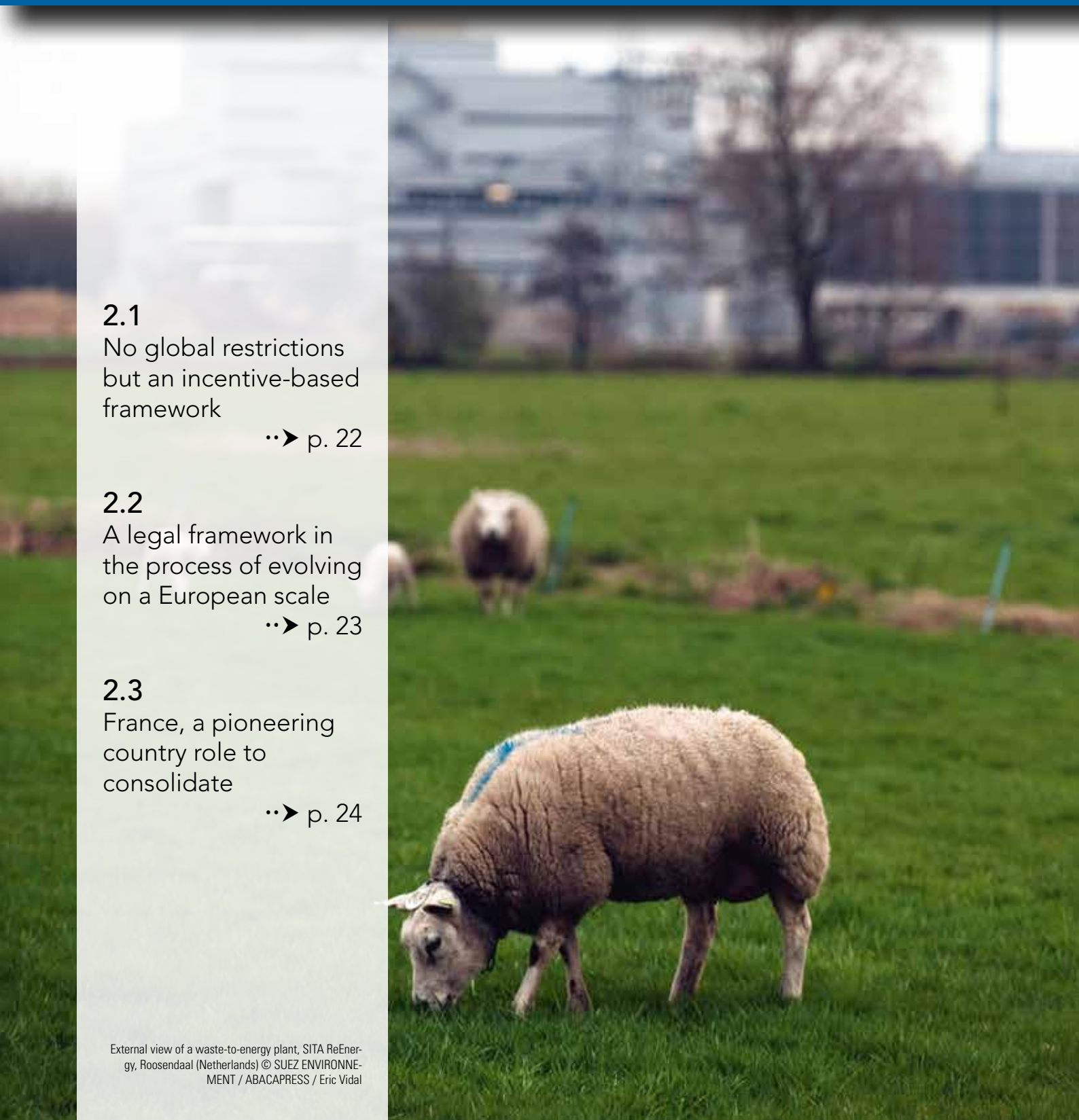


External view of a waste-to-energy plant, SITA ReEnergy, Roosendaal (Netherlands) © SUEZ ENVIRONNEMENT / ABACAPRESS / Eric Vidal

Beaver in the Loire river basin © S. Richer

2.1 NO GLOBAL RESTRICTIONS BUT AN INCENTIVE-BASED FRAMEWORK

There is currently no international legal provision that forces companies to disclose environmental information. Nevertheless, they are strongly encouraged to do so. The signatory States of the Final Declaration of the People's Summit at Rio+20 in June 2012 acknowledged "*the importance of corporate sustainability reporting" encouraging companies, "especially publicly listed and large companies, to consider integrating sustainability information into their reporting cycle (…)*" (Paragraph 47 of the Final Declaration)[48].

In reference to this text, South Africa, Brazil, Denmark and France launched the "Group of Friends of Paragraph 47" initiative in June 2012, with support from the United Nations Environment Programme (UNEP) and the Global Reporting Initiative (GRI). It underlines the essential role played by governments in developing best practices with regard to corporate transparency. However, it does not specify the nature of the information that should be divulged[49].

Moreover, companies are given access to most operational tools, which are aimed at guiding them in writing their non-financial documents (the most frequently used tool is the GRI guidelines; *cf.:* 3.2).

Contact between a forest ecosystem and farmland (Nord) © A. Cavrois

48 United Nations (UN), 2012, *The Future We Want*

49 *Cf.:* the Charter of the Group of Friends of Paragraph 47 on corporate sustainability reporting, published in November 2012: http://www.developpement-durable.gouv.fr/IMG/pdf/CHARTE-Groupe_des_Amis_du_paragraphe_47.pdf

Developed pond in a special planning area (ZAC) © G. Lemoine

2.2 A LEGAL FRAMEWORK IN THE PROCESS OF EVOLVING ON A EUROPEAN SCALE

In June 2003, the European Parliament and the Council of Europe adopted a Directive[50] encouraging companies to present non-financial elements in their management reports: *"To the extent necessary for an understanding of the company's development, performance or position, the analysis shall include both financial and, where appropriate, non-financial key performance indicators relevant to the particular business, including information relating to environmental and employee matters"*.

Despite the adoption of this Directive, the European Commission noted after a study carried out in 2011 - 2012[51] that certain *"companies fail to adequately meet growing demand from stakeholders (including investors, shareholders, employees and civil society organizations) for non-financial transparency"*[52]. The failures are both in terms of quantity (it is estimated that *"only 2,500 out of a possible 42,000 EU companies formally disclose non-financial information each year"*) and quality (*"lacking in materiality, balance, accuracy and timeliness"*) and thus do not meet the users' needs adequately.

On the basis of this study, in April 2003 the European Commission adopted a proposal for a Directive[53] one of the objectives of which was to *"increase the transparency of certain companies, and to increase the relevance, consistency, and comparability of the non-financial information currently disclosed"*. In order to achieve this, the proposal for a Directive imposes the publication of a non-financial statement in certain companies' annual management report. The report should include information relating to at least of four areas, which are listed in this proposal. These areas include the environment. However, the proposed Directive does not provide more details on this topic and thus does not mention biodiversity. Within each of these areas, the company must provide a description of its policies, results and risk-related aspects. The publication of information can rely on recognized, international, high-quality reference frameworks (such as the OECD guidelines, the Global Compact, ISO 26000, the GRI; *cf.:* 3.3). The analysis can be accompanied by indicators.

The proposed directive employs the "comply or explain" principle[54], in other words it asks companies to cover all four areas quoted unless they can explain why they have decided to exclude one or several of them ("*companies that do not have a specific policy in one or more of these topical areas would be at least required to explain why this is the case*").

50 European Parliament, 2003. Directive 2003/51/EC of the European Parliament and of the Council of 18 June 2003 amending Directives 78/660/EEC, 83/349/EEC, 86/635/EEC and 91/674/EEC if the Council on the annual and consolidated accounts of certain types of company, banks and other financial institution and insurance undertakings.
51 European Commission, 2013. Commission staff working document impact assessment accompanying the document: Proposal for a Directive of the European Parliament and of the Council.
52 European Commission, 2013a. Proposal for a Directive of the European Parliament and of the Council amending Council Directives 78/660/EEC and 83/349/EEC as regards disclosure of non-financial information and diversity information by certain large companies and groups.
53 *European Commission, 2013a. Ibid.*
54 For more information on this principle, see: Institut Français des Administrateurs (IFA), 2013. *"Comply or Explain" Guide pratique de mise en oeuvre.* Les travaux de l'IFA.

The European Parliament and the Council of the European Union reached an agreement over the European Commission's proposed Directive in February 2014. The text of the compromise reached scales down the scope of the proposed Directive. The European Commission's proposal involved all large companies with over 500 employees, whilst the text of the compromise indicates that the Directive's demands will only concern public interest entities (in other words, listed companies, credit institutions and insurance companies) with over 500 employees. The legislation will thus apply to 6,000 of the 42,000 large European companies instead of the 18,000 companies initially targeted by the European Commission's proposed Directive.

The text of the new legislation also stipulates that the European Commission should prepare *"non-binding guidelines including general and sectoral non-financial key performance indicators"* with a view to facilitating reporting.

The proposal has still to be adopted by the European Parliament and by the Member States of the Council. The Parliament should vote on this in April 2014, before the Council.

2.3 FRANCE, A PIONEERING COUNTRY ROLE TO CONSOLIDATE

Limestone quarry operated by Holcim at Sennecey-le-Grand (Saône-et-Loire) © P. Estève

2.3.1 PROGRESSIVE OBLIGATIONS

In 2001, in other words two years before the Directive of the European Parliament and of the Council of June 2003, France was one of the first countries to establish an obligatory, non-financial reporting system for certain companies.

Other countries that have passed legislation on the disclosure of non-financial information include:
> The Netherlands in 1997
> Norway in 1998
> Sweden in 1998
> The United States of America in 2002
> The United Kingdom in 2006 and in 2008
> Australia in 2007
> Denmark in 2008

France was once again a pioneer when in 2002 and in 2012 it was the first country to implicitly and then explicitly refer to biodiversity among the subjects to be covered in non-financial reporting documents.

Protection of the sand martin (Riparia riparia) in the quarry operated by GSM at Illats (Gironde) © N. Lemarchand

Figure 3: Construction and the contents of the French legal provision

Law on New Economic Regulations (NRE)

Law of 15 May 2001

Article 116 of the law, set out in Article L225-102-1 of the French Commercial Code, obliges listed companies to publish non-financial information.

"The [report presented by the board of directors of the directorate, as the case may be, at the general assembly] (…) also includes information, the list of which is established by an Order-in-Council, on the way in which the organization takes into account the social and environmental consequences of its activity. This paragraph does not apply to companies whose securities are not admitted to trading on a regulated market"

Implementation Decree of Article L225-102-1 of the French Commercial Code

Decree of 20 February 2002

This Decree, implementing Article L225-102-1 of the French Commercial Code establishes the list of information that listed companies must disclose.

"In the implementation of the fourth paragraph of Article L225-102-1 of the French Commercial Code, in the report by the board of directors or the directorate (...) the following information appears on the impacts of the company's activity on the environment, in accordance with the nature of this activity and its effects:
1° The consumption of water resources, raw materials and energy with, when appropriate, measures taken to improve energy efficiency and the resorting to the use renewable energies, the conditions of land use, as well as air, water and soil pollution having a serious impact on the environment, a list of which will be determined by decree by the ministers in charge of the environment and industry, noise or olfactory pollution and waste:
2° The measures taken to limit the negative impacts on the ecological balance, on natural environments, on protected plant and animal species;
3° The procedures for assessing or certifying companies in environmental issues;
4° The measures taken, when appropriate, to ensure the society's activity complies with legislation and regulations currently in force on this subject;
5° The money spent to prevent the impact of the social activity on the environment;
6° The existence in society of internal environmental management services, the training and informing of employees with regard to the latter, the means devoted to reducing potential risks for the environment and for the company, implemented in order to deal with accidental pollution incidents that have an impact that extends beyond the company's own facilities;
7° The amount of provisions and guarantees for environmental risks, except in cases where this information might cause serious damage to the company in an ongoing dispute;
8° The amount of compensation paid during the exercise of a legal ruling regarding the environment and the actions carried out to make up for the damages caused by these actions;
9° All the elements on the objectives that the company assigns to its subsidiaries abroad on points 1° to 6° above."

Figure 3 (continued)

The Grenelle II Law on the French commitment to the environment

Law of 12 July 2010

Article 225 of the law amends Article L225-102-1 of the French Commercial Code. It increases its scope making certain publicly unlisted companies obliged to disclose non-financial information and extends the contents of this information to cover social commitments in favour of sustainable development. It also introduces a mechanism to control information by a third-party independent organization.

"The obligation of including in the management report the information listed in the Implementation Decree of Article L. 225-102-1 applies to "companies whose securities are admitted to trading on a regulated market as well as companies whose total end of year statement or turnover and number of employees exceed the thresholds set by the Order-in-Council."

The "Warsmann" Law on the simplification of law and administrative procedures

Law of 22 March 2012
Article 12 of the law amends Article L225-102-1 of the French Commercial Code.
A. It differentiates between information required by listed and unlisted companies;
B. It introduces the possibility for subsidiaries or controlled companies to benefit from a special dispensation, exempting them from publishing the information required in their own management report, as long as their parent company publishes it for them in a detailed manner.

"**A.** "[The report by the board of directors or the directorate] (...) also includes information on the way in which the company takes into account the social and environmental impacts of its activity, as well as on its social commitments in favour of sustainable development and the fight against discrimination and the promotion of diversity. An Order-in-Council establishes two lists detailing the information referred to in this paragraph as well as how it can be presented, in order to allow data to be compared, depending on whether the company is admitted to trading on a regulated market."

B."The subsidiaries or controlled companies that exceed the thresholds mentioned in the first sentence of this paragraph are not obliged to publish the information mentioned in the fifth paragraph of this Article if this information is published in detail by their parent company, as set out in Article L233-3, the subsidiary or the controlled company and that these subsidiaries or controlled companies indicate how to access this information in their own management report."

Decree of the obligations regarding a company's' transparency in social and environmental issues

Decree of 24 April 2012

It amends Articles R225-104 and R225-105 of the French Commercial Code and creating Article R225-105-

1. It establishes:

A. The list of information to be disclosed by all companies (both listed and unlisted);

B. The list of complementary information that only needs to be disclosed by listed companies.

"**A.** "Subject to the provisions of the third paragraph of Article R. 225-105, the board of directors or the directorate of the company (...) mentions in their report (…) the following information: (...)

2º Environmental information

a) General environmental policy:
- The organization of the company to take into account environmental issues and, if appropriate, the procedures for assessment or certification in environmental issues;
- Training and informing employees in environmental conservation issues;
- The resources devoted to the prevention of environmental risks and pollution;

b) Pollution and waste management:
- Measures for the prevention, reduction or compensation for air, water or soil pollution causing serious harm to the environment;
- Measures for the prevention, recycling and elimination of waste;
- The consideration of noise pollution and all other types of pollution specific to a given activity;

c) Sustainable use of resources:
- Water consumption and supply in accordance with local constraints;
- The consumption of raw materials and measures taken to improve the efficiency of their use;
- Energy consumption, measures taken to improve energy efficiency and the resorting to the use of renewable energies;

d) Climate change:
- Greenhouse gas emissions;

e) Biodiversity conservation:
- The measures taken to conserve or develop biodiversity;

3º Information on social commitments in favour of sustainable development:

a) The local, economic and social impact of the company's activity:
- On employment and regional development;
- On local populations;

b) Relations with people or organizations interested in the company's activity, in particular integration associations, educational centres, environmental organizations, consumers associations and local populations:
- The conditions of dialogue with these individuals or organizations;
- Partnership or sponsorship initiatives;

c) Subcontracting and suppliers:
- Taking social and environmental issues into account in purchase policies.

B. "Subject to the provisions of the third subparagraph of article R. 225-105, and in complement of the information set out in the first subparagraph, the board of directors or the directory of the company whose securities are admitted to trading on a regulated market provides the following information in their report: (…)

a) General environmental policy:

2º Environmental information:

a) General environmental policy:
- The amount of provisions and guarantees for environmental risks, except if this information may cause serious damage to the company in an ongoing dispute;

c) Sustainable use of resources:

- Land use;

d) Climate change:
- Adaptation to the consequences of climatic change."

It should be noted that in September 2012, the French Prime Minister announced in his closing speech at the first environmental conference the replacement of the distinction established by the so-called "Warsmann" law, among the information that must be disclosed by listed companies and the information that must be published by unlisted companies. The distinction will be *"replaced by a more relevant criterion, which will be linked to the company's size"*.

The companies concerned by the provisions of Article L225-102-1 of the French Commercial Code on the publication of non-financial information

(Defined in the Decree on transparency obligations)

> Companies whose securities (shares or bonds) are admitted to trading on a regulated market:

> Other companies whose total end of year statement or turnover and the number of employees exceed certain thresholds:
- The total end of term statement or net turnover is over or equal to 100 million euros;
- And the average number of permanent employees over the course of the financial year is over or equal to 500.

The scope of consolidation of reporting documents

(Defined in Article L225-102-1 of the French Commercial Code)

> When the company has established accounts, the information to be supplied is consolidated and concern the company itself as well as all its subsidiaries as defined in Article L233-1 or the companies it controls as defined in Article L233-3 of the French Commercial Code;

> When the company does not establish consolidated accounts, the information to provide only concerns the company.

Definition: consolidation

Consolidated financial statements are a legal obligation, which applies to all parent companies that control other entities or influence them to a significant degree (Article L233-16 of the French Commercial Code),

These parent companies must present the financial position and results of operations for their own company, and of all their subsidiaries or any entities they control or influence, as if the individual entities actually were a single company or entity. This is known as a consolidated financial statement.

The scope of consolidation refers to all the individual entities whose accounts are combined in a single financial statement.

Two key dates to remember:

> 2002: listed companies must public information on "*the measures [they take] to limit negative impacts on the ecological balance, on the natural environment, and on protected species of flora and fauna*";

> 2012: the term "biodiversity" appears explicitly for the first time among the information to be published by listed companies and those that exceed certain thresholds. Now they have to communicate the "*measures [they take] to conserve or develop biodiversity*".

2.3.2 MIXED RESULTS

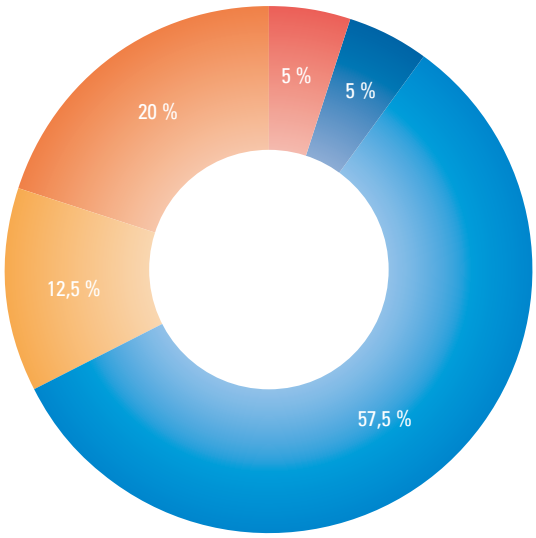
The French legal system is assessed regularly. The French Government believes that it has led to "*a clearly qualitative evolution, which allows shareholders and other stakeholders to appreciate the global performance of companies better*" [55]. This is based on the global survey by the auditing firm KPMG, carried out in 2011 on non-financial reporting. It showed that France was ranked 4th worldwide that year in terms of non-financial reporting by large companies; in three years, the number of companies disclosing their environmental, social and governance actions rose from 59% to 94%.

Nevertheless, the quality of the information could be improved. Indeed, whilst there is a lot of information on some topics (training, health, diversity, social dialogue) insufficient data are provided on others, such as biodiversity (*cf.*: Figure 4 below)[56].

According to one independent study, of 650 companies obliged to report non-financial information, only one definitely complied totally[57].

Figure 4: 2012-2013: after Article 225 of the "Grenelle II Law" has been applied for one year, what are the results?

THE COMMUNICATION OF INFORMATION ON BIODIVERSITY BY 40 LISTED COMPANIES*



- Provide qualitative information and quantitative indicators
- Provide qualitative information only
- Provide information on biodiversity that is not specific to the company
- Do not provide any information but justify the absence of information
- Do not provide any information or justification

Result based on: Orée, 2013. *Reporting extra-financier première année d'application de l'article 225 de la loi grenelle 2. Bilan et perspectives.*

**Orée studied a sample of the 20 most important capitalizations on the French stock market index, CAC 40, and the 20 weakest capitalizations on the French stock market index, SBF 120.*

75% of the companies studied supply information on biodiversity. However, 12.5% of these companies publish information that is not specific to them (for example, they express their wish to mitigate the impacts of their activities without going into greater detail).

A very limited use of indicators can also be noted: only 2 of the 40 companies studied used them. These indicators most frequently reveal the quantity of sites that have been measured, and not the effective results on species and their environments.

A large number of companies (20%) declare they are not concerned about biodiversity. Three aspects of biodiversity reporting were studied in detail by Orée.

The main observations are listed below. For more information, in particular citations of the companies' documents, please consult the study carried out by Orée.

1. Information on impacts and dependencies:

Sixteen companies mention in their reports that they have impacts on biodiversity. Nonetheless, several companies underestimate these impacts: two companies qualify these impacts as being "indirect" and six state that they have a "limited" impact. Whilst most of the companies mention their impacts, only one describes the dependency of their activities on biodiversity.

2. Information on their commitment to biodiversity conservation:

Seven companies, in other words 17.5% of the sample, mention "biodiversity policies" or "biodiversity strategies", but few explain the content of these policies and strategies.

Five companies, or 12.5% of the sample, refer to different "programmes" set up in the company and focused on biodiversity in particular: reforestation, the rehabilitation of species, etc.

55 République française, 2013. *Document préparatoire au plan national français de développement de la responsabilité sociétale des entreprises (RSE).*
56 Groupe alpha, 2010. *Les informations sociales dans les rapports 2009. Huitième bilan de l'application de la loi NRE.*
57 Groupe alpha, 2012. *Bilan de neuf années d'application de la loi NRE en matière de reporting social. Comment le reporting modèle la RSE ?*

Figure 4 (continued)

Companies often mention the programmes they have subscribed to:
> Three companies present their projects that have been accepted by the French Biodiversity Strategy;
> Two companies state that they comply with CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora);
> Two companies mention that they support the Convention on Biological Diversity.

3. Information on responses to impacts:

Actions to monitor the state of biodiversity

Six companies describe the implementation of an inventory of or a system for monitoring the species concerned by their activities. Four companies refer to the setting up of mapping of the natural areas on which they operate. Finally, eight companies reveal the protected areas on which their activities are carried out.

Corrective actions

Most companies present their action plan listing its main components; others choose only to describe certain 'pilot' actions. This choice of communication (adopted by eleven companies) gives a specific dimension to the report, but evades the fact that no action is carried out on certain sites.

Companies insist on two types of action:
> Actions that show respect for the regulation and, in particular, impact studies and the consideration of protected areas in biodiversity management (Natura 2000 sites);
> The creation of partnerships and sponsorship agreements. Some associations are mentioned very regularly, for example the IUCN French Committee (quoted five times), WWF (quoted four times) and the French League for the Protection of Birds (Ligue de Protection des Oiseaux, LPO) (quoted three times).

Prospective actions (dedicated R&D)

Five companies (12.5%) refer in their report to research and development activities linked to biodiversity. These activities provide a good illustration of the awareness of the strategic role natural environments and species play in a company's organization.

Visit by the general public to the EDF Group's nuclear power plant at Saint-Laurent-des-Eaux (Loir-et-Cher) during the Nature Festival © EDF - Philippe ERANIAN

One explanation for these mixed results may be the great flexibility given by the French legal system with regard to reporting practices, in particular on biodiversity.

One the one hand, the regulations' demands cover very broad subjects, which are neither described in detail nor explained (*cf.*: 3.3). On the other, like the European Directive proposal (*cf.*: 2.2), the French legal system is based on the "comply or explain" principle. This means that whilst Article L225-102-1 of the French Commercial Code stipulates the communication of information on biodiversity, companies can nevertheless get away with not supplying this information if they provide justification; they can indicate the information that, "*given the nature of the activities or the organization of the company, cannot be produced or do not appear relevant, by supplying all the useful explanations*"[58]. Moreover, regarding the information to be provided by listed companies, it mentions "*the company's obligation to justify, where necessary, the reasons why it finds it impossible to supply certain information*"[59]. However, no criterion is given on the explanations to be provided in the event of the company being unable to supply certain information.

In an opinion submitted on 26 June 2013[60], the Economic, Social and Environmental Council (ESEC) also underlines certain weaknesses in the Decree on companies' obligations regarding transparency on this subject. Among the five recommendations for reinforcing reporting, it prescribes, *"reinforcing environmental reporting, in particular on information on biodiversity conservation in addition to the adaptation to and fight against climate change"*.

58 Article R225-105 of the French Commercial Code.
59 Decree No. 2012-557 of 24 April 2012 on the obligations regarding a company's transparency in social and environmental issues.
60 Economic Social and Environmental Council (ESEC), 2013. *CSR: a pathway towards economic, social and environmental transition.*

3. Initiatives to consider when writing corporate biodiversity reports

3.1
The different global, European and French biodiversity initiatives and their indicators
··➤ p. 32

3.2
Recommendations from French and international reference frameworks
··➤ p. 35

3.3
Initiatives that reveal the limits of the French legal system
··➤ p. 41

The Villefort dam built by the EDF Group on the river Altier, under the tributary of the river Rhône (Lozère) © EDF - P. Dhumes

3.1 THE DIFFERENT GLOBAL, EUROPEAN AND FRENCH BIODIVERSITY REPORTING INITIATIVES AND THEIR INDICATORS

Dry moorland with rowan trees and blueberries © A. Persuy

The 1992 "Earth Summit" in Rio de Janeiro reinforced international commitments to sustainable development, in particular through 150 Heads of State signing three international conventions including the Convention on Biological Diversity (CBD).

This event promoted the definition and rolling out at the start of the 21st century of two successive sequences of global, European and French biodiversity conservation strategies. It appeared necessary to create sets of indicators with a view to monitoring, assessing and disclosing the progress made in meeting the goals set by each of these strategies.

3.1.1 GLOBAL REPORTS AND THEIR INDICATORS

At the 2002 "Earth Summit" in Johannesburg, the Heads of State recorded in the global agenda the objective of achieving "*by 2010 a significant reduction in the current rate of loss of biological diversity at the global, regional and national level as a contribution to poverty alleviation and to the benefit of all life on Earth*". In order to ensure this commitment did not go unheeded, it appeared important that the efforts made by the countries to achieve this "2010 Biodiversity Target" were evaluated. This is why, two years after this objective was set, a provisional framework of around twenty indicators was adopted during the 7th session of the Conference of the Parties (COP 7) and then completed and reformulated at the 8th session of the Conference of the Parties (COP 8).

In order to consolidate and implement this set of indicators, a Biodiversity Indicators Partnership (BIP) was established in 2007, bringing together over 40 organizations. In 2010, it published 29 operational indicators developed around 18 headline indicators covering seven focal areas:

1. Status and trends of the components of biological diversity;
2. Sustainable use;
3. Threats to biodiversity;
4. Ecosystem integrity and ecosystem goods and services;
5. Status of traditional knowledge, innovations and practices;
6. Status of access and benefit-sharing;
7. Status of resource transfers.

The indicators are listed in Appendix II.

In 2010, at the 10th session of the Conference of the Parties (COP 10) the signatories of the CBD adopted the new Strategic Plan for Biodiversity 2011-2020[61]. In particular, it includes 20 "Aichi Targets". It was necessary to review and expand on the set of 18 indicators established in 2010 by the BIP, because seven of the 20 Aichi Targets were not covered by the latter. The Parties demanded the introduction of a new set of indictors, published in 2020 at the 11th session of the Conference of the Parties (COP 11): 32 headline indicators and 98 operational indicators.

61 UNEP, 2010, *Decision X/2: Strategic Plan for Biodiversity 2011-2020 and Aichi Biodiversity Targets.* In: Conference of the Parties to the Convention on Biological Diversity, 10th meeting, Nagoya, 27 October 2010.

Most of the 18 indicators published by the BIP in 2010 (17 out of 18) were adopted again as operational indicators. The indicators are listed in Appendix III.

Since it dealt with the mobilization of resources in support of biodiversity, Decision X/3[62] adopted in 2010 at the 10th session of the Conference of the Parties made it possible to ratify 15 indicators designed to monitor the implementation of the strategy for resource mobilization.

A preliminary reporting framework (UNEP/CBD/COP/11/14/Add.1[63]) was created two years later during the 11th session of the COP in order to help the Parties to provide data on the mobilization of resources in line with the indicators adopted as a result of Decision X/3. In particular, it aims at reporting the different sources of finance from the profit-making private sector, through markets, as well as the non-profit sector (foundations). It is on the basis of this report that the progress made on the implementation of the "Hyerabad Commitment" was evaluated. This commitment aims to "double total biodiversity-related international financial flows to developing countries (…) by 2015 and at least maintain this level until 2020" (Decision XI/4[64]).

3.1.2 EUROPEAN REPORTING INITIATIVES AND THEIR INDICATORS

In order to assess the first European biodiversity strategy drawn up in 1998, in 2004 the European Union proposed 15 key indicators essentially based on the set of indicators adopted several months prior to that by the CBD at the COP 7.

At the request of the Environment Council of the European Union, the European Union and the European Environment Agency launched the pan-European programme, SEBI (Streamling European Biodiversity Indicators) in 2005. In 2007, the programme published 16 key indicators broken down into 26 operational indicators. This set of indicators, which represents the European contribution to BIP's initiatives, was also mobilized in order to:

> Assess the second European Biodiversity Strategy defined in 2006 in the communication "Halt the loss of biodiversity at all levels by 2010 – and beyond"[65], which aimed to stop biodiversity loss in Europe by 2010;

> Follow the implementation of the 6th EU Environment Action Programme;

> Deliver input to other sets of indicators such as the central core of the European Environment Agency's environmental indicators[66] or the set of indicators created for monitoring the first French Biodiversity Strategy (SNB). The indicators are set out in Appendix IV.

The European Commission defined a third strategy for the period 2011-2020 in a communication of May 2011 entitled, *"Biodiversity, our life insurance, our natural capital: an EU biodiversity strategy to 2020"*[67]. Divided up into six objectives and 20 actions, it sets the goal of *"Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020 (…)"*. A system for monitoring, assessing and communicating progress on the implementation of the strategy is currently being prepared.

62 UNEP, 2010a. Decision adopted by the Conference of the Parties to the Convention on Biological Diversity at its tenth meeting. Strategy for resource mobilization in support of the achievement of the Convention's three objectives.
63 UNEP, 2012a. Review of implementation of the strategy for resource mobilization.
64 UNEP, 2012b. Decision adopted by the Conference of the Parties to the Convention on Biological Diversity at its eleventh meeting. Review of the implementation of the strategy for resource mobilization, including the establishment of targets.
65 European Commission, 2006. Commission Communication. *Halting the loss of biodiversity by 2010 - and beyond: Sustaining ecosystem services for human well-being.*
66 European Environment Agency, 2012. *Streamlining European biodiversity indicators 2020: Building a future on lessons learnt from the SEBI 2010 process.* Copenhagen, 50 p. EEA Technical report, n°11/2012.
67 European Commission, 2011. *Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions. Our life insurance, our natural capital: an EU biodiversity strategy to 2020.*

3.1.3 FRENCH REPORTING INITIATIVES AND THEIR INDICATORS

In 2004, the first French Biodiversity Strategy 2004-2010 (SNB 2004-2010)[68] defined the objective of *"halting wild and domestic biodiversity loss, restoring and maintaining the capacity for change by 2010"* Two sets of indicators were published in 2006 (one for mainland France and the other for its overseas departments and territories). They were largely inspired by the SEBI process, which is in turn based on most of the CBD indicators. The set consists of 14 generic indicators broken down into 27 indicators (the equivalent of the European "operational indicators").

A new French Biodiversity Strategy for the period 2011-2020 (SNB 2011-2020)[69], consisting of six strategic guidelines and 20 objectives, was adopted in 2011.

It appeared necessary to propose new indicators for monitoring the status and evolution of biodiversity and of the interactions between biodiversity and society. These indicators were developed by the French Biodiversity Observatory (Observatoire national de la biodiversité, ONB). Its mission was to propose indicators giving *"reliable reference frameworks allowing for an efficient piloting of the policies (decision-makers and managers) and a broad and constructive democratic debate (citizens)"*. These French initiatives reflect the European and global reporting initiatives: the sought-after correspondence between the indicators drawn up by ONB and the European and global indicators reveals this concern for consistency.

Thus, for example, the ONB indicator *"National expenditure for official international development assistance with regard to biodiversity"* is a French version of indicators 11 and 12 of Decision X/3 of the Convention on Biological Diversity (*cf.*: 3.1.1).

In 2012, ONB published around 50 indicators, including nine from the 27 indicators in the first SNB. This time, the indicators were organized by subject matter.

Three sets of indicators were developed at this stage ("SNB Summary", "Overseas Specificities" and "Nature").
The ONB indicators for the SNB 2011-2020 are given in Appendix V.

Today, ONB asks French companies to produce two indicators linked to the following indicators:

> *"French national expenditure for biodiversity and landscape conservation"*:

> *"French national expenditure for public aid for the international development of biodiversity policies"*[70].

It would be appropriate if these indicators were broken down and communicated, at their level, by companies and even included in their biodiversity reporting documents. The results obtained by companies could thus be added by ONB to the French data before contributing to the calculations made at a global level within the framework of the mobilization of resources in support of biodiversity.

Other ONB indicators could be adapted and communicated, at their level, by companies. These include indicators such as:

> *"Net annual coverage by impervious surfaces in mainland France"*;

> *"Net annual coverage by impervious surfaces in French overseas departments and territories"*:

> *"Changes in the number of experiences the public have in nature, in contact with the living world, within the framework of a series of educational activities"*;

> *"Changes in the consumption of plant protection products"*;

> *"Number of species present in at least one of the French overseas departments and territories, which are among the list of 100 species considered by IUCN to be the most invasive in the world"*

Proposals for the adaptation of these indicators found in the recommendations (Part 4).

68 République française, 2004. *Stratégie française pour la biodiversité. Enjeux, finalités, orientations.*
69 République française, 2011. *Stratégie nationale pour la biodiversité 2011-2020.*
70 As such, private sector expenditure cannot be classified as official development assistance (see definition by OECD: http://www.oecd.org/dac/stats/officialdevelopmentassistancedefinitionandcoverage.htm). However, the financial flows of French companies with regard to biodiversity towards countries eligible to official development assistance nonetheless enter into the calculation of the *"French national expenditure for official international development assistance with regard to biodiversity"* indicator.

REMEMBER

> The reporting initiatives implemented in the middle of the 2000s, worldwide, in Europe and in France, are characterized by being extremely consistent: their indicators were organized in the same way (subjects broken down into key indicators, which were in turn described in operational indicators) and an interlocking logic (the CBD's set of global indicators giving rise to those of the European Union, which were in turn used to define the set of indicators used to monitor the first French Biodiversity Strategy).

> In 2010, in view of the fact that the objectives set at the beginning of the 2000s had not been achieved, and after a review of the CBD, European Union and French strategies, these sets of indicators were judged to be insufficient and changed substantially: the number of operational indicators increased considerably (rising from 29 to 98 for the CBD, and from 27 to 51 for France), and their organization became more complex. The ways in which the indicators are organized now varies (structured by key issues, by subjects, by objectives assessed). These changes underline the specificity of the reporting initiatives on each scale, with a more reliable proportion of common indicators. Consistency between scales is now assured upwards through the objectives of the different strategies (*cf.:* Appendix VI).

Installation of a reed nursery on the quarry operated by GSM at La Grande Paroisse (Seine-et-Marne) © F. Frébourg

3.2 RECOMMENDATIONS FROM NATIONAL AND INTERNATIONAL REFERENCE FRAMEWORKS

3.2.1 RECOMMENDATIONS BY REFERENCE FRAMEWORKS ON THE CONTENTS OF BIODIVERSITY REPORTING DOCUMENTS

The drafting of a non-financial reporting document, and especially one on biodiversity, is made complex in particular by the fact that the principal international reference frameworks (reporting, commitment or management reference frameworks) that tackle question of non-financial reporting, either do not formulate recommendations concerning the subjects to be covered, or draw up the list of the subjects to be dealt with but do not detail which information to publish for each one of them.

By way of example, we can quote the following reference frameworks and initiatives:

- The United Nations Global Compact:

The Global Compact is an international initiative launched in 2000 by the Secretary General of the United Nations[71]. As a member of this Compact, a company undertakes to align its operations and strategies with ten universally accepted principles, three of which concern the environment (the others relate to the human rights, labour law and the fight against the corruption). Today it has over 12,000 corporate participants.

71 For more information, please visit the following website: http://www.unglobalcompact.org/index.html

Since 2003, the Global Compact's business participants have had to *"commit to issue an annual Communication on Progress (COP), a public disclosure to stakeholders […] on progress made in implementing the ten principles of the UN Global Compact [...]. All business participants are required to post their COP on the Global Compact website and to share it widely with their stakeholders"*.

The UN Global Compact's policy on the Communication on Progress[72] remains general with regard to the information that must be included in the communication:
> A description of specific measures (*in other words a public disclosure*) that the company has implemented to apply the ten principles of the Global Compact;
> Performance indicators or other qualitative and quantitative measurements of results.

• The international standard ISO 14001:

The international standard ISO 14001, whose latest version[73] dates back to December 2004, constitutes a framework defining the rules for integrating environmental issues into the activities of any organization in order to control its environmental impacts.

Standard ISO 14001 envisages the scenario whereby a company decides not to disclose information on environmental issues. For those who do want to adopt this approach, the standard does not give any recommendations on the method to adopt or the contents to disclose, and gives companies the freedom to choose in this regard:
"The organization should determine whether it will communicate to external parties information on its significant environmental aspects", and must document its decision. If the organization does decide to disclose information to external parties, it must implement one of the following methods for this communication.

• The international standard ISO 26000:

Published in November 2010, this standard[74] describes seven subjects that cover corporate social and environmental responsibility (social responsibility) and proposes guidelines for integrating and implementing this responsibility in a company.

One of the recommendations relates to the communication with internal and external stakeholders on the social and environmental topics. The standard stresses the importance of such a communication, draws up the list of the characteristics the information communication must comply with, and details the existing types of communication. However, the standard is more allusive concerning the information that should be supplied: *"The organization should present a complete and fair image of their performance as regards social responsibility, including its achievements and any examples of incompetence as well as the means of dealing with the incompetence"*.

• OECD Guidelines for multinational enterprises:

Published in May 2011, the latest version of the OECD Guidelines[75] contains the recommendations of OECD's 43 adhering governments addressed to multinational corporations in order to *"encourage the enterprises operating on their territories to observe the Guidelines wherever they operate, (while taking into account the particular circumstances of each host country) and to respect a set of widely recognized principles and standards, which aim at ensuring their responsible business conduct."*

The Guidelines mention biodiversity as one of the subjects to cover in non-financial reporting, but do not provide details about the nature of the information to be disclosed: *"The Guidelines encourage […] disclosure or communication practices in areas where reporting standards are still evolving […] This is particularly the case, with greenhouse gas emissions […]; biodiversity is another example"*.

• Initiatives carried out by the International Integrated Reporting Council – IIRC:

The Council is a global coalition of representatives of civil society, companies, NGOs, intergovernmental organizations as well as the accounting profession, investors, regulators and standard setters. It was created on the initiatives of the GRI[76] and Prince's Accounting for Sustainability Project (A4S)[77] in order to develop a framework defining the standards of integrated reporting documents[78].

In 2013, the Council published a reference framework[79] for integrated reporting, whose goal is to make a list of:
> The guiding principles that underpin the preparation of an integrated report (in particular the materiality, the conciseness, the reliability and completeness, the consistency and comparability), informing of the content of the report and how the information is presented;

72 *Cf.:* The United Nations Global Compact on Communication on Progress; http://www.unglobalcompact.org/docs/communication_on_progress/translations/COP_Policy_FR.pdf
73 International Organization for Standardization (ISO), 2004. *Standard ISO 14001. Environmental management systems. Requirements with guidance for use.*
74 International Organization for Standardization (ISO), 2009. *Standard ISO 26000 on social responsibility in organizations.*
75 OECD, 2011. *OECD Guidelines for multinational enterprises.*
76 *Cf.* page 37.
77 Set up by the Prince of Wales, this project aims to help companies and the public sector recognized the benefit of integrating environmental and social aspects into their decision-making.
78 Documents that provide, within a single document, financial and non-financial information.
79 International Integrated Reporting Council (IIRC), 2013. *The international Integrated Reporting Framework.*

> The content elements to be included in an integrated reporting document (in particular the business model, the strategy and resource allocation, the governance, an organizational overview and the external environment).
The reference framework therefore does not contain any recommendation regarding the indicators to communicate, the measurement methods to use or the subjects to cover.

Several international reference frameworks for commitment and management as well as reporting reference frameworks address detailed and operational recommendations to companies about the contents and the method of preparing their non-financial reporting documents. They are the following reference frameworks:

• Global Reporting Initiative (GRI):

The Global Reporting Initiative (GRI) was created in 1997 by the Coalition for Environmentally Responsible Economies (CERES)[80] in partnership with the United Nations Environment Programme (UNEP). GRI has played a pioneering role in the development of a global reference framework on non-financial information.

Highly operational, it provides a non-financial reporting framework for organizations irrespective of their size, location or sector. GRI's guidelines cover the contents of the reporting as well as the measures to take to guarantee the quality of the information disclosed. They also include elements of the information required such as performance indicators.

These characteristics make GRI the most frequently used and quoted reference framework for reporting in the world: according to a study of environmental and social reporting carried out by the auditing and consultancy firm, KPMG)[81], 80% of the reports published by the Global Fortune 250 (G250) companies and 69% of the reports by the 100 largest companies in each country (N100 companies) were formally aligned to the structure of the third version of GRI's reporting standards.

The G4 version of GRI's guidelines:

A company today that wants to apply the fourth generation of the guidelines on sustainable reporting from May 2013)[82] must include the information required by the standard disclosure (the company's strategy, organizational profile, stakeholder engagement, governance, ethics and integrity).
Version G4 also requires companies to address the aspects that they have identified as being relevant (or material). Indeed, unlike the previous versions of GRI, version G4 is based on the "comply or explain" principle (*cf.*: 2.2): it no longer expects companies to cover all non-financial subjects (exhaustivity principle) in their reporting documents, but requires companies to select and cover only those issues relevant to them (demonstrating the relevance of the issues selected).

Three main categories can be dealt with by companies: "economic, environmental and social". Each category is then further divided into several aspects, which companies can choose to identify as being relevant. One of the 12 aspects listed in the "environmental" category is biodiversity.

Version G4 proposes four indicators directly linked to the topic of biodiversity:

> *"EN11 – Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas."*

> *"EN12 – Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity outside protected areas."*

> *"EN13 – Habitats protected or restored."*

> *"EN14 – Total number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk."*

Version G4 of the GRI proposes other indicators that deal with the topic of biodiversity indirectly:

> Impact indicators on ecosystem services:
Example: *"EN9 – Water sources significantly affected by withdrawal of water."*

> Dependence on ecosystem services indicators:
Example: *"EN1 – Materials used by weight or volume."*

> Indicators regarding the reduction of the impacts on ecosystem services:
Example: *"EN19 – Reduction of greenhouse gas (GHG) emissions."*

> Dependence on ecosystem services management indicators:
Example: *"EN – Percentage and total volume of water recycled and reused."*

80 An American network of investors, companies and public interest groups, which aims to accelerate and expand the adoption of sustainable business practices by the economic sector: http://www.ceres.org/
81 KPMG, 2011. *KPMG International Survey of Corporate Responsibility Reporting 2011.*
82 Global Reporting Initiative (GRI), 2013. *G4 Sustainability Reporting Guidelines.*

Alongside these indicators, GRI provides definitions as well as several methodological elements aimed at supporting companies disclosing these indicators.

Moreover, GRI asks companies to *"Provide sufficient information for report users to understand the organization's approach to managing"* each aspect they have identified as relevant and to describe the components of the company's management approach in this area: *"policies, commitments, objectives and targets, responsibilities, resources, specific actions"*.

Approach for reporting on ecosystem services:

In 2011, GRI, in partnership with UNEP World Conservation Monitoring Centre and CREM[83], published a report[84] on reporting on ecosystem services.

This document recognizes that:
> Whether it be directly or indirectly, all companies and their stakeholders derive benefits from ecosystems, which are often essential in order to allow them to carry out their activities.
> The benefits provided by biodiversity to companies and their stakeholders may generate pressures that can have an impact on the availability of ecosystem services.

Therefore, it recommends companies to disclose information on:
> Their key impacts and dependencies on ecosystem services;
> Their risks and opportunities related to ecosystem services;
> Their governance methods linked to ecosystem services, in particular regarding the arbitration of the use and extraction of or the impacts on ecosystem services;
> Different performance indicators for each ecosystem service, for example regarding usage (e.g. volume of food consumed), impacts and pressures (habitat destruction, overexploitation of resources, various emissions, invasive alien species, climate change), measures for avoiding, reducing or offsetting impacts or measures adopted for the sustainable management of the ecosystem services used.

By tackling the issue of biodiversity dependencies directly and explicitly, this approach appears relevant for reporting on the relations between the private sector and biodiversity.

• "Key Performance Indicators for Environmental, Social and Governance Issues" by EFFAS[85] and DVFA[86]:

Published in September 2010, this work[87] makes recommendations to companies on the integration of non-financial information into their reporting documents. They relate to the structure and the form of these documents as well as the nature of the minimum information to include. In particular, the reference framework proposes lists of key environmental, social and governance indicators for 114 subsectors of activity. For three of these 114 subsectors, the document recommends an indicator that deals directly with biodiversity. The three indicators deal with the measures taken by companies to support biodiversity:

For the farming and fishing subsector:
> *"Investments in ecosystems and biodiversity in monetary terms"*.

For the hotels subsector and the tourism sector:
> *"Expenditure on projects for the preservation of biodiversity, ecosystems, landscapes, coastlines and natural habitats"*.

It should nevertheless be noted that this publication by EFFAS and DVFA not does not accompany these indicators with a methodology aimed at helping companies disclose their information and does not propose indicators linked to biodiversity for the other 111 subsectors.

• Eco-Management and Audit Scheme (EMAS):

EMAS (88) is a European Union eco-management and audit system. A voluntary initiative, it is designed to enable all types of organization to evaluate, publish and improve their environmental performance. EMAS' approach corresponds to:

> The implementation and validation of an initial environmental analysis, taking into account all the impacts of the company's activities on the environment.
> The adoption of an environmental policy and an action plan that address the main environmental issues (including biodiversity) and the commitment to respect any pertinent legislation linked to the environment in order to promote continuous improvement of environmental performance;

83 Consultancy and Research for Environmental Management (CREM), a company that carries out consultancy, research and training in the field of sustainable development.
84 Global Reporting Initiative (GRI), 2011. *Ibid.*
85 The European Federation of Financial Analysts Societies (EFFAS).
86 Society of Investment Professionals in Germany (Deutsche Vereinigung für Finanzanalyse und Asset Management, DVFA).
87 EFFAS and DVFA, 2010. *Ibid.*
88 European Union, 2009. *Ibid.*

> The preparation of an internal environmental audit in order to check the effectiveness of the system;
> The drafting by the company of an environmental declaration on the assessment of the actions that it carried out and its validation by an accredited inspector;
> Sending off the declaration to EMAS in order to make it public.

An organization that meets these requirements is then registered with EMAS for three years (four years for small organizations).
The last two stages fundamentally differentiate the EMAS from standard ISO 14001: in order to be registered with the EMAS, an organization must make an environmental statement that can be consulted by its stakeholders.

The EMAS regulations describe the information that must be included in the environmental statement:
> The consumption of resources;
> The direct and indirect negative impacts on the environment (generation of waste, use of land, emission of pollution, etc.);
> Stakeholder engagement;
> The environmental policy and targets.

The requirements are detailed and, whilst on a whole they concern environmental issues, they can be divided up for the topic of biodiversity. In January 2012, a total of 4,532 organizations of all sizes and from all sectors were registered in Europe.

• The TEEB (The Economics of Ecosystems and Biodiversity) study report for business:

The report[89] underlines the interest (for companies and their stakeholders) of measuring and communicating in reporting documents, information on the dependencies and impacts of their activities on biodiversity and ecosystem services. The report also provides recommendations on the information to include in a reporting document on this subject. In particular, it recommends that companies indicate clearly:
> That the main risks linked the impacts and dependencies of ecosystem services are identified;
> The company's position with regard to ecosystem services;
> That a strategy and management tools have been prepared in order to address these risks and that monitoring is being carried out to ensure they are implemented.

In order to improve the biodiversity reporting documents, the reports also insists on the importance of continuing research in order to measure the ecosystem services at site, product and organizational levels, as well as to try to gain greater recognition through the ecosystem services market.

Figure 5 sums up the subjects that above mentioned reference frameworks recommend covering with regard to biodiversity. The extracts of the texts that correspond to each term ✓ are provided in Appendix VII.

Figure 5: Summary of the topics related to biodiversity, which the main international reference frameworks on reporting and commitment recommend covering.

RECOMMENDED SUBJECT	GRI		The EFFAS and DVFA Key Performance Indicators	Eco-Management and Audit Scheme (EMAS)	TEEB Report
	GRI G4	Approach for reporting on ecosystem services			
A company's dependencies on biodiversity		✓		✓	✓
A company's negative impacts on biodiversity	✓	✓		✓	✓
The priority sites for biodiversity conservation	✓				
Measures taken by a company to avoid, reduce and offset its impacts on biodiversity	✓	✓	✓	✓	
The relationship between a company and its stakeholders	✓			✓	
A company's commitment and organization in support of biodiversity	✓	✓		✓	✓

N.B.: A space with no tick means the subject in question is not recommended by the corresponding reference framework.

89 TEEB, 2012. *The Economics of Ecosystems and Biodiversity in Business and Enterprise.*

Few countries have chosen to use legal means to set the limits for non-financial communication, and even fewer of the legal systems in these countries mention biodiversity (*cf.*: 2.3). Nonetheless, certain countries that have not registered in their legal texts the obligation for companies to mention information on biodiversity, invite companies to adopt this approach with non-binding texts.

Of the states that invited companies to disclose non-financial information, the ones that require the most accurate information on biodiversity include:

> Japan and its *Guidelines for Environmental Reporting: Fiscal Year 2007 Version* [90];

> The Netherlands and their *Guide to Sustainable Reporting* [91] *of 2003*;

> Germany and its *German Sustainability Code* [92] of 2011.

The table in Figure 6 uses the same terms as the table above to summarize the subjects that these three national reference frameworks recommend should be covered with regard to biodiversity.

The extracts of the texts that correspond to each tick are provided in Appendix VII.

Figure 6: Summary of the topics related to biodiversity, which the national reference frameworks on reporting recommend covering

RECOMMENDED TOPICS	Japanese reference framework	Dutch reference framework	German reference framework
A company's dependencies on biodiversity			✓
A company's negative impacts on biodiversity	✓	✓	
A company's priority sites for biodiversity conservation	✓		
Measures taken by a company to avoid, reduce and offset its impacts on biodiversity	✓	✓	✓
The relationship between a company and its stakeholders			
A company's commitment and organization in support of biodiversity	✓		✓

N.B.: A space with no tick means the subject in question is not recommended by the corresponding reference framework.

90 Japanese Ministry of the Environment, 2007. *Environmental Reporting Guidelines. Towards a Sustainable Society.* Fiscal Year 2007 Version.
91 Dutch Ministry of Economic Affairs, 2003. *Guide to Sustainability Reporting.*
92 German Council for Sustainable Development, 2011. *German Sustainability Code.*

3.2.2 RECOMMENDATIONS BY REFERENCE FRAMEWORK ON THE SCOPE OF ANALYSIS

The main international reference frameworks for reporting and commitment, as well as the national reporting reference frameworks are unanimous (except for ISO 26000) on the fact that companies should be requested to mention information on:

> Their dependencies and their direct impacts on biodiversity (the dependencies and impacts generated by the entities controlled by the companies)

> Their indirect dependencies and their impacts (the dependencies and impacts generated by other entities not controlled by the company, but are in the value chain of products, goods or processes that it sells (suppliers, clients). In other words, these dependencies and impacts are the counterparts of the processes companies require to carry out their activities.

Appendix VIII provides a list of the extracts of these reference frameworks regarding the scope of analysis.

Uncut roadside verge that favours biodiversity © G. Lemoine

3.3 INITIATIVES THAT REVEAL THE LIMITS OF THE FRENCH LEGAL SYSTEM

3.3.1 IMPRECISIONS REGARDING THE CONTENTS OF BIODIVERSITY REPORTING DOCUMENTS

Asking companies to mention information on *"The measures taken to conserve and develop biodiversity"* (Article R225-105-1 of the French Commercial Code) constitutes progress in terms of the integration of biodiversity into non-financial communication in France (*cf.*: 2.3).

Nevertheless, the success of the GRI guidelines and the talks carried out with the IUCN French Committee's corporate partners shows the interest many companies display for more precise recommendations, in particular on the contents of non-financial reporting documents.

The IUCN French Committee expects companies to publish information that is not requested in Article R225-105-1 of the French Commercial Code and that is moreover recommended by international reference frameworks. For example, the French legal system does not ask companies to provide information on the dependencies of their actions on biodiversity[93] or on their impacts on biodiversity [94] (*cf.*: the recommendations in Part 4 of this study. In particular, they concern the list of topics that should be covered in a high-quality reporting document).

93 Article R225-105-1 asks for information on *"The consumption of raw materials (…)"*, *"Water consumption and supply in accordance with local constraints"* and *"Energy consumption"*). However, these three pieces of information to not encompass all the dependencies that companies' activities can have on biodiversity and the notion of "dependence on biodiversity" does not appear explicitly.

94 Article R225-105-1 asks for information on *"Greenhouse gas emissions"*, which contribute to climate change, one of the five causes of biodiversity loss. However, the notion of the "negative impact" on biodiversity does not appear explicitly and companies are not asked to mention their contribution to the other four causes of biodiversity loss.

It should also be noted that French companies are asked by the French Biodiversity Observatory to produce two indicators (*"National expenditure for biodiversity and landscape conservation" and "National expenditure for official international development assistance with regard to biodiversity"*), which do not appear in the list of information to be mentioned that appears in Article R225-105-1 of the French Commercial Code.

3.3.2 AN EXCESSIVELY LOW LEVEL OF REQUIREMENT REGARDING THE SCOPE OF ANALYSIS

In the French legal system, the obligatory scope of non-financial reporting is modelled on that of financial reporting: the information to be disclosed deal with the parent companies and the subsidiaries or controlled companies (*cf.*: insert Page 28).

However, the majority[95] of international and national reference frameworks for reporting and commitment (*cf.*: 3.2) recommend a different approach. They request companies to avoid basing themselves solely on the notion of the control of the parent company over other entities to determine which entities to include in the scope of analysis in their non-financial reporting documents. These reference frameworks advise companies to adopt a broader non-financial scope of analysis, in other words one that includes not only information on subsidiaries or companies they control but also information on the entities they do not control, but which are in their value chain (these entities are linked to the production process for the goods, services or procedure that the companies sell, or to their use [*cf.*: 3.2.3]). For example, this approach may lead a company to disclose information on the impacts on biodiversity generated by their suppliers.

This recommendation by the reference frameworks is in line with the expectations of many of the companies' stakeholders (in particular citizens, their governments, associations), who want them to acknowledge or even to admit to[96] certain damage in their reporting documents, even though they are not legally obliged to do this[97].

Companies can therefore be expected to publish in their non-financial reporting documents information from entities that they do not control but which are in their value chain, on all non-financial topics, and biodiversity in particular.

The definition of the scope of analysis in accordance with the GRI sustainability report guidelines

Changes in the definition given by GRI for the scope of a sustainability report illustrates the trend towards the adoption of broader scope:

Definition of Version G3 of GRI: *"A sustainability report should include in its boundary all entities that generate significant impacts (actual and potential) and/or all entities over which the reporting organization exercises control or significant influence with regard to financial and operating policies and practices."* This version of GRI combined two criteria:

> The criterion of control with regard to financial accounting regulations (*"all entities over which the reporting organization exercises control or significant influence"*;

> The criterion with regard to the notion of significant impact, which responds to the broader vision of CSR (*"all entities that generate significant impact on society"*).

In 2013, version G4 of GRI goes further by eliminating the reference to the control criterion. Only the significant character of an impact, whether it is generated *within the organization or outside of the organization*, counts when determining whether it should be mentioned in the reporting document.

95 Only international standard ISO 26000 stands out, by failing to make this recommendation and asking companies to disclose information on part of their organization only.
96 The Erika/Total case is an example of this. Indeed, in September 2012, France's top court, the Final Court of Appeal, ruled that the oil company Total S.A., which chartered the Erikas, was just as responsible for the December 1999 oil spill as the ship's owner.
97 Carroll A. B., 1979. *A three dimensional conceptual model of corporate social performance.* Academy of Management Review and Carroll A. B., 1999. *Corporate social responsibility: Evolution of a definitional construct.* Business and society.

4. Recommendations by the IUCN French Committee for high-quality biodiversity reporting

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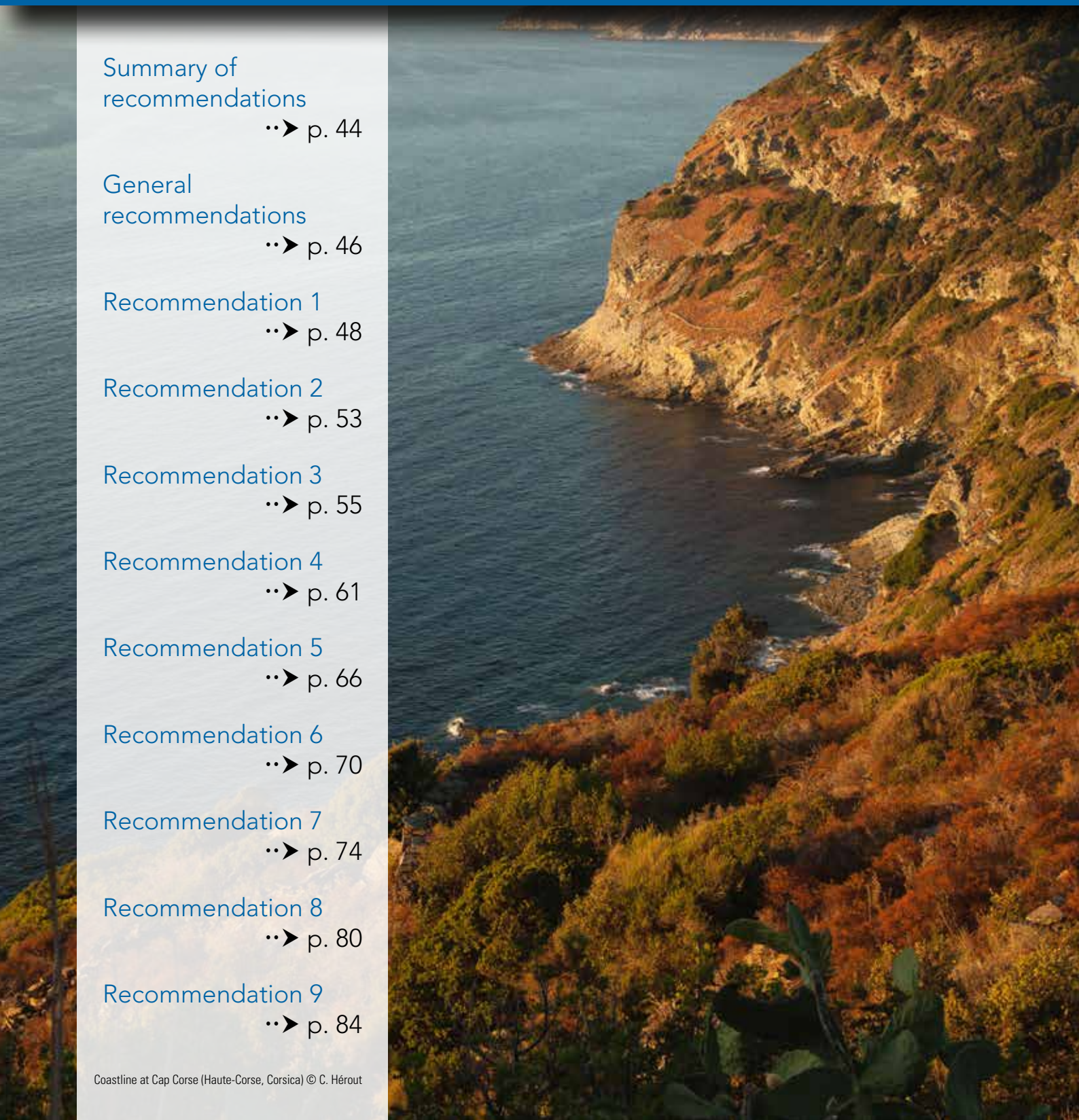

Coastline at Cap Corse (Haute-Corse, Corsica) © C. Hérout

These recommendations convey the IUCN French Committee's expectations regarding the scope and the nature of the information communicated by companies on biodiversity. They also reflect the desire of the IUCN French Committee's corporate partners to receive operational recommendations, accompanied by proposals regarding the methods, tools and indicators that should be used. These recommendations take into account existing biodiversity reports on other scales (*cf.*: 3.1) as well as recommendations by reporting, management and commitment reference frameworks (*cf.*: 3.2). They are applicable irrespective of the country / legal system in force and regardless of the company's business sector.

SUMMARY OF RECOMMENDATIONS

RECOMMENDATION 1

DEFINE THE SCOPE OF CONSOLIDATION

The first stage consists of choosing the scope of the reporting's consolidation, in other words to identify which of the company's entities it will cover. It is a matter of indicating this choice clearly in the reporting document.

RECOMMENDATION 2

DEFINE THE SCOPE OF ANALYSIS

A company should determine the nature of the information it wants to communicate for each entity included in its previously chosen scope of consolidation. A company can decide:

> To publish only information that comes directly from the entities within the company's scope of consolidation.

> Or also to publish information from entities within the chain of value of the entities included in the scope of consolidation as well as information on the projects it finances.

RECOMMENDATION 3

PUBLISH INFORMATION ON THE DEPENDENCY OF ACTIVITIES ON BIODIVERSITY AND ECOSYSTEM SERVICES

It is important that each company discloses information on its biodiversity dependencies. These data will allow the company's stakeholders to assess its awareness of the links between biodiversity and its activities, as well as its need to invest and act in order to conserve biodiversity.

RECOMMENDATION 4

PUBLISH INFORMATION ON THE NEGATIVE IMPACTS OF ACTIVITIES ON BIODIVERSITY AND ECOSYSTEM SERVICES

It is essential that each company reveals information on the negative impacts of their activities on biodiversity. These data will allow the company's stakeholders to assess its awareness of how its activities contribute to biodiversity loss.

RECOMMENDATION 5

PUBLISH INFORMATION ON THE ORGANIZATION'S COMMITMENT TO BIODIVERSITY

The company should indicate in its reporting document its level of commitment to biodiversity conservation and describe how it manages this issue.

RECOMMENDATION 6

PUBLISH INFORMATION ON THE PRIORITY SITES FOR BIODIVERSITY CONSERVATION

It is important that the company shows its efforts to focus its action on the sites that are of highest priority in terms of biodiversity conservation, and which thus require particular attention from the company to mitigate the impacts of the its activities on biodiversity.

RECOMMENDATION 7

PUBLISH INFORMATION ON THE MEASURES TAKEN TO RESPOND TO LEGAL OBLIGATIONS

It is essential that companies publish information on the measures they have taken to meet legal requirements they are subject to in terms of biodiversity.
These steps allow the companies either to respond directly to a legal requirement or ultimately ensure legal compliance.

RECOMMENDATION 8

PUBLISH INFORMATION ON THE VOLUNTARY MEASURES THAT GO BEYOND LEGAL OBLIGATIONS

It is important that a company publishes information on the measures that favour biodiversity, which is implements voluntarily and that complement the measures the company takes to address the legal obligations it is subject to.

RECOMMENDATION 9

PUBLISH INFORMATION ON THE RESULTS OBTAINED WITH REGARD TO BIODIVERSITY

Companies that own and / or manage land are advised to provide information on their capacity to maintain the status of biodiversity that existed prior to their starting operations on this land, or information that shows that they have improved the status of biodiversity.

• How the recommendations are structured:

Recommendations 1 and 2 are methodological recommendations. They deal with the scope of the biodiversity reporting.

Recommendations 3 to 9 are thematic recommendations. They cover how the way in which seven subjects are dealt with allows a company to disclose information on biodiversity appropriately.

Each recommendation is made up of four parts:
1. A description of the recommendation and its objectives;
2. Methodological advice and proposals of tools that can be used by companies to facilitate the application of the recommendation;
3. Non-exhaustive proposals of information to publish in the application of the recommendation, including indicators;
4. Extracts of reporting documents from 2012 by the IUCN French Committee's corporate partners, corresponding to the recommendation. These extracts are accompanied by a comment by the IUCN French Committee, underling where necessary the additional information it would like to obtain.

GENERAL RECOMMENDATIONS

• The commitment should be carried out in a manner consistent with the reporting approach:

The reporting approach presented in this study can be applied to any company, including medium-sized or even small organizations. It is therefore advisable for the reporting exercise to be carried out in proportion to the company's capacities.
Thus, initially, a company with few resources for carrying out its biodiversity reporting can:
> Publish the information adopting Scope A (*cf.*: Recommendation 2), which corresponds to the company only publishing information on the entities it controls (for example: information on their direct impacts and dependencies);
> Adopt a qualification (identification and description) approach with regard to its impacts and dependencies on biodiversity (*cf.*: Recommendations 3 and 4).

When it has reached a sufficient level of maturity in terms of reporting, it can publish information adopting Scope B and take an approach involving the quantification of its impacts and dependencies on biodiversity.

• The company should use all the communication support it has at its disposal:

The IUCN French Committee's recommendations do not deal exclusively with the improvement of these compulsory reporting documents.
First of all, many companies subject to French law are not obliged to produce reporting documents (*cf.*: the companies concerned are listed on page 28), despite the fact that they too have an impact on biodiversity and undertake actions to conserve it. The IUCN French Committee would therefore also like to receive information on these two aspects from these companies. Secondly, obligatory reporting documents should cover a large number of financial and non-financial topics[98]: the space allotted to each subject is limited and all subjects cannot be analyzed in the same level of detail as that required by the IUCN French Committee with regard to biodiversity.

In order to apply these recommendations and make a high-quality disclosure of biodiversity information, companies should use all the communication supports they have and target, for each support, the data expected by their public:

> Obligatory reporting documents (for which the space allotted to each subject is limited) and the supports and events focused on the companies' achievements and results (internal presentations, roadshows, etc.) can include only the information requested in Recommendations 6-7.8 and 9 (which concern the company's achievements and results).
> It is important that these supports and events are complemented by other documents, which contain the information requested in all the recommendations (and in particular the information on companies' impacts and dependencies when these data are not included in the other reporting documents). These documents can take the form of page on the company's website devoted to biodiversity, or a document that can be downloaded from this website. Particular attention should be paid to the presentation of

98 *Cf.* Articles L225-100 and L225-100-2 of the French Commercial Code, which define the contents of the annual management report as well as Articles L451-1-2 of the Monetary and Financial Code and 222-3 of the General Regulation of the Financial Markets Authority (AMF), which define the contents of the reference document.

the information in order to ensure it is accessible to everyone.

• How to use the proposed indicators:

For each recommendation, indicators are proposed in order to specify the expectations of the IUCN French Committee regarding the nature and level of detail required in biodiversity reporting documents.

A selection and/or adaptation process is needed by each company in order to choose the indicators that correspond to their activities and their requirements, or to match them up with their situation.

After the adaptation process, it is recommended to ensure they still respect the five criteria that characterize a high-quality indicator (simple, reliable,easy to measure consistent and operational; *cf.*: 1.2.2). An external scientific organization can be called on to help construct or validate the methodologies on which the indicators are based.

The set of indicators as a whole should be revealing, in other words it should give an overview of the company's relationship with biodiversity; *cf.*: 1.2.2). In other words, it is important that the company provides indicators for each of the seven subjects describing its relationship with biodiversity (Recommendations 3 to 9).

Finally, it is advisable to keep the same indicators in the long term, so as to be able to compare the information published in different years. This would make it possible to identify trends and progress.

Meadow filled with wildflowers on the site of the quarry operated by Lafarge at Arnay-le-Duc (Côte-d'Or) © E. Russier-Decoster

RECOMMENDATION 1

Define its scope of consolidation

The first step consists of choosing the reporting document's scope of consolidation (*cf.*: definition page 28), in other words of identifying which of the company's entities it covers. It is a matter of indicating this choice clearly in the reporting document.

METHODOLOGICAL ADVICE AND TOOLS THAT CAN BE USED

Plusieurs méthodes de sélection de ces entités existent. En France, l'article L225-102-1 du code de commerce fixe celle qui doit être adoptée. Les documents de reporting extra-financier doivent contenir des informations sur :

THE PARENT COMPANY + **THE SUBSIDIARIES** (entities over 50% owned by the parent company)

OR

THE PARENT COMPANY + **THE CONTROLLED COMPANIES** (entities over 40% owned by the parent company)

Article L233-24 of the French Commercial Code states that commercial companies are exempt from complying with these accounting rules when the use the international accounting standards adopted by the European Commission regulation.

PROPOSALS FOR INFORMATION OR INDICATORS TO PUBLISH

It is advisable for a company to include in its reporting document precise information on the scope of consolidation chosen:

1. State which method of consolidation is adopted:
> One of two methods of consolidation described by the French Commercial Code;
> Or international accounting regulations.

2. Indicate the method use to integrated biodiversity data: data 100% integrated for each entity included in the scope or data integrated in proportion with the rights to vote that the parent company has in each entity's general assembly of shareholders.

3. Provide information on the entities within the scope of consolidation. The information that a company should provide includes:
> A summarized description of the activities it carries out;
> Its turnover;
> The simplified flow chart describing the organization between its entities;
> The number of sites;
> Their geographical presence;
> The number of employees.

This information (that can be understood by non-experts) will enable the stakeholders to judge:

> The relevance of the company's approach to biodiversity conservation with regard to its activities;
> The proportionality between the company's capacities and, at the same time, the ambition and the reality of its action for biodiversity
> The proportionality of the company's capacities with the quality and the quantity of the information disclosed (the stakeholders can be less demanding about reporting with a SME than with a large group).

INFORMATION PUBLISHED TODAY BY COMPANIES

Regarding the method of consolidation and the method of integrating data:

Extract from EDF's 2012 reference document

"In application of Regulation (EC) No. 1606/2002 of the European Parliament and of the Council of 19 July 2002 on the application of international accounting standards, the consolidated financial statements of Group EDF for tax year ending 31 December 2012 were prepared in compliance with international accounting standards such as those published by IASB (International Accounting Standards Board) and approved by the European Union on 31 December 2012. These international standards include IAS (International Accounting Standards), IFRS (International Financial Reporting Standards) and the interpretations (SIC and IFRIC). (…) The integrality of the companies that are part of the Group's scope of consolidation is mentioned in Note 52 of the Appendix on consolidated accounts for tax year ending 31 December 2012."

Extract from EDF's GDF SUEZ 2012 reference document

"The entities included in the scope of reporting are those whose activities are relevant in terms of environmental impact and that are integrated globally or proportionally in accordance with the financial consolidation regulations (IFRS), whilst legal entities whose sole activity is energy trading, financial activities or engineering are excluded from the scope. The entities selected for reporting report the performance and impacts of the industrial installations for which they control the technical operations, including facilities operated by third parties. Legal entities that are valued by the equity method are excluded.
Thus, in accordance with the financial consolidation regulations, 100% of the impacts collected are consolidated when the entities are subject to global integration. For entities subject to proportional integration, the environmental impacts are consolidation in proportion with the Group's financial integration, as long as they own 100% of the technical operational control or that it is at least shared with other stakeholders.
The scope is set on 30 June of the financial year. For any transfers that take place after this date, the plan is for the entity to fill out the environmental questionnaire with the data available on the last day of the month precedes the transfer. Acquisitions that take place after 30 June are not take into account, unless the Branch concerned requests special dispensation and subject to the data being available."

RECOMMENDATION 1

Extract from Lafarge's 2012 reference document

"In application of Regulation (EC) No. 1606/2002 of the European Parliament and of the Council of 19 July 2002, the consolidated financial statements of the Group published for tax year 2012 were prepared in compliance with the International Financial Reporting Standards (IFRS) in force in the European Union on 31 December 2012.
(…)
2.2 Consolidation rules
Subsidiaries
The companies over which the Group exerts exclusive control are consolidated through total integration. Exclusive control is the direct or indirect capacity to manage a company's financial and operational polices in order to take advantage of its activities. In order to appreciate the control, the potential rights to vote that are currently exercisable are taken into consideration. The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control is obtained until the date on which control ceases. The third party's share of the aggregate income is presented on the "Non-controlling interest" line even if this leads to interest that does not give deficit control.
(…)
Joint ventures
Companies over which the Group has joint control with another investor are consolidated through proportional integration. The Group's share in the results, the assets and liabilities of these companies are recorded in the consolidated financial statement. These companies are called "joint ventures" in consolidated financial statements.
Associated companies
The companies over which the Group has a significant influence over financial and operational policies without control, are recorded through the equity basis (…)"

Extract from the 2012 Veolia Environnement reference document

"**9.2.1. Definitions and accounting context**
In application of the Regulation (EC) No. 1606/2002 of the European Parliament and of the Council of 19 July 2002 amended by the Regulation (EC) No. 297/2008 of 11 March 2008, the Group's consolidated financial statements for tax year 2012 were prepared in compliance with the International Financial Reporting Standards (IFRS), adopted by the European Union and in line with the IFRS standards published by the International Accounting Standards Board (IASB). (…)"

THE IUCN FRENCH COMMITTEE'S OPINION

OBSERVATION All companies describe in detail the methods they use to prepare their financial statements (essentially the IFRS international accounting standards[99]). Information on the methods of consolidation for certain non-financial subjects (for example social topics or those linked to health and security) is disclosed by some companies. However, the level of detail is far higher with regard to the methods of consolidation used to collect information on the environment and biodiversity in particular.

MOVING FORWARD The companies should provide details on the methods of consolidation they use to collect environmental information, and data on biodiversity in particular (*cf.*: points 1 and 2 of the section "proposals of information and indicators to publish" in this recommendation).

99 The International Financial Reporting Standards (IFRS) are issued by a private international organization: the International Accounting Standards Board (IASB). The aim of these standards is to harmonize the presentation of accounting data, allowing it to be exchanged on an international level.

Concerning information on entities integrated into the scope of consolidation:

Extract from the 2012 GDF SUEZ reference document

1.1.1 General presentation

The GDF SUEZ Group is a benchmark global player in the fields of electricity and natural gas, as well as energy services and the environment. It is active across the entire energy value chain, in electricity and natural gas, upstream to downstream in:

- Purchasing, producing and marketing natural gas and electricity;
- Transportation, storage, distribution, management and development of major natural gas infrastructures;
- Providing energy and environmental services.

It is also the benchmark industrial shareholder in Suez Environnement, a global leader in the water treatment and waste management sectors.

GDF SUEZ operates a well-balanced business model:

- Through its presence in complementary business activities across the entire value chain (a balanced turnover breakdown between gas, electricity and services);
- Through its presence in regions exposed to different business and economic cycles, with a strong position in emerging markets with the greater prospects for growth, a position that was further strengthened in 2011 and 2012 with the integration of International Power. While the Group still intends to maintain its position as a key player in Europe, it is now a benchmark energy provider in the emerging world;
- Through its presence allocated between activities that are exposed to market uncertainties and others that offer recurring revenue (infrastructures, services, PPA-type contracts, etc.);
- Through a balanced energy mix with priority given to low- and zero-carbon energy sources (…)

1.1.3 Organization

As at 31 December 2012, GDF SUEZ was organized at an operational level into six business lines (five business lines owned 100% by GDF SUEZ and one environment line 35.76% owned (…)

Extract from Veolia Environement's 2012 annual and sustainability report

Whether for public authorities, industrial concerns or domestic users, Veolia Environnement offers a complete range of environmental solutions, including: water supply and wastewater recycling; waste collection, treatment and recovery; the supply of heating and cooling, and industrial process optimization. The solutions provided by its business enable the company to reconcile the development of human activity with environmental protection. Veolia Environnement employs 220,000 employees[1] worldwide and reported revenue of €29.4 billion[1] in 2012.

1 Excluding Veolia Transdev

RECOMMENDATION 1

Extract from EDF's 2012 reference document

6.2 Presentation of Group EDF's business activity in France

6.2.1 Deregulated operations in France

EDF's deregulated operations in France (activities open to competition) include electricity generation and the sale of electricity and natural gas. EDF is implementing an integrated model for the joint operational management of its portfolio of assets upstream (generation and procurement of energy and fuels) and downstream (wholesale and retail) to guarantee the supply to its customers through the best possible management of operational market risks and with a view to maximizing the gross margin.

6.2.1.1

EDF groups together its main electricity generation activities in France within its Generation and Engineering Division, which has all of the skills and performance levers necessary to operate the largest European electricity generation fleet and to manage its development and continuity. As at 31 December 2012, the Generation and Engineering Division had 38,417 employees. It is organized around three major business lines: nuclear power, hydropower and fossil fuel thermal power. In addition, through its engineering, it provides technical and industrial skills to the entire Group in these three areas (see Section 6.3 ["Presentation of EDF Group's international business"]

6.2.1.1.1 General presentation of EDF's generation fleet (…)"

THE IUCN FRENCH COMMITTEE'S OPINION

OBSERVATION The companies disclose detailed information on their activities in their reporting documents.

MOVING FORWARD Companies could use other means of communication (and their website in particular) to provide a summary containing simplified information on the activities they carry out. This information would be aimed at players, including their stakeholders, who are not experts in the company's sector of business activity (*cf.*: Points 3 of the section "proposals of information and indicators to publish" in this recommendation).

RECOMMENDATION 2

Define the scope of analysis

A company has to determine the nature of the information it wants to communicate for each entity included in its previously chosen scope of consolidation (*cf.*: Recommendation 1). A company can decide to:
> Publish only information that comes directly from the entities within the company's scope of consolidation:
> Or also to publish information from entities within the chain of value of the entities included in the scope of consolidation as well as information on the projects it finances.

METHODOLOGICAL ADVICE AND TOOLS THAT CAN BE USED

The choice of the scope of analysis arises for the disclosure of information on dependencies (*cf.*: Recommendation 3) and on impacts (*cf.*: Recommendation 4) in particular.
> A company can decide to publish only information on the dependencies and impacts generated by the entities in its scope of consolidation (their direct dependencies and impacts).
> It can also choose to mention information on the dependencies and impacts generated by the projects it finances as well as by the entities that it does not control, but which are on the value chain of entities within its scope of consolidation (their direct dependencies and impacts).

A company that deals with its direct and indirect dependencies and impacts reveals its commitment to report exhaustively and transparently its links with biodiversity: the company also publishes information on the impacts and dependencies that do not concern it directly, but which are linked to the production process (for example: impacts of suppliers) or linked to the use (for example: impacts of customers) of the goods, services or processes it sells.

A company can thus adopt a Scope A or a Scope B:

	Upstream	On site	Downstream
SCOPE B	> Impacts on biodiversity and dependencies with regard to ecosystem services generated by: • The activities necessary before activities are carried out on the sites of the entities controlled by the company in order to produce the goods, services or processes it sells (the activities of suppliers in particular). These activities are carried out outside of these sites, by entities the company does not control.		
SCOPE A		> Impacts on biodiversity and dependencies on ecosystem services generated by the activities carried out on the sites of the entities controlled by the company to produce the goods, services or processes it sells. These activities can be carried out: • By the company itself; • By other entities (subcontractors in particular). These impacts and dependencies can be exerted: • On the sites where the activities are carried out; • Outside of the sites where the activities are carried out (for example, the impacts on ecological continuity or dependencies on a neighbouring natural environment).	> Impacts on biodiversity and dependencies with regard to ecosystem services generated by: • The activities financed by the company; • The activities that result from the use of the goods, services or processes sold by the company (in particular the use by the customers). These activities are carried out outside of these sites, by entities the company does not control.

RECOMMENDATION 2

Scope A: It corresponds to the impacts and dependencies that are directly linked to the company (*direct dependencies and impacts*).
Scope B: It includes Scope A and also the impacts and dependencies that are indirectly linked to the company (*indirect dependencies and impacts*).

Some companies have many entities in their value chain (suppliers, customers). It is difficult for these companies to disclose information on the dependencies and impacts of all of these entities. In order to get round this difficulty, they can decide to disclose information on a selection of these entities (which could be qualified as "significant" or "major" entities). They may be:

> The entities that account for the majority of the company's procurements or sales;
> The entities identified as being the most sensitive with regard to biodiversity (those that are characterized by having the highest dependencies and impacts on biodiversity).

The use of Scope B corresponds to the adoption of an approach similar to that of life cycle assessment (LCA). This approach, which gathers together a wide diversity of tools and methods, aims to quantify both the direct and the indirect impacts of a product, service or process on the environment. This approach encourages companies to not only be concerned with what is happening on their own sites and to identify the "extraterritorial" influences, in particular the dependencies and impacts generated by entities not controlled by the companies but in the value chain of the entities in their scope of consolidation.
For example: a company that manufactures tyres and that decides to adopt this approach will not only communicate the impacts and the dependencies on biodiversity of its factories, but will also mention those generated by the production of the rubber it consumers and by its customers' use of the tyres. Using Scope B and carrying out biodiversity reporting following an approach similar to that of LCA is compatible with standard ISO 14040. The latter provides the prescriptions for LCA in terms of the transparency of the methods and data used and makes it obligatory to disclose the procedure used and to make the complete report on the results of the study available to the public.

PROPOSALS FOR INFORMATION OR INDICATORS TO PUBLISH

It is important for the company to define clearly the scope of analysis selected and explain this choice in the reporting document.

INFORMATION DISCLOSED TODAY BY COMPANIES

THE IUCN FRENCH COMMITTEE'S OPINION

OBSERVATION Today, companies do not specify the scope of analysis they choose to disclose information on biodiversity. It is implicitly established that, by default, the information disclosed only relates the entities included in the scope of consolidation.

MOVING FORWARD Companies are advised to disclose information on their Scope B and to develop this approach in favour of a complete and transparent analysis of their links with biodiversity, mentioning it in their reporting documents. For companies that today are not in a position to disclose information on Scope B, the priority consists of padding out the information provided on Scope A (*cf.*: following recommendations).

It is also essential for these companies to indicate explicitly as from now that:

> Today their reporting documents do not only contain information on their Scope A and thus notably only on their direct dependencies and impacts on biodiversity;
> They are not currently in a position to engage in an approach involving reporting on the entities they do not control but which are located on the chain of value of goods, services and processes sold by the entities included in their scope of consolidation;
> They recognize that these entities potentially generate impacts and dependences within the framework of the process of producing the goods, services or procedures that they sell.

RECOMMENDATION 3

Publish information on the dependency of activities on biodiversity and ecosystem services

Like all human activities, a company uses natural processes, goods and services (called ecosystem services), which are often essential for carrying out its activities. A company's need to have direct or indirect access to this "natural capital"[100] establishes the notion of the company's dependence on biodiversity. It is important that each company discloses information on its biodiversity dependencies. These data will allow the company's stakeholders to assess its awareness of the links between biodiversity and its activities, as well as its need to invest and act in order to conserve biodiversity.

METHODOLOGICAL ADVICE AND TOOLS THAT CAN BE USED

It is important that the publication of information on the dependencies is carried out in accordance with the scope of analysis A or B chosen.

> If the company chooses Scope A, the exercise consists of identifying and, wherever possible, quantifying:
- The dependencies on ecosystem services generated by the activities carried out on the sites of the entities included in the scope of consolidation. The activities can be carried out by the company itself or by another company (for example: a subcontractor).

See diagram in Recommendation 2

> If the company chooses Scope B, the exercise consists of identifying and, wherever possible, quantifying:
- The dependencies on ecosystem services generated outside of the company's sites by the activities required for the production of the goods, services or processes sold by entities included in the company's scope of consolidation.
- The dependencies on ecosystem services generated outside of the company's sites by the activities resulting from the use of the goods, services or processes sold by entities included in the company's scope of consolidation.
- The dependencies on ecosystem services generated outside of the company's sites by the activities it finances.

See diagram in Recommendation 2

In order to tackle the question of its dependences to the biodiversity, a company can base itself on the Millennium Ecosystem Assessment (MEA)[101] typology. It distinguishes four main categories of ecosystem services:

> Support services (or ecosystem functions). They form a basis for all the services because they ensure the functioning of the ecosystem (for example: the water cycle).

> Provisioning services, which correspond to the production of material goods (for example: timber). Certain companies resort to these goods.

> Regulating services. They are responsible for the regulation of natural ecosystem processes. Some companies recycle these methods of regulation (for example: water purification).

> Cultural services. These are non-material services, obtained from ecosystems through spiritual enrichment, aesthetic experiences and recreation. Certain companies use these services to support the activities that do not produce material goods (for example: eco-tourism).

For more precise information, a detailed list of ecosystem services is provided in Appendix IX.

To report its biodiversity dependencies, it is important that a company identifies and, whenever possible, quantifies in accordance with the scope of analysis A or B that has been selected:

> The goods of natural origin it resorts to (dependence on provisioning services);

100 Principle set out by E. F. Schumacher in: Schumacher, E. F., 1973. *Small Is Beautiful: A Study Of Economics As If People Mattered* quoted in: International Integrated Reporting Council (IIRC), 2013. *The international Integrated Reporting Framework.*

101 Millennium Ecosystem Assessment (MEA), 2005. *Ecosystem Wealth and Human Well-Being*, Island Press.

RECOMMENDATION 3

> The types of nature regulation it develops (dependence of regulating services);
> The services it uses as a support for the non-material services (dependence on cultural services).

It should be noted that the supporting services form the basis for all the services. A supporting service can help several services and, conversely, a service can arise from several supporting services. Consequently, it is not necessary for companies to report their dependence on supporting services because, in dealing with their dependencies on other ecosystem services, they indirectly report their dependence on the supporting services.

Tools that can be used by a company to accompany it in the identification of its biodiversity dependencies:

> Ecosystem services review (ESR)[102]: procedural methodology aimed at identifying the dependencies and impacts of a site or a company on biodiversity and ecosystem services. The objective is to help the managers and directors develop strategies to manage risks and opportunities linked to these impacts and dependencies.

> EBEvie (outil d'Evaluation des interrelations Biodiversité et Entreprises pour la vie) [Tool for Assessing the Interrelations between Biodiversity and Business for Life][103]: in particular, this Internet tool allows a company to identify the level of awareness/vulnerability with regard to biodiversity for each function it is made up of (finance, human resources, marketing, etc.). This exercise can guide a company in the identification of its biodiversity dependencies.

> Biodiversity Risk & Opportunity Assessment (BROA)[104]: this tool was designed to help companies identify the dependency of their activities on biodiversity (as well as the impacts, *cf.*: Recommendation 3). It places an emphasis on the risks and opportunities linked to these dependencies.

> The Business and Biodiversity Interdependence Indicator (BBII)[105]: a self-assessment tool aimed to enable companies to reveal their direct and indirect interactions with biodiversity. Its 23 criteria are divided up into five groups, characterizing in particular their direct links with the living world (including dependencies on ecosystem services).

Tools that can be used by a company to accompany it in the quantification of its biodiversity dependencies:

> The Bilan Biodiversité [Biodiversity Accountability Framework][106]: this reference framework and accounting tool allows any company to quantify its relations with biodiversity (dependencies and impacts) in order to produce an annual report on its footprint and also on its performance in terms of disclosing this information to its shareholders in the company's annual reports. It describes a method allowing the benefits each company obtains from the different groups of ecosystem services to be quantified.

> Integrated Valuation of Environmental Services and Tradeoffs (InVEST)[107]: this tool is designed to quantify the services provided by ecosystems in biophysical terms (for example: quantity of biomass, water, etc.) and in economic terms (for example: the money saved).

> Guide to Corporate Ecosystem Valuation[108]: this guide proposes a process that allows companies to attribute values – in particular monetary values – on the degradation and profits generated by ecosystem services.

> Numerous Life Cycle Assessment (LCA) software packages can be used by companies to quantify some of their biodiversity dependencies. They are particularly well suited to companies that have adopted Scope B and would like to identify and quantify the dependencies linked to the entities they do not control but which are in their value chain. For example, the Ecologically Based Life-Cycle Assessment (Eco-LCA)[109], is an online tool, which provides accounting software that help quantify the role played by natural resources in the life cycle of the goods, services and processes sold by a company. It complements the other LCA tools by taking into account a large spectrum of ecosystem services.

102 Developed by the World Resource Institute (WRI), the World Business Council for Sustainable Development (WBCSD) and the Meridian Institute. *Cf.*: WBCSD, Meridian Institute, WRI, 2009. *The corporate ecosystem services review. Guidelines for identifying business risks and opportunities arising from ecosystem change.* Version 1.0
103 Designed by the French Ministry of Ecology, Sustainable Development and Energy: http://www.developpement-durable.gouv.fr/Evaluez-l-interdependance-de-votre.html
104 Developed by The British American Tobacco Biodiversity Partnership (consists of four partners: British American Tobacco and the NGOs Earthwatch Institute, Fauna & Flora International and the Tropical Biology Association). www.batbiodiversity.org
105 Developed by the working group, Orée, the French Institute of Biodiversity (IFB) and the Master Sciences et Génie de l'Environnement of the Université de Paris Diderot.
106 Developed by the association Synergiz with the support of Natureparif.
107 Developed by The Natural Capital Project (NatCap) is a partnership between Stanford Woods Institute for the Environment, WWF, The Nature Conservancy and the Institute on the Environment at the University of Minnesota.
108 WBCSD, 2011. *Guide to Corporate Ecosystem Valuation. A framework for improving corporate decision-making.*
109 Developed by Ohio State University's Center for Resilience. www.resilience.osu.edu.

PROPOSALS FOR INFORMATION OR INDICATORS TO PUBLISH

Is a company has chosen Scope A:

> It can identify the ecosystem services to which it resorts (using the tools detailed below and the list of ecosystem services provided in Appendix IX);
> To go further, it can quantify the ecosystem services to which it resorts, by communicating and publishing the following indicators, for example:

Dependence on provisioning services indicators
For example:
- Quantity of natural raw materials (for example: fruit, meat, cereals, biomass, water, genetic resources) consumed to meet the company's requirements (production/sale of materials, production/sale of energy, production/sale of food and drinks, personnel requirements, etc.).
- Quantity of processed natural raw materials consumed (for example: vegetable oil).
- Number of sites located near raw materials used in the production processes.

Indicators of dependence on regulating services
For example:
- Number of production processes that need to be located near an environment supplying an ecosystem service.

Indicators of dependence on cultural services
For example:
- Characteristics of environments or ecosystems used for commercial purposes (for example: a forest rich in biodiversity for ecotourism or good water quality for water sports).

Costs linked to ecosystem service dependencies
For example:
- The amount allocated to the purchasing of natural raw materials

If a company has chosen Scope A:

> It can identify (with the help of the tools detailed below and in the list of ecosystem services provide in Appendix IX) the ecosystem services to which the entities in Scope B resort (entities that it does not control but which are the holders of a project that it finances or entities that are in its value chain [*cf.*: Recommendation 2]).
> To go further, it can quantify the ecological services to which the Scope B entities resort, by communicating and publishing the Scope A indicators for the Scope B entities, for example.

INFORMATION PUBLISHED TODAY BY COMPANIES

Extract from Veolia Environnement's 2012 CSR Performance Digest

"Biodiversity is present at all sites operated by Veolia and its activities depend on the services provided by nature (water treatment, natural breakdown of many types of pollutants, etc.). As a beneficiary of biodiversity services, Veolia has undertaken to become a determined and committed player in the conservation and restoration of biodiversity, to guarantee the quality of its services and to improve its environmental performance.
(…)

A relation of interdependence between Veolia Environnement's activities and biodiversity
The proper functioning of ecosystems is essential to Veolia Environment in order to allow it to provide some of its services to its clients. The wastewater treatment regulating ecosystem service (self-purification) makes it possible to maintain the high quality of the water resource, used for the production of drinking water, and thus to limit the treatment required to make it fit for consumption. Veolia Water accompanies its municipal and industrial customers through the introduction of approaches to protect the water catchment areas and thus help conserve water resources. Paying particular attention to the upstream supply, forestry and agriculture sectors, Veolia Energy-Dalkia tries to optimize the benefits linked to the timber provisioning service and ensures the supply of combustible biomass to its installations, whilst protecting resources and their sustainable development.

RECOMMENDATION 3

Extract from Veolia Environnement's 2012 CSR Performance Digest (continued)

Veolia Water's waste treatment activities, as well as the composting and the treatment of polluted soil by Veolia Environmental Services use biological processes to degrade organic materials. Finally, the good management of land entrusted by our customers or which Veolia owns, illustrates the Group's attention to relations of interdependence between its activities and ecosystems.

THE IUCN FRENCH COMMITTEE'S OPINION

OBSERVATION This extract clearly highlights the company's dependence on ecosystem services and the need for it to invest in their conservation. It shows that the company ceases to consider biodiversity simply as a technical constraint and that the healthy environmental status of ecosystems favours the conditions in which it carries out its activities.

MOVING FORWARD This paragraph could be completed by the identification of all the ecosystem services on which the company depends (for example: dependence on the service regulating the runoff, which limits the volume of water that Veolia's facilities have to treat). It could also be enriched by an approach to quantify these dependencies, which would establish trends from one year to the next (intensification or on the contrary the weakening in certain biodiversity dependency links).

Extract from EDF's GDF SUEZ 2012 reference document

3.3.4.3 Energy efficiency

Indicator title	Scope covered in 2012 (% relevant CA)	GDF SUEZ 2012	GDF SUEZ 2011
Total primary energy consumption (excluding own consumption)	99.98 %	544,851.7 GWh	527,503.2 GWh
Percentage of coal/lignite		37.7 %	34.0 %
Percentage of natural gas		54.9 %	59.8 %
Percentage of fuel oil (heavy and light)		2.0 %	2.3 %
Percentage of alternative fuels		1.9 %	1.8 %
Percentage of biomass		3.5 %	3.1 %
Percentage of waste		0.045 %	0.045 %
Electricity consumption (excluding own consumption)	99.16 %	14,120.6 GWh	7,415.0 GWh
Heat energy consumption (excluding own consumption)	99.96 %	5,256.8 GWh	3,481.7 GWh
Energy efficiency of fossil fuel power stations (including biomass)	99.74 %	42.2 %	43.3 %

Extract from Lafarge's 2012 reference document

Total water withdrawal by source

	2012				2011			
(in million cubic metres)	**Cement**	**Aggregates**	**Concrete**	**Total**	**Cement**	**Aggregates**	**Cement**	**Total**
Stormwater including from rivers, lakes, wetlands and oceans	190.6	29.7	1.2	221.5	187.5	23.1	1.0	211.6
Ground water	21.4	15.9	3.2	40.5	24.3	14.7	3.3	42.3
Rainwater harvested	2.3	13.3	0.5	16.1	2.4	12.8	0.5	15.7
Municipal water supplies or other water utilities	5.5	1.5	4.7	11.7	6.9	1.2	4.9	13.0
Total withdrawal	219.8	60.4	9.6	289.8	220.2	51.7	9.6	282.5
Water returned to same catchment area	165.4	0.0	161.7	161.7	161.7	0.0	0.0	161.7
Net withdrawal	54.4	60.4	9.6	124.4	58.5	51.7	9.6	120.8

Extract of the 2012 annual report of Ciments Français (including GSM, Ciments Calcia and Unibéton)

Water consumption in 2012, aggregates		
Mature markets	m3/t aggregates	0.05
Emerging markets		0.05
TOTAL		**0.05**
Mature markets	Millions m3	1.2
Emerging markets		0.1
TOTAL		**1.3**

Extract from EDF's 2012 reference document

Natural disasters, significant weather changes and any important event on a scale that is difficult to predict, may have a material adverse impact on the Group's industrial and commercial activities. (…)

As was the case with storms Klaus (2009) and Xynthia (2010) in France, natural disasters (floods, landslides, earthquakes, etc.), other significant weather changes (droughts, etc.) or any other event on a scale that is difficult to predict (large-scale epidemics, etc.) may affect the Group's activities. (…). Such measures may generate costs in addition to the costs of repairing the damage caused by the natural disaster and the loss of earnings from the interruption to supply.

The Group is exposed to risks associated with weather conditions and seasonal variations in the business.

Energy consumption is seasonal and depends to a great extent on weather conditions. For example, in France, electricity consumption is generally higher during winter months. Furthermore, available power may also depend on weather conditions. Thus, low water levels or heat waves may limit nuclear power generation due to the requirement that rivers downstream of facilities not exceed maximum temperatures. Similarly, power generated by wind power or solar plants depends on wind conditions or hours of sunshine at the sites where such facilities are installed.

RECOMMENDATION 3

Extract from EDF's 2012 reference document (continued)

Therefore, the Group's results reflect the seasonal character of the demand for electricity and may be adversely affected by exceptional weather conditions or by wind or sunshine conditions that are less favourable than anticipated. (…)

The Group is exposed to fluctuations in the price and availability of materials and services (other than nuclear fuels) that it purchases in connection with its business operations.

In the event of significant and sustained increases in the prices of raw materials, the Group may experience higher procurement costs for certain critical products or services. Such increases may also lead certain suppliers to reduce supply due to reduced profit margins. In addition, there is increased demand for certain equipment or services, which may have an impact on their availability, in particular equipment used for gas-fired combined cycle power stations, wind turbines and services and equipment in the nuclear sector. »

THE IUCN FRENCH COMMITTEE'S OPINION

OBSERVATION

These extracts show that:

> Some companies provide qualitative or quantitative information in their reporting documents, which reveals their dependence on ecosystem services (GDF SUEZ quantifies its dependence on biomass provisioning services, Lafarge and Ciments Français quantify their dependence on water provisioning services and EDF qualifies its dependence on services regulating the weather, diseases and raw material provisioning services);

> Companies do not always highlight this information, presenting it as the quantification of their biodiversity dependencies (these data appear in the "water" and "energy efficiency" chapter, which are separate from the "biodiversity" chapter).

MOVING FORWARD

In order to provide a better account of their relations with the living world, companies could adopt a different method for presenting this information they exploit to illustrate other topics:

> By adding a comment stating that this information also explains their dependence on biodiversity;

> By compiling this information in a paragraph in the biodiversity chapter devoted to the description of their dependence on ecosystem services.

The extract from Lafarge's document makes it possible to underline two advantages presented by companies' quantification of their dependencies on ecosystem services in comparison with their identification alone:

> A more precise description: quantification allows us to appreciate the complexity of the relationship between the company and ecosystem services (the quantification of the amount of water consumed that was harvested from rainwater and the amount of water returned to the same catchment area, makes it possible to relativize the pressure exerted on the environment);

> A comparison made easier: putting the 2012 into perspective alongside the results of previous years (Lafarge's 2012 reference document also provides the results for 2010. The latter were not used in this report in order to avoid making the document too long) allows this company to demonstrate the efforts it makes to manage its biodiversity dependencies properly (for example: a global reduction in the net withdrawal).

It would be a good idea if the companies could adopt a similar approach in quantifying all their biodiversity dependencies.

RECOMMENDATION 4

Publish information on the negative impacts of activities on biodiversity and ecosystem services

The company's activities can have a negative impact on biodiversity (habitat destruction and fragmentation, pollution, accidental introduction of invasive alien species, noise and light pollution, etc.). Moreover, the companies' use of the goods and services provided by ecosystems can affect their availability and eventually harm the companies' own production processes.

It is essential that each company reveals information on the negative impacts of its activities on biodiversity. These data will allow the company's stakeholders to assess its awareness of how its activities contribute to biodiversity loss.

METHODOLOGICAL ADVICE AND TOOLS THAT CAN BE USED

It is important that the publication of information on the impacts is carried out in accordance with the scope of analysis A or B chosen.

> If the company chooses Scope A, the exercise consists of identifying and, wherever possible, quantifying:
- The impacts generated by the activities carried out on the sites of the entities included in the scope of consolidation.

These activities may be carried out by the company itself or by another company (for example: a subcontractor).
See diagram in Recommendation 2

> If the company chooses Scope B, the exercise consists of identifying and, where possible, quantifying:
- The Impacts generated apart outside of the company's sites by activities necessary for the production of the goods, services and processes sold by the entities included in their scope of consolidation.
- The impacts generated outside of the company's sites by the activities resulting from the use of the goods, services or processes sold by the entities within the company's scope of consolidation.
- The impacts generated outside of the company's sites by the activities it finances.

See diagram in Recommendation 2

In order to disclose information on its impacts on the living world, a company should link up two approaches:
> The identification and, when possible, the quantification of its contribution to the causes of biodiversity loss: the modification of habitats, the overexploitation of natural resources, pollution, the introduction of invasive alien species and climatic change[110];
> The identification and, when possible, the quantification of its impacts on ecosystem services.

This exercise is facilitated by the fact that there are many correspondences between a company's contribution to the causes of biodiversity loss and the impacts on ecosystem services (see Table on the following page).

110 *Ibid.* The five major threats are described in Appendix X.

RECOMMENDATION 4

The main causes of biodiversity loss	The impacts on ecosystem services
The destruction, modification, uniformization and fragmentation of habitats	Alternations to ecosystems lead to the disappearance and fragmentation of habitats and can cause certain species to become extinct. However, the quality and the quantity of the services provided by an ecosystem are related on the size and the connectivity of the natural areas.
The overexploitation of natural resources	Ecosystem services are directly affected by the overexploitation of natural resources. Global demand often exceeds the ecosystems' capacity to function. This phenomenon of overexploitation is particularly marked with regard to provisioning services. Moreover, the adoption of intensive practices aimed at exploiting provisioning services is carried out at the expense of other supporting, regulating or cultural services (for example: intensive farming practices that use plant protection products, ploughing and the homogenization of landscapes (destruction of hedges and copses), which have a negative impact on water quality and the regularity of water flows, etc.
Pollution	The increase in the production of waste gives rises to an increase in the contamination and pollution of the ecosystems affected by these inputs: this phenomenon modifies the self-purification and detoxification capacities of the environment, since the contaminants can no longer be eliminated satisfactorily.
The introduction of invasive alien species	The introduction of invasive species deteriorates the interactions within the ecosystems as well as their functionalities: the trophic chains are disturbed and the relations between the living organisms in the environment are changed. The invasive species, often introduced to provide a provisioning or a cultural service (ornaments), involve losses, which have a direct impact on an economic level (loss of farmed species, native fish stocks, etc.) and human health (favouring the appearance of allergies and the transmission of viruses and bacteria).
Climate change	Climate change modifies ecosystems and generates impacts on the distribution of species, the size of populations, breeding and migration periods, as well as on the increase in the size of pest species populations and prevalence of disease. The effects of climate change have a direct or indirect impact on ecosystem services. Climate change also disturbs the proper functioning of the oceans, which play an essential role in the global carbon cycle, by absorbing approximately ¼ of the amount of carbon dioxide emitted into the atmosphere[111].

This table is based on the following publication: IUCN French Committee, 2012. *Panorama des services écologiques fournis par les milieux naturels en France – Volume 1: Contexte et enjeux.* Paris, France.

111 Secretariat of the Convention on Biological Diversity, 2010, *Scientific Synthesis of the Impacts of Ocean Acidification on Marine Biodiversity.* Montreal, Technical Series No. 46.

Tools that can be used by a company to accompany it in the identification of its impacts on biodiversity:

> Ecosystem services review (ESR)[112]: procedural methodology aimed at identifying the dependencies and impacts of a site or a company on biodiversity and ecosystem services. The objective is to help the managers and directors develop strategies to manage risks and opportunities linked to these impacts and dependencies.

> EBEvie (outil d'Evaluation des interrelations Biodiversité et Entreprises pour la vie) [Tool for Assessing the Interrelations between Biodiversity and Business for Life][113]: in particular, this Internet tool allows a company to identify the level of the impact on biodiversity for each function it is made up of (finance, human resources, marketing, etc.).

> Integral Biodiversity Impact Assessment System (IBIS)[114]: this tool contains a risk analysis method linked to biodiversity by anticipating the impacts of the goods, services or processes sold by a company.

> Biodiversity Risk & Opportunity Assessment (BROA)[115]: this tool was designed to help companies identify the impacts of their activities on biodiversity (as well as the dependencies, *cf.*: Recommendation 3). It places an emphasis on the risks and opportunities linked to these impacts.

> L'Indicateur d'Interdépendance de l'Entreprise à la Biodiversité (IIEB) [the Business and Biodiversity Interdependance Indicator][116]: a self-assessment tool designed to enable companies to reveal their direct and indirect interactions with biodiversity. Its 23 criteria are divided up into five groups, notably focusing on the impacts on biodiversity and ecosystem services.

Tools that can be used by a company to accompany it in the quantification of its impacts on biodiversity:

> The Bilan biodiversité [Biodiversity Accountability Framework]: this reference framework and accounting tool allows any company to quantify its relations with biodiversity (dependencies and impacts) in order to produce an annual report on its footprint and also on its performance in terms of disclosing this information to its shareholders in the company's annual reports.

> Guide to Corporate Ecosystem Valuation (Entreprises et Ecosystèmes: Comprendre, Evaluer, Valoriser)[117]: this guide proposes a process that allows companies to attribute values – in particular monetary values – on the degradation and profits generated by ecosystem services.

PROPOSALS FOR INFORMATION OR INDICATORS TO PUBLISH

If the company has chosen Scope A:

> It can identify (using the tools appearing above and the list of the five major causes of biodiversity loss described in Appendix X) its contribution to the causes of biodiversity loss and the resulting impacts on ecosystem services. To go further, it can quantify its contribution to the causes of biodiversity loss, for example by communicating and publishing the following indicators;

Indicators of habitat destruction, modification, uniformization, fragmentation and the disturbance/destruction of flora and fauna.

For example:

- Net annual coverage by impervious surfaces [*ONB indicators*][118].

112 Developed by the World Resource Institute (WRI), the World Business Council for Sustainable Development (WBCSD) and the Meridian Institute. *Cf.*: WBCSD, Meridian Institute, WRI, 2009. *The corporate ecosystem services review. Guidelines for identifying business risks and opportunities arising from ecosystem change.* Version 1.0

113 Designed by the French Ministry of Ecology, Sustainable Development and Energy: http://www.developpement-durable.gouv.fr/Evaluez-l-interdependance-de-votre.html

114 Developed by the Consultancy and Research for Environmental Management (CREM). http://www.crem.nl/files/upload/documents/downloads/file/IBIS_Methodology_report_98_309.pdf

115 Developed by The British American Tobacco Biodiversity Partnership (consists of four partners: British American Tobacco and the NGOs Earthwatch Institute, Fauna & Flora International and the Tropical Biology Association). www.batbiodiversity.org

116 Developed by the working group, Orée, the French Institute of Biodiversity (IFB) and the Master Sciences et Génie de l'Environnement of the Université de Paris Diderot.

117 WBCSD, 2011. *Guide to Corporate Ecosystem Valuation. A framework for improving corporate decision-making.*

118 "*Net annual coverage by impervious surfaces in mainland France*" and "*Net annual coverage by impervious surfaces in French overseas departments and territories*".

RECOMMENDATION 4

It is also possible to differentiate between various categories of impervious surfaces, in accordance with the degree of anthropization (for example: it is possible to distinguish between 1) impermeabilized surfaces, which have the greatest impact on the environment, 2) non-impermeabilized impervious surfaces and 3) surfaces on which the company currently carries out no activities).

Indicators on the contribution to the overexploitation of natural resources

For example:

- The number of wild species exploited for commercial purposes. Indicators on emissions of pollutants into air, water soil.

For example:

- The quantity of plant protection products consumed.
- The quantity of radioactive pollutants emitted.
- The quantity of chemical pollutants emitted (or the average quantity per site).
- The quantity of photochemical pollutants emitted (or the average quantity per site).
- Number or parts of sites where the physical and chemical characteristics of the environment have been affected by the company's activity.

Indicators on the introduction of invasive alien species

For example:

- Number of sites on which at least one invasive alien species has been identified, which was not present before the company began its activities.
- Number of invasive alien species identified on the company's sites.

Indicators on the contribution to climate change

This subject is currently well covered by companies in their environmental or sustainable development reporting documents (quantification of sulphur dioxide (SO2), nitrogen oxide (NOx), and methane (CH4) emissions, etc.). Consequently, it was decided not to provide companies with recommendations on the way of reporting their contribution to this cause of biodiversity loss. However, each company should clarify that its contribution to climate change is added to the other causes of biodiversity loss, and even worsens them[119].

Another indicator

- The monetary value of significant fines and the total number of non-monetary sanctions for non-compliance with biodiversity laws and regulations *[version of the GRI indicator G4 EN29 on biodiversity]*

If the company has chosen Scope B:

> It can identify (with the help of the tools that appear below and the list of the five major causes of biodiversity loss described in Appendix X) the negative impacts on biodiversity generated by the entities in Scope B (entities that it does not control but which are in its value chain [*cf.*: Recommendation 2]).

> To go further, it can quantify the impacts generated by the Scope B entities, while communicating and publishing for example the Scope A indicators for the Scope B entities.

This recommendation is similar to GRI indicator G4 EN33[120]).

INFORMATION PUBLISHED TODAY BY COMPANIES

Extract from EDF's 2012 reference document

4.1.2 Risks associated with the Group's activities

The Group operates facilities that may cause significant harm to the natural or human environment or for which accidents, natural disasters or external attacks may have serious consequences.

(…)

Like the struggle against climate change, preserving biodiversity is a major priority for the EDF group, as the owner of large reserves of land, mostly located in France in or immediately next to protected natural areas. The group constantly monitors the environmental impacts of its industrial activities in order to better control and reduce them.

119 It helps change the living conditions of different species, forcing them to migrate or to adapt, something that not all of them are able to do. From 15% to 37% of all living species could be driven to extinction by climate change by 2050.

120 G4 EN33 - "*Significant actual and potential negative environmental impacts in the supply chain and actions taken*"

Extract from Lafarge's 2012 reference document

"Ecosystems play an important role in the quality of life in a given area and our operations can impact (positively or negatively) on local ecosystems."

Extract from Veolia Environnement's 2012 CSR Performance Digest

"Nevertheless, the Group's activities have negative impacts on biodiversity. In particular, these impacts are linked to its facilities footprint, which contributes to land take, as well as the consumption of natural resources and the residual pollution in the discharge from its operations. Aware of these impacts, the Group undertook to reduce and manage them, in particular by using the systems and tools described below."

Extract from Holcim France's 2012 Sustainability Report

"**Impacts:**
Consumption of natural resources (water, land / habitats, raw materials)"

Extract from EDF's GDF SUEZ 2012 reference document

"**2.4.2 Environmental pollution**
Facilities that the Group owns or manages on behalf of third parties entail risks of damage to the natural environment (air, water, soil, the habitat and biodiversity) (…)."

Extract from GSM's website

"Quarries are directly concerned by biodiversity:
- the exploitation of quarries has an impact on ecosystems, habitats and species; (….)."

THE IUCN FRENCH COMMITTEE'S OPINION

OBSERVATION In these extracts, the companies all recognized that they have an impact on biodiversity and this is the first important step in the non-financial reporting exercise. However, it can be seen that this information is not very detailed.

MOVING FORWARD It is essential that companies tackle this subject in greater depth. Initially, companies should present all the impacts they have on biodiversity and the damage thus caused to ecosystem services. Secondly, companies can broaden the spectrum of the information they disclose by communicating details on the impacts caused by entities on their value chain. Finally, companies can start to quantify all these impacts.

RECOMMENDATION 5

Publish information on the organization's commitment to biodiversity

In its reporting document, the company should indicate its level of commitment to biodiversity conservation and describe how it manages this issue.

PROPOSALS FOR INFORMATION OR INDICATORS TO PUBLISH

> If the company is formally committed to a structured approach in favour of biodiversity conservation (continuous improvement of the awareness of its negative impacts on biodiversity and its dependence on ecosystem services), it can specify whether this approach:

- Is signed by the company's management (an official commitment by the highest decision-making level leads to a more efficient and quicker implementation of its actions);
- It is based on an environmental management system like ISO 14001;
- It is broken down in the form of an action plan including qualitative and quantitative objectives;
- It is driven and coordinated by a biodiversity reference framework (specify its responsibilities);
- It was recognized in conformance with the French Biodiversity Strategy (SNB);
- It includes the stakeholders, and NGOs in particular, to help in its implementation;
- It concerns, involves and is broken down by the Group's various management teams and business lines.

It is also recommended that the company mentions the amount it spent during the year both in France and abroad (developing country) to support biodiversity conservation [*indicator ONB*[121] *and variation of GRI indicator G4 EN31*[122] *for biodiversity*].

The IUCN French Committee recommends including in the calculation of this amount the measures directly linked to biodiversity, in other words "*the measures that can protect biological diversity and support the planning of biological diversity*"[123]. Therefore, it is a matter of measures, one of the main objectives of which[124] is to address at least one of the objectives of the Convention on Biological Diversity, and more precisely all or some of the five strategic goals defined in its Strategic Plan for Biodiversity 2011-2020:

1. Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society;
2. Reduce the direct pressures on biodiversity and promote sustainable use;
3. Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity;
4. Enhance the benefits to all from biodiversity and ecosystem services;
5. Enhance implementation through participatory planning, knowledge management and capacity building.

> If the company does not have an official biodiversity strategy, it can nonetheless specify whether:

- It has a sustainable development or environmental policy, which mentions issues related to biodiversity;
- It implements occasional measures in favour of biodiversity;
- It subscribes to the National Biodiversity Strategy (SNB) and its voluntary commitment has been recognized.

121 "*National expenditure for biodiversity and landscape conservation*"
122 "*Total environmental protection expenditures and investments, by type*"
123 Definition given by the Convention on Biological Diversity (CBD) within the framework of the application of the strategy for resource mobilization; *cf.*: UNEP, 2012a. *Review* of implementation of the strategy for resource mobilization.
124 It should be noted that, "*Principal policy objectives can be defined as those being fundamental in the design and impact of the activity*"; *cf.*: Biodiversity Indicators Partnership, 2010. *Official development assistance provided in support of the Convention. Indicator 7.1.1.*

INFORMATION PUBLISHED TODAY BY COMPANIES

Extract from Lafarge's 2010 Biodiversity Review

A responsible approach
(…) today, every new quarry opened by Lafarge must have a rehabilitation plan in place before it even beings operations. The question of credibility comes before anything else. "We have a motto which is: 'The redevelopments of today are the quarries of the future'," explains Pierre de Prémare (1) "To continue to operate quarries, we need to show what we have done elsewhere, how we have created viable natural environments, managed forests for 25 years, and worked in close collaboration with partners and local communities".
(…)
The standards established in collaboration with WWF were set out in the Sustainable Development Ambitions 2012 plan. They define the rules for drawing up a redevelopment plan. "We put a comprehensive management system in place, involving four stages: analysis, scheduling, action and review," explains Pierre de Prémare. "The system, which was formalized in 2009, ensures that all our initiatives are in line with our recommendations on biodiversity.
(…)".

1 Director of the environment and the public affairs for Lafarge quarries

Extract from Veolia Environement's 2012 CSR Performance Digest

In line with the commitment written into its biodiversity policy, and directly linked to the Aichi targets adopted in Nagoya, and those of the French National Biodiversity Strategy, Veolia Environnement is continuing its work in three main areas:
- Improving its knowledge of biodiversity and pursuing the characterization of its impacts and dependency on ecosystems;
- Acting to protect biodiversity and develop and promote ecosystem services;
- Informing, training and raising awareness of biodiversity issues.

(…)

Increasing awareness of biodiversity through monitoring and commitment
In order to monitor progress and encourage initiatives on the ground, the company has defined a series of performance indicators and targets to gauge the level of commitment to biodiversity protection at the local level.

Extract from EDF's GDF SUEZ 2012 reference document

Using the ISO 26000 standard, the key principles of the OECD, the principles of the Global Compact and the Global Reporting Initiative as a basis, GDF SUEZ has formalized its sustainable development commitment, mainly through the publication of 10 dated and qualified objectives in 2011. These objectives can be divided into the various themes within the policy's three main areas:
(…)
- Biodiversity: implementing a biodiversity action plan in each sensitive site in the European Union by 2015;
(…)

3.3.4.8 Management of biodiversity
The issue of biodiversity conservation is a major environmental challenge. Based on its broad guidelines for the preservation of biodiversity, the Group has developed an integrated action plan to structure work already done in the field by the various Group entities and to start new ones. This voluntary project aims to fully integrate biodiversity into the management of industrial sites and to deploy action plans on sensitive sites.
The project should implement

RECOMMENDATION 5

Extract from EDF's GDF SUEZ 2012 reference document (continued)

three main actions:
- Strengthen the interactions between Group activities and ecosystems and identify sensitive / priority sites at a Group level;
- Stimulate the development of action plans on sensitive/priority sites and promote the implementation of voluntary initiatives on all Group sites;
- Promote biodiversity with project developers and enhance internal expertise, with the aim of increasing sound initiatives and promoting business opportunities centred around biodiversity.

This commitment has been recognized thanks to the French Biodiversity Strategy (SNB). In this process, in May 2008, the Group established a partnerhip with the IUCN French Committee. GDF SUEZ also renewed its partnership for three years (2013-2015) with France Nature Environment on the preservation of natural habitats and biodiversity in France. Its aim is to enhance actions that promote biodiversity in the design and management of the Group's sites and facilities (existing or future), to explore the potential contribution of GDF SUEZ's facilities to environmental continuity, and to develop tools for raising awareness of biodiversity. The Group has established an internal communications network in this area and is developing internal tools to facilitate ownership of the topic and objectives by as wide an audience as possible. Conferences and information sessions are also organized to raise awareness of biodiversity issues in their businesses.

Extract from EDF's 2012 reference document

"The Group's environmental policy incorporates developments on major environmental issues, such as fighting climate change, adverse affects on biodiversity etc. Operational implementation of this policy relies on the deployment of an "Environmental Management System" in all of the Group's entities that have a direct or indirect influence on environmental impacts.
The implementation of this Environmental Management System ensures improved management of the Group's knowledge of and compliance with regulations and anticipation of regulatory developments. This system has been ISO 14001 certified since April 2002 (see section 6.6.2.1 ["Organization and ISO 14001 certification"])

6.6.1 Sustainable development (…)
The EDF Group's environmental and societal policy draws on the principles of the United Nations Global Compact, which the Group jointed in 2001. The Group has formally defined its action in a sustainable development policy that addresses the relevant key issues, guided by EDF's ethical approach. This is reflected in an environmental policy focusing on climate change prevention and protection of biodiversity (…).
(…)

6.6.2.1.2 Oversight of environmental risks
Risk mapping and risk control levels, including EDF's environmental risks, are prepared by the Group's Risk Control Division, in relation with all Group subsidiaries and entities. Financially and economically, the most significant factors associated with environmental risks related to:
- Deployment of energy efficiency actions and achieving the associated certificates;
- Impacts of EDF businesses on the air, water, the ground quality and waste production;
- Protection of biodiversity;
- Management of water resources;
- Greenhouse gas emissions.

These risks are fully integrated into EDF's environmental management system and are covered by action plans resulting from the orientations laid down in the Group`s Sustainable Development policy.
(…)

6.6.2.6 Preserving biodiversity
(…)
The managements of industrial installations have implemented biodiversity strategies. The hydropower fleet applied the action plan for its new 2010-2012 strategy.
(…)"

Extract from GSM's "Our commitment to biodiversity" leaflet - Updated in 2011 after SNB's recognition of GSM's commitment to biodiversity

"In 2008, the establishment of a new Environmental Policy reinforced the company's approach to progress in three commitments:

- Successful regional integration of their activities,
- Addressing the authorities' material requirements in a sustainable manner,
- Preventing, managing and controlling our impact on the environment.

Within this framework, GSM decided to establish a specific biodiversity policy in order to integrate it formally into its environmental management system.

Through its biodiversity policy, GSM undertakes to contribute to biodiversity conservation and restoration and thus:

- I. To train people, raise awareness and disclose information on biodiversity.
- II. To increase knowledge and awareness of biodiversity.
- III. To develop the ecological management of the sites.

In July 2011, GSM subscribed to the new SNB 2011-2020 and one year later filed its Biodiversity Management System (SMBio) project. This commitment was officially recognized as an "SNB" by the French Ministry of Ecology, Sustainable Development and Energy in December 2012."

THE IUCN FRENCH COMMITTEE'S OPINION

OBSERVATION The companies currently publish information on their commitment to biodiversity and the management of their action in this area. Depending on the case, companies highlight:

> The inclusion of their actions in favour of the biodiversity in a strategy dedicated to this topic;
> The importance of biodiversity conservation to ensure the sustainability of their activities;
> The link between their commitment and those made on French and international levels in favour of biodiversity;
> The main focus areas of their actions in this field;
> The existence of indicators aimed at monitoring the implementation of the company's strategy;
> The integration of their stakeholders, and at the forefront of nature conservation organizations, to support the company in the implementation of their biodiversity conservation actions.

All this information should be mentioned by each company in order to reveal their commitment to biodiversity and the organization that has been put in place to implement their operations.

MOVING FORWARD Additional information could define the description of the companies' commitment, in particular:

> The total amount of money mobilized for biodiversity conservation by the company;
> The human means mobilized with regard to biodiversity;
> How this topic is presented by the company's decision-making bodies;
> The company's involvement and the breakdown of its approach by the various management departments and business lines.

RECOMMENDATION 6

Publish information on the priority sites for biodiversity conservation

A company must show its efforts to focus its action on the sites that are of highest priority in terms of biodiversity conservation, and which thus require particular attention from the company to mitigate the impacts of its activities on biodiversity.

METHODOLOGICAL ADVICE AND TOOLS THAT CAN BE USED

Two criteria can be used, either separately or together, in order to identify the priority sites:

> Their presence within or near to a protected area[125], or a natural area of outstanding interest (the Natural Areas of Ecological Interest for Fauna and Flora [ZNIEFF][126]), the sites that make up the Green and Blue Infrastructure[127] or an ecosystem classified as endangered in the IUCN's Red List of Ecosystems;

> Their presence within or near the ranges of protected and/or threatened species.

Several lists, databases and tools can be mobilized to access this information:

To identify priority sites on a global scale:

> The Integrated Biodiversity Assessment Tool (IBAT)[128]: this tool makes it possible to visualize on a site scale the presence of protected areas and threatened species on a global scale.

> The Protectedplanet.net database[129]: this interface, accessible free of charge, is the most comprehensive global database on marine and terrestrial protected areas.

> The IUCN Red List of Threatened Species[130]: drawn up by IUCN, this is the most comprehensive source of information on the conservation status of wild species. The IUCN Red List has a solid scientific basis and is prepared using the most accurate information available. The objective of the list is to identify those plants and animals that are facing a higher risk of global extinction, in order to help orient conservation work.

> The IUCN Red List of Ecosystems[131]: currently being developed, this global standard for risk assessment of the world's ecosystems will make it possible to tell whether an ecosystem is facing imminent risk of collapse or whether it is vulnerable, endangered or critically endangered.

IUCN is currently developing a tool to integrate this data, which will enable key biodiversity areas to be identified.

In order to identify the priority sites in France:

> The French National Inventory of Natural Heritage (Inventaire National du Patrimoine Naturel, INPN) set up by the Natural Heritage Service (Service du Patrimoine naturel, SPN) of the National Museum of Natural History (Muséum National d'Histoire Naturelle, MNHN) provides the geographical coordinates of protected natural areas and the ZNIEFF,

125 For IUCN, a protected area is a *"clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values"*.

126 The aim of the inventory of Natural Areas of Ecological Interest for Fauna and Flora (Inventaire des Zones Naturelles d'Intérêt Ecologique Faunistique et Floristique. ZNIEFF) is to identify and describe areas of outstanding biological interest, which have a good conservation status. Two types of ZNIEFF have been identified: those of Type I that contain at least one species or habitat of outstanding biological or ecological interest, and those of Type II, which because they of the richness of their natural heritage and the fact that they are relatively undisturbed, offer significant biological potential.

127 The Green and Blue Infrastructure (Trame Blue et Verte, TBV) is a network made up of marine and terrestrial ecosystems identified by regional ecological continuity schemes and by documents from the Government, regional authorities and their associations.

128 Developed by BirdLife International, Conservation International, IUCN and the UNEP World Conservation Monitoring Centre: https://www.ibatforbusiness.org/login. In order to use this tool, a subscription must be purchased.

129 Developed by IUCN and the United Nations Environment Programme: http://www.protectedplanet.net/

130 http://www.iucnredlist.org/

131 http://www.iucnredlistofecosystems.org/

132 http://inpn.mnhn.fr/telechargement/cartes-et-information-geographique http://www.uicn.fr/Liste-rouge-France.html

both in mainland France and its overseas departments and territories[132].

> La Liste Rouge des Espèces Menacées en France [The Red List of Threatened Species in France][133]: established in accordance with IUCN's international criteria, the national Red List describes the conservation status of species in mainland France as well as in France's overseas departments and territories. This list allows the risks of extinction to be determined for plant and animal species that reproduce or are regularly present in natural environments in France and its overseas departments and territories.

> Lists of protected species[134]: The Environmental Code provides for a strict system to protect species of wild fauna and flora, the list of which are established by ministerial decree. The lists are prepared on national, regional and departmental levels.

> The Regional Schemes of Ecological Coherence (Schémas Régionaux de Cohérence Écologique, SRCE): on a regional level, the Government and the Regions jointly prepare planning documents, which are known as regional schemes of ecological coherence. These schemes identify on a regional scale the areas inventoried as biodiversity reservoirs and ecological corridors, which made up the Green and Blue Infrastructure (TBV).

Justify the distance accepted for defining "proximity": The distance accepted by companies for qualifying the "proximity" of its sites to a protected area, a natural area, a threatened ecosystem or to the range of a protected and / or threatened species must be specified and justified in the reporting document. Companies generally choose a distance of between 500 metres and 5 kilometres.

Specify the criteria linked to protected areas:
The protected areas are very heterogeneous, in particular in terms of management objectives. In order to differentiate between them properly, IUCN has created an international system of protected area categories, which are classified in accordance with their of management objectives and range from strict protection (Category I) to the sustainable use of natural resources (Category VI)[135].
Companies can thus refine the criteria linked to protected areas. They can choose between two options:

> Option 1:
As the criterion for the sensitivity of its sites, a company can choose only to use the presence within or in the proximity of protected areas in which activities are more strictly controlled (Categories I to IV).

> Option 2:
As the criterion for the sensitivity of its sites, a company can choose to assign higher ratings to sites present within or in the proximity of protected areas in which activities are more strictly controlled (Categories I to IV).

PROPOSALS FOR INFORMATION OR INDICATORS TO PUBLISH

Companies can disclose:
- The number of the percentage of sites on which or near to which threatened and / or protected species have been identified and may be affected by the company's activities.
- The number or the percentage of the company's sites present within or near to a protected area or an important area for biodiversity.

These two indicators correspond to the GRI's indicators G4 EN11[136] and G4 EN14[137].

133 http://www.uicn.fr/Liste-rouge-France.html
134 The lists of protected species on a national level are provided on the following website: http://inpn.mnhn.fr/reglementation/protection
135 UICN France, 2010. *Les espaces protégés français: une pluralité d'outils au service de la conservation de la biodiversité.* Paris, France.
136 *"Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas."*
137 *"Total number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk."*

RECOMMENDATION 6

INFORMATION PUBLISHED TODAY BY COMPANIES

Extract from Lafarge's 2012 reference document

Roll-out of the biodiversity management plan template

In 2011 our screening programme using IBAT, a global mapping tool of international biodiversity sensitive areas, identified 18% of our active quarries as being in or within 18% of a sensitive area. Lafarge set an objective to develop Biodiversity Management Plans (BMPs) for these sensitive quarries by 2012. In order to achieve this, Lafarge and WWF employed ecology graduates to help develop these plans in close partnership with the environment and operational teams in several countries. (…) Thanks to these partnerships, Lafarge was able to complete 99.2% of its BMPs of sensitive quarries by year end, just short of the 100% target.

Sample of 708 quarries	
Percentage of quarries having been screened via biodiversity analysis (using criteria validated by WWF) (100% of target in 2010)	100 %
Percentage of quarries that operate within or adjacent to a protected area(1)	18.5 %
Sites within or adjacent to a protected area*, which have a biodiversity programme (100% objective in 2012)	99.2 %

(1) Quarries within 500 m of IUCN I – VI, Ramsar, IBA, Natura 2000.

Extract from EDF's GDF SUEZ 2012 reference document

1.2.3 Non-financial indicators

(…)

Biodiversity: implementing a biodiversity action plan in each sensitive site in the European Union by 2015.

(…)

3.3.4.8 Management of biodiversity

(…) The voluntary project [aims to fully integrate biodiversity into the management of industrial sites] and should implement three main actions:

- Strengthen the interactions between Group activities and ecosystems and identify sensitive/priority sites at a Group level;
- Stimulate the development of action plans on sensitive / priority sites and promote the implementation of voluntary initiatives on all Group sites; (…).

Extract from Veolia Environnement's 2012 CSR Performance Digest

"**Assessment tools**
The Group develops an approach based first and foremost on identifying the area where its priority action is needed, and then deploying an assessment method to define an action plan. Since 2010, Veolia Environnement has incorporated information extracted from the IBAT (Integrated Biodiversity Tool) database developed by BirdLife International, Conservation International, IUCN and the United Nations Environment Programme (UNEP) into its "Atlas of Responsibilities and Sustainable Development Opportunities". This internal tool was developed to identify all the sustainable development issues for a given site, including the conservation of local species and the natural environment.
Since 2011, the Group has also included functions using geolocated data of its sites, to prioritize its ecosystem management actions on the basis of a context that is recognized and identified by the local stakeholders (ordinary and locally remarkable species and ecosystems)."

Extract from the 2012 reference document of EDF Edison (Italy):

"Introduction of biodiversity mapping of the areas around all the company's generation sites, to prioritize action on sites affected by Italy's national strategy for biodiversity. Work on setting up operational and technical partnerships with environmental NGOs active in the sensitive areas concerned."

Extract of the 2012 reference document from Ciments Français (including GSM, Ciments Calcia and Unibéton)

"Particular attention is paid to indicators to monitor biodiversity. Many projects and focused initiatives have already been launched, including: The broad experience of GSM, the French aggregates subsidiary in the framework of an agreement with IUCN (International Union for Conservation of Nature), a pilot project in Morocco with Rabat University, and the ongoing cooperation project in North America with the Wildlife Habitat Council. Moreover, in the context of a complete biodiversity management strategy, which has already been drafted and should be published in 2013, the Group has increased awareness, starting with a more precise identification of sensitive quarries (72 out of 181 quarries managed)."

THE IUCN FRENCH COMMITTEE'S OPINION

OBSERVATION In these extracts, the information disclosed is heterogeneous, but the companies all state that they prioritize their actions (on a company level or in the region where it is located) based on a selection of their sites, which present the most pressing issues in terms of biodiversity.

MOVING FORWARD It would be a good idea if the reporting documents included information on:

> The number of percentage of sites selected as being "priority" areas;
> The methodology the companies use to select these sites;
> The specific effects of the prioritization of action on the selected sites.

RECOMMENDATION 7

Publish information on the measures taken to respond to legal obligations

It is essential that companies publish information on the measures they have taken to meet legal requirements they are subject to in terms of biodiversity.
These steps allow the companies either to respond directly to a legal requirement or ultimately ensure legal compliance.

METHODOLOGICAL ADVICE AND TOOLS THAT CAN BE USED

It should be clear to the reader that the actions described correspond to legal or regulatory requirements. Indeed, they should not be confused with the additional voluntary actions that the company can implement, which reveal their commitment to act in favour of biodiversity beyond what is legally required of them (*cf.*: Recommendation 8).
To this end, it could be useful to indicate explicitly which legal requirements the described actions correspond to.

PROPOSALS FOR INFORMATION OR INDICATORS TO PUBLISH

Information on the measures taken by companies to avoid, reduce and offset the impacts of their projects on biodiversity within the framework of the administrative procedures they authorize (environmental impact studies or thematic incidence studies: the water law, Natura 2000, protected species, etc.).

The information on these measures should be linked to the impacts identified in advance (*cf.*: Recommendation 4).

Companies can disclose the following indicators for each step of the avoid, reduce and offset sequence:

> Avoidance measures:

- Number of projects for which the company is the contracting authority, started during the financial year, whose relevance in terms of requirements/objectives, environmental issues and alternative solutions for the project has been verified (opportunity analysis).
- Number of projects for which the company is the contracting authority, started during the financial year, whose location or plot was chosen because it was the least sensitive in terms of environmental issues when compared with other possible locations or plots for the project (geographical avoidance).
- Number of projects for which the company is the contracting authority, which during the financial year applied technical solutions that were more favourable for the biodiversity, guaranteeing the total avoidance of impact in these projects (technical avoidance).

> Reduction measures:

Reduction of the impacts generated during a project's construction phase:

- Number or percentage of building sites whose schedule for carrying out work was adapted to reduce the impact during nesting, hibernation or spawning periods.
- Number or percentage of building sites whose site footprint was reduced for ecological reasons.

- Number or percentage of building sites on which temporary water treatment systems were set up for construction site runoff.
- Number or percentage of building sites on which preventative measures were prescribed (monitoring of the building site by an ecologist, training staff and raising their awareness, informative documents send to all stakeholders).

Reduction of impacts generated during the project's operational/site management phases:
- Number or percentage of projects / sites whose ecological transparency was increased (installation of fish passes, wildlife corridors, etc.).
- Number or percentage of projects/sites whose footprint was decreased for ecological reasons.
- Number or percentage of projects / sites on which pollution risk management is carried out (no plant protection products used in the maintenance of the parks, waste management, etc.).
- Number or percentage of projects / sites on which the identification/destruction of invasive species is carried out.

Additional indicators:
- Costs avoided by the measures adopted to reduce impacts (for example: costs avoided related to the reduction in the size of the area covered in asphalt or to the reduction in the volume of plant protection products used).
- Comparison between the costs of measurements taken to reduce the impacts and the costs avoided.

> Offset measures:
- Number of individual specimens or species of flora or fauna transplanted.
- Restored surfaces (degraded environments in which management initiatives are implemented to help improve their state of conservation).
- Recreated surfaces (environments in which management initiatives are implemented so as to create a habitat on a site where it did not exist initially).
- Land on which management initiatives are implemented in order to increase biodiversity levels.

Other measures are taken by companies in order to ultimately respond to legal requirements, such as:

The steps taken to acquire knowledge:
- How does the company carry out an inventory of the environment in which its activities take place?
- How does the accompany carry out an inventory of the impacts of its activities on biodiversity?

The prospective research and development procedures:
- Which innovative experiments or projects are implemented by the company in order to improve biodiversity conservation?

Training courses for internal stakeholders (aimed at ensuring an improved application of the company's procedures and initiatives to favour biodiversity):
- Number of training days organized by the company.
- Number of trained employees.
- Actions carried out with the world of science and nature conservation stakeholders in order to address legal requirements.
- Number of partnerships signed by the company or its foundation with a scientific body or a nature conservation stakeholders for actions allowing it to address legal requirements (describe the contents of each partnership and the actions carried out within this context during the financial year).

RECOMMENDATION 7

INFORMATION PUBLISHED TODAY BY COMPANIES

Extract from Lafarge's 2012 reference document

Target	Deadline	Performance 2012	Performance 2011	Why is Lafarge pursuing this ambition? What will change? How are we progressing against this ambition?
By the end of 2010, reach a rate of 85% of quarries with a rehabilitation plan complying with Lafarge standards.	2010	84.6 %	86.4 %	Although we reached this objective in 2011, changes in assets slightly undermined our performance in 2012.
Quarries in sensitive areas (1) will have developed a site biodiversity programme by 2012.	2012	99.2 %	49.2 %	In order to achieve this ambition, Lafarge and WWF employed ecology graduates to help develop the biodiversity programmes, in close collaboration with the environment and operational teams in several countries.

(1) Sensitive areas correspond to IUCN Category I to VI sites, and sites containing endangered species (included in the Red List).

(…)

Creation of a biodiversity management tool

In 2012, a Biodiversity Management Plan (BMP) template was finalized for roll-out across Lafarge's quarries to help site teams develop their own programme locally.

This template helps site teams to identify specific conditions to take into account when developing the management plan. In 2013, Lafarge will work with WWF International to adapt this template and create a standard model biodiversity management programme that can be used in any industry or organization. Similarly, in 2012, Lafarge, in partnership with the IUCN French Committee, WWF France and WWF International developed a toolbox of methods to monitor biodiversity over time. The toolbox includes simple methods such as the use of photographic images to track the change in habits over time, but also more complex methods such as Lafarge's Long-term Biodiversity Index (LBI), which was revised and released internally in 2012, following extensive consultation with many stakeholders, including their International Biodiversity Panel.

Extract from GDF SUEZ's website

Specific initiatives in the GDF SUEZ Group's branches

Contributing to the preservation and restoration of biodiversity: SUEZ Environnement reinforced its analysis and understanding of the risks and opportunities linked to the management of ecosystems and biodiversity at its sites. A booklet entitled, "SUEZ Environnement Contribution to the Preservation and Restoration of Biodiversity" was published at the end of the year. The aim is to define the challenges that the company will need to face and to highlight some examples of the specific initiatives implemented to connect partners with experts and raise the general public's awareness.

Study of how the activities carried out by Gaz Réseau Distribution France (GrDF) have an impact on biodiversity: In 2010, GrDF constructed a methodology for incorporating biodiversity conservation into the management of its operations on natural gas networks: connections, extension work and maintenance.
(…)

Extracts from the 2012 Veolia Environnement reference document

Redevelopment of landfill cells:

The operation of a landfill site requires landfill cells to be dug and prepared. Where the Group is responsible for this task, it complies with all the obligations regarding surface sealing and the recovery of excavated materials. Once used, the cells are covered as quickly as possible, paying close attention to soil functionalities with regard to ecosystems. These measures encourage the development of local ecosystems. The cells are monitored for environmental impacts before being returned to general use.
When the entire site is redeveloped, monitoring is continued to ensure the species planted have repopulated the area (post-operation phase).
These stages are integrated into the site biodiversity action plans.
(...)
In 2008, the Company entered into a partnership with the IUCN French Committee, strengthening Group actions in favour of biodiversity.

In 2012, for example, ecological management forms were produced and collective work on corporate biodiversity reporting undertaken in this context. The IUCN French Committee comprises 55 members (government ministries, public institutions and NGOs) and a network of approximately 250 experts. On an international level, IUCN has been a United Nations observer since 1999.

Extract from Holcim France's 2012 Sustainability Report

Holcim has a long tradition of studying its impacts and of restoring its sites, in collaboration with local communities or their most well-informed representatives such as nature conservation groups of government authorities. (…)

Quarries on cement works sites can be operated for several decades. As soon as a site is no longer operational, Holcim complies with its obligations by securing and stabilizing the ground, whilst implementing actions in favour of biodiversity.

RECOMMENDATION 7

Extracts from EDF's 2012 reference document

"The Group takes environmental offset measures in application of European and French regulations. Most cases concern applications for permission to destroy protected species due to work on construction or maintenance of industrial installations (around 15 applications in France and the UK since 2008).
In France, EDF is testing various environmental offset methods and ways of assessing the ecosystem services it uses (for example: current testing at the Cordemais fossil-fired plant of the Ecosystem Service Review developed by WBSCD) and represents the Eurelectric association in the European Commission's "No net loss" working party.
(…)

The managements of industrial installations have implemented biodiversity strategies. The hydropower fleet applied the action plan for its new 2010-2012 strategy. One key action was adapting site management for the maintenance of the Sarrans dam, which is located in a Natura 2000 protected zone: to preserve the red kite and the peregrine falcon, low-noise machines (electric cranes) were chosen to reduce unnecessary noise during the breeding period.

In 2012, the management of EDF's fossil-fired fleet began a strategic biodiversity plan to take a detailed census of local populations for each of its industrial sites, and identify protected areas and biodiversity preservation areas for each plant. In a similar vein, steps are being taken to list the available land at the nuclear power plants, in order to map out the natural areas.

EDF Real Estate Division: Campaign to reduce the use of chemical weed killers and fertilizers on all sites (cut by 8% a year on average in the hydropower fleet), or eliminate it completely in favour of manual weeding, late mowing and fallow land including native wild flowers.

EDF Hydropower Generation and Engineering Division (France): Inauguration of the fish pass at Jons sur le Rhône in November, after 10 months of work.
(…)

EDF has embarked on a programme to raise managers' and employees' awareness and consideration of sustainable development issues, via:
(…) the publication of methodological guides on attention to biodiversity in operational business lines (hydropower and property management in 2011, nuclear power and networks in 2012); (…)

After the French Ministry for Ecology, Sustainable Development and Energy launched a call in 2011 for projects to study feasibility of environmental offset mechanisms, EDF was selected to conduct an experimental operation of ecological offset offers in the Rhône-Alpes region of France. The project involves the rehabilitation of 120 hectares of Alpine land in the Belledonne Mountains in Isère, to create a favourable habitat for flora and fauna; in particular introducing measures to reintroduce the black grouse, which is an endangered species. The restored land will be used both to offset EDF's work on hydropower facilities, and to meet offset needs for other projects specific to the region: the development of winter sports resorts, town-planning projects, railway projects, etc. The operation is scheduled to last 8 years. Afterwards, the land will remain the property of EDF, but will be incorporated into a National Reserve for Hunting and Wildlife ("RNCFS").."

Extract from EDF's website

With regard to hydraulic works, EDF undertakes to ensure the ecological and sedimentary continuity of the watercourses it has an impact on:
(…)

- By maintaining a minimum flow downstream to preserve aquatic life. Established by law, depending on the dam, this flow is the equivalent of 10% to 5% of the average flow of the watercourse.
- Building fish passes for upstream spawning runs and downstream migration to help migratory fish pass through dams.
- Developing research on aquatic biology, sedimentology, hydrology and river pollution.

Extract of the 2012 reference document from Ciments Français (including GSM, Ciments Calcia and Unibéton)

Natural resources and quarries
79% of Ciments Français' quarries have a rehabilitation plan in place, which also addresses biodiversity.

Italcementi has devoted a great deal of energy to applying the new WBCSD guidelines to the rehabilitation of its quarries. These guidelines aim at implementing best practices in the operation and rehabilitation phases worldwide.
(…)

A specific budget is planned for quarry management initiatives with the constitution of provisions required for financial coverage.

THE IUCN FRENCH COMMITTEE'S OPINION

OBSERVATION In these extracts, the companies disclose all the information on the actions they carry out to address the obligation to manage the impacts of their activities on biodiversity. However, two trends can be noted, which could represent progress:

> Companies mainly highlight the actions carried out during the operation or post-operation phases (rehabilitation of quarries, redevelopment of landfill cells, etc.). On the other hand, they publish little information on the actions carried out upstream, during the project design phase, and in particular actions aimed at avoiding their impacts.

> The information is often communicated by a branch or a division, which does not allow them to have an overview of all the actions the company carries out to address its legal requirement.

MOVING FORWARD Companies are advised to publish information on the measures they take to address their legal requirements during each stage of a project or a site, and in particular during the design phase, which is currently covered to a lesser degree by companies.
It is also important that, whenever possible, companies add the information communicated by the different branches or divisions and succeed in publishing consolidated information on a group level. For this reason, the indicators proposed above (in the section "Proposals of information or indicators to publish") are generic and can be disclosed on a group level.

RECOMMENDATION 8

Publish information on the voluntary measures going beyond legal obligations

It is important that a company publishes information on the measures that favour biodiversity, which is implements voluntarily, and that complement the measures the company takes to address the legal obligations it is subject to. A large number of motivations may lie behind these initiatives: to facilitate the regional integration of the companies' sites, to anticipate the regulation, to answer the increasing awareness of environmental criteria by non-financial rating agencies, to mobilize collaborators, to attract customers and gain their loyalty, to contribute to a mission of general interest such as environmental conservation, etc.

METHODOLOGICAL ADVICE AND TOOLS THAT CAN BE USED

Here it is important to differentiate between the voluntary measures resulting from a company's additional undertaking in terms of the strict compliance with its legal requirements regarding the environment and the measures that, whilst they do not correspond directly to a legal obligation, are nevertheless implemented by a company in order to ultimately ensure its legal compliance. This recommendation concerns the first category of measures.

PROPOSALS FOR INFORMATION OR INDICATORS TO PUBLISH

Information on voluntary actions to raise the awareness of employees and the general public about biodiversity.
For example:
- Number of percentage of employees having attended at least one biodiversity awareness-raising session.
- Number of activities or actions offered to employees, which are related to the subject of biodiversity (for example: the number of initiatives organized by the company and offered to the general public, activities in contact with the living world, and in particular during the Nature Festival[138]).

Information on voluntary activities implemented by the company in order to facilitate its regional integration (at local and French levels).
For example:
- The number of projects and programmes arising from public policies the company participates actively in (Documents on Natura 2000 objectives, French action plans for endangered species, regional natural park charters, regional ecological coherence schemes, regional biodiversity strategies, etc.).

Information on voluntary actions that are implemented with the world of science and nature conservation stakeholders.
For example:
- Number of partnerships signed by the company or its foundation with a scientific body or a nature conservation stakeholder (describe the contents of each partnership and the actions carried out within this context during the financial year) for actions allowing it to address actions that go beyond the scope of regulations.
- Number of projects in favour of biodiversity that are not initiated but supported by the company or its foundation for the benefit of a scientific body or a nature conservation stakeholder during the reporting year (describe the methods used to provide support: financing, supply of internal data, access provided to scientists or external experts on their land).

138 http://www.fetedelanature.com/

Information on voluntary measures implemented to address the impacts on biodiversity of projects funded by the company (for companies in the banking and financial sector).

For example:

- Number of projects financed by the company for which the latter demanded compliance with criteria linked to biodiversity conservation (for example: the obligation to implement measurements to avoid, reduce and offset the impacts generated by the project).

Information on voluntary measures implemented in order to mitigate the impacts on biodiversity generated by the entities in the company's Scope B.

For example:

- Does the company have a procurement policy that includes criteria related to biodiversity conservation?
- Number or percentage of entities in Scope B forced to respect criteria linked to biodiversity conservation (for example, by means of monitoring terms of reference that contain instructions on biodiversity).
- Number or percentage of new suppliers controlled via ecological criteria (version of the GRI indicator G4 EN32 on biodiversity).
- Does the company control the application and effectiveness of the criteria regularly?
- Number or percentage of Scope B entities trained in and/or made aware of biodiversity conservation issues.
- Number or percentage of goods and services sold or produced by the company, which comply with sustainability criteria (for example: products bought from producers that have been certified in Organic Farming, sustainable forest management products purchased[139], which have been certified under the FSC[140] or the PEFC[141] schemes, MSC[142] certified products, etc.).

INFORMATION PUBLISHED TODAY BY COMPANIES

Extract from the 2012 Veolia Environnement reference document

"The Group has also participated in international studies, primarily through the works of the WBCSD (Ecosystem Services Review, [ESR], Corporate Ecosystem Valuation), with a case study focusing on the Berlin site. This study was supplemented in 2012 by a biodiversity compatibility case study. The integration into its activities of the principles of the Convention on Biological Diversity (CBD) is highlighted in "Responding to the Biodiversity Challenge – Business contribution to the CBD", and was the focus of a presentation in 2010 during the tenth Conference of the Parties (COP 10) convention in Nagoya. A follow-up presentation was made in 2012 to the COP 11 convention in Hyderabad. Finally, enhancing the value of ecosystem services is the subject of case studies within the Group. Improving out understanding of ecological balance and sharing this knowledge by increasing awareness and communicating on biodiversity, are supplemented by the activities of the Veolia Environnement Foundation. For example, each year since 2010, the Foundation has financed the preparation of a Red List of threatened species in France by the French Committee of the IUCN and the National Museum of Natural History (see below).

(…)

Protective perimeter around water catchment areas:

Protective perimeters are established around catchment areas for water intended for human consumption to preserve the resource. Within these perimeters, certain human activities that could directly or indirectly affect the quality of water are forbidden or tightly controlled. When the Group operates wellfields, it implements voluntary biodiversity-friendly actions (differentiated management of public parks, inventory of animal and plant life, etc.) such as those taken at the Crépieux-Charmy wellfield in Lyon. These best practices are also favoured in France at sites operated by the Company, in accordance with the good ecological management guidelines for Group sites."

139 Furniture, paper, packaging and other products that depend on the exploitation of forests.
140 Forest Stewardship Council
141 Programme for the Endorsement of Forest Certification (PEFC) schemes
142 Marine Stewardship Council

RECOMMENDATION 8

Extract from Veolia Environnement's 2012 CSR Performance Digest

"**Information and raising the awareness of collaborators and stakeholders**

In addition to involving its collaborators in the implementation of its management initiatives, the Group carries out different awareness-raising activities with its stakeholders with regard to biodiversity conservation.

Several training days were thus organized in 2012. On the International Day for Biological Diversity, in partnership with a local association, GRS Valtech for example offered the employees at the Saint-Pierre-de-Chandieu site (69) the opportunity to discover local birds and insects. Volunteers were thus able to build and set up insect hotels and nest boxes on the site.

Within the context of biodiversity actions in particular, initiatives such as educational ponds are also implemented and integrated into site tours.

In 2012, an educational pond was built on the Boissettes site and there are plans for it to be included in the site tour. A biodiversity accelerator zone is also planned on the site of the main water treatment plant in the agglomeration community of Châlons-en-Champagne. Moreover, in partnership with local stakeholders, the Group organizes sessions to clean and restore natural environments, fauna observation, and workshops for raising awareness about organic gardening and beekeeping as well as educational tours.

(…)

The ecological management of the sites

The Group is keen to pursue the ecological management of its green areas, which consists of developing the "standard horticultural model". The actions carried out by Veolia Environnement in this field are designed to conserve the existing natural heritage and help to develop ecosystems. Thus the group collaborates with local partners to help maintain and restore the different ecosystems on its sites, including ponds and meadows. It preserves local ecological communities by planting hedges, grass buffer strips and restoring wetlands. In partnership with the IUCN French Committee, it has provided its French sites with a guidebook called "Guide to ecological management of Veolia Environnement sites in France". This is a compilation of positive actions for ecosystems that should be adapted to the characteristics and uses of these areas in the planning stages and / or during their management. In particular, the guidebook covers:

- The management of herbaceous environments and fauna;
- Measures used to look after these areas;
- The development of roadways and buildings.

The guidebook details actions that will encourage the regeneration of native species, conserve and diversify habitats for fauna and pollinators, and combat invasive alien species."

Extract from Holcim France's website

"Holcim Granulats (France) integrates environmental and in particular biodiversity conservation into the management of its sites; this is carried out at all its quarries from the moment operations begin until the sites have been completely rehabilitated.

This involves favouring biodiversity through exemplary rehabilitation processes, which are carried out during the operation of the sites, creating environments that favour the coexistence of wildlife species with the quarry, and informing the general public and raising their awareness on biodiversity issues."

Extract from EDF's 2012 reference document

"**Électricité Réseau Distribution France (ERDF):** Continuation of an action plan to save Bonelli's eagle.

UTE Norte Fluminense (Brazil): Reinforcement of management tools for the Macaé de Cima environmental protection zone and the Três Picos State Park to preserve the primary Atlantic forest, in partnership with the State Institute for the Environment (environmental offset programme).

EDF Énergies Nouvelles: Continuation of the biodiversity preservation programme on the photovoltaic site at Toul (Meurthe-et-Moselle), with the installation of shelters to protect bats, the integration of landscaped woods and hedges, and the planting of melliferous flower species for bees.
(…)

6.6.2.6 Preserving biodiversity
(…)
Moreover, the Group is pursuing a policy of biodiversity partnerships to encourage exchanges of technical knowledge, support projects led by associations and implement practical technical projects. Priority is given to projects with EDF's longstanding NGO partners: the Bird Protection League (Ligue pour la protection des oiseaux, LPO), the Coastal Protection Agency (Conservatoire du littoral), French Nature Reserves (Réserves naturelles de France), the IUCN French Committee, and the National Federation for Fishing in France (Fédération nationale pour la pêche en France) (see Section 6.6.3.2.3 ("New orientation for the sustainable development partnership strategy").

Extract of the 2012 reference document from Ciments Français (including GSM, Ciments Calcia and Unibéton)

"The annual celebration of World Environment Day, supported by the United Nations, was designed to increase understanding and awareness of biodiversity issues.

THE IUCN FRENCH COMMITTEE'S OPINION

OBSERVATION This subject of voluntary measures is currently the one best developed by companies: a large number of detailed measures are cited. The examples generally relate to:

- The companies' relations with nature conservation associations (contribution to the associations' work and the benefits of their expertise);
- The companies' participation in national studies and actions in favour of biodiversity;
- Voluntary actions carried out in the field in order to favour biodiversity locally (in particular the ecological management of sites);
- Raising the collaborators' awareness of biodiversity conservation issues.

MOVING FORWARD Companies should also cover their relations with entities in their value chain, in order to assess to what extent they commit to and manage to convince them to act in favour of biodiversity.

RECOMMENDATION 9

Publish information on the results obtained on biodiversity

The description of the measures taken by companies in favour of biodiversity (Recommendations 7 and 8) does not take the results of these measures on biodiversity into account: indeed, the implementation of all these measures does not guarantee that they will actually improve biodiversity on the ground.
Companies that own and / or manage land are thus advised to provide information on their capacity to maintain the status of biodiversity that existed prior to their starting operations on this land, or information that shows that they have improved the status of biodiversity. It is therefore important that these companies:
> Have tools that can be used to assess the ecological value of their sites at any given time;
> Monitor the evolution of this ecological value over time;
> Publish information on the results of this assessment.

Even if the evolution of biodiversity depends on many factors, these tools should constitute a means of measuring the results of the process in favour of biodiversity on the ground.
The benefit for companies of using these tools is twofold: they can be simply designed to provide information that can be disclosed each year to their stakeholders in the company's reporting documents, and they can also be used from a managerial perspective to monitor the performance of sites and serve as a decision-making tool.

METHODOLOGICAL ADVICE AND TOOLS THAT CAN BE USED

Each company should develop its own methodology for evaluating and comparing the ecological richness of its sites over time. Nevertheless, these tools should be based on two main areas:
> Assign each site a rating corresponding to its ecological value, ranging from the "weakest" to the "most exceptional". One or more dimensions of biodiversity can be assessed: interactions between species, the level of threat or protection of the species, the services provided by the ecosystems;
> Observe the evolution in the ratings for each site.

Companies already have internal management tools like this (the Environmental Quality Index [EQI] developed by SITA a subsidiary of SUEZ ENVIRONNEMENT, the Long-term Biodiversity Index [LBI] developed by Lafarge, the Programme Roselière [Reedbed Programme] developed by several quarries[143] or the Biodiversity Indicator and Reporting System [BIRS] tool, which is being developed by Holcim), which can help provide guidance to other initiatives.

PROPOSALS FOR INFORMATION OR INDICATORS TO PUBLISH

- Number or percentage of sites in which the ecological richness is progressing
- Number or percentage of sites in which the ecological richness is stable
- Number or percentage of sites in which the ecological richness is regressing

143 The Programme Roselière was launched in 2006 by the Loing Valley and Fontainebleau Massif Naturalists' Association (Association des naturalistes de la vallée du Loing et du massif de Fontainebleau, ANVL), in partnership with the Île-de-France French National Union of Quarrying and Materials Industries (Union nationale des industries de carrières et matériaux de construction Île-de-France, UNICEM) and the French National Union of Aggregate Producers (Union nationale des producteurs de granulats, UNPG).

INFORMATION PUBLISHED TODAY BY COMPANIES

Extract from Lafarge's 2010 Biodiversity Review

Assessing the impact of rehabilitations

Having defined the criteria for ecological studies of quarries before extraction, Lafarge and WWF are in the process of setting up a system for assessing biodiversity in rehabilitated quarries. The Long-term Biodiversity Index (LBI) will make it possible to measure what effects the quarry rehabilitation process has on the development of plant and animal species. "The LBI is the first measurement tool for assessing our impact on biodiversity", says Pierre de Prémare. "Its purpose is to help quarry operations and redevelopment managers to routinely estimate the effectiveness of their biodiversity preservation work. At the end of the assessment, the site is given a rating on a scale ranging from one (low ecological value) to seven (exceptional ecological value). The number of species recorded on the site and their rarity are both taken into account."

This index, which is still at an experimental stage, has been calculated for around ten quarries. It was applied for the first time in Mannersdorf under the supervision of WWF Austria. In France, studies have been conducted at several sites including the alluvial quarry at Saint-Ouen on the banks of the river Loire. Its LBI indicates that it is of slightly more ecological interest than surrounding sites. (…).

THE IUCN FRENCH COMMITTEE'S OPINION

OBSERVATION Several companies have tools designed to evaluate the ecological quality of their sites. However, these indicators are not used for reporting because they were originally created for internal management purposes and no company has used them for all its sites (*cf.*: Lafarge's description of its indicator).

MOVING FORWARD As indicated above, the results of the assessments of the ecological quality of the sites could be included in the reporting documents. They would make it possible to show the companies' stakeholders the long-term effectiveness of the actions they carry out in favour of biodiversity.

APPENDICES

Sign at a quarry site operated by Lafarge at Anneville-Ambourville (Seine-Maritime) © E. Russier-Decoster

APPENDIX I: THE QUALITY CRITERIA OF AN INDICATOR

Numerous initiatives deal with the issue of creating indicators. Each of these initiatives is accompanied by its own set of quality criteria, aimed at helping the users of the indicators establish the latter. Despite the apparent diversity of the quality criteria, it is possible to single out five common denominators in the criteria generally adopted or recommended:

SIMPLE

Other keywords: readability, presentation, educational, easy to use)

- EMAS[144]:

"*The indicators shall be understandable and unambiguous*".

- GRI[145]:

"*Clarity: The organization should make information available in a manner that is understandable and accessible to stakeholders using the report.*"

- UNCTAD[146]:

"*The information (...) must be understandable to the reader. This means that the manner of presentation has to be in keeping with the knowledge and experience of users (…). Relevance takes priority over understandability, but the two concepts should not be seen as mutually exclusive.*"

- Agenda 21[147]:

"*Clarity and simplicity: can the indicator be presented to the public in a simple and instructive manner that is universally understandable?*"

- OECD[148]:

"*An environmental indicator should be simple, easy to interpret and able to show trends over time*".

- BIP[149]:

"*Easily understandable – a) conceptually, how the measure relates to the purpose, b) in its presentation, and c) the interpretation of the data.*"

- SNB 2011-2020[150]:

"*A good compromise between simplicity and generality*".

RELEVANT

Other keywords: reliability, specificity, precision, reactivity, robustness, objectivity, acceptability, credibility, consensus, standards, accuracy

- GRI:

"*Reliability: The organization should gather, record, compile, analyse and disclose information and processes used in the preparation of a report in a way that they can be subject to examination and that establishes the quality and materiality of the information.*"

144 Quality criteria for indicators that should appear in a company's environmental statement that they wish to be EMAS registered.
145 GRI principles for determining the quality of the information published in sustainable development reporting
146 Criteria for the selection of UNCTAD corporate responsibility indicators
147 Criteria for the selection of indicators for Agenda 21 assessment in France
148 Criteria for the selection of OECD environmental indicators
149 Criteria proposed by BIP for an "effective indicator"
150 Qualities proposed for the SNB 2011-2020 choice of indicators

Accuracy: The reported information should be sufficiently accurate and detailed for stakeholders to assess the organization's performance.

- **EFFAS and DVFA[151]:**

"ESG information should be: consistent, transparent, quantified and adequately explained, provided as to which data has been approximated and which assumptions and methods were used as the basis for this approximation, or sources should be cited for such information.
ESG-KPIs must be accurate (i.e. free from significant errors), plausible and definitive, and not in contradiction with current measures, other company documentation or generally recognized economic facts."

- **UNCTAD:**

"Information has the quality of reliability when it is free from material error and bias, and when it gives a true, complete and balanced view of the actual situation. The information should:
> *Be faithful and representative of the actual situation in the business*
> *Be complete within the boundaries of what is relevant*
> *Be well-balanced on both positive and negative events*
> *Be presented in the right context*
> *Be neutral (free from bias)*
> *Allow for internal or external verification*
> *Enable comparison with underlying evidence."*

- **Agenda 21:**

"Pertinence: does the indicator actually reflect the result that is expected of the territorial strategy and the added value for sustainable development that is sought?
Does it reflect changes that it was meant to measure?
Responsiveness or sensitivity: does the indicator detect small changes in the system over time? Is it responsive to the phenomenon that we want to monitor?
Reliability: is the same result obtained if the same indicator is measured two or three times under the same circumstances? Would two researchers reach the same conclusions?"

- **OECD:**

"Analytical soundness – An environmental indicator should:
> *Be theoretically well founded in technical and scientific terms*
> *Be based on international standards and international consensus about its validity; lend itself to being linked to economic models, forecasting and information systems."*

- **European Environment Agency (EEA)[152]:**

"Routinely collected data: indicators must be based on routinely collected, clearly defined, verifiable and scientifically acceptable data."

- **BIP:**

"Scientifically valid
There is an accepted theory of the relationship between the indicator and its purpose, with agreement that change in the indicator does indicate change in the issue of concern; the data used is reliable and verifiable."

- **SNB 2011-2020:**

"Connected to the phenomenon by a proven casual link, and not simply correlated
Sensitive: it varies significantly when the monitored phenomenon varies
Robust: it always evolves in the same directly as the phenomenon it follows and, if possible, with a proportional intensity"

- **FRB[153]:**

"Reliability: the indicator always changes in the same way as the phenomenon it describes
> *Precision: an indicator is precise when it measures the phenomenon it is supposed to describe with a low margin of error or uncertainty. The obtaining of a high level of precision is generally associated with the use of proven tools and methods, tested by the low variability of the measurement when it is repeated in similar conditions (low interval of confidence).*
> *Sensitivity / responsiveness: the value of the indicators changes proportionally with the changes in the described phenomenon. It is the indicator's capacity to differentiate between situations that are really different. For ratings, the values change when those of one or more of their components change. A sensitive indicator rapidly detects a significant change. It is adapted to the relevant degree of detection for the desired objectives. This requires the each measure to be carried out at a specific pace and on a specific spatial scale. The sensitivity of the ratings is often assessed by sensitivity tests, where the simple indicators and / or the weighting of these indicators are varied, and the impact on the result is measured. This can lead to one indicator being eliminated if it does not have sufficient influence on the result or does not weight it enough.*
> *Robustness: fragility in the face of bias: the measurement or calculation of the indicator / rating remains reliable even when the conditions vary. The indicator / rating cannot be affected by bias or variables that are not taken into account in its calculation. The value of a simple, robust indicator is not very greatly influenced or not influenced at all by imprecise measures or errors, the variability of measurement tools, missing data or confounding variables. This may make it necessary to test the normality of data, the impact of missing data, the choice of weighting, the choice of aggregation methods, etc."*

151 Principles with regard to non-financial key performance indicators by EFFAS and DVFA
152 Criteria adopted by the European Environment Agency for the selection of biodiversity indicators.
153 Properties of the indicators/ratings identified by FRB to assess the 27 indicators of the SNB.

EASY TO MEASURE

Other keywords: low cost, financial accessibility, technical feasibility, controlled data, measurability, accessibility, reliable procedures, clear methodology, standardized methods)

• Agenda 21:
"*Technical feasibility: can the indicator be calculated on the basis of the available time series data, adequate quality data (...)?*
Financial accessibility: does the indicator only require data which are accessible at a 'reasonable cost'?"

• OECD:
"*Measurability – The data required to support the indicator should be: - readily available or made available at a reasonable cost/benefit ratio; adequately documented and or known quality; updated at regular intervals in accordance with reliable procedures*".

• EEA:
"*Well-founded methodology: the methodology should be clear, well defined and relatively simple indicators should be measurable in an accurate and affordable way, and constitute part of a sustainable monitoring system data should be collected using standard methods with known accuracy and precision, using determinable baselines and targets for the assessment of improvements and declines*".

• BIP:
"*Based on available data – so that the indicator can be produced over time.*"

• SNB 2011-2020:
"*Easy to communicate (technically, financially, politically, etc.).*"

CONSISTENT

With indicators on other scales (other keywords: can be aggregated, lower scale, higher scale, level of objectives)

• OECD:
"*An environmental indicator should: provide a basis for international comparisons; be either national in scope or applicable to regional environmental issues of national significance; have a threshold or reference value against which to compare it, so that users can assess the significance of the values associated with it*".

• EEA:
"*Aggregation and flexibility: aggregation should be facilitated on a range of scales. Country comparison: as far as possible, it should be possible to make valid comparisons between countries using the indicators selected. Progress towards 2010: indicators should show clear progress towards the 2010 target*"..

OPERATIONAL

Other keywords: public policies, evaluation of progress, understanding of the issues, political relevance, policy levers

• EMAS
"*The indicators allow for a year on year comparison to assess the development of the environmental performance of the organization. They allow for comparison with sector, national or regional benchmarks as appropriate. They allow for comparison with regulatory requirements, as appropriate.*"

• GRI:
"Timeliness: The organization should report on a regular schedule so that information is available in time for stakeholders to make informed decisions."

• EFFAS and DVFA:
"*Information is communicated based on relevance for the recipients and meets the expectations of investors and financial analysts with respect to scope, detail, frequency and completeness*".

• UNCTAD:
"*(…) information is relevant when it influences the decisions of users in the following manner: by helping them evaluate past, present or future events (…) or by confirming or correcting their past evaluations*".

• Agenda 21:
"*Association of ways to take action: does the indicator measures changes that all local authorities have the capacity to implement? (by 'capacity to implement' we mean not just the fields of competence, but also other resources such as support, incitements, promotion, etc.).*"

• EEA:
"*Policy relevant and meaningful: indicators should send a clear message and provide information at a level appropriate for policy and management decision-making by assessing changes in the status of biodiversity (or pressures, responses, use or capacity), related to baselines and agreed policy targets if possible*".

• BIP:
"*Relevant to the user's needs. Used for measuring progress, early-warning of problems, understanding an issue, reporting, awareness-raising, etc.*".

APPENDIX II: INDICATORS DEVELOPED BY THE "BIODIVERSITY INDICATOR PARTNERSHIP" FOR ASSESSING PROGRESS TOWARDS THE ACHIEVEMENT OF THE CBD'S 2010 BIODIVERSITY TARGET[154]

FOCAL AREA	HEADLINE INDICATORS	INDICATORS
1 Status and trends of the components of biological diversity	1 Trends in extent of selected biomes, ecosystems and habitats	1 Extent of forests and types of forest
		2 Extent of various different habitats
	2 Trends in the abundance and distribution of selected species	3 Living Planet Index
		4 Global Wild Bird Index
		5 Waterbird population status index
	3 Coverage of protected areas	6 Coverage of protected areas
		7 Protected area overlays with biodiversity
		8 Management effectiveness of protected areas
	4 Change in the status of threatened species	9 Red List Index and the sampled Red List Index
	5 Trends in genetic diversity	10 Ex situ crop collections
		11 Genetic diversity of terrestrial domesticated species
2 Sustainable use	6 Areas under sustainable management	12 Area of forest under sustainable management: certification
		13 Area of forest under sustainable management: degradation and deforestation
		14 Area of agricultural ecosystems under sustainable management
	7 Proportion of products derived from sustainable sources	15 Proportion of fish stocks within safe biological limits
		16 Status of species in trade
		17 Wild Commodities Index
	8 Ecological footprint and related concepts	18 Ecological footprint and related concepts
3 Threats to biodiversity	9 Nitrogen deposition	19 Nitrogen deposition
	10 Invasive alien species	20 Trends in invasive alien species

154 Source: Biodiversity Indicators Partnership, 2010. *2010 BIP Biodiversity Indicators.*

4 Ecosystem integrity and ecosystem goods and services	**11** Marine Trophic Index	**21** Marine Trophic Index
	12 Water quality of freshwater ecosystems	**22** Water quality index for biodiversity
	13 Connectivity / fragmentation of ecosystems	**23** Forest fragmentation
		24 River fragmentation and flow regulation
	14 Health and well being of communities	**25** Health and well being of communities directly dependent on ecosystems goods and services
	15 Biodiversity for food and medicine	**26** Nutritional status of biodiversity
		27 Biodiversity for food and medicine
5 Status of traditional knowledge, innovations and practices	**16** Status and trends of linguistic diversity and numbers of speakers of indigenous languages	**28** Status and trends of linguistic diversity and numbers of speakers of indigenous languages
6 Status of access and benefit-sharing	**17** To be determined	
7 Status of resource transfers	**18** Official development assistance provided in support of the Convention	**29** Official development assistance provided in support of the Convention

Wetland on the quarry operated by Ciments Calcia at Bussac (Dordogne) © E. Russier-Decoster

APPENDIX III: INDICATORS OF THE MONITORING OF THE STRATEGIC PLAN FOR BIODIVERSITY 2011-2020 OF THE CDB[155]

POLICY QUESTION	HEADLINE INDICATOR	INDICATOR SUB-TOPICS	OPERATIONAL INDICATORS :
			Priority and ready for use globally (A)
			Priority to develop at global level (B)
			For consideration at sub-global level (C)
State : **How is the state of biodiversity changing?**	**1** Trends in extent, condition and vulnerability of ecosystems, biomes and habitats	**1** Trends in degradation of natural habitats	**1** Trends in proportion of degraded/threatened habitats
			2 Extinction risk trends of habitat dependent species in each major habitat type
		2 Trends in extent of natural habitats	**3** Trends in extent of selected biomes, ecosystems and habitats
			4 Trends in condition and vulnerability of ecosystems
			5 Trends in the proportion of natural habitats converted
		3 Trends in fragmentation of natural habitats	**6** Trends in fragmentation of natural habitats
	2 Trends in abundance, distribution and extinction risk of species	**4** Trends in abundance, distribution and extinction risk of species	**7** Trends in abundance of selected species
			8 Trends in extinction risk of species
			9 Trends in distribution of selected species
	3 Trends in genetic diversity of species	**5** Trends in genetic diversity of species	**10** Trends in genetic diversity of cultivated plants, and farmed and domesticated animals and their wild relatives
			11 Trends in genetic diversity of selected species
Pressures and underlying causes : **Why are we losing biodiversity?**	**4** Trends in pressures from unsustainable agriculture, forestry, fisheries and aquaculture	**6** Trends in degradation of natural habitats	**12** Trends in primary productivity
			13 Trends in proportion of land affected by desertification

155 Source: UNEP, 2012. Decision adopted by the Conference Of the Parties to the Convention on Biological Diversity at its eleventh meeting. Monitoring progress in implementation of the Strategic Plan for Biodiversity 2011-2020 and the Aichi Biodiversity Targets

POLICY QUESTION	HEADLINE INDICATOR	INDICATOR SUB-TOPICS	OPERATIONAL INDICATORS :	Priority and ready for use globally (A) / Priority to develop at global level (B) / For consideration at sub-global level (C)
Pressures and underlying causes : **Why are we losing biodiversity?**	**4** Trends in pressures from unsustainable agriculture, forestry, fisheries and aquaculture	**7** Trends in sustainability of agriculture, forestry & aquaculture	**14** Trends in population of forest and agriculture dependent species in production systems	B
			15 Trends in production per input	C
		8 Trends in sustainable consumption and production of goods and services	**16** Trends in Ecological Footprint and/or related concepts	A
			17 Trends in population and extinction risk of utilized species, including species in trade	A
			18 Ecological limits assessed in terms of sustainable production and consumption	C
			19 Trends in proportion of products derived from sustainable sources	C
		9 Trends in sustainable utilisation of target and bycatch populations	**20** Trends in catch per unit effort	C
			21 Trends in fishing effort capacity	C
			22 Trends in extinction risk of target and bycatch aquatic species	A
			23 Trends in population of target and bycatch aquatic species	A
			24 Trends in proportion of utilized stocks outside safe biological limits	A
			25 Trends in area, frequency, and/or intensity of destructive fishing practices	C
	5 Trends in pressures from habitat conversion, pollution, invasive species, climate change, overexploitation and underlying drivers	**10** Trends in degradation of natural habitats	**26** Population trends of habitat dependent species in each major habitat type	A
			27 Trends in biodiversity of cities	C
		11 Trends in impact of invasive alien species	**28** Trends in the impact of invasive alien species on extinction risk trends	A
			29 Trends in the economic impacts of selected invasive alien species	B
		12 Trends in integrity of ecosystems vulnerable to climate change	**30** Extinction risk trends of coral and reef fish	A
			31 Trends in climate change impacts on extinction risk	B
			32 Trends in coral reef condition	B
			33 Trends in extent, and rate of shifts of boundaries, of vulnerable ecosystems	C

Pressures and underlying causes : **Why are we losing biodiversity?**	**5** Trends in pressures from habitat conversion, pollution, invasive species, climate change, overexploitation and underlying drivers		**34** Trends in climatic impacts on community composition
			35 Trends in climatic impacts on population trends
		13 Trends in number/ extent of invasive alien species	**36** Trends in number of invasive alien species
			37 Trends in incidence of wildlife diseases caused by invasive alien species
		14 Trends in pollutant releases to the environment	**38** Trends in incidence of hypoxic zones and algal blooms
			39 Trends in water quality in aquatic ecosystems
			40 Impact of pollution on extinction risk trends
			41 Trends in pollution deposition rate
			42 Trends in sediment transfer rates
			43 Trend in emission to the environment of pollutants relevant for biodiversity
			44 Trend in levels of contaminants in wildlife
			45 Trends in nitrogen footprint of consumption activities
			46 Trends in ozone levels in natural ecosystems
			47 Trends in proportion of wastewater discharged after treatment
			48 Trends in UV-radiation levels
Benefits : **What are the implications of biodiversity loss ?**	**6** Trends in distribution, condition and sustainability of ecosystem services for equitable human well-being	**15** Trends in benefits that humans derive from biodiversity and ecosystem services	**49** Trends in benefits that humans derive from selected ecosystem services
			50 Trends in delivery of multiple ecosystem services
			51 Trends in economic and non-economic values value of selected ecosystem services
		16 Trends in consequences of benefits derived from ecosystem services for human wellbeing	**52** Trends in proportion of the population using improved water services
			53 Trends in proportion of total freshwater resources used
			54 Trends in health and wellbeing of communities who depend directly on local ecosystem goods and services
			55 Trends in human and economic losses due to water or natural resource related disasters
			56 Trends in nutritional contribution of biodiversity: Food composition
			57 Trends in incidence of emerging zoonotic diseases
			58 Trends in inclusive wealth

POLICY QUESTION	HEADLINE INDICATOR	INDICATOR SUB-TOPICS	OPERATIONAL INDICATORS : Priority and ready for use globally (A) / Priority to develop at global level (B) / For consideration at sub-global level (C)
Benefits : **What are the implications of biodiversity loss ?**	**6** Trends in distribution, condition and sustainability of ecosystem services for equitable human well-being	**16** Trends in consequences of benefits derived from ecosystem services for human wellbeing	**59** Trends in nutritional contribution of biodiversity: Food consumption
			60 Trends in prevalence of underweight children under-five years of age
			61 Trends in natural resource conflicts
			62 Trends in the condition of selected ecosystem services
		17 Trends in natural capital that delivers multiple ecosystem services	**63** Population trends and extinction risk trends of species that provide ecosystem services
			64 Status and trends in extent and condition of habitats that provide carbon storage
			65 Trends in biocapacity
	7 Trends in awareness, attitudes and public engagement in support of biological diversity and ecosystem services	**18** Trends in awareness, attitudes and public engagement in support of biological diversity	**66** Trends in awareness and attitudes to biodiversity
			67 Trends in public engagement with biodiversity
		19 Trends in sustainable consumption and production of goods and services	**68** Trends in communication programmes and actions promoting social corporate responsibility
Responses : **What do we do about biodiversity loss?**	**8** Trends in integration of biodiversity, ecosystem services and benefits sharing into planning, policy formulation and implementation and incentives	**20** Trends in degree to which traditional knowledge and practices are fully respected in implementation of the Strategic Plan.	**69** Trends in land-use change and land tenure in the traditional territories of indigenous and local communities
			70 Trends in the practice of traditional occupations
		21 Trends in genetic diversity of species	**71** Trends in number of effective policy mechanisms implemented to reduce genetic erosion and safeguard genetic diversity related to plant and animal genetic resources
		22 Trends in impact of invasive alien species	**72** Trends in invasive alien species pathways management
		23 Trends in implementation of National Biodiversity Strategy and Action Plans (NBSAPs)	**73** Trends in implementation of National Biodiversity Strategies and Action Plans, including development, comprehensiveness, adoption and implementation

Responses : **What do we do about biodiversity loss?**	**8** Trends in integration of biodiversity, ecosystem services and benefits sharing into planning, policy formulation and implementation and incentives	**24** Trends in incorporation of biodiversity and ecosystem services into incentive systems	**74** Trends in the number and value of incentives, including subsidies, harmful to biodiversity, removed, reformed or phased out
			75 Trends in identification, assessment and establishment and strengthening of incentives that reward positive contribution to biodiversity and ecosystem services penalize adverse impacts
		25 Trends in knowledge of values of biodiversity and ecosystem services incl. Economic, social and spiritual	**76** Trends in number of countries that have assessed values of biodiversity, in accordance with the Convention
		26 Trends in proportion of production landscapes sustainably managed	**77** Trends in area of forest, agricultural and aquaculture ecosystems under sustainable management
		27 Trends in reflection of biodiversity and ecosystem services in policy decisions, planning and reporting processes	**78** Trends in number of countries incorporating natural resource, biodiversity, and ecosystem service values into national accounting systems
			79 Trends in guidelines and applications of economic appraisal tools
			80 Trends in integration of biodiversity and ecosystem service values into integrated in sectoral and development policies
			81 Trends in policies considering biodiversity and ecosystem service in environmental impact assessment and strategic environmental assessment
		28 Trends in responses to invasive alien species	**82** Trends in policy responses, legislation and management plans to control and prevent spread of invasive alien species
		29 Trends in sustainable consumption and production of goods and services	**83** Trends in extent to which biodiversity and ecosystem service values are incorporated into organizational accounting and reporting
		30 Trends in sustainable utilisation of target and bycatch populations	**84** Trends in proportion of depleted target and bycatch species with recovery plans
	9 Trends in access and equity of benefit sharing of genetic resources	**31** Trends in access and equity of benefit sharing of genetic resources	**85** ABS indicator to be specified through the ABS process

POLICY QUESTION	HEADLINE INDICATOR	INDICATOR SUB-TOPICS	OPERATIONAL INDICATORS : Priority and ready for use globally (A) / Priority to develop at global level (B) / For consideration at sub-global level (C)
Responses : **What do we do about biodiversity loss?**	**10** Trends in accessibility of scientific/technical/traditional knowledge and its application	**32** Trends in degree to which traditional knowledge and practices are fully respected in implementation of the Strategic Plan.	**86** Trends in degree to which traditional knowledge and practices are respected through: full integration, participation and safeguards in national implementation of the Strategic Plan (B)
			87 Trends of linguistic diversity and numbers of speakers of indigenous languages (B)
		33 Trends in improvement, sharing, transfer and application of knowledge	**88** Trends in coverage of comprehensive policy-relevant sub-global assessments including related capacity building and knowledge transfer, plus trends in uptake into policy (B)
			89 Number of maintained species inventories being used to implement the Convention (C)
	11 Trends in coverage, condition, representativeness and effectiveness of protected areas and other area-based approaches	**34** Trends in area of sustainably used ecosystems	**90** Trends in extent of marine protected areas, coverage of key biodiversity areas and management effectiveness (A)
		35 Trends in natural capital that delivers multiple ecosystem services	**91** Trends in area of degraded ecosystems restored or being restored (B)
			92 Population trends of forest-dependent species in forests under restoration (C)
		36 Trends in protected areas coverage, representation and condition	**93** Trends in coverage of protected areas (A)
			94 Trends in protected area condition and/or management effectiveness including more equitable management (A)
			95 Trends in representative coverage of protected areas and other area based approaches, including sites of particular importance for biodiversity, and of terrestrial, marine and inland water systems (A)
			96 Trends in the connectivity of protected and other area based approaches integrated into land and sea scapes (B)
			97 Trends in the delivery of ecosystem services and equitable benefits from protected areas (C)
	12 Trends in mobilisation of financial resources	**37** Trends in financial flows of funding for implementation of the Strategic Plan	**98** Indicators agreed in decision X/3 (B)

APPENDIX IV: INDICATORS DEVELOPED BY THE EUROPEAN SEBI PROGRAMME

FOCAL AREAS	INDICATORS
1. Status and trends of the components of biological diversity	**1.** Abundance and distribution of selected species (birds, butterflies, etc.)
	2. Change in the status of threatened species
	3. Change in the status of protected species of European interest
	4. Trends in ecosystem coverage
	5. Trends in habitats of European interest
	6. Trends in genetic diversity of domesticated animals (livestock, crops)
	7. Coverage of nationally designated protected areas
	8. Coverage of Natura 2000 sites
2. Threats to biodiversity	**9.** Critical load exceedance for nitrogen
	10. Trends in invasive alien species in Europe
	11. Impact of climate change on species sensitive to variations in temperature
3. Ecosystem integrity and ecosystem goods and services	**12.** Marine Trophic Index of European seas
	13. Fragmentation of natural and semi-natural areas
	14. Fragmentation of river systems
	15. Nutrients in transitional, coastal and marine waters
	16. Freshwater quality
4. Sustainable use	**17.** Area of forest under sustainable management
	18. Quantity of deadwood in forests
	19. Nitrogen balance in agriculture
	20. Areas under management practices potentially supporting biodiversity
	21. Status of European commercial fish stocks
	22. Effluent water quality from finfish farms
	23. Ecological footprint of European countries on the rest of the world
5. Others	**24.** Patent applications based on genetic resources
	25. Financing biodiversity management
	26. Public awareness and participation

APPENDIX V: THE FRENCH BIODIVERSITY OBSERVATORY'S INDICATORS FOR THE FRENCH BIODIVERSITY STRATEGY (SNB) 2011-2020

	INDICATORS	DETAIL
1	Official international development assistance with regard to biodiversity	French national expenditure for official international development assistance with regard to biodiversity
2	Marine protected areas with a management document	Proportion, in surface area, of marine protected areas over three years old with a validated management document (DOCOB or management plan)
3	Coverage by impervious surfaces in French overseas departments and territories	Net annual coverage by impervious surfaces in French overseas departments and territories
4	Coverage by impervious surfaces in mainland France	Net annual coverage by impervious surfaces in mainland France
5	Level of knowledge of outstanding habitats	Proportion of parameters mentioned as being "unknown" in the assessment of the conservation status of habitats of community interest
6	Level of knowledge of the threat levels for different species	Proportion of species assessed on the IUCN French Committee-MNHN Red Lists, which are data deficient
7	French national expenditure for biodiversity	French national expenditure for biodiversity and landscape conservation
8	Displacement of species linked to climate change	Trends in the average heat index in bird communities in response to climate change
9	Structural diversity of forests in mainland France	Proportion of forests in mainland France with several superimposed tree layers
10	Threatened species included in a French national action plan	Threatened species included in a French national action plan
11	Heritage species considered as being well represented in protected areas	Proportion of the Strategy for the Creation of Protected Areas (Stratégie de creation d'aires protégées, SCAP) key species for which mainland France's network of protected areas is considered satisfactory
12	Conservation status of natural habitats	Proportion of habitats of community interest assessed, which have a favourable conservation status
13	Status of the most characteristic habitats in France on a European level	Proportion of habitats of community interest for which France has a higher responsibility than average and that have a favourable conservation status
14	Trends in the health of coral reefs	Trends in the percentage of reefs covered in live coral
15	Trends in the status of wetlands	Proportion of wetlands within a national sample, in which the trend is stable or improving in terms of the extent and the status of the wetlands it contains
16	Changes in the involvement of citizens in participatory science linked to biodiversity	Changes in the number of active participants in participatory science initiatives linked to biodiversity
17	Soil microbial biomass trends in mainland France	Average soil microbial biomass trends in mainland France

18	Changes in the consumption of plant protection products	Changes in the number of unit doses of plant protection products used
19	Trend in the participation in educational initiatives to raise public awareness of biodiversity	Changes in the number of experiences the public has in nature, in contact with the living world, within the context of a series of educational initiatives
20	Trend in the pollution of watercourses	Changes in pollution levels in watercourses by macro-pollutants of urban, industrial and agricultural origin in mainland France
21	Trends in the permanent grasslands considered as being ecologically functional	Changes in the extent of the permanent grasslands in France, which are managed extensively
22	Trend in agroecological infrastructures that support biodiversity	Annual trend in the average value of the proportion of agroecological infrastructures in the Utilized Agricultural Area (UAA) of small agricultural regions
23	Trend in populations of common specialist bird species	Changes in the abundance of common specialist bird species in metropolitan France
24	Trend in bat populations	Changes in the abundance of bats in mainland France
25	Trend in the number of marine turtle clutches in French overseas departments and territories	Changes in the number of marine turtle clutches in French overseas departments and territories
26	Trend in the volume of data available on biodiversity	Annual growth rate in the amount of elementary data accessible via the nature and landscapes information system platform
27	Trend in mainland France for the volume of timber particularly favourable for biodiversity	Proportion of forest ecoregions in which the volume of deadwood and very large trees is progressing
28	Completeness of the list of known species in French overseas departments and territories	Proportion of taxonomic groups for which the level of completeness of the list of known species in French overseas departments and territories is judged to be satisfactory
29	Fragmentation of watercourses	Density of obstacles preventing the natural flow of watercourses in mainland France
30	Fragmentation des milieux naturels	Effective mesh size of natural spaces in metropolitan France
31	Heterogeneity of species communities	Trend in the average community specialization index (CSI) in different groups (birds, Orthoptera, etc.) with regard to habitats
32	Importance attached by the French to biodiversity issues	Proportion of the French population that considers the disappearance of certain plant or animal species to be two of the most worrying issues linked to the degradation of the environment
33	Level of knowledge of the distribution of marine species	Proportion of valid marine species listed in the French taxonomic register, TAXREF, which appear at least once in the French National Inventory of Natural Heritage (INPN)
34	Level of knowledge of the distribution of species in mainland France	Proportion of valid species in mainland France listed in the French taxonomic register, TAXREF, which appear at least once in the French National Inventory of Natural Heritage (INPN)

	INDICATORS	DETAIL
35	Number of the species in French overseas departments and territories, which are among the most invasive in the world	Number of species present on at least one of the French overseas departments and territories, which are among the list of 100 species considered by IUCN to be the most invasive in the world
36	Number of endemic species in France	Number of endemic and subendemic species in mainland France and French overseas departments and territories
37	Number of endemic species in French overseas departments and territories	Number of endemic and subendemic species in French overseas departments and territories
38	Number of ecologically functional habitats	Proportion of habitats of community interests whose structures and functions have a good conservation status
39	Proportion of French natural areas on a European scale	Proportion of the surface area occupied by natural environments in France compared with surface area of natural environments in the EU-27
40	Proportion of the French overseas departments occupied by ecosystems with low levels of anthropization	Proportion of the French overseas departments occupied by ecosystems with low levels of anthropization
41	Proportion of mainland France occupied by ecosystems with low levels of anthropization	Proportion of mainland France occupied by ecosystems with low levels of anthropization
42	Main natural environments in mainland France destroyed through coverage by impervious surfaces	Surface area of main type of natural environment in mainland France destroyed through coverage by impervious surfaces
43	Main natural environments in French overseas departments and territories destroyed through coverage by impervious surfaces	Surface area of main type of natural environment in French overseas departments and territories destroyed through coverage by impervious surfaces
44	Proportion of species in mainland France listed as extinct or threatened in the Red Lists	Proportion of species list in the extinct or threatened categories of the IUCN-MNHN Red Lists for mainland France in comparison with the total number of species assessed
45	Proportion of species in French overseas departments and territories listed as extinct or threatened in the Red Lists	Proportion of species list in the extinct or threatened categories of the IUCN Red Lists for French overseas departments and territories in comparison with the total number of species assessed
46	Ecological quality of stormwater	Proportion of rivers, lakes, ponds, lagoons, estuaries and coastal seas with good ecological status
47	France's international responsibility for the most original species	Number of French species of amphibians and mammals on the Evolutionarily Distinct and Globally Endangered (EDGE) global lists
48	Surface areas of natural habitats in good condition	Proportion of habitats of community interest in mainland France assessed, which have a favourable conservation status, weighted by the surface area of the habitats
49	Surfaces areas of terrestrial protected areas in mainland France	Proportion of the terrestrial surface of mainland France classified as protected areas (high level of protection)
50	Surfaces areas of terrestrial protected areas in French departments and territories	Proportion of the terrestrial surface of French overseas departments and territories classified as protected areas (high level of protection)
51	Area covered by a land use development plan that includes biodiversity issues	Proportion of France covered by a comprehensive zoning and development plan that includes biodiversity issues ("SCOT Grenelle")

APPENDIX VI: CORRESPONDANCES BETWEEN THE TARGETS OF THE FRENCH AND EUROPEAN STRATEGIES FOR 2020 AND THE AICHI TARGETS

	THE 20 AICHI BIODIVERSITY TARGETS, INCLUDED IN THE CBD STRATEGIC PLAN FOR BIODIVERSITY 2011-2020
1	People are more aware of the values of biodiversity
2	The values of biodiversity are integrated
3	Financial incentives are reformed
4	Sustainable consumption and production plans are implemented
5	Habitat loss is brought close to zero or at least halved
6	Fish and invertebrate stocks and aquatic plants are managed and harvested sustainably and legally
7	Areas under agriculture, aquaculture and forestry are managed sustainably
8	Pollution is reduced
9	Invasive alien species are controlled or eradicated
10	The pressure exerted on ecosystems is reduced
11	Improvements and increase in protected area
12	The extinction of known threatened species is prevented
13	Genetic diversity is preserved
14	Ecosystems and essential services are safeguarded
15	Ecosystems are restored and their resilience enhanced
16	The Nagoya Protocol is in force and operational
17	The national strategies and action plans are adopted as general policy instruments
18	Traditional knowledge is respected
19	Knowledge is improved, shared and applied
20	Financial resources from all sources are increased

	THE 20 TARGETS OF THE FRENCH BIODIVERSITY STRATEGY 2011-2020:	Correspondence with the Aichi Biodiversity Targets
1	Foster, enrich and share a nature-oriented culture	1
2	Reinforce mobilization and citizen initiatives	-
3	Turn biodiversity into a positive issue for decision-makers	2
4	Preserve species and their diversity	12, 13
5	Build a green infrastructure including a coherent network of protected areas	11
6	Preserve and restore ecosystems and their functioning	11, 14, 15

7	Include preservation of biodiversity in economic decisions	2,3
8	Develop innovations for and through biodiversity	4,18,19
9	Develop and perpetuate resources for biodiversity	20
10	Turn biodiversity into a driver for development and for regional cooperation in the overseas entities	-
11	Control pressures on biodiversity	5, 8, 9, 10
12	Safeguard sustainability of biological resource use	4, 6, 7
13	Share equitably the benefits arising out of the utilization of biodiversity on all scales	16
14	Ensure consistency across public policies on all scales	3, 17
15	Ensure ecological efficiency of public and private policies and projects	-
16	Develop French and international solidarity among territories	-
17	Reinforce green diplomacy and international governance for biodiversity	-
18	Develop research, organize and perpetuate the production, analysis, sharing and dissemination of knowledge	18,19
19	Improve expertise in order to build capacity to anticipate and act, mobilizing all sources of knowledge	-
20	Develop and organize mainstreaming of biodiversity issues in all education and training courses	-

	THE 6 EU BIODIVERSITY TARGETS FOR 2020	Correspondence with the Aichi Biodiversity Targets
1	Fully implement the "Birds" and "Habitats" Directives	5,12
2	Maintain and restore ecosystems and their services	14,15
3	Increase the contribution of agriculture and forestry to maintaining and enhancing biodiversity	7
4	Ensure the sustainable use of fisheries resources	6
5	Help combat Invasive Alien Species	9
6	Help avert globally biodiversity loss	-

SNB Targets	Aichi Biodiversity Targets	EU Biodiversity Targets
1	1	
7	2	
2 ,7,14	3	
8,12	4	
11	5	1
12	6	4
12	7	3
11	8	
11	9	5
11	10	
5,6	11	
4	12	1
4	13	
6	14	2
6	15	2
13	16	
14	17	
8,18	18	
8,18	19	
9	20	

APPENDIX VII: TOPICS TO BE DEALT WITH IN BIODIVERSITY REPORTING RECOMMENDED BY INTERNATIONAL AND FRENCH REFERENCE FRAMEWORKS

TOPIC 1: THE COMPANY'S DEPENDENCIES ON BIODIVERSITY

• EMAS[156]:

"Data concerning the 'annual mass-flow of different materials used' (excluding energy carriers and water), expressed in tonnes;
The data concerning the 'total annual water consumption', expressed in m3".

GRI G4 (the indicators mentioned here nevertheless only refer to biodiversity indirectly and implicitly):

"EN1 - Materials used by weight or volume
EN3 - Energy consumption within the organization
EN4 - Energy consumption outside of the organization
EN8 - Total water withdrawal by source".

• GRI (Approach for reporting on ecosystem services):

"Different performance indicators for each ecosystem service, for example regarding usage (…).
An indicator can be either qualitative or quantitative.

A quantitative indicator requires a unit of measure to report upon. Several categories of ecosystem services (basically provisioning services) already benefit from known units of measure, which can help them be integrated into biodiversity reporting".

ECOSYSTEM SERVICES	POTENTIAL UNIT OF MEASUREMENT
Food	kg, litre, area planted in hectares
Fibre	kg, litre, area planted in hectares
Biomass fuel	kg, litre, area planted in hectares
Freshwater	Litre
Genetic resources	% of DNA diversity
Biochemicals	kg, litres, area planted in hectares
Recreation and tourism	Number of visitors or jobs nature-based or related to eco-tourism; revenue nature-based or from eco-tourism

• The TEEB for Business report:

"Chapter 3: Measuring and reporting biodiversity and ecosystem impacts and dependence."
"Business measurement of its impacts and dependence on biodiversity and ecosystems can serve both private and public interests."
"Effective management of BES requires measurement of business impacts on various components of biodiversity […] as well as business dependence on intangible biological processes […]."

• German reference framework[157]:

"Usage of natural resources: The company discloses the extent to which natural resources are used for the company's business activities (input and output of e.g. materials, water, soil, waste, energy, emission, land, biodiversity)".

156 The extract from EMAS comes from the list of data companies should provide in an environmental statement in order to be registered with EMAS (Article 4 of the EMAS Regulations).
157 German Council for Sustainable Development, 2011.

TOPIC 2: A COMPANY'S NEGATIVE IMPACTS ON BIODIVERSITY

• EMAS:

"A description of all the significant direct and indirect environmental aspects, which result in significant environmental impacts of the organization and an explanation of the impacts as related to these aspects.
The data concerning the 'total annual generation of waste', broken down by type, expressed in tonnes.
The data concerning the 'total annual generation of hazardous waste', expressedin kilograms or tonnes.
The data concerning the 'use of land', expressed in m2 of built-up area.

The data concerning the 'total annual emission of greenhouse gases', including at least emissions of CO2 CH4, N2O, HFC, PFCs and SF6, expressed in tonnes of CO2 equivalent.

The data concerning the 'total annual air emission' of other gases, including at least emissions of SO2, NOx and PM, are expressed in kilogrammes or tonnes".

• GRI G4:

"EN9 - Water sources significantly affected by withdrawal of water
EN12 - Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity outside protected areas.
EN 15 - Direct greenhouse gas (GHG) emissions (Scope 1)
EN 16 – Energy indirect greenhouse gas (GHG) emissions (Scope 2)
EN 17 - Other indirect greenhouse gas (GHG) emissions (Scope 3)
EN18 - Greenhouse gas (GHG) emissions intensity
EN20 - Emissions of ozone-depleting substances (ODS)
EN21 - NOx, SOx and other significant air emissions
EN22 - Total water discharge by quality and destination
EN23 - Total weight of waste by type and disposal method
EN24 - Total number and volume of significant spills
EN25 - Weight of transported, imported, exported or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally
EN26 - Identify, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges or water and runoff
EN29 - Monetary value of significant fines and the total number of non-monetary sanctions for non-compliance with environmental laws and regulations
EN30 - Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce
EN33 - Significant actual and potential negative environmental impacts in the supply chain and actions taken

• GRI (Approach for reporting on ecosystem services):

"Different performance indicators for each ecosystem service, for example regarding usage (…), impacts, pressures, damages (…)"

• The TEEB for Business report:

"Chapter 3: Measuring and reporting biodiversity and ecosystem impacts and dependence."
"Business measurement of its impacts and dependence on biodiversity and ecosystems can serve both private and public interests".
"Effective management of BES requires measurement of business impacts on various components of biodiversity […] as well as business dependence on intangible biological processes […]."

• Japanese reference framework[158]:

"Major impacts on ecosystems and wildlife caused by business activities (the use of materials produced using methods, such as overexploitation, which can generate an impact on biodiversity) and their assessment. Projects in the planning phase that will be carried out in a sanctuary, an area of fragile ecosystem, or adjacent areas, and impacts on biodiversity and ecosystems caused by such projects."

• Dutch reference framework[159]:

"Reporting contains information on the impacts of the company's activities on biodiversity".

158 Japanese Ministry of the Environment, 2007.
159 Ministry of Economic Affairs, 2003.

TOPIC 3: PRIORITY SITES FOR BIODIVERSITY CONSERVATION

• GRI G4:

"EN11 - Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.
EN14 - Total number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk."

• Japanese reference framework:

"Information concerning species that inhabit or grow on land owned, leased or managed, and in adjacent areas (especially endangered species and endemic species in the area).
If an organization owns, leases back, or manages land in a region or area with abundant biodiversity or land with high protective value, the area of the land and status of conservation".

TOPIC 4: MEASURES TAKEN BY A COMPANY TO AVOID, REDUCE AND OFFSET ITS IMPACTS ON BIODIVERSITY

• EFFAS and DVFA:

"For farming and fishing activities: investments in ecosystems and biodiversity in monetary terms. For the hotel trade and activities linked to tourism: Expenditure on projects for the preservation of biodiversity, ecosystems, landscapes, coastlines and natural habitats".

• GRI G4:

"EN2 - Percentage of materials used that are recycled input materials
EN6 - Reduction of energy consumption
EN7 - Reductions in energy requirements of products and services
EN10 - Percentage and total volume of water recycled and reused
EN13 - Habitats protected or restored.
EN19 - Reduction of greenhouse gas (GHG) emissions
EN27 - Extent of impact mitigation of environmental impacts of products and services
EN28 - Percentage of products sold and their packaging materials that are reclaimed, by category
EN31 - Total environmental protection expenditures and investments, by type
EN32 - Percentage of new suppliers that were screened using environmental criteria
EN33 - Significant actual and potential negative environmental impacts in the supply chain and actions taken

• GRI (Approach for reporting on ecosystem services):

"Different key performance indicators for each ecosystem service, for example materials (…) measures to avoid, reduce or offset impacts or else the measures used for the sustainable management of the ecosystem services used (…)."

• Japanese reference framework:

"Initiatives to avoid or mitigate any impact that may occur on biodiversity caused by organizational activities.
Products and services which take into account the mitigation of impacts on biodiversity in the process of production or procurement or raw materials, or the sustainable use of biological resources, and such products and services as a percentage of all products and services.
Policies for using organic products certified by the Japanese Agricultural Standards Association and agricultural products involving no or minimal use of agrochemicals during cultivation, and the status of the initiatives.
Changes to habitats caused by organizational activities and percentage of protection or restoration of habitat.
Programmes that are carried out to conserve and restore ecosystems and their goals (including conservation activities such as purchase or donation of land with abundant biodiversity or with a high level of protection) are of idle land in mountains, farmland or urban districts where nature has been restored to conserve biodiversity."

• Dutch reference framework:

"The reporting contains information on the measures taken to mitigate the impacts of the company's activities on biodiversity."

• German reference framework:

"A further statement is made as to whether the economic, social and ecological effects of the company's main products and services are currently or will be assessed and improved through its value-added chain and product life cycle".
"The company discloses what qualitative and quantitative goals it has set itself with respect to the efficient use of resources, the use of renewable energy sources, the increase in raw material productivity and the reduction in the usage of natural resources and how these goals have been met."

TOPIC 5: THE RELATIONS BETWEEN A COMPANY AND ITS STAKEHOLDERS

• EMAS:

"The organization shall be able to demonstrate an open dialogue with the public and other interested parties including local communities and customers with regard to the environmental impact of their activities, products and services in order to identify the public's and other interested parties' concerns."

• GRI G4:

"Stakeholder engagement:
The following Disclosure items refer to general stakeholder engagement conducted by the organization over the course of the reporting period. These Disclosures are not limited to stakeholder engagement implemented for the purposes of preparing a sustainability report."

TOPIC 6: A COMPANY'S COMMITMENT AND ORGANIZATION IN SUPPORT OF BIODIVERSITY

• EMAS:

"The environmental policy and a brief description of the environmental management system of the organization.
A description of the environmental objectives and targets in relation to the significant environmental aspects and impacts."

• GRI 4:

"Provide sufficient information for report users to understand the organization's approach to managing the material Aspect and its impacts."

• The TEEB for Business report:

"(…) 2) policy and position on [biodiversity and ecosystem services] is clear, 3) a strategy to address the risks [associated with ecosystem decline and biodiversity loss] has been developed; 4) management tools are in place to address the risks, and 5) monitoring and review of processes is being undertaken to ensure implementation. Without such information, reports on [biodiversity and ecosystem services] are of limited value to an investor or any other stakeholder with an interest in [biodiversity and ecosystem services]".

• Japanese reference framework:

"Policies, targets, plans, (…) related to biodiversity conservation.

• German reference framework:

"The company discloses what qualitative and quantitative goals it has set itself with respect to the efficient use of resources, the use of renewable energy sources, the increase in raw material productivity and the reduction in the usage of natural resources and how these goals have been met."

Corsican countryside (Haute-Corse) © F. Hennion

APPENDIX VIII: METHODOLOGIES RECOMMENDED BY INTERNATIONAL AND NATIONAL REFERENCE FRAMEWORKS ON REPORTING AND ENGAGEMENT FOR DEFINING THE SCOPE OF ANALYSIS

SEVERAL REFERENCE FRAMEWORKS INVITE COMPANEIS TO PUBLISH INFORMATION ON THE DIRECT IMPACTS AND DEPENDENCIES AS WELL AS THE INDIRECT IMPACTS AND DEPENDENCIES

• The EFFAS and DVFA Key Performance Indicators:

"Companies should also report on how they interact with members of their supply chain, e.g. how suppliers' adherence to minimum ESG requirements is reviewed and how customers are informed about the company's ESG performance."

• GRI G4:

"The impacts that make a topic relevant can occur within or outside of the organization, or both.

a. Within the organization
Impacts that make a topic relevant can occur within the organization. In the Guidelines, 'within the organization' means the group of entities that are reported in G4-17.

b. Outside of the organization
Impacts that make a topic relevant can occur outside of the organization. There is no exhaustive list of outside parties to be considered in this process. Instead, the organization should attempt to capture the instances where a relevant impact occurs. These relevant impacts can be described as direct or indirect for some topics or as caused by, contributed to, or linked to the organization for others.

c. Within and outside of the organization
Impacts that make a topic relevant can occur within and outside of the organization. When describing the Boundaries for such topics, organizations should combine the considerations for determining Boundaries within the organization and outside of the organization, as explained earlier.

• GRI (Approach for reporting on ecosystem services):

"Organizations with significant influence in the supply chain are often closely scrutinized for the activities of their business partners. From a reporting perspective, the boundaries of their reporting will also extend to include disclosure within the supply chain. In practical terms, this might involve:
> Including biodiversity as a selection criterion when awarding a contract
> Requiring existing suppliers to adhere to certain standards or apply certain processes (e.g. not accepting certain ingredients or raw materials)
> Requiring certification verifying biodiversity-friendly operations."

• OECD Guidelines for multinational enterprises (2011 Edition):

"In some cases [the] communication with the public and with other parties directly affected by the enterprise's activities may pertain to entities that extend beyond those covered in the enterprise's financial accounts. For example, it may also cover information on the activities of subcontractors and suppliers or of joint venture partners. This is particularly appropriate to monitor the transfer of environmentally harmful activities to partners."

• The TEEB for Business report:

"Significant aspects of an organization's biodiversity and ecosystem services impacts and dependencies may fall outside legal or financial boundaries. Biodiversity and ecosystem services measurement should focus on the performance of entities that generate significant risks or impacts and over which the reporting organization has control and/or significant influence.
(…)
Many companies today set narrow measurement and reporting boundaries that do not reflect key biodiversity and ecosystem services issues and entities. […] In the food, beverage and tobacco sectors, for example, corporate biodiversity targets generally focused on direct operational impacts rather than indirect impacts within the supply chain".

• Japanese reference framework:

"More specifically, it is preferable that organizations take into consideration the main causes of impacts on biodiversity, including these given below, not only in operational areas that may be affected by the organization, but also more broadly including upstream and downstream supply chain partners".

• Dutch reference framework:

"The scope of analysis may involve the whole company, but it may also be extended to other entities on which the company exerts an influence on the value chain.
Contrary to the financial statement, the legal definition of the company is less important in the definition of the scope of analysis than its capacity to control or exert an influence on other entities. If a company is part of the value chain of a good or a service, the reporting document can cover the whole value chain.
The company must also state clearly to what extent the performance of subcontractors is included in the scope of analysis. A company can choose to start by covering only a limited number of sites and progressively extend the scope in order to provide a more complete reporting document. The period covered by the non-financial report is clearly stated and the distance from the financial reporting period is explained".

• German reference framework:

"Scope of reporting: In order to establish financial reporting comparability, as a rule the Code refers to the same group of companies as those included in the consolidated financial statements. Whenever deviations are made from this principle – when the report covers the entire supply chain – companies will make this known and explain the deviation. In this case, reference should be made to an established standard such as the Greenhouse Gas (GHG) Protocol of the World Business Council for Sustainable Development (WBCSD)."

ONLY ONE REFERENCE FRAMEWORK DOES NOT ENCOURAGE COMPANIES TO PUBLISH INFORMATION ON THEIR INDIRECT IMPACTS AND DEPENDENCIES

• The standard ISO 26000:

"An organization should at appropriate intervals report about its performance on social responsibility to the stakeholders affected." An organization may choose to cover its activities as a whole at one time, or report separately on activities at a particular location or site. Community groups often consider smaller, location-specific reporting more useful than organization-wide reporting."
In order to prepare a report on social responsibility, a company should take the following considerations into account:

> *The field and the scale of a company's report should be adapted to suite the size and type of company;*
> *The level of detail may reflect the amount of experience the company has in drawing up this kind of report. In certain cases, organizations start by focusing on limited reports that only cover a few key issues and later, over the course of the following years, they broaden the scope when they have more experience and have sufficient data on which to base a more comprehensive report;*
> *The report should describe how the company decided on the fields of action that is intends to cover and how it plans on doing this".*

APPENDIX IX: TYPOLOGY OF ECOSYSTEM SERVICES

REGULATING SERVICES	Regulating the global climate	Certain ecosystems such as forests and oceans play an important role in climate regulation but either sequestering or emitting certain gases (carbon dioxide in particular).
	Regulating the local climate	Ecosystems influence the local and regional climate. Changes in land cover at a local scale can affect precipitation and other factors such as cloud cover and humidity.
	Regulating the air quality	Thanks to the fact that leafy plants trap particles in the air, certain ecosystems regulate the chemical composition of the atmosphere.
	Regulating water quality	Thanks to the filtration and self-purification functions they provide, certain ecosystems such as wetlands help provide high quality water.
	Regulating pests, infections and diseases	Ecosystems are home to the natural predators of crop pests, such as bats, which provide a "pest regulating" service.
	Pollination	Ecosystems are home to a large number of species of pollinators such as insects, birds and bats, which play an essential role in the reproduction of wild plant species and crops.
	Waste purification and decomposition	Ecosystems can treat waste, filter out and decompose organic substances, control pollutants and detoxify compounds by degrading them or diluting their concentration.
	Regulating natural hazards (fires, floods, hurricanes, landslides, etc.)	Ecosystems provide protection from several natural phenomena: for example, wetlands play an important role in the regulation of floods thanks to their ability to retain water, plant cover in ecosystems retains soil and coastal forests and mangroves constitute a natural barrier, which can reduce the damage caused by hurricanes.
PROVISIONING SERVICES These services provide the products obtained from ecosystems, including food, fibre, freshwater, and genetic resources.	Freshwater	In nature we find reservoirs of freshwater that is of good quality and potentially can be used as drinking water (underground water, watercourses or wetlands, Etc.), which are used for domestic consumption, farming, generating energy and for industrial purposes (e.g.: for cooling machinery).
	Air	Ecosystems such as forests provide fresh air of good quality, which is essential for our health.
	Food	Ecosystems are sources of plant and animal food, from wild species (hunted, fished or gathered) or from crops and livestock.

PROVISIONING SERVICES These services provide the products obtained from ecosystems, including food, fibre, freshwater, and genetic resources.	Materials and fibre	A wide range of materials and substances can be obtained from ecosystems. For example: - Timber and other wood products, obtained by felling trees in natural forests or plantations (raw wood, pulp, paper); fibre and resin, cotton, hemp, rubber, etc. - Animal skins (leather), etc.
	Agrofuels	These are materials derived from living organisms, which constitute a source of energy (wood, biomass, cereals for the production of ethanol, etc.).
	Ornamental resources	These resources are used for their aesthetic qualities (shells, flowers, etc.).
	Genetic resources	Nature and living organisms constitute a reserve of unique genetic resources, which we use or could use for scientific, industrial, agricultural or agri-food purposes.
	Medicinal and pharmaceutical compounds	Bioprospecting, carrying out research to develop new products based on biochemical and genetic resources has revealed that ecosystems are rich in materials and products, which could be used for medicinal or pharmaceutical purposes. Most molecules in medicines come from plants, animals or microorganisms. Wild species have created extremely elaborate chemical mechanisms. The health of 80% of the world population depends on natural medicines.
CULTURAL SERVICES These correspond to non-material benefits people obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation, and aesthetic experiences. These services allow people to develop and maintain their knowledge systems, social relations and aesthetic values.	Cultural services	Many cultural activities, social relations, spiritual and religious values, knowledge systems, educational and cultural heritage values, inspiration, aesthetic values etc. are based on nature and, moreover, it gives a sense of belonging.
	Recreational services	Ecosystems provide the opportunities for tourism and leisure activities such as outdoor sports, recreational hunting and fishing, etc.

Based on: IUCN French Committee, 2012. *Panorama des services écologiques fournis par les milieux naturels en France – Volume 1: Contexte et enjeux.* Paris, France.

APPENDIX X: THE MAIN CAUSES OF BIODIVERSITY LOSS

> Invasive alien species[160]:

Through their establishment and propagation, they pose a threat to ecosystems, habitats and native species[161] (as a result of predation, competition, etc.). They can also have a negative impact on human health and the economy. Islands are particularly vulnerable (to predators in particular), due to several of their characteristics: limited surface area, long evolutionary isolation, high levels of endemism, taxonomic and functional imbalances (absence of certain biological groups and simplified trophic chains).

> Climate change:

Climate change is mainly characterized by changes in temperature, precipitation and sea levels, which then have a direct and indirect affect (through the food chain in particular) on the distribution of species, as well as their physiology and behaviour (breeding periods, migration, etc.). At a slower rate, this also leads to the modification of habitats and their distribution.

> Pollution:

Agricultural pollution (fertilizers, pesticides, etc.) and industrial emissions (heavy metals, gas, etc.) bring about changes that can be lasting and intense (depending on whether they are over a large scale or isolated) to the environment, in particular modifying the physical and chemical state of the soil, the air and the water. They degrade the quality of ecosystems (and thus the services the latter provide), and can pose a direct threat to plant and animal species. Other types of environmental pollution, in particular light and noise, also have an impact on biodiversity.

> Habitat loss and degradation:

Changes in land use (cutting down forests and opening up land for agriculture, coverage in impervious surfaces) and watercourses (dams, dykes, etc.) cause the destruction, reduction and fragmentation of ecosystems and can lead to the extinction of certain species and, at a higher level, a homogenization of landscapes.

> Overexploitation of natural resources:

This is the exploitation of wildlife and ecosystems at a rate that exceeds their capacity for regeneration: overfishing, overexploitation of forests, land, water resources, saturation of the tourism carrying capacity of ecosystems, etc. This unsustainable management of natural resources has ecological consequences (extinction of species, genetic drift, habitat degradation, etc.), and also has an economic impact as a result of the depletion of resources.

160 *"Plant and animal species introduced (deliberately or accidentally) into a natural environment, whose acclimatization (naturalization) and propagation represent a major threat to ecosystems, habitats and native species with negative impacts on the environment, the economy and human health"*. From IUCN French Committee, ONCFS, 2011. *Les vertébrés terrestres introduits en outre-mer et leurs impacts: Guide illustré des principales espèces envahissantes.*

161 "*Species naturally occurring within a given region, including the zone it can access and inhabit without human intervention*". From UICN France, ONCFS, 2011. *Les vertébrés terrestres introduits en outre-mer et leurs impacts: Guide illustré des principales espèces envahissantes.*

Jointly initiated by Veolia at Saint-Brieuc (Côtes-d'Armor), the Aquisafe project involves creating artificial wetlands that capture nitrates from agricultural sources. © Photothèque Veolia - Stéphane Harter /Agence VU

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Solid rock quarry operated by Lafarge at La Calmette (Gard) © E. Russier-Decoster

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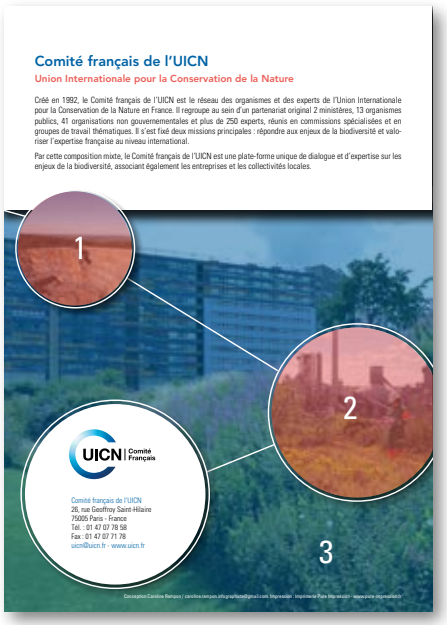

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Created in 1992, the IUCN French Committee is the network of organizations and experts of the International Union for Conservation of Nature in France. This democratic membership union is a unique partnership, bringing together 2 ministries, 13 public organizations, 41 non-governmental organizations, and more than 250 voluntary scientists and experts, who meet in specialized commissions and working groups. Due to its mixed composition, the IUCN French Committee provides a unique platform for dialogue and expertise on biodiversity issues, which also involves local authorities and private companies.

The IUCN French Committee has two main missions: to respond to biodiversity issues in France, and to promote French expertise internationally.

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IUCN French Committee
26, rue Geoffroy Saint-Hilaire
75005 Paris - France
Tel.: +33-1 47 07 78 58
Fax: +33-1 47 07 71 78
uicn@uicn.fr - www.uicn.fr

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