

EPI-Finance 2000

Environmental Performance Indicators for the Financial Industry

Report of an international project
undertaken by financial institutions

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EPI-Finance 2000 Report Foreword

A view on Environmental Performance Indicators for the Financial Services Sector

Dear reader,

Performance indicators are important tools for effective management decision-making. They serve companies and other organisations to measure progress against targets and to report such progress to stakeholders. Environmental performance indicators – in combination with social and economic ones – enable companies to make eco-efficiency and sustainability measurable and progress more transparent.

This report is a workbook for the financial industry to better communicate and benchmark its environmental performance using a common set of management and operational performance indicators that are relevant for the sector. The report presents the results of a study that a group of leading German and Swiss financial institutions and insurance companies has undertaken to harmonise reporting practices of their sector and to facilitate benchmarking. By publishing this report, the initiators – practitioners from both global and regional providers of financial services – intend to share their current state of progress with the interested public in order to support other institutions in their reporting practice and financial analysts and investors to better assess the performance of financial service providers.

A better and more uniform understanding of what and how to measure is essential for reporting and performance assessment. Indicators and reporting are therefore important elements on WBCSD's and UNEP's agenda: Both our organisations contribute – in different ways – to the development of sustainability performance indicators and work with others to improve reporting practices. Our continued engagement supports initiatives such as ISO 14,000ff Environmental Management System Standards and the 'Global Reporting Initiative' towards progress and broader acceptance.

While general guidelines provide guidance for all businesses and describe generally applicable indicators, each industrial sector must work on its own to characterise its specific circumstances. The sectors themselves can best describe those indicators relevant for their business and work towards acceptance of these indicators in their sector. The indicators and processes proposed here offer such guidance for the financial service sector. With a focus on products and management performance, the authors concentrate on those issues most relevant and meaningful for the financial industry. We therefore welcome the inclusion of this material in ongoing development work, such as the UNEP working group on environmental guidelines for financial services.

The institutions involved in this work applied the indicators themselves in order to test their practicality and usefulness. We encourage other financial service providers to test and to use these indicators in their own development and practice of decision-making and performance reporting. The authors welcome any suggestions for improvement in view of making the indicators as meaningful and robust as possible. We encourage other sectors to follow this initiative and also engage in developing indicators for their own sectoral environmental performance. Some, such as the chemical sector, are already advanced in this process; others have just started working in this area or have declared their intention to do so.

Such sectoral indicators, together with general guidelines and specific metrics, will help build a full picture of a company's sustainability performance, which will allow for effective management decision-making and stakeholder interaction, as well as meaningful benchmarking.

Jacqueline Aloisi de Larderel
United Nations Environment Programme (UNEP)

Björn Stigson
World Business Council for Sustainable Development (WBCSD)

Management Summary

Between autumn 1999 and autumn 2000, a group of 11 financial service institutions with headquarters in Germany and Switzerland, consulted by E2 Management Consulting AG, developed a set of environmental performance indicators for the financial industry. The set of indicators is divided into the following four business sectors:

- ◆ Commercial Banking
- ◆ Investment Banking
- ◆ Asset Management
- ◆ Insurance

The indicators are particularly suitable for financial institutions which are developing a standardised environmental management system in one or more of these business sectors, or have already become certified to an environmental management standard such as ISO 14001.

The various products and services within the mentioned business sectors differ with respect to their environmental relevance and their suitability for environmental performance measurement:

The Environmental Relevance of Financial Services

Business sector	Products and services with particular environmental relevance*	Products and services with less environmental relevance*
Commercial Banking	<ul style="list-style-type: none"> ◆ Corporate clients ◆ Mortgage lending 	<ul style="list-style-type: none"> ◆ Letter of credit ◆ Guarantees ◆ Lombard loan ◆ Interbank business
Investment Banking	<ul style="list-style-type: none"> ◆ Corporate Finance ◆ Project Finance ◆ Trade Finance 	<ul style="list-style-type: none"> ◆ Trading
Asset Management	<ul style="list-style-type: none"> ◆ Shares ◆ Funds ◆ Real estate (provided that it is contained in "Assets under Management") 	<ul style="list-style-type: none"> ◆ Money market ◆ Interbank business
Insurance	<ul style="list-style-type: none"> ◆ Corporate clients ◆ (Environmental-) third party liability 	<ul style="list-style-type: none"> ◆ Life insurance

* non-exhaustive list

The project group applied the new international standard for environmental performance evaluation, ISO 14031, as a guideline. For this reason the indicators proposed have been categorised into Management Performance Indicators (MPI) and Operational Performance Indicators (OPI).

This project covers neither in-house ecology performance, due to the existence of the VfU-Standard, nor Environmental Condition Indicators (ECI) as defined by ISO 14031. Social performance indicators, in the sense of a comprehensive sustainability approach, are also not presently covered by this set of indicators.

In the area of Management Performance Indicators (MPI) both absolute and relative indicators are proposed, covering the following three topics:

1. Environmentally relevant posts and available know-how in the form of environmental departments
2. Environmental management training
3. Environmental management audits

Absolute and relative operational performance indicators (OPI) in the area of product ecology are proposed for the business sectors, covering the following two topics:

4. Integration of environmental aspects into the core business procedures
5. Specific environmentally oriented financial services

Overview of the Environmental Performance Indicators

Indicators:	Commercial Banking	Investment Banking	Asset Management	Insurance
Management Performance (MPI):				
1: Know-how	Environmentally relevant posts and environmental departments			
2: Training	Environmental management training			
3: Auditing	Environmental management audits			
Operational Performance (OPI):				
4: Integration into the core business	Environmental risk check	Environmental risk check	"Assets under Green Management"	Environmental risk coverage
5: Environmentally oriented services	Financing environmentally oriented pioneers	Transactions with environmentally oriented pioneers	Investments in environmentally oriented pioneers	Environmentally innovative policies

This report presents an overview of the indicators and their definitions, along with practical examples provided by the participating financial institutions.

EPI-Finance 2000 proposes specific operational performance indicators for the four business sectors of the financial industry. However, the borders between the business sectors, as well as organisational structures, can vary in practice. For this reason, the indicator examples which were collected during the project demonstrated the need for comments on the following points:

- ◆ A concise description of the underlying business sector.
- ◆ An explanation of the indicator value and the underlying (environmental) management system.

The web-site www.epifinance.com contains a German and English PDF version of this report. The site also contains links to the participating institutions' home pages, environmental management sites and indicator examples, where available.

The project group considers EPI-Finance 2000 to be an initial proposal for environmental performance indicators for the financial industry. They would like to invite other financial institutions to critically assess and apply this set of indicators. This will allow EPI-Finance to be supplemented and updated in the future on the basis of broader experience.

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1 Introduction

1.1 Background

Since the beginning of the 90s, financial institutions have been systematically installing environmental management systems. An important initiation for this were the UNEP Statements by Banks and Insurers on the Environment and Sustainable Development, which are signed today by over 250 financial institutions.

With the signing of this declaration, banks and insurance companies committed themselves to an open communication regarding the realisation of their environmental measures. This has increased the need for a standardised environmental reporting, as well as an externally comparable environmental performance measurement.

Widely-applied industry standards already exist for the areas of in-house ecology and environmental reporting. The recently introduced international standard, ISO 14031, provides an additional step towards a standardised environmental performance evaluation.

During the period between autumn 1999 and autumn 2000 a group of 11 financial institutions with headquarters in Germany and Switzerland applied the guidelines of the standard ISO 14031 and developed a set of industry-specific environmental performance indicators.

The set of indicators presented in this report displays the environmental performance of financial institutions with regards to the following aspects:

- ◆ the performance of the environmental management system itself, on the basis of management indicators.
- ◆ the environmental performance resulting from the institution's financial services, whereby the following four business sectors were individually examined: Commercial Banking, Investment Banking, Asset Management and Insurance.

This set of indicators is particularly suitable for financial institutions which are developing a standardised environmental management system or have already become certified to an environmental management standard such as ISO 14001. The indicators will primarily be used for internal environmental performance measurements and reporting. Simultaneously, they will also serve as the basis for a credible external environmental communication. The target groups for environmental performance indicators include employees and managers, environmental organisations, authorities, environmental rating agencies and investors.

This set of indicators focuses on issues of environmental management. In the broader context of comprehensive sustainable development, the indicators are open for the future addition of social performance indicators.

1.2 Why Indicators?

During the development of environmental management systems within financial institutions, the emphasis initially focussed on the in-house ecology issues, such as waste and energy management concepts. The actual financial services, e.g. loans, investments and insurance, were only later taken into consideration.

Today, the first financial institutions have environmental management systems certified to a standard (ISO 14001 or EMAS). These include the following institutions participating in this project: Credit Suisse Group, Deutsche Bank, Gerling Konzern, UBS AG and Victoria Versicherungen. Other institutions use these standards as guidelines whilst developing their environmental management systems.

Standardised indicators fulfil different internal functions: Firstly, they act as a tool enabling management to measure the continuous improvement of environmental management, the environmental management system and environmental performance. Secondly, they aid in measuring the benefits associated with the environmental optimisation of business processes and/or the reduction of environmental financial risks, as well as providing employees and management with concrete facts of these benefits. Gathering and evaluating the data for the indicators is also an internal learning process and contributes to the further development of an environmental management system.

Financial institutions active in the area of asset management face a double role during communication with external stakeholders:

- ◆ On the one hand they themselves request such environmental indicators. A growing number of financial institutions presently offer investment products which base themselves on environmental or sustainable criteria. These products, which concentrate on the principles of eco-efficiency and/or sustainability, were launched at the end of the 90s and are increasingly gaining popularity with traditional investors. Financial institutions therefore have an interest in obtaining standardised and comparable environmental performance indicators. These can then be applied within their environmental and social research departments.
- ◆ Simultaneously, they are also providers of environmental performance indicators of their own institutions. This is in order to provide an account of their environmental responsibility to interested parties, such as environmental organisations, the media and shareholders.

The above-mentioned investors, i.e. those seeking environmentally and/or sustainably oriented investment strategies, have become an increasingly important stakeholder in the past years.

The financial service industry is also contained within these environmentally and/or sustainably oriented investment products according to their relative importance in reference indexes, such as MSCI or the DJSI. This raises motivation within financial institutions to be among the best in environmental management within their industry.

The Investor Relations division of listed financial institutions are confronted with an ever growing number of questionnaires and information requests from such stakeholders. The indicators proposed within this report should result in an improved communication quality with rating analysts.

1.3 Project Goals and Principles

The project group observed the following principles during the formulation of the individual indicators:

- ◆ they are concrete and problem-oriented, i.e. they correctly reflect the continuous improvement process,
- ◆ the data can be gathered effectively and with justifiable expenditure, preferentially through existing business information systems,
- ◆ they can be externally verified,
- ◆ they are straightforward and can be easily and readily interpreted,
- ◆ they are internally and externally comparable with little expenditure,
- ◆ they are institutionally anchored, i.e. they are developed and published by a qualified committee,
- ◆ the necessary data has ideally been collected internally before standardisation of the indicators, so that experience of data collection and evaluation of the indicators has already been gathered.

From these principles, the following project goals for the set of indicators were formulated:

- ◆ A set of indicators encompassing the product ecology aspects and management processes of the financial service industry will be developed for the four business sectors:
 - Commercial Banking
 - Investment Banking
 - Asset Management within banks and insurance companies
 - Insurance
- ◆ Within the institution, the indicators should:
 - examine continuous improvement
 - aid in obtaining certification, e.g. ISO 14001
- ◆ The set of indicators should improve the quality of external communication with stakeholders, such as rating agencies, media, etc., who are interested in an objective and standardised comparison across the industry.
- ◆ The indicators should be simple, manageable and comprehensible to external stakeholders. For these reasons there should be no more than 7 +/-2 indicators per business sector.
- ◆ The set of indicators should tend towards normalisation efforts such as ISO 14031. The ISO standard will be utilised as a starting point, and the management and product indicators will be developed into more concrete terms for the financial industry.

1.4 Organisation and Development of the Project

The project took place between autumn 1999 and autumn 2000. The initiative originated from within the group of participating institutions. E2 Management Consulting AG provided expert advice during the formulation of the indicators, was responsible for the project organisation and moderation, and produced the final report.

The project group organised itself in an informal manner. Institutions with headquarters in Germany and Switzerland were invited to participate based on the following criteria:

- ◆ The financial institutions have a functioning, or even a certified, environmental management system in place.
- ◆ They have concrete experiences and products in the area of product ecology which they can display.
- ◆ They are interested in the development of standardised environmental performance indicators.
- ◆ They are prepared to gather data for the indicators within their own institutions, where possible, and present these results.

The work largely developed during the meetings of the four business-sector-specific subgroups. The financial institutions contributed within the four subgroups as follows:

Overview of the Participating Institutions per Subgroup

Commercial Banking	Investment Banking	Asset Management	Insurance
Credit Suisse Group Deutsche Bank AG HypoVereinsbank AG UBS AG Zürcher Kantonalbank	Credit Suisse Group Deutsche Bank AG HypoVereinsbank AG UBS AG	Bank Sarasin & Cie Credit Suisse Group HypoVereinsbank AG SAM Sustainability Group Swiss Re UBS AG Zürcher Kantonalbank	Credit Suisse Group/ Winterthur Gerling Konzern Rheinland Versicherungen Swiss Re Victoria Versicherungen

The project proceedings were determined during three main workshops, during which attention was also paid to the comparability of the subgroup results.

In summer 2000 the final results were presented to international experts. Their comments were integrated where possible. The following people contributed to EPI-Finance 2000 by providing most valuable comments and feedback to the report, without however bearing responsibility for the final report's content:

Organisations and Persons Participating in the External Review

Organisation	Reviewer	Organisation	Reviewer
Bayerische Landesbank	H. Bauer	SGS International Certification Services AG	E. Bieri
Deloitte & Touche	M. Lehni	Stadtsparkasse München	J. Schäfer
IWÖ St.Gallen	T. Dyllick	SustainAbility Ltd.	P. Zollinger
KPMG	M. Kelly	SustainAbility Ltd.	S. Beloe
Landesbank Baden-Württemberg	S. Weiss	University of Lüneburg	S. Schaltegger
oekom research	M. Bönning	VfU	C. Velosa da Silva

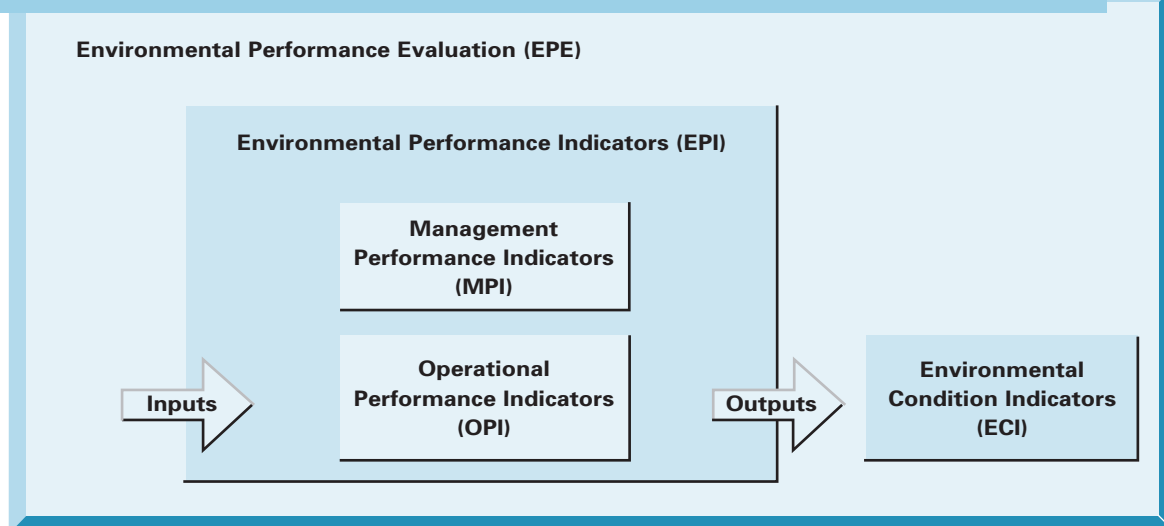
All participating financial institutions are signatories of one of the UNEP Declarations and/or members of WBCSD. In order to accomplish the broadest effect possible for the results of this project, these two organisations have kindly overtaken the foreword of this report. However, they do emphasise that this report is not a product of an official working group of either organisation.

2 Environmental Performance Indicators

2.1 Practical Interpretation of ISO 14031

An important guideline for this project was the recently set standard for environmental performance evaluation, ISO 14031. Within the standard a method of categorising environmental management indicators is presented, which was applied to the set of indicators proposed here.

The Systematics of Environmental Performance Indicators According to ISO 14031



ISO 14031 suggests the following Environmental Performance Evaluation (EPE) indicators:

To begin with, ISO 14031 distinguishes between Environmental Performance Indicators (EPI) within the institution and Environmental Condition Indicators (ECI) outside of the institution.

The Environmental Performance Indicators are further divided into:

- ◆ Indicators measuring the management performance within the environmental management system (Management Performance Indicators, MPI) and
- ◆ Operational Performance Indicators (OPI) describing the actual environmental performance of the institution.

Management Performance Indicators (MPI) focus on the “drivers” whilst the Operational Performance Indicators (OPI) concentrate on the “results”.

On the basis of this, the project group focused on the development of indicators for the following areas of the actual financial services (for which the term “product ecology” is regularly used):

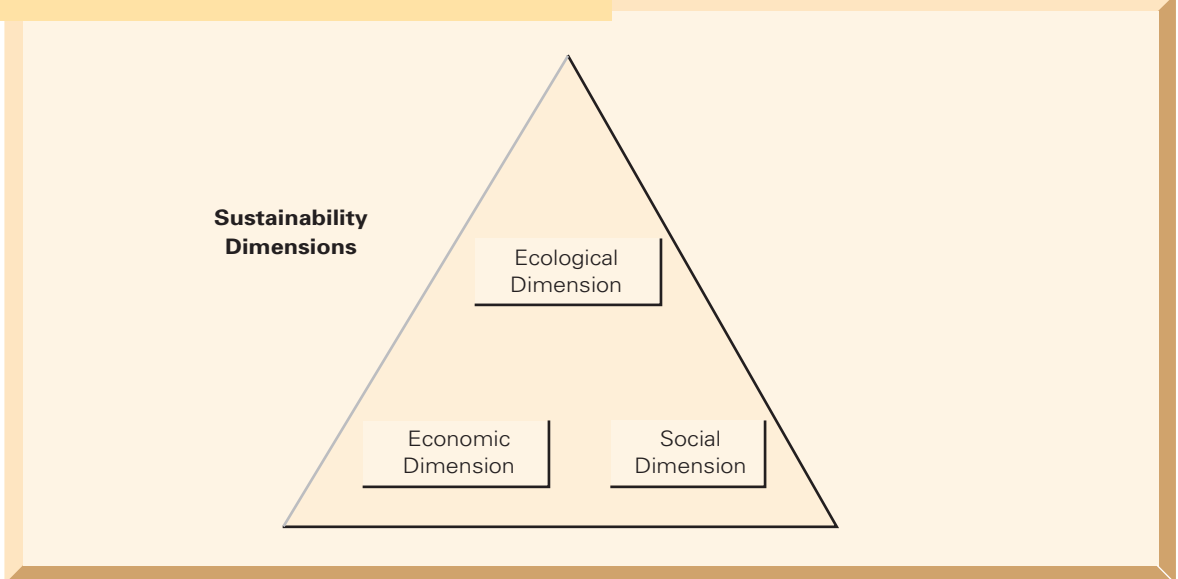
- ◆ the development of **Management Performance Indicators (MPI)** for the environmental management system in the financial service sectors
- ◆ the development of **Operational Performance Indicators (OPI)** for the actual financial services.

2.2 System Boundaries

The following issues were not examined during this project:

- ◆ The Environmental Condition Indicators (ECI) for changes to the environment outside of the financial institution were not considered. The ecological impacts associated with an investment credit of a bank client, whose project for example leads to pollution of drinking water, cannot yet be measured through indicators by financial institutions. Firstly, there remains the methodical problem of a standardised world-wide measurement of such changes to the environment. Secondly, financial institutions play an important role but are not crucial in realising such environmentally relevant investments. It is the client's primary responsibility to document these changes to the environment within its own environmental management system.
- ◆ The in-house ecological performance processes, categorised under the Operative Performance Indicators (OPI), were also not considered within the scope of this project. This is due to the existence of a standardised set of indicators for this area (VfU indicators – refer to section 2.5), which is already widely applied within German-speaking countries.
- ◆ Furthermore, the social dimension of sustainable management within financial service institutions is not covered. Sustainable business is defined from a corporate point of view as the integrated and interactive optimisation of the economic, ecological and social performance within business.

The Three Dimensions of Sustainable Business



Within the economic dimension, management systems and their efficiency criteria are already well developed. Within the ecological dimension, management systems according to ISO 14001 etc. are increasingly being implemented. Within the social dimension, on the other hand, standardised management systems, such as SA 8000, are presently still within their early stages. It was, therefore, considered premature for this project to propose indicators for measuring the efficiency of social performance.

2.3 Management Indicators

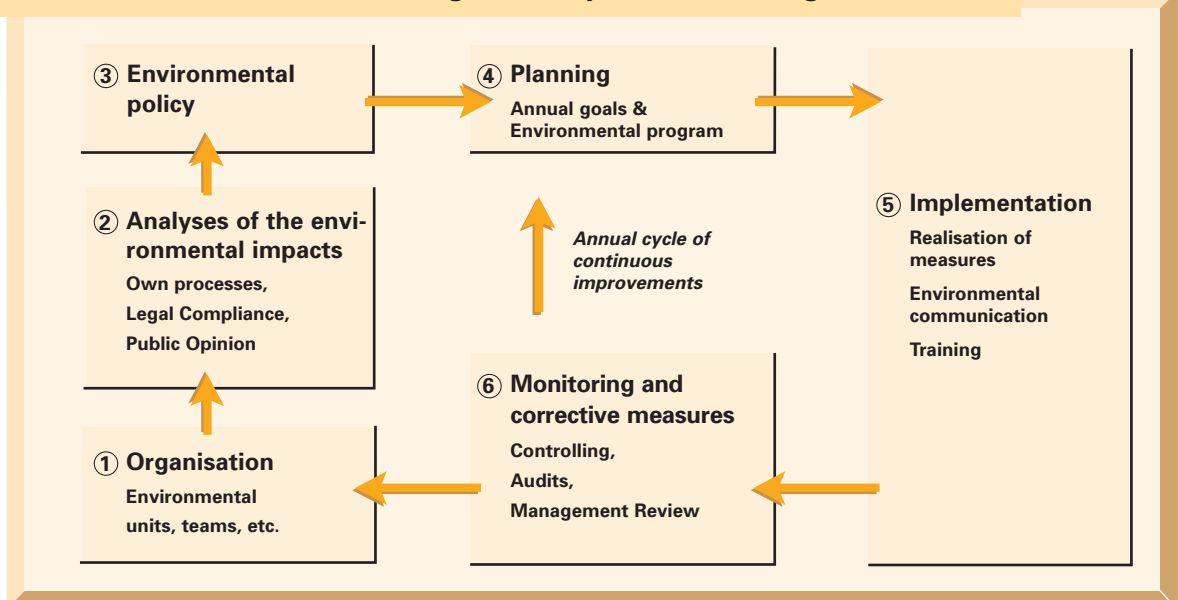
Management Performance Indicators (MPI) should measure the (environmental) performance of an (environmental) management system. Such a system contains the formalisation and standardisation of business processes. These processes should be improved qualitatively with the aim that the company's corporate performance, such as production, turnover or earnings, improves quantitatively.

Consequently, management indicators possess an internal discrepancy: qualitative processes are measured quantitatively. Management indicators are thus aids in describing qualitative processes.

Management indicators also provide certain advantages: unlike operative performance indicators, which normally describe past performances (such as turnover during a certain period), management performance indicators (such as training) provide an indication of operative efficiency in the future.

The question therefore arose for the project as to which management processes of an environmental management system are best suited to become quantified in the form of indicators. The most important elements of an environmental management system according to ISO 14001 or EMAS can be seen below:

Elements of an Environmental Management System According to ISO 14001



The project group did not propose standardised indicators for the following elements of an environmental management system (see figure):

- ◆ the type or number of environmental goals, as well as the number of environmental goals achieved
- ◆ the type or number of environmental measures, as well as the number of implemented environmental measures over a certain period of time
- ◆ the type or number of overall environmental communication

Such management indicators, and as they are listed in the ISO 14031 appendix, may be useful internally within a company. It is of great interest for management to have a means of measuring the number of environmental goals achieved. Under the guidelines of external comparison by rating agencies, however, a meaningful definition applicable across the industry did not seem practicable.

The project group found the following three elements to be most suitable as standardised indicators for external reporting.

2.3.1 Environmentally Relevant Posts and Environmental Departments

Investing in new know-how and relevant expertise is essential during the development of an environmental management system, particularly in the following two areas:

- ◆ Within all departments where environmentally relevant processes need to be integrated into the daily operations: For example, each client adviser within commercial banking needs to be able to recognise the risks associated with ground contamination and environmentally exposed industries, and recommend the case for detailed examination.
- ◆ Within central environmental departments, which are the internal and external contact partners regarding special environmental responsibilities.

In practice, larger financial institutions currently may have a number of environmental departments with varying responsibilities:

- ◆ A central environmental department with the responsibility of maintaining and developing the environmental management system, as well as internal and external communication.
- ◆ A department for examining environmentally relevant risks and opportunities.
- ◆ Analysts for environmentally and/or sustainably oriented investments.
- ◆ A department, within the insurance industry, which analyses short- and long-term environmental risks (e.g. climate change).
- ◆ An in-house ecology department responsible for optimising operational procedures.

The project group therefore proposes an indicator for the standardised description of environmentally relevant posts and departments (for a precise definition refer to section 3.2.1).

2.3.2 Training

Training is an important aspect for the continuous qualitative improvement of environmental management. For this reason, ISO 14001 explicitly requires training concerning the environmental policy and environmental management system of an organisation, as well as the environmental relevance of business processes. Training is required so that employees are able to integrate environmentally relevant issues within their daily work routines.

The project group therefore proposes an indicator for the standardised description of environmental management training (for a precise definition refer to section 3.2.2).

2.3.3 Audits

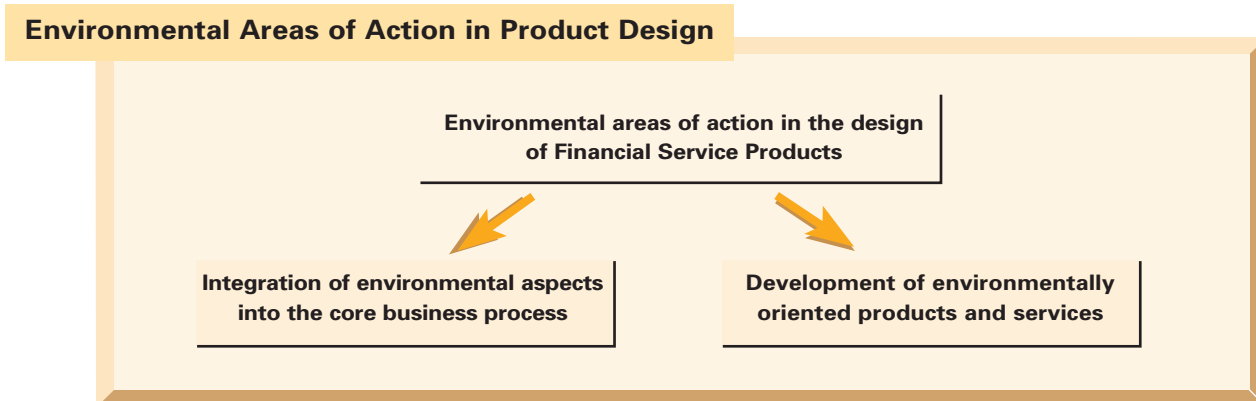
Audits play an important role in the necessary control and corrective measures of an environmental management system. As well as this, carrying out internal and external audits is a requirement for obtaining certification of the environmental management system according to ISO 14001 or EMAS.

Experiences to date within financial institutions during the certification process have shown that current practice and the scope of the internal and certification audits vary considerably. A standardised reporting procedure on the number and extent of such audits would therefore be beneficial to companies interested in certification, as well as to certification organisations. The indicators will provide help for a pragmatic and suitably sized audit procedure.

The project group therefore proposes an indicator for the standardised description of environmental management audits (for a precise definition refer to section 3.2.3).

2.4 Product Indicators

In the area of product ecology, financial institutions face two aspects:



The first step usually consists of integrating environmental aspects into the existing products and services. This is achieved through systematically examining the environmentally relevant chances and risks in the business processes. This primarily concerns risk management within commercial banking or insurance, e.g. risks for banks and insurers resulting from ground contamination or through environmentally exposed industries. Financial institutions which neglect these responsibilities within environmentally relevant business areas (refer to section 3.1), are at a higher risk in the long term and it is, therefore, against their own interests if they do not act.

A second area with ecological relevance is the realisation of market opportunities through developing and marketing environmentally oriented products and services. Examples of this within commercial banking include: loans for particularly environmentally oriented projects or enterprises (e.g. eco-loans); the provision or mediation of venture capital and private equity for environmentally oriented innovations; or particular insurance coverage for environmentally oriented households or organisations. Mostly this also involves aiming at client sectors which draw additional benefits from environmentally oriented financial services.

Within the core business process, such environmentally oriented services are usually regarded as special or niche products. Nevertheless such niches can also be early indicators of an environmentally driven structural change.

An example of this can presently be seen in the area of asset management: the segment dealing with environmental and sustainable criteria is still relatively small, however, it can display a good performance and is growing. This has resulted in traditional investors asking themselves whether long-term risks and profits cannot be optimised through the integration of such criteria. The growing interest for these products by institutional investors also confirms this trend.

Financial institutions not able to display the relevant know-how and products in this area, are in the medium-term being placed under pressure to act and/or are experiencing competitive disadvantages. In the long-term this will level out the distinction between the core business and the environmentally oriented products and services.

Taking these points into consideration, the project group proposes absolute and relative indicators for the four business sectors (for a precise definition refer to sections 4.1 to 4.4):

- ◆ for the integration of environmental aspects into the core business
- ◆ for the development of environmentally oriented products and services

2.5 In-house Ecology Indicators

As mentioned earlier, this report does not examine operational performance indicators (OPI) for the internal domain of in-house ecology. The VfU-Indicators exist as a practicable and already widely applied industry standard for the measurement of in-house ecological performance. A number of the project team members and organisations participated during the development of these indicators:

VfU-Indicators for In-house Ecological Performance

Category	Absolute Indicator	Relative Indicator
Electricity consumption	kWh p.a.	kWh per employee
Heat consumption	kWh p.a.	kWh per m ² energy utilisation area
Water usage	m ³ p.a.	Litre per employee and day
Paper consumption	kg p.a.	kg per employee separation into paper sort
Waste	kg p.a.	kg per employee separation into disposal method
Business traffic	km p.a.	km per employee separation into transport method
CO ₂ -Emissions	kg p.a.	kg per employee

With respect to the formation of management indicators, there are many similarities between in-house ecology and product related business processes within financial institutions. The proposed environmental management indicators (refer to chapter 3) can also be applied to the area of in-house ecology, which the institutions participating in this project intend to do.

3. Management Indicators

3.1 Environmental Management Systems in the Financial Industry

The development of an environmental management system within a financial institution, as well as in other sectors, usually proceeds in stages. Also within industry, an environmental management system is usually first introduced within the main factory and then eventually spread across the whole organisation, including foreign sites.

Within the financial industry, this step-like approach is not only applicable to the organisation, but also to the financial services which display varying environmental relevance. An example of this can be seen when comparing the Interbank and corporate client credit businesses. Environmental aspects play a minor role in the former, whereas in the latter each client adviser should be able to recognise the most important environmental risks, such as ground contamination or typical industry risks.

The Environmental Relevance of Financial Services

Business sector	Products and services with particular environmental relevance*	Products and services with less environmental relevance*
Commercial Banking	<ul style="list-style-type: none"> ◆ Corporate clients ◆ Mortgage lending 	<ul style="list-style-type: none"> ◆ Letter of credit ◆ Guarantees ◆ Lombard loan ◆ Interbank business
Investment Banking	<ul style="list-style-type: none"> ◆ Corporate Finance ◆ Project Finance ◆ Trade Finance 	<ul style="list-style-type: none"> ◆ Trading
Asset Management	<ul style="list-style-type: none"> ◆ Stock ◆ Fund management ◆ Real estate (provided that it is contained in "Assets under Management") 	<ul style="list-style-type: none"> ◆ Money market ◆ Interbank business
Insurance	<ul style="list-style-type: none"> ◆ Corporate clients ◆ (Environmental-) third party liability 	<ul style="list-style-type: none"> ◆ Life insurance

* non-exhaustive list

There are also financial services, such as within investment banking, where environmental aspects are only considered within risk management for individual transactions targeted at specific projects. However, if this is the case they are then examined in detail.

In addition, the evaluation of environmental relevance may change over time. New scientific findings, changing legal situations and institutional learning processes can result in the environmental relevance of financial services being judged differently (e.g. as occurred in the area of asset management during the 90s, see section 4.3.1).

For these reasons, it is typical for a financial institution to build up an environmental management system within individual business sectors in stages and with varying scope. It can therefore be expected that the proposed indicators will, at first, only be collected and published for certain business sectors of a financial institution.

3.2 Definition of the Management Indicators

Each management indicator is presented below, followed by a short definition. An indicator can be specified as absolute ("number of employees trained on environmental management") or relative ("15% of the target group has been trained"). Through combining the relative and absolute values of indicators, they can be interpreted more easily. For this reason, proposals for relative indicators are also provided where possible.

The Management Performance Indicators (MPI) proposed in this chapter, as well as the Operational Performance Indicators (OPI) presented in chapter 4, typically consist of two to four sub-indicators (a to d). These include reference figures, which are themselves not "real" indicators in the technical sense, but which are required during the formulation of relative indicators. These figures are nonetheless defined as indicators for textual and presentational ease.

3.2.1 Definition of Indicator 1: Environmentally Relevant Posts and Environmental Departments

Indicator 1, which describes the environmentally relevant posts and environmental departments, achieves the following goals:

- ◆ Indicator 1a is a reference figure which describes the total number of posts in the business sector. This allows the reader to determine the scope of the business sector within the entire institution, provided that the indicator does not cover the entire organisation.
- ◆ Indicator 1b directs the focus on those posts directly dealing with environmental aspects during everyday business processes, independent of the environmental portion of the work. This describes the actual target group for the environmental management system within each business sector. The larger the percentage 1b/1a, the larger the scope of the environmental management system. The environmental relevance of the business sector determines how high a percentage should be aimed for. Indicator 1b also serves as a reference figure for relative indicators.
- ◆ Indicator 1c describes the expert personnel, in the form of environmental departments, available to the institution.

Definition of Indicator 1: Environmentally Relevant Posts and Environmental Departments

No.	Definition of the indicator	Comments for Collection	Relative Indicators
1a	Number of posts in the business sector, expressed in full-time positions	- equivalent to the annual report (usually as per 31.12.) - sector-specific data should be listed: which central sub-sectors (e.g. IT, Logistics, etc.) are included in the total figure	1a / number of posts within the entire organisation = relative scope of the business sector
1b	Number of posts dealing with environmental aspects within everyday business processes, expressed in full-time positions	- the number of posts is related to the entire function, and not to the environmental portion of the work	1b / 1a = coverage of the environmental management system within the business sector
1c	Number of specialised environmental posts (in full-time positions in the business sector or organisation)	- external expertise, which are regularly assigned with duties in the area of the environmental management system, should be included if relevant - central environmental departments should be divided in accordance with their tasks between the business sectors	1c / 1a = percentage of full-time environmental posts

3.2.2 Definition of Indicator 2: Environmental Management Training

Indicator 2 aims at portraying the level of environmental management training:

- ◆ Indicator 2a describes the number of employees trained. The scope of training becomes apparent when indicator 2a is compared to indicator 1b, which describes the

target group of the environmental management system.

- ◆ Indicator 2b quantifies this training in terms of person-hours and allows for the calculation of the intensity of the training.

Definition of Indicator 2: Environmental Management Training

No.	Definition of the indicator	Comments for Collection	Relative Indicators
2a	Number of employees trained on environmental management (i.e. number of employees reached)	Training is defined through: <ul style="list-style-type: none"> - obtaining the ability of taking environmental aspects into consideration during everyday business processes - the possibility of interaction between the trainer and trainee - training quantities are documented - not considered as training includes, e.g., unsupervised displays - training via electronic means (e.g. the Intranet) can only be defined as training when it is included in and binding for business processes 	$2a / 1b =$ Scope of training in %, calculated by the employees trained in the relevant target groups
2b	Training time in person-hours (calculated by training time x number of employees reached)	<ul style="list-style-type: none"> - the use of new media equivalent to (employees x time per employee), for example: Email: number of recipients x e.g. 5 minutes; Intranet: number of hits x e.g. 1 minute 	

3.2.3 Definition of Indicator 3: Environmental Management Audits

Indicator 3 aims at describing internal and external audits as a control mechanism for an environmental management system:

- ◆ Indicator 3a describes the number of environmental management audits carried out.
- ◆ Indicator 3b specifies the time expended for carrying out the audits. This qualifies the value of indicator 3a and allows for the intensity of the audits to be determined. This indicator can be compared with indicator 1b in order to determine the average intensity of the audits in the form of minutes per employee.
- ◆ Indicator 3c provides the number of employees audited. The percentage of employees audited from the relevant target groups can be determined when indicator 3c is related to indicator 1b.

Definition of Indicator 3: Environmental Management Audits

No.	Definition of the indicator	Comments for Collection	Relative Indicators
3a	Number of environmental management audits	<ul style="list-style-type: none"> - audits need to be documented in writing - includes certification and other external audits - does not include external rating meetings 	
3b	Auditor time in hours (net for audits)		$3b / 1b =$ Audit intensity per employee in the target group (in min. / employee)
3c	Number of employees audited	- see comments in the Interpretation (section 3.4)	$3c / 1b =$ Audit coverage in %, calculated through the employees audited within the relevant target group

3.3 Company Examples

Company Examples of Management Indicators

Institution	Bank Sarasin	Deutsche Bank	Gerling	SAM	Swiss Re	UBS
Business sector	Entire bank, per end of 1999	Germany, 1999	Location Köln, per end of 1999	Entire institution, per end of 1999	Domestic re-insurance business, per end of 1999	Private and corporate clients (domestic), per end of 1999
1 Know-how						
1a Number of posts in the business sector, expressed in full-time positions	629 posts		3,900 posts	25 posts	3,642 posts	24,100 posts
1b Number of posts dealing with environmental aspects within everyday business processes, expressed in full-time positions	198 posts		2,720 posts	23 posts	2,253 posts	2,900 posts
1c Number of specialised environmental posts	10.4 posts	29 posts	38 posts	16 posts	13 posts	2.5 posts

Institution	Credit Suisse Group	Deutsche Bank	Zürcher Kantonalbank
Business sector	Domestic corporate clients, 1999	Germany, 1999	Commercial banking, 1999
2 Training			
2a Number of employees trained on environmental management	510 employees (=14% of 1b)		120 employees (=19% of 1b)
2b Training time in person-hours	765 hours	1,700 hours (seminars only)	350 hours

Institution	Bank Sarasin	Deutsche Bank	Gerling	Swiss Re	UBS
Business sector	Entire bank, 1999	Germany, 1999	Location Köln, 1999	Domestic re-insurance business, per end of 1999	Private and corporate clients (domestic), per end of 1999
3 Audits					
3a Number of environmental management audits	1 audit		14 audits	5 audits	44 audits
3b Auditor time (in hours)	4 hours	800 hours	136 hours	48 hours	33 hours
3c Number of employees audited	5 employees				44 employees

These management indicators are only a portion of the indicators collected within the participating institutions for the purpose of EPI-Finance 2000. The web-site www.epifinance.com contains links to the indicator examples published on the Internet.

3.4 Interpretation

The following points are important for the interpretation of the indicators:

- ◆ an exact definition of the business sectors covered by the indicator
- ◆ a comment explaining the contents of the indicator

As well as defining the status of environmental management, the indicators can also reflect the various traditions and structures of an organisation. For example, a change in the relationship between environmental posts (indicator 1c) and training intensity (indicator 2b) can result depending on centralisation and decentralisation. Where expert knowledge is largely decentralised and incorporated into line processes, this leads to a lower number of centralised environmental posts, however, to more training. The indicators therefore need to be interpreted bearing in mind the specific background of an organisation.

Indicators allow for a view of past periods, however, they can also be applied when setting future goals within environmental management. This led to indicator 1b (number of posts dealing with environmental aspects) aiding a few of the participating institutions in more clearly defining the target group for training.

The number of posts within indicator 1b is defined independently of the environmental percentage of their duties. If the percentage were to increase, this would not automatically lead to an increase in the indicator, since the number of posts remains constant.

For indicator 2 it is important to provide a description of the type of training, the most important contents and the target group.

One of the participating institutions applied the relative indicators „scope of training“ (2a/1b) and „audit coverage“ (3c/1b) in formulating quantitative goals for their environmental management system. This allowed an optimal training and auditing coverage for the relevant target groups to be defined.

Indicator 3c encompasses the number of employees having been audited. Environmental audits, however, have the aim of testing the efficiency of environmentally relevant processes. This should take place both within the central environmental departments (indicator 1c) and on location with those posts dealing with environmental aspects (indicator 1b). The indicator therefore does not want to encourage that the greatest number of employees possible be audited, but rather to provide an indication of the coverage of audits.

The management indicators cover all four business sectors of commercial banking, investment banking, asset management and insurance. They can be applied to the individual business sectors, or cumulatively to the whole organisation. Smaller, or more specialised, financial institutions will only cover one or two of the business sectors. On the other hand, a bancassurance institution can collect the indicators in each of the four sectors.

In order to describe the whole organisation, in-house ecology (logistics, energy management, etc.) should also be considered. The management indicators can also be applied to these organisational units.

4. Product Indicators

The following four sub-chapters describe the product related performance indicators for the four business sectors. Within each sector 2 categories of indicators are proposed:

- ◆ Indicator 4 – integration of environmental aspects into the core business
- ◆ Indicator 5 – development of environmentally oriented products and services (“pioneers and innovations”)

The environmental quality achieved by the environmental performance is of particular interest. Financial institutions often experience that external stakeholders have particular expectations concerning their environmental performance yield.

In the area of indicator 4, the core business processes, ecological quality is relatively easy to describe. The environmental aspects associated with the core business processes are to a large extent known. Correspondingly, the participating financial institutions have either built up environmental management systems or have expanded their risk management systems to incorporate these environmental aspects.

The examples of the indicators provided by the participating organisations display that indicator 4 can be collected in practice. This was possible despite the fact that not all institutions were able to collect the necessary information from their existing business information systems, and thus required manual collection. Future adaptations to risk management EDP solutions will ease the collection and analysis of these indicators.

Indicator 5 aims at portraying the development of environmentally oriented products and services for financing or insuring environmental pioneers and innovations. With the aid of this indicator, it should be possible to depict qualitatively interesting developments in this area at an early stage.

Indicator 5 has even higher quality demands. In order to display the environmental improvements resulting from projects, a reference point and information about the (positive or negative) deviations from this point are required.

At the present time this is not yet possible: process and organisation specific ecological benchmarks are only available on a limited scale. Additionally, financial institutions only rarely know the eco-balances of their clients. Environmental labels, such as the international “Forest Stewardship Council FSC” or the Swiss Minergie Standard for low-energy houses, would be a good starting point for such benchmarks. However, such labels are mostly applied to products, whereas financial institutions typically finance or insure enterprises or projects.

After intense discussions concerning the environmental quality standard for indicator 5, the project group decided on a pragmatic course of action: the responsibility will lie with each institution to define its self-declared environmental quality standard which it applies in determining environmentally oriented products and services, and provide this description along with the indicator.

In aid of this the project group provides two criteria which the products and services should fulfil to be included within indicator 5. The financed or insured projects should prove:

- ◆ a **high benefit** to the environment and
- ◆ to be **innovative**

Environmental benefits can result either from an organisation or project: by making their own processes (in particular production processes, transport, waste disposal) more environmentally friendly; or by providing market services that are more environmentally friendly in other areas of the life-cycle, such as with the producers, users or disposers (e.g. reduced emissions during energy production, such as with fuel cells).

The degree of technological innovation (e.g. loans for the production of fuel cells) or the pioneering role of a project or company (e.g. providing capital for start-up firms with particularly environmentally friendly product ideas) can be utilised for defining the degree of innovation. The innovation of a project is thus limited on a timescale. The larger the acceptance of a new technology or project within the market, the fewer the associated credit risks as well as the degree of innovation.

Additionally, reference can be made to frequently named environmental goals, such as the World Business Council for Sustainable Development WBCSD's eco-efficiency criteria:

- ◆ reduced material intensity
- ◆ reduced energy intensity
- ◆ reduced dispersion of toxic substances
- ◆ enhanced recyclability
- ◆ maximised use of renewables
- ◆ extended product life
- ◆ increased service intensity (with prolonged life expectancy and/or increased functionality)

The project group realises that the open qualification of indicator 5 for the financial service provides a large leeway during the institution's specific interpretation of the indicator's boundaries. The majority of external reviewers also came to the conclusion that this open definition makes the external comparison of published indicators very difficult, nevertheless allows for internal comparison over time.

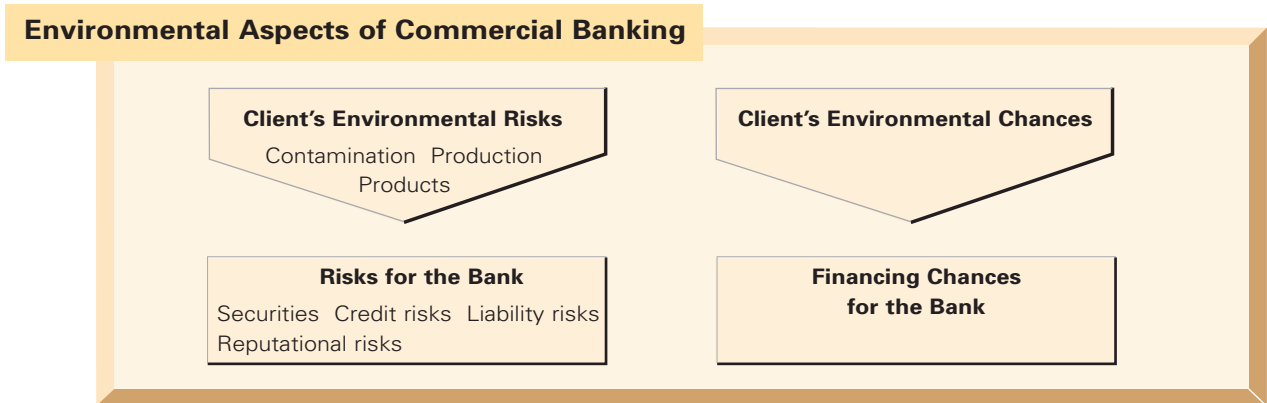
Internal EDP systems, however, are presently not at the stage of being able to identify environmentally oriented financing or insurance, since they were not designed for this. Providing a large leeway when defining indicator 5 allows a greater number of financial institutions to find internal solutions and to integrate the results within the discussion.

From the project group's point of view, promoting the reporting of environmentally oriented financial services has priority over the restricted external comparability of the results. In the future, the experiences gained can be used to create a more precise definition of indicator 5.

4.1 Commercial Banking

4.1.1 Environmental Aspects

Commercial banking is the business sector within the industry with the longest experience of integrating environmental aspects. The main reason for this is that nowadays environmental aspects can become a substantial credit-worthiness risk.



Environmentally associated risks amongst credit clients include:

- ◆ ground contamination of industrial or housing real estate
- ◆ environmentally damaging production processes
- ◆ products resulting in negative environmental impacts through the end user(s)

Depending on the legal situation, these can become credit-worthiness risks for the financing banks:

- ◆ Collateral such as encumbrances on property for real estate can be partially or wholly devaluated as a result of ground contamination.
- ◆ The costs of the required cleaning for facilities and production processes places pressure on the profitability and cashflow of the client and endangers the payment of interest and principal.
- ◆ Depending on the legal situation, the bank may be liable for damages caused to the environment.
- ◆ Depending on the role and actions of the financing bank, a reputational risk exists where serious environmental damages have occurred as a result of the financed plant or company.

For these reasons, banks have expanded their lending process to take into account environmentally associated risks. This usually occurs in two to three stages: Initially, all environmentally relevant loans must undergo a preliminary check by the client adviser for possible environmental risks. For those cases where an environmental risk is identified, they are then examined in detail either by internal or external experts.

Indicator 4 specifically aims at measuring the integration of these environmental aspects into the core business, and describes the contribution to the reduction of environmental risks through commercial banking.

Indicator 5 concentrates on identifying the active contribution of financial institutions to environmental protection through the financing of environmental opportunities. This involves the above-mentioned procedure of applying the institution's self-declared environmental criteria.

Such financing stands in competition with the remaining client credit wishes. Since environmentally oriented projects often have a long-term outlook, various financial institutions have developed so-called eco-loans which provide favourable conditions for these projects.

4.1.2 Definition of the Indicators

Definition Indicator 4 of Commercial Banking: Environmental Aspects of the Core Business

Indicator 4 of commercial banking aims at documenting the examination of environmental aspects within commercial banking:

- ◆ Indicator 4a is a reference figure and describes the sum of lendings or the number of loans according to the bank balance.
- ◆ Indicator 4b restricts this sum to the loans which are environmentally relevant. Depending on the institution providing the data, this figure may be identical to 4a.
- ◆ Indicator 4c documents those loans which undergo a preliminary examination regarding environmental aspects.
- ◆ Indicator 4d displays the particularly environmentally relevant loans which are examined in detail by internal or external experts.

Definition Indicator 4 of Commercial Banking: Environmental Aspects of the Core Business

No.	Definition of the Indicator	Comments	Relative Indicators
4a	Sum of lendings according to the bank balance sheet or number of loans	- equivalent to the annual report (usually as per 31.12.) - the boundaries of the business sector should be provided with the indicator - the number of loans encompasses the number of client commitments. If this commitment consists of a number of smaller loans, e.g. with varying repayment periods, this counts as one loan	
4b	Sum of lendings or number of loans with environmental relevance	Not environmentally relevant loans are e.g.: - loans to other banks - small and consumer loans - warranties	$4b / 4a =$ Percentage of environmentally relevant loans
4c	Sum of lendings or number of loans with a preliminary environmental examination	Requirement: within the credit check process a minimum of one question concerning environmental aspects is to be answered and the result is to be retained electronically or in writing	$4c / 4b =$ Percentage of loans with a preliminary environmental examination
4d	Sum of lendings or number of loans with a detailed environmental examination	- a detailed examination requires an individual and documented examination by an internal or external expert - provide the number of loans examined within a financial year	$4d / 4b =$ Percentage of loans with detailed environmental examination

Definition Indicator 5 of Commercial Banking: Pioneers and Innovations – Financing Environmentally Oriented Projects

Indicator 5 of commercial banking aims at portraying the bank's contribution through the financing of environmentally oriented projects. Indicator 5a provides the number of loans and indicator 5b the volume of financing. The percentage of environmentally oriented financing can be determined when this indicator is related to the lendings in indicator 4a.

Definition Indicator 5 of Commercial Banking: Pioneers and Innovations

No.	Definition of the Indicator	Comments	Relative Indicators
5a	Number of loans with both high environmental benefits and innovative characteristics		$5a / 4a =$ Percentage of environmentally oriented loans for pioneers and innovations
5b	Volume of financing (effective claims) within both 5a categories		$5b / 4a =$ Percentage of environmentally oriented financing

4.1.3 Company Examples

Company Examples of Product Indicators in Commercial Banking

Institution	HypoVereinsbank AG	UBS	Zürcher Kantonalbank
Business sector	Domestic corporate clients, per end of 1999	Private and corporate clients (domestic), 1999	Commercial banking, 1999
4 + 5 Commercial Banking			
4a Lendings or number of loans	17,000 loans	103 bn. €	38.7 bn. €
4b Lendings or number of loans with environmental relevance	14,500 loans	103 bn. €	30.7 bn. €
4c Lendings or number of loans with preliminary environmental examination	9,050 loans	56 bn. €	30.7 bn. €
4d Lendings or number of loans with detailed environmental examination		38 loans	55 loans
5a Total number of loans with high environmental benefits and innovative characteristics			391 loans
5b Volume of financing for 5a	202 m. € new loans in 1999		23.9 m. €

4.1.4 Interpretation

In reference to indicator 4 within commercial banking, the difference between "number of loans" and "sum of lendings" was intensely discussed during its formulation: Within this business sector, indicator 4a and occasionally indicator 4b are published. However, they are usually published as a summary on the basis of the sum of lendings. Therefore the publication of the number of loans at this level is not standard business practice.

In order to simplify the application of the indicators, the project group decided that it would remain up to each institution whether to publish the number of loans and/or the sum of lendings as the subindicators of indicator 4.

A further point of discussion within the subgroup was the choice between the theoretical credit risk (which is defined by the conceded line of credit) and the actual credit risk for the balance sheet date (which corresponds to the effective lendings). Indicator 4 consists of the lendings since this is the sum available in the business report.

The sum of lendings according to the bank balance sheet is typically applied to indicators 4a to 4c by the institutions within this project. In this case, it is irrelevant whether a loan has existed over 20 years or was recently granted. This is not the case for indicator 4d, where the number of loans with detailed examination is taken from the year of the business report (e.g. 1.1.99 – 31.12.99). For this reason, 4d cannot be directly compared with the subindicators 4a to 4c. In order to obtain a corresponding value for indicators 4a to 4c, the total number of loans checked since the introduction of detailed environmental examinations should be added.

The development of the relative indicator 4d/4b (percentage of loans with detailed environmental examination) should be commented on by the institution publishing the indicator. If the relationship increases, this can be interpreted in two ways if no comment is provided:

- ◆ In a negative sense, since environmentally relevant loans were apparently granted without the required care prior to the introduction of environmental management systems.
- ◆ In a positive sense, since an in-depth examination of possible environmental risks led to a more positive environmental performance.

4.2 Investment Banking

4.2.1 Environmental Aspects

The environmental aspects of investment banking are similar to those of commercial banking: Business Risks and Liability Risks are the most important aspects of the core business.

Reputational risks are an additional factor to take into consideration. On the basis of the size of the transactions within investment banking, projects with large environmental impacts can become reputational risks for the financing bank. Well-known examples of this include large dam and power plant projects.

These three risks take on varying proportions within the different business fields of investment banking. This is illustrated in the following table developed by the project group:

Environmental Risks of the Business Fields within Investment Banking

Business field	Business Risks	Liability Risks	Reputational Risks	Comments
Trade Finance: <ul style="list-style-type: none"> ◆ Export Finance ◆ Non-recourse Financing ◆ Commodity Trade Finance ◆ Export Leasing 	middle ¹ low low middle	low low middle low	high middle middle middle	1 e.g. when export credit guarantee is not granted due to ecological or social reasons
Project Finance: <ul style="list-style-type: none"> ◆ Projects + Plants 	high	middle ²	high	2 public perception is very high due to the direct allocation possibility within project financing
Corporate Finance: <ul style="list-style-type: none"> ◆ Leveraged Finance ◆ Equity Capital Markets ◆ Debt Finance Markets 	high low low	middle middle ³ middle	low middle ³ middle	3 e.g. IPO of an environmentally damaging organisation e.g. Project bonds
Not considered: <ul style="list-style-type: none"> ◆ Trading ◆ Research 				no direct environmental impacts

The assignment of the business fields varies in practice: here Trade Finance is categorised under Investment Banking due to its proximity with Project Finance, however, it is often found under Commercial Banking.

Aside from the risk perspective, business chances can also be realised within investment banking. This can be achieved through financing environmentally oriented projects and enterprises, such as in the area of renewable energy.

4.2.2 Definition of the Indicators

Definition Indicator 4 of Investment Banking: Environmental Aspects of the Core Business – Environmental Due Diligence

Indicator 4 of investment banking aims at documenting the examination of environmental aspects within investment banking:

- ◆ Indicator 4a is a reference figure and describes the sum of transactions within a business field.
- ◆ Indicator 4b documents those transactions which have undergone a preliminary examination regarding environmental aspects.
- ◆ Indicator 4c displays the particularly environmentally relevant transactions which have been examined in detail for their environmental aspects by internal or external experts.

Definition Indicator 4 of Investment Banking: Environmental Aspects of the Core Business

No.	Definition of the Indicator	Comments	Relative Indicators
4a	Volume and number of transactions in the business field	This requires an exact boundary between the business fields within investment banking (e.g. project finance, corporate finance, etc.)	
4b	Volume and number of transactions with internal environmental screening	- at least one checkpoint for environmental aspects within the screening method - the indicator represents the period of one financial year	
4c	Volume and number of transactions with an environmental impact assessment, environmental certificate of conformity (e.g. US Regulation Phase 1 + 2)	This requires individual examination, either by internal or external experts	$4c / 4a =$ Percentage of transactions with detailed environmental examination

Definition Indicator 5 of Investment Banking: Pioneers and Innovations – Financing Environmentally Oriented Projects

Indicator 5 of investment banking aims at portraying the bank's contribution through the financing of environmentally oriented projects. Indicator 5a provides the corresponding transaction and financing volumes. The percentage of environmentally oriented financing can be determined when this indicator is related to the total sum of transactions, respectively financing (indicator 4a).

Indicator 5 of Investment Banking: Pioneers and Innovations

No.	Definition of the Indicator	Comments	Relative Indicators
5	Volume of transactions with both high environmental benefits and innovative characteristics	It is useful to divide this indicator into new transactions of the current year and sum of financing	$5 / 4a =$ Percentage of investments in pioneers and innovations

4.2.3 Company Examples

Company Examples of Product Indicators in Investment Banking

Institution	HypoVereinsbank AG	Credit Suisse Group
Business sector	Project and Asset Based Financing, 1999	Investment Banking 1999
4 + 5 Investment Banking		
5 Volume of transactions with high environmental benefits and innovative characteristics	264 m. € (= 3.7 % of the total transactions within the business sector)	2,724 m. €

4.2.4 Interpretation

When comparing the four business sectors considered in this project, it can be determined that the greatest potential for the introduction and spread of environmental management systems lies in the business sector investment banking.

Environmental aspects are usually examined at a project-specific level within investment banking. In this area environmental quality standards exist, such as the World Bank guidelines, to which certain investors require compliance with.

Systematic environmental management systems, e.g. in accordance with ISO 14001, can only be found in few Investment Banks. Environmental performance indicators, however, require at least a few elements of an environmental management system in order to measure performance. Further steps within investment banking are therefore required in practice.

4.3 Asset Management

4.3.1 Environmental Aspects

Environmental aspects have been considered in specialised investment products for many years. Nevertheless, the investment volume of these products often lies under 1% of total assets under management, though with a growing tendency. The market leaders in this area today each manage between ca. 500 to 1,000 million EUR in specialised investment products.

This results in asset management having a different starting point compared to the other business sectors: environmental aspects are examined either never, rarely or only by specialised providers during investment recommendations within the core business. The proposed differentiation (see section 2.4) between environmental performance of the core business (indicator 4) and environmentally oriented services (indicator 5) can therefore not sensibly be applied to asset management.

On this basis and for the purpose of EPI-Finance 2000, the project group decided to direct indicators 4 and 5 towards the segment of environmentally oriented investments (Assets under Green Management). However, considering the over-proportional growth of this market segment, the need for environmental performance indicators for the entire asset management sector is only a question of time.

Within this area of environmentally oriented investments, there are two principal investment strategies:

- ◆ in the Anglo-Saxon region the strategy occurs mainly on the basis of exclusion criteria, which exclude certain industries, regions or operations (e.g. not investing in weapons or nuclear energy, etc.).
- ◆ In the 90s within Europe and other regions, strategies were developed dealing with investments in companies displaying higher than average eco-efficiency on the basis of detailed positive criteria (such as management systems, training/communication, processes and products).

These two approaches result in differing portfolios, which is the reason for the project group proposing a description according to these two strategies (see indicators 4b and 4c).

This set of indicators focuses on environmental aspects. In the area of environmentally oriented investments, the distinction between environmentally and socially responsible orientation is nowadays fading. In particular, "Socially Responsible Investment" (SRI) considered both aspects from the beginning. Consequently, investments which are oriented towards social sustainability or an all-encompassing approach integrating all three dimensions of sustainability ("Assets under Sustainable Management") can also be integrated, provided this is made transparent.

Asset management is not only a service provided by banks, but also by insurance companies. The proposed indicators are compared with the entire "Assets under Management", as defined by the individual institutions. Within banks this typically incorporates client assets, without including the bank's own assets. For insurance companies, this incorporates the company's own capital (without contribution from clients) and, possibly, direct investments from client's capital.

The following are encompassed within "Assets under Green Management":

- ◆ own environmental / sustainable funds with own or external research, in their own or foreign deposits,
- ◆ foreign environmental / sustainable funds in own deposits,
- ◆ individual investment mandates with a contract regarding environmental or sustainable aspects,
- ◆ investment deposits regularly examined on the basis of environmental or sustainable aspects,

- ◆ investment foundation assets with environmental or sustainable aspects,
- ◆ environmentally or sustainably oriented investment companies,
- ◆ environmentally or sustainably oriented savings accounts, provided they are incorporated within Assets under Management,
- ◆ environmentally above-average real estate in one's own possession, provided it is incorporated within Assets under Management, which is typical for insurance companies,
- ◆ the corresponding derivatives of the named products and services.

Financial service institutions which sell environmentally or sustainably oriented research without managing assets themselves, can mention those assets managed by their research.

4.3.2 Definition of the Indicator

Definition Indicator 4 of Asset Management: "Assets under Green Management" – Investments in Listed Companies

Indicator 4 of asset management aims at identifying the environmentally oriented assets in listed companies:

- ◆ Indicator 4a is a reference figure and corresponds with the figure published in an organisation's business report. Providing a definition of the Assets under Management is recommended since this varies depending on the business sector.
- ◆ Indicator 4b defines those "Assets under Green Management" which are chosen through exclusion criteria.
- ◆ Indicator 4c encompasses those "Assets under Green Management" which are chosen through detailed positive criteria.
- ◆ The percentage of "Assets under Green Management" of the total Assets under Management can be determined by comparing indicators 4b and 4c with indicator 4a.

Definition Indicator 4 of Asset Management: "Assets under Green Management"

No.	Definition of the Indicator	Comments	Relative Indicators
4a	Assets under Management	- please provide your institution's definition of "Assets under Management" - usually as per 31.12. of the given year	
4b	Assets under Green Management, according to environmental (or sustainable) exclusion criteria	Investments in listed stocks, provided they are considered in the definition of "Assets under Management"	$4b / 4a =$ Percentage Assets under Green Management (exclusion criteria)
4c	Assets under Green Management, according to environmental (or sustainable) detailed positive criteria	The same boundaries as for 4b	$4c / 4a =$ Percentage Assets under Green Management (detailed positive criteria)

Definition Indicator 5 of Asset Management: Pioneers and Innovations – Investments in Non-listed Companies

Indicator 5 of asset management aims at portraying the environmentally oriented assets in non-listed companies. Indicator 5a provides the number of such investments and indicator 5b the volume of investments. Both indicators can be related to the total assets under management.

Definition Indicator 5 of Asset Management: Pioneers and Innovations

No.	Definition of the Indicator	Comments	Relative Indicators
5a	Number of investments in non-listed pioneer companies with high environmental benefits and innovative characteristics	- usually as per 31.12. of the given year	
5b	Volume of investments in € according to definition in 5a		5b / 4a = Percentage investments in non-listed pioneers and innovations

4.3.3 Company Examples

Company Examples of Product Indicators in Asset Management

Institution	Bank Sarasin	Credit Suisse Group	SAM	Swiss Re	UBS	Zürcher Kantonalbank
Business sector	Entire bank, per end of 1999	Entire institution, per end of 1999	Entire institution, 1999	Domestic re-insurance business, per end of 1999	Asset Management, per end of 1999	Entire institution, per end of 1999
4 + 5 Asset Management						
4a Total Assets under Management	25.9 bn. €	760 bn. €		65 bn.€ ¹	1,090 bn. €	66 bn. €
4b Assets under Green Management, according to exclusion criteria		0.039 bn. €				
4c Assets under Green Management, according to detailed positive criteria	0.88 bn. €	0.64 bn. €	0.2 bn. €	0.038 bn. €	0.39 bn. €	0.062 bn. €
5b Volume of investments in non-listed pioneer companies with clear environmental product and process innovations as compared to state of the art technology				24 m. €		

¹encompasses 20 bn. € in shares and investments as well as direct tangible assets

4.3.4 Interpretation

Assets under Green Management (respectively "Assets under Sustainable Management") encompass all stocks which were purchased on the basis of an environmentally oriented recommendation (ecorating) and which are possibly rejected due to a modified ecorating result. Therefore it is not possible to include within "Asset under Green Management" the identical stocks of a particularly environmentally oriented company which were chosen through a different investment strategy. The critical question is whether a modified environmental rating would result in the further buying or selling of the stock.

In order to distinguish between indicators 4c and 4b, it is recommended to provide a description of the detailed positive criteria, the analysis procedure and the analysis team. The type of environmentally or sustainably oriented know-how a provider bases such products on is also a point of interest for investors in "Assets under Green Management". On the basis of a combined interpretation of indicator 4 with the management indicator 1c (number of specialised environmental posts), one can determine to what extent an institution relies on internal or external know-how for environmental research.

Within indicator 5 there are possible investment vehicles, such as investment companies which are themselves listed but which concentrate on non-listed companies. These can be integrated into indicator 5 provided that corresponding comments are supplied.

4.4 Insurance

4.4.1 Environmental Aspects

The indicators defined in this project can be applied to non-life insurance. The areas of life and health insurance were not considered in the scope of this project.

The environmental aspects of the various insurance operations were initially defined by the project group and assigned to different indicators:

Environmentally Relevant Areas within Insurance

Environmentally relevant areas within the insurance industry	Indicator proposals
◆ Acceptance terms (promotion criteria; exclusion criteria) endorsed by environmental risk-specific criteria	no indicators (describe qualitatively)
◆ Contracts and tariff terms with environmental risk relevant differentiation	no indicators (describe qualitatively)
◆ Covering damages to environmental goods (as well as consequential damages to economic goods (e.g. drinking water) and adverse effects to the environment/eco-damages)	Indicator 4b
◆ Covering damages resulting from environmental influences (e.g. weather conditions)	Indicator 4c
◆ Launching innovations which minimise environmental risks or protect natural resources	Indicator 5
◆ Taking into consideration environmental compatibility during the processing and coverage of claims	no indicators (describe qualitatively)
◆ Active environmental risk communication (during client consultations and training)	covered within management indicators 2 and 3

This list covers the environmentally relevant activities currently undertaken by the insurance industry. They are, however, not systematically integrated on an industry-wide basis and, from an environmental risk point of view, not optimally integrated into business processes.

4.4.2 Definition of the Indicators

Depending on the status of data, an insurance company can present indicators 4 and 5 as either premium volumes or volume of damages. When providing volume of damages, declaration makes sense where specific environmentally relevant policies are available.

Environmental damages (either for environmental goods or through environmental influences), however, are frequently integrated within a comprehensive coverage, e.g. a comprehensive general liability policy. There, the environmental exposition (environmental risk) is not specifically considered within the calculation of a premium. In these cases, the insurance company cannot provide a separate figure for the share of the premium covering environmental risks. This reflects the present situation of the insurance market, where environmental risk aspects are normally not regarded separately within the calculation of the premium. For this reason it can be easier to provide the damages volume instead of the premium volume.

Definition Indicator 4 of Insurance: Environmental Aspects of the Core Business – Environmentally Oriented Volume of Premiums or Damages

Indicator 4 of the insurance business aims at portraying those insurances within core business affected by environmental aspects:

- ◆ Indicator 4a is a reference figure and provides the potentially environmentally relevant premium or damages volumes.
- ◆ Indicator 4b aims at defining the environmental performance through insuring damages to the environment,
- ◆ whereas indicator 4c focuses on the coverage of damages resulting through environmental influences.
- ◆ Indicators 4b and 4c can both be related to the sum of environmentally relevant premium or damages volumes, and thereby indicate the relative importance of environmental performance within the business.

Definition Indicator 4 of Insurance: Environmental Aspects of the Core Business

No.	Definition of the Indicator	Comments	Relative Indicators
4a	Total premium or damages volume	- not including life or health insurances - gross premium volumes or paid damages (including reserves)	
4b	Premium or damages volume for possible damages or damages having occurred to the environment (absolute environmental damages and consequential losses)	One should mention important legal liability regulations and updates	$4b / 4a =$ Percentage of "to the environment" premium or damages volume
4c	Premium or damages volume for possible damages or damages having occurred through environmental influences	Gross premium volumes or paid damages including reserves	$4c / 4a =$ Percentage of "through the environment" premium or damages volume

Definition Indicator 5 of Insurance: Pioneers and Innovations – Environmentally Innovative Insurance Products and Solutions

Indicator 5 provides the means for insurance companies to portray particularly innovative insurance solutions to environmentally related risks or policies with particular environmental benefit.

Definition Indicator 5 of Insurance: Pioneers and Innovations

No.	Definition of the Indicator	Comments	Relative Indicators
5	Premium volumes or number of policies with innovative cover solutions for environmental risks and/or environmentally effective incentives within the tariffs	Gross premium volumes or number of closed contracts that demonstrate "environmental and innovative" criteria	

4.4.3 Company Examples

Company Examples of Product Indicators in Insurance

Institution	Credit Suisse Group	Gerling	RheinLand Versicherungs AG	Swiss Re
Business sector	Winterthur, per end of 1999	1999	1999	Domestic re-insurance business, per end of 1999
4 + 5 Insurance				
4a Total premium or damages volume	8.8 bn. € gross premium volume 5.7 bn. € damages		153 m. € gross premium volume 109 m. € gross damages	5.1 bn. €
4b Premium or damages volume for possible damages or damages having occurred to the environment	3.7 m. €		20,000 € (liability damages)	104 m. € completed environmental examinations; 69 m. € products & solutions
4c Premium or damages volume for possible damages or damages having occurred through environmental influences			6.2 m. € (weather induced damages)	
5 Premium volumes or number of policies with innovative cover solutions for environmental risks and/or environmentally effective incentives within the tariffs	ca 2.5 m. €	2.5 m. € ¹	2.75 m. €	14 m. €

¹ in "Eco-Soil" and "Clean-Up" policies

4.4.4 Interpretation

Codes for environmental risk components should be introduced within underwriting entries and damage documentation. In practice, only those aspects can be differentiated which are systematically ascertained and entered into the business information systems.

Timescales of the damages, as well as premium volumes, should be interpreted with care: On the one hand they provide information regarding the development of damage potentials and damage causes. On the other hand they reflect the particular strategies used for setting up business fields or retreating away from them.

From an environmental point of view, a high premium volume ("we insure this potential") or a low premium volume ("we underwrite only those risks with high environmental standards") can be signs of the awareness of environmental risks.

5 Conclusions and Recommendations

5.1 Overview of Environmental Performance Indicators for the Financial Industry

The project group set itself the goal of developing management performance indicators (MPI) and operational performance indicators (OPI) within the area of product ecology for the four business sectors: commercial banking, investment banking, asset management and insurance.

The following overview illustrates the status of indicators for financial institutions.

Overview of Environmental Performance Indicators for the Financial Industry

Indicators	Commercial Banking	Investment Banking	Asset Management	Insurance	In-house Ecology
Management Performance (MPI):					
1: Know-how	Environmentally relevant posts and environmental departments				dito
2: Training	Environmental management training				dito
3: Auditing	Environmental management audits				dito
Operational Performance (OPI):					
4: Integration into the core business	Environmental risk check	Environmental risk check	"Asset under Green Management"	Environmental risk coverage	7 VfU-Indicators
5: Environmentally oriented services	Financing environmentally oriented pioneers	Transactions with environmentally oriented pioneers	Investments in environmentally oriented pioneers	Environmentally innovative policies	<ul style="list-style-type: none"> - Electricity - Heating - Water - Paper - Waste disposal - Transport - CO₂

There is a widely accepted standard, the VfU-Standard, for determining operative performance within the area of in-house ecology. At the present time, however, there is no standardised measurement of environmental management performance within in-house ecology. This area was not covered during the project, nor were indicator examples delivered for this area. Nevertheless, the management performance indicators developed during this project appear to also be applicable for the area of in-house ecology.

5.2 Further Indicators?

Within the scope of this project further possible indicators were discussed (see 5.2.1 and 5.2.2). The following reasons led to the rejection of those indicators:

- ◆ They would not be collectable through the corporate information systems (or only with unjustifiable effort),
- ◆ the indicators would not lead to a significant statement regarding environmental performance,
- ◆ the indicators would not be able to be published due to corporate policy reasons.

The indicators which were rejected following intensive discussions within the subgroups are presented in the next two sections in order to provide a comprehensive coverage.

5.2.1 Rejected Management Indicators

Within commercial banking and investment banking, an addition to indicator 1 was considered which would include the costs of internal and external environmental analysis.

The cost of the environmental analysis consists of:

- ◆ internal process costs
- ◆ costs for the internal environmental departments
- ◆ costs for external expertise provided by consultants

While the first two categories are comparable, the third category is independent of the environmental risks of the bank yet depends on the market position of the bank vis-a-vis the client: with certain projects the bank takes over the cost of the consultant, with others the client carries these costs.

The total costs carried by the bank can therefore not be a thorough indication of all the environmental examinations undertaken as a result of its environmental management system.

5.2.2 Rejected Product Indicators

An indicator measuring the financial performance of environmental examinations within all four business sectors was discussed.

Within **commercial banking** the performance could be measured according to credit failures resulting from environmental risks. However, credit failures do not usually result from one factor alone. Normally other factors, such as management mistakes, changes in the market, etc., cumulatively add up with environmental risks.

Banks can therefore publish the sum of reserves within commercial banking, however this cannot be divided into individual originators.

Performance is already currently published in the area of **asset management**. This performance, however, is defined from a client's point of view and not from the institution's. In addition, the performance of environmentally oriented investments is not in itself an environmental performance. There are numerous other influencing factors such as interest level, market developments or the fluctuations in exchange rates.

A possible indicator could be defined to compare the under- and over-performance of environmentally oriented investments with otherwise similar investments.

For indicator 4 within **insurance** it was deliberated whether to distinguish between preliminary and detailed examination of environmental risks within insurance policies, such as for commercial banking. This was found not to be possible due to the varying levels of quality between preliminary and detailed examination depending on the insured risk.

5.3 Recommendations

The institutions participating in this project daily experience the critical discussions resulting from the needs of internal and external stakeholders.

Bearing this in mind, one reason why this set of indicators was developed was to improve the quality of communication with interested third parties, as well as to allow for the comparison of environmental performance across the industry.

This report and the indicators proposed herewith do not claim to be complete in the sense of content and methodology. The main aim was to present an initial practical proposal.

The comparability of the indicators was an important goal for the project group. The practical examples presented in this report display that many of the indicators require additional information. The broad variety of participants from a large scope of company sizes within the project group, divisions of business sectors and organisational strategies reflects the necessity, that institutions provide additional information, particularly for the product indicators, in order to allow for comparisons.

A prerequisite for the application of these indicators is that at least certain elements of an environmental management system are in place within the specific business sector(s), or are planned for the near future.

In order to determine a status quo it is certainly also possible to collect the indicators without the aid of an environmental management system, but environmental performance indicators aim at measuring and reporting performance over a period of time. Ideally they are used to formulate goals for improving environmental performance, for internal controlling and for benchmarking with comparable companies.

Interested parties should be able to count on the indicators developed on the basis of these guidelines. A criteria considered whilst formulating the indicators was that the published values be auditable and verifiable through third parties. This external verification is already being practised in the area of corporate environmental reports.

The experiences in in-house ecology with the VfU indicators, which were introduced in 1996, have shown that a set of indicators delivers robust and precise results within two to three years of being applied within a company. For this reason, the project members ask for understanding in the case that the first indicator values presented in this report should be corrected at a later date.

Additional possible sources of errors in the indicator examples provided in this report may arise from the fact that not all indicators can presently be collected for all categories through the current business information systems of the institutions. Some have been collected by means of random sampling and manual collection. The concentration and restructuring processes occurring in many places within the industry adds a further hindrance to the continual reporting of a stable system.

Through naming the report "EPI-Finance 2000", the project group aims at portraying the following statements:

- ◆ the report uses the environmental performance indicators (**EPI**) described by ISO 14031 as a guideline.
- ◆ the report substantiates ISO 14031 for the **financial industry** (as to the project members' knowledge, the financial institutions are thus taking on a pioneer role)

- ◆ the report utilises the available knowledge in the year **2000** of financial institutions active in the field of environmental management, and should be supplemented and updated in the future.

The project members look forward to critical comments and suggestions for improvements to the set of indicators presented in this report. They would also welcome the discussion of the proposed indicators between external stakeholders and other financial institutions.

The greater the number of financial institutions who can provide environmental performance indicators for discussion in the future, the higher the quality of future versions.

Abbreviations

AM	Asset Management
CB	Commercial Banking
DJSGI	Dow Jones Sustainability Group Index
ECI	Environmental Conditions Indicators
EDP	Electronic Data Processing
EMAS	Eco-Management and Audit Scheme
EPE	Environmental Performance Evaluation
EPI	Environmental Performance Indicators
IB	Investment Banking
IPO	Initial Public Offering
ISO	International Organisation for Standardisation
MPI	Management Performance Indicators
MSCI	Morgan Stanley Composite Index
OPI	Operational Performance Indicators
SA8000	Social Accountability Standard, edited by CEP (Council for Economic Priorities)
SRI	Socially Responsible Investment
UNEP	United Nations Environment Programme
VfU	Association for Environmental Management in Banks, Savings Banks, and Insurance Companies ("Verein für Umweltmanagement in Banken, Sparkassen und Versicherungen")
WBCSD	World Business Council for Sustainable Development

References

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ISO 14001	Environmental Management Systems – Specifications with Guidance for Use (ISO 14001 : 1996)
ISO 14031	Environmental Management – Environmental Performance Evaluation – Guidelines (ISO 14031 : 1999)
VfU	Association for Environmental Management in Banks, Savings Banks, and Insurance Companies, 1996 (Ed.): Environmental Reporting of Financial Service Providers (available from Credit Suisse; refer to www.epifinance.com)
WBCSD	Verfaillie/Bidwell: Measuring Eco-Efficiency – A Guide to Reporting Company Performance, 2000

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