

**ECO-OFFERS OF BANKS  
AND INVESTMENT FUNDS**

**POLAND & INTERNATIONAL TRENDS**

© Copyright by Wydawnictwo Naukowe Uniwersytetu Mikołaja Kopernika

© Copyright by Wydawnictwo Naukowe Uniwersytetu Mikołaja Kopernika

**LESZEK DZIAWGO**

**ECO-OFFERS OF BANKS  
AND INVESTMENT FUNDS**

**POLAND & INTERNATIONAL TRENDS**

© Copyright by Wydawnictwo Naukowe Uniwersytetu Mikołaja Kopernika



Toruń 2003

Translated and proof-read by  
**Edward Maliszewski**  
**Beata Luc**

Business English consulting by  
**Przemysław Hewelt**

This publication has been possible thanks to the support  
from the **Polish Committee of Scientific Research** (Komitet Badań Naukowych)  
and the carrying out of a research project entitled  
'Banks and investment funds towards natural environmental protection problem.  
Ecological criteria in financial transactions'  
No. 1 H02C 023 18.

Printed in Poland

© Copyright by Leszek Dziawgo and Wydawnictwo Uniwersytetu Mikołaja Kopernika  
Toruń 2003

All rights reserved

ISBN 83-231-1534-6

WYDAWNICTWO UNIWERSYTETU MIKOŁAJA KOPERNIKA

ul. Gagarina 39, 87-100 Toruń

REDAKCJA: tel. (+ 48 56) 611 42 95; fax 611 47 05

e-mail: [dwyd@uni.torun.pl](mailto:dwyd@uni.torun.pl)

DYSTRYBUCJA: tel./fax (+48 56) 611 42 38

e-mail: [ksiazki@umk.pl](mailto:ksiazki@umk.pl)

[www.wydawnictwo.uni.torun.pl](http://www.wydawnictwo.uni.torun.pl)

Wydanie pierwsze. Nakład 350 egz.

Łamanie: Studio KROPKA dtp – *Piotr Kabaciński*

tel. (+ 48 56) 66 01 737, (+48 602) 303 814; e-mail: [studiokropka@inetia.pl](mailto:studiokropka@inetia.pl)

Druk: Zakład Poligraficzno-Wydawniczy POZKAL

88-100 Inowrocław; Cegielna 10/12, tel./fax (+ 48 52) 354 27 00

# CONTENTS

Review ( <b>Grażyna Borys</b> ) .....	9
INTRODUCTION .....	11
<b>CHAPTER 1</b>	
<b>FINANCIAL INSTITUTIONS VERSUS THE PROBLEM OF ENVIRONMENTAL PROTECTION</b>	
1. Foreword .....	17
2. The hierarchy of pro-ecological activities of financial institutions .....	18
3. Environmental management system: integrated and complex systems of management of a financial institution's relationship with the natural environment .....	21
4. Characteristics of selected pro-ecological activities of a financial institution ..	21
4.1. Organisation of work and management processes .....	22
4.2. Information policy .....	23
5. Classification of pro-ecological activity in a financial institution .....	24
5.1. Classification of financial institutions in respect of their engagement in the financing of environmental protection: the offer criterion .....	27
5.2. Other classifications of pro-ecological activity of financial institutions .....	31
6. Banks .....	33
6.1. Foreword .....	33
6.2. Environmental protection in banking operations .....	33
6.3. The concept of the ecological bank .....	39
7. Investment funds companies .....	41
7.1. Foreword .....	41
7.2. Ecological investment funds .....	43
7.3. The classification of ecological investment funds .....	45

8. Other financial institutions engaged in the financing of environmental protection .....	47
9. The securities market .....	49

**CHAPTER 2**

**BANKING TOWARDS NATURAL ENVIRONMENT PROTECTION**

1. Foreword .....	52
2. Selected international initiatives .....	53
2.1. UN Declaration (UNEP) .....	53
2.2. UNEP international conferences: financial institutions and the protection of the environment .....	54
3. Integrated and complex systems of managing the relationships of a bank with the natural environment: environmental management system .....	55
4. Organisation of work processes .....	59
5. Standards, stock indexes and eco-ratings .....	61
6. Taking ecological risk into account .....	64
7. The bank offer .....	65
7.1. Foreword .....	65
7.2. Examples of bank offers .....	66
8. The ecological bank .....	72
8.1. Presentation of selected ecological banks .....	73
8.1.1. UmweltBank AG .....	73
8.1.2. Triodos Bank .....	79

**CHAPTER 3**

**ECOLOGICAL INVESTMENT FUNDS**

1. Foreword .....	82
2. The development of the market of ecological investment funds' .....	82
3. International overview .....	87
3.1. The United States .....	87
3.2. Great Britain .....	89
3.3. Germany – Austria – Switzerland – Luxembourg .....	91
3.4. The Netherlands .....	94
3.5. France .....	95
3.6. Japan .....	96
3.7. Other markets .....	97
4. Selected ecological investment funds .....	98
4.1. UBS (Lux) Equity Funds – Eco Performance .....	98
4.2. Pictet Global Water Fund .....	99

4.3. ValueSar Equity .....	101
4.4. OekoSar .....	104
4.5. Jupiter Ecology Fund .....	108
4.6. Swisca Green Invest .....	109
4.7. DWS .....	110
5. Eco-ethical investment clubs .....	113
5.1. Investment Club Sisyfos .....	113

**CHAPTER 4**  
**SECURITIES MARKET**

1. Foreword .....	115
2. Indexes .....	116
2.1. Dow Jones Sustainability Index .....	116
2.2. FTSE4Good .....	117
2.3. Index NAI .....	118
2.4. UmweltBank-AktienIndex UBAI .....	120
3. Eco-rating .....	121
3.1. Ecological rating agency – Oekom Gesellschaft fuer Oekologische Kommunikation GmbH .....	121
4. Ecological issues and ecological issuers .....	123
4.1. Examples of government and municipal issues .....	123
4.2. Issuers: enterprises and institutions .....	125
4.2.1. Eurofima – European Company for Railroad Rolling Stock Financing .....	126
4.2.2. Selected examples of ecological issuers .....	131
4.3. Other financial instruments .....	132

**CHAPTER 5**  
**COMMERCIAL FINANCIAL INSTITUTIONS AND THE PROTECTION OF THE NATURAL  
ENVIRONMENT IN POLAND**

1. Foreword .....	135
2. Pro-ecological attitudes in financial institutions .....	136
2.1. Ecological risk and credit risk .....	138
3. Bank Ochrony Środowiska S.A. ....	139
3.1. General information about the bank .....	139
3.2. The pro-ecological activity of the bank .....	140

3.3. Credit offer – preferential ecological loans .....	141
3.4. Ecological results .....	143
3.5. Deposit offer .....	145
3.6. Evaluation of the bank’s activity .....	147
4. Business offer of financial institutions combined with financing of environmental protection .....	147
4.1. Banking offer .....	147
4.2. The offers of pension and investment funds .....	149
4.2.1. The Uni XXI Century investment fund .....	150
5. Securities market .....	155
5.1. Foreword .....	155
5.2. Examples of issues .....	155
6. Polish society’s interest in ecological investing .....	158
6.1. Results of selected surveys .....	158
6.2. Complex questionnaire surveys regarding the inclusion of the ecological criterion in the offer of financial institutions .....	159
6.2.1. Foreword .....	159
6.2.2. The results of 1997 and 2002 surveys .....	159
6.2.3. General assessment of survey results .....	167
CONCLUSION .....	169
APPENDIX 1. UNEP Statement by Financial Institutions on the Environment and Sustainable Development .....	171
APPENDIX 2. List of Signatories to the UNEP Statement by Financial Institutions on the Environment & Sustainable Development (By Country. As of March 2003) .....	174
BIBLIOGRAPHY .....	182
LIST OF SCHEMATA .....	186
LIST OF TABLES .....	187
LIST OF CHARTS .....	190



## REVIEW

...This monograph aims at a presentation of the offer of commercial financial institutions, particularly banks, investment funds and rating agencies pertaining to a varied range of products connected with broadly perceived environmental protection.

...Through their careful product offer (preferential ecological loans, green deposits, socially responsible investment of public financial resources, confirmed high ecological and economic effectiveness of developmental economic undertakings etc.) financial institutions can considerably support the process of environmental protection as an important element of sustainable development.

...Without financial institutions engaged in the solution of ecological problems of contemporary economies it will not be possible to control the ecological crisis in the global, regional and local dimensions.

In conclusion, I consider this monograph [...] a novel and interesting elaboration of a high content level.

Jelenia Góra, 18.02.2003

*Grażyna Borys*

**Grażyna Borys**, Professor, Ph.D., Head of the Chair of Finance and Accounting at the Faculty of Regional Economy and Tourism in Jelenia Góra, Wrocław University of Economics.

She has conducted research on financial aspects of sustainable development for many years. She is an author and co-author of many scientific articles, textbooks and books, of which the following should be indicated: *Financial Aspects of Agricultural Land Protection*; *Economic and Financial Aspects of Environmental Protection and Shaping*; *Credit Risk Management in Banks*; *Ecological Risk in Bank Activity*.

Contact: e-mail: [kfir@oscar.ae.jgora.pl](mailto:kfir@oscar.ae.jgora.pl)

© Copyright by Wydawnictwo Naukowe Uniwersytetu Mikołaja Kopernika

## INTRODUCTION

The devastation of man's natural environment assumes very alarming dimensions. Attempts are made in the whole world not to allow an ecological disaster and attention is paid to the essential role of capital in the protection of the environment. Environmental protection is financed in many ways, yet, considering the issues of financing environmental protection one should not neglect the role of the institution of financial market. So far, the financing of environmental protection has generally been associated with grants, fines, fees, preferential loans and deposits. These are the solutions where public financial means are used to a significant degree. However, attention should be paid to commercial financial institutions and mechanisms of the financial market and possibilities to use them in the process of financing the natural environment.

Undoubtedly, institutions of international financial market are subject to "ecological" pressure in the positive sense of the word. The international financial market has noticed the growing importance of the protection of natural environment in society.

Very often social expectations force a lesser or greater acceptance of the requirements of environmental protection in the economic activity above the level required by law. A series of cases can be shown on the international financial market where renowned financial institutions maintain or gain customers by using the aspect of environmental protection in offering their own services and products. Like other production and service companies before, numerous commercial financial institutions have now discovered a chance to distinguish themselves positively on the market in order to maintain and gain customers. Supporting environmental protection by a financial institution may focus society's attention to this particular institution and help to gain a greater social approval of their activity. Consequently, this may lead to a stronger market position and increase the value of the company.

Globalisation and international co-operation create an additional opportunity to work out a conception of using commercial financial institutions in the

protection of natural environment. The process of exchange of ideas, reflections and experience, advances in the scope of a broader participation of financial institutions in the implementation of the conception of sustainable development. Attention is paid to the growing importance of the issue of banking and finance in environmental protection on the Earth.

Not only less or more spectacular gestures of financial institutions concerning the natural environment protection are known on the international financial market. Other serious initiatives in the area of natural environment protection of renowned financial institutions around the world are also known. These are definite cases of shaping a developmental strategy of a financial institution compatible with the principles of sustainable development as well as examples of implementation of the Environmental Management System and obtaining the standards of ISO 14001 or EMAS in the field of natural environmental protection.

It is characteristic that many banks have an offer for customers, which also takes ecological aspects in the financial decisions. Moreover, attention can be paid to the so-called ecological banks. Two of them have developed to such a degree that the shares have been admitted to the stock exchange turnover.

The so-called ecological investment funds are becoming more and more popular. They are functioning in the United States, Great Britain, Germany, Switzerland, Austria, Belgium, Holland, France, Sweden, Finland, Australia, and even in Japan.

On the international financial market, however, the so-called stock exchange or sustainable-type indexes are introduced. Dow Jones Sustainability Group Index and FTSE4Good are excellent examples. These are the indexes whose construction was based on the values of public companies which can be numbered among socially responsible companies, which is concordant with the idea of Social Responsible Investment.\* This notion relates also, among others, to the treatment of the natural environment.

The assessments of the ecological quality of an economic undertaking of the eco-rating or sustainability rating type are also becoming popular.

Poland remains under the influence of the international financial market. The influence of environmental protection on the financial market can also be observed in this country. We can boast essential successes. The first significant bank to finance environmental protection was established in Poland. For some time, it was also the only ecological bank in the world whose shares were quoted on the stock exchange. Financial products designed for customers who took the ecological criterion into account appeared in the offers of other Polish stock-

---

\* SRI conception: Social Responsible Investment or Ethical Investment are particularly popular in the United States and Great Britain.

quoted banks. In addition, an investment fund appeared in Poland, in whose investment policy securities of the issuers connected with environmental protection technologies are allowed for.

Summing up, it seems that a process of adaptation of economic and financial subjects to the functioning in a society which recognises the requirements of natural environment protection is taking place now.

On the international financial market numerous cases of a positive influence of environmental protection on the functioning of financial institutions, including banks, can be found. So far, the offers of banks and investment fund companies in the field of environmental protection financing do not constitute an essential part of the international financial market. However, it already is a perceivable part of the market created by serious international financial institutions and it marks, as it seems, new quality standards of investment in today's world. Giving the number of banks engaged in the protection of natural environment or the number of ecological investment funds and the value of assets accumulated in them will not suffice for the correct assessment of the influence of environmental protection on the international financial market. It is also important to pay attention to which renowned financial and banking institutions offer products with ecological aspects taken into account.

The use of the financial market, its institutions, instruments and mechanisms for co-operation in the field of environmental protection constantly remains an important challenge. The possibility to use the financial market and engage financial institutions in the protection of the natural environment is a widely discussed issue where finding possible solutions would be very promising.

## THE SUBJECT AND AIM OF THIS PUBLICATION

The subject of this publication is an offer of commercial financial institutions of the financial market related to the financing of the protection of natural environment, particularly to pro-ecological economic undertakings. This offer concerns the financing or the gaining of financial resources for the financing of the above-mentioned aim.

It seems that having such a financial offer at the disposal of a financial institution is evidence of a special engagement in environmental protection, thus, the more precious of an attempt that it is to use the financial market. So, this means an ability to use the basic feature of a financial institution, that is, the ability to perform financial operations in order to finance the natural environment.

Especially, an offer of commercial financial institutions of the financial market was analysed. These institutions are later called financial institutions.

In this paper attention is focused on two kinds of financial institutions, namely, banks and investment fund companies. Firstly, these are the institutions

of an unquestioned strong position on the international financial market. It can be supposed that the processes, which take place in them will influence other financial institutions. Secondly, it is in the case of banks and investment companies that most examples of offers containing environmental aspects can be shown.

In turn, a pro-ecological economic undertaking is perceived in this publication as an undertaking which contributes in a special way to natural environmental protection. This may be an economic undertaking in which products of environment protection technologies are manufactured, or an economic undertaking in which the management process is performed with a particular respect of environmental protection. Obviously, there are divided opinions on what a pro-ecological undertaking is. These discrepancies are frequently very serious. In this publication these disputes will not be analysed in spite of the importance of this issue. They should be addressed in other specialist elaborations.

Not only a fair description of the present reality is an important task of this research work but also a prognosis of developmental trends in selected processes. This publication is also subject to this idea.

This paper aims at drawing the attention of scientific, political, economic and financial circles to examples and offers of banks and investment fund companies which operate on the international financial market and take environmental protection into consideration. It can be hoped that this will serve to popularise the solutions as well as open a debate on the use of the institution of the financial market for the financing of natural environment protection.

The aim of this publication is also to present the Polish experience and achievements in the financing of environmental protection by using commercial financial institutions. Not only western solutions are adapted in Poland, but a series of domestic, unique, and tested solutions can be indicated. Poland is one of the more important emerging markets. This country's forthcoming accession to the European Union will make the Polish market even more attractive and worthwhile.

## THE LAYOUT OF THIS BOOK

This book consists of five chapters.

In the first chapter theoretical considerations concerning pro-ecological behaviours of financial institutions on today's international financial market have been introduced. The issue of creating a financial offer connected with the financing of pro-ecological economic undertakings for customers has been given a special role in these considerations.

The second chapter contains examples of pro-ecological behaviours of banks including especially Swiss, German, and Dutch banks. A bank offer concerning the financing of pro-ecological economic undertakings has been presented. The functioning of two ecological banks has also been described.

The third chapter is devoted to the description of ecological investment funds. The most important markets have been presented, such as: American, British, German, Swiss, French, Dutch, and Japanese. This chapter also contains descriptions of investments policies and portfolios of selected ethical and ecological investment funds.

The fourth chapter presents selected examples of pro-ecological financial offers on the international securities market. It describes selected financial instruments, namely the bond and the instruments for classification, assessment and comparison of the ecological quality of investments, such as ecological and sustainability stock indexes, eco-rating and sustainability rating. It presents selected issuers of securities, who are classified as issuers of friendship towards the natural environment.

The fifth chapter presents pro-ecological achievements of the Polish financial market as a more and more important emerging market, the more so as the date of Poland's joining the European Union is near. Much space has been devoted to the Polish ecological bank, i.e. the Bank Ochrony Środowiska (Bank for Environmental Protection). This bank is unique on the world scale. This chapter also presents the results of questionnaires conducted on a representative sample of Polish society which concerned the inclusion of ecological aspects in the process of financial decision-making by individual customers of financial institutions.

In the conclusion theoretical considerations have been summarised and empirical examples presented.

## THE RESEARCH PROCESS

Research work was carried out both in Poland and abroad. Initial research was begun as early as 1992, when the author stayed in Bonn thanks to a German Parliament (Deutscher Bundestag) scholarship. The greatest intensification of research work took place between 1995 and 2002. It was conducted, to a large extent, owing to the means received from the Polish Committee of Scientific Research designed for a group research project *Banks and investment funds and the problem of natural environment protection*. This project used the output of previous research work carried out within the Committee's project *The use of the instruments of the securities market in the financing of ecological investments*.

This large-scale research would not have been possible without the financial support from of the afore-mentioned committee.

The research was conducted in Poland, Austria, Germany, Great Britain, Switzerland, Japan, and the United States. A series of confrontations with renowned international financial institutions of the financial market has been conducted. A number of specialist elaborations and replies to the Author's

questions, which concern the relationships between a financial institution and the natural environment, as well as financial offers connected with the financing of natural environmental protection, have been analysed.

In the research process extensive literature studies and special elaborations have been used.

Questionnaires conducted on a representative sample of Polish society were an essential part of this research. Questionnaire surveys were carried out in Poland twice (in 1997 and 2002) on a representative sample of Polish society which related to the perception of environmental protection in the functioning of financial institutions including banks and ecological preferences of natural persons in the process of saving and investing in the Polish financial market were carried out according to the author's design. They were commissioned by him, too.

The latest survey of 2002 was a continuation of a similar survey of 1997. In this publication the results of both of the questionnaire surveys carried out in a five-year interval have been presented and compared. Both of these questionnaires were conducted by the renowned Centrum Badania Opinii Społecznej CBOS (The Public Opinion Research Centre).

The questionnaire survey carried out on a representative sample of Polish society should be regarded as a unique and very important research project. It is society's interest that will have a great influence on the engagement of the institutions of the financial market in the process of financing natural environmental protection on emerging markets as well. Poland is considered one of the greatest emerging markets and an increasingly more important European financial market.

The results of the surveys were presented fragmentarily during many conferences. During the preparation of this book a number of articles were elaborated to present the results and popularise this research.



## CHAPTER 1

# FINANCIAL INSTITUTIONS VERSUS THE PROBLEM OF ENVIRONMENTAL PROTECTION

### 1. FOREWORD

The growing importance of environmental protection in society has been noticed on the international financial market. Like other production and service enterprises before, numerous commercial financial institutions have now noticed a chance for themselves in order to become positively distinguished on the market to gain and maintain customers. Supporting the protection of the natural environment by a financial institution may focus society's attention to that particular institution and be conducive to the gaining of a greater social approval of this activity. Consequently, this may help to strengthen the market position of a company and increase its value.

As a result, an ecological challenge to the already existing manner of management has not remained uninfluential of the financial market, which is an integral part of the economy. Competition between financial institutions for shares in the financial market including access to private and public funds designed for the protection of the environment gave rise to the process of changes on the financial market. The process consists in a gradual forcing of financial institutions to respect the requirements of environmental protection in their economic activities.

The following factors, among other things, influence the process of taking the requirements of natural environment protection into account on the financial market:

- social support for activities for the benefit of natural environmental protection,
- profitability of many economic undertakings related to environmental protection,
- gaining the interest of part of the investors in achieving an ecological aim by financial investments.

It seems that the financial market may play an important role in the pro-ecological transformation of the economy. Considering the place and function of the financial market in the economic process it is difficult to deny the correctness of this opinion.<sup>1</sup> In financial institutions, in which capitals are gained, concentrated, and invested, there are possibilities to monitor the economy, and in part, also exert an influence on it.

In this chapter a proposed hierarchy of pro-ecological activities of financial institutions has been presented as well as considerations on the engagement of banks and investment fund companies for the benefit of natural environment protection.

## 2. THE HIERARCHY OF PRO-ECOLOGICAL ACTIVITIES OF FINANCIAL INSTITUTIONS

Even though activities connected with natural environment protection have not been supported financially in most financial institutions, attempts are made to join activities for the benefit of natural environment protection<sup>2</sup> in a different way considering the community's support<sup>3</sup> and the necessity to be distinguished among the competitors on the financial market<sup>4</sup> which cannot be neglected. In most cases this is certainly not the level of engagement that would reflect the potential of financial institutions.

It is possible to distinguish a variety of kinds of financial institutions' activities for the protection of the environment. Attempts at a systematisation of these activities are given below with their classification and a proposed hierarchy.

The activities of financial institutions for natural environment protection may include, among other things, the following:

- a voluntary sponsorship of ecological initiatives and organisations,
- activities in the field of marketing and public relations,

<sup>1</sup> Text of the UNO Declaration 'Banking and Environment'. This problem is also raised by Łyszczak, M. (1992). *Finanse jednostek gospodarczych w nowych warunkach ustrojowych*. In B. Poskrobko (Ed.), *Działalność gospodarcza a ochrona środowiska przyrodniczego* (p. 272). Biuro Badań i Wdrożeń Ekologicznych: Białystok 1992; *Umwelt und Banken. Erklärung der Banken zu Umwelt und langfristiger tragfähiger Entwicklung*. (1992). Deutsche Bank. Conference in Frankfurt 04.05.1992.

<sup>2</sup> E.g.: in Deutsche Bank AG a database on the ecological market was created. It was called "db-Unternehmens-Service: Umweltschutz". In turn, Bank Austria AG is working on the managerial system of ecological risk assessment in credit activity: *Umweltrisikomanagementsystem*. There are many more similar examples.

<sup>3</sup> Czaja, S. (1996). *Rola banków w finansowaniu ochrony środowiska przyrodniczego w Polsce*. (p. 88). Poznań: Zeszyty Naukowe Wyższej Szkoły Bankowej. (Vol. 1).

<sup>4</sup> Opolski, K. and Polkowski, K. (1997). *Stosowanie koncepcji zarządzania przez jakość (TQM) w bankach*. *Bank i Kredyt*, 9.

- work and management processes organisation including the requirements of the protection of the environment,
- taking ecological risk into account in financial operations performed,
- linking the commercial offer of a financial institution with the financing of the protection of the environment (gaining capitals for the financing of pro-ecological economic undertakings and their financing, etc.).

In the author's opinion a hierarchy could be proposed for pro-ecological activities of financial institutions considering the institution's possibilities, the specificity of its functioning and the importance of these activities for the protection of the environment. A proposal a hierarchy of pro-ecological activities of financial institutions will be presented in Schema 1.1.

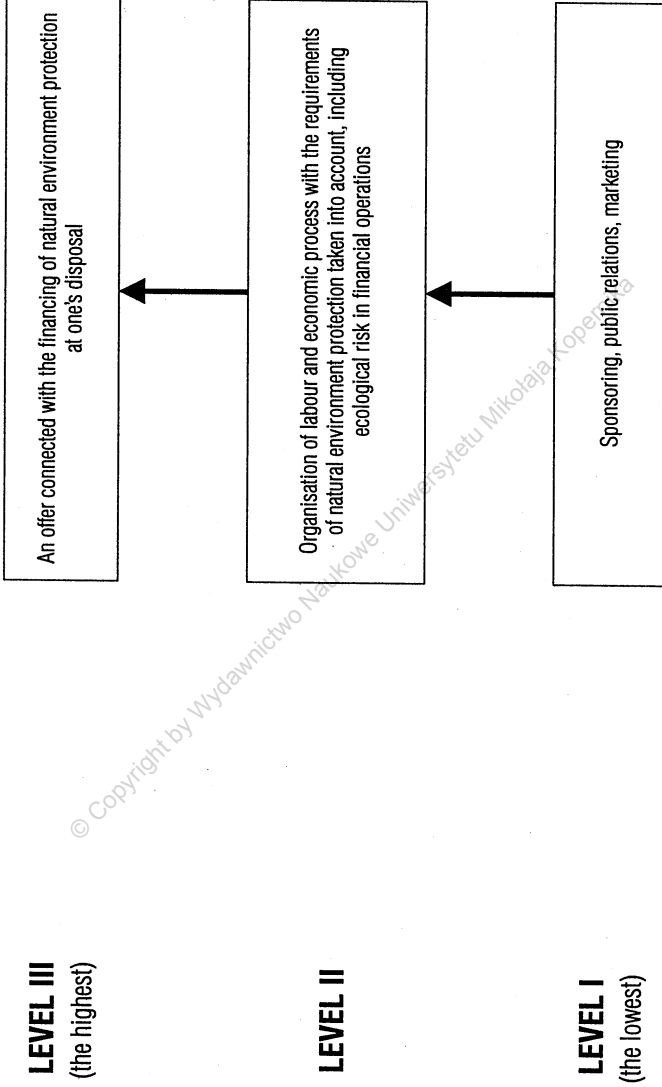
An activity in the field of voluntary sponsorship of initiatives for the protection of the environment, activities in marketing or public relations can be regarded as the lowest level of an activity of a financial institution for natural environment protection (excluding the case a total lack of such activities in a given financial institution). Such activities require the relatively lowest engagement on the part of a financial institution. Such activities are usually considered as rather superficial and not quite convincing in the public opinion. Obviously, however, they are frequently spectacular.

The activities which serve such an organisation of work process and management process in a given financial institution in which the requirements of the protection of the environment have been taken into consideration, i.e. the management of resource use, and the control and reduction of pollution, can be regarded as a higher level of engagement of a given financial institution for the protection of the environment. This kind of activities may also include the recognition of ecological risk in the process of financing economic undertakings. The above activities require, similarly to those mentioned before, a greater effort on the part of the financial institution. The level of these activities can be confirmed by certificates (ISO 14000) and indexes (FTSE4Good, Dow Jones Sustainability Index) or eco-rating assessments.

The highest level of engagement of a financial institution for natural environment protection may include such activities where a financial institution uses the specificity of the financial economic activity performed by the institution, i.e. profits from capital operations on the financial market. This type of activities positively distinguishes a financial institution from other kinds of enterprises. Such activities contain primarily the funds gained for the financing of pro-ecological economic undertakings and the financing of these. It is only the financial institutions whose subject of economic activity is capital operations which are in a position to suggest such activities. This would then be a linking of an offer of a financial institution with the financing of natural environment protection.

It seems that a financial institution's use of an offer, which is related to the financing of the protection of the environment, in particular, pro-ecological

Schema 1.1. The hierarchy of activities of a financial institution for natural environment protection



Source: Author's own elaboration.

economic undertakings, is clear and indisputable evidence of engagement of a financial institution in natural environment protection. It is more valuable that it is an attempt to use the financial market, its institutions, its instruments and mechanisms for the financing of the protection of the environment.

The above-mentioned hierarchy of activities for the protection of the environment can be considered most useful in a description of pro-ecological engagement of a financial institution if pro-ecological activities occur on each of the levels listed.

In a modern financial institution all the activities for the protection of the environment, regardless of the level of the ecological activity achieved by a given financial institution should be included in the system of ecological management.

### **3. ENVIRONMENTAL MANAGEMENT SYSTEM: INTEGRATED AND COMPLEX SYSTEMS OF MANAGEMENT OF A FINANCIAL INSTITUTION'S RELATIONSHIP WITH THE NATURAL ENVIRONMENT**

In general, in the most important financial institutions of today's financial market, the ecological policy of a bank is implemented in an integrated and complex manner, supervised by one of the members of the board. The integrated and complex system of management of relationships with the natural environment is referred to as the Environmental Management System and includes the following scopes of the functioning of a financial institution: work and management processes organisation, pro-ecological social initiatives, co-operation between a financial institution and other institutions and organisation for the protection of the environment, the sponsoring of environmental protection, ecological risk, commercial offer, information policies, etc. All the afore-mentioned scopes of Environmental Management System are co-ordinated both on the national and international levels. Situating the supervision of ecological policy implementation on the level of a member of the board assures pro-ecological activities an appropriate rank and a suitable effectiveness.

### **4. CHARACTERISTICS OF SELECTED PRO-ECOLOGICAL ACTIVITIES OF A FINANCIAL INSTITUTION**

This book presents primarily these pro-ecological activities, which are connected with the financing of pro-ecological financial undertakings. However, the activities, which are not strictly connected with such financing, but are also

pro-ecological, should be presented briefly. They include such activities as: work and management organisation processes, marketing, and public relations.

#### 4.1. ORGANISATION OF WORK AND MANAGEMENT PROCESSES

In financial institutions, like in other enterprises, attention is paid to such work flow and management process as to save as many resources as possible (paper, electric energy, heat, gas, water, etc.) and reduce pollution (waste, rubbish, waste emissions into the atmosphere). The management of resource use and pollutant emission is already a standard in a modern financial institution. Obviously, this contributes to the rationalisation of operating costs, which becomes more and more important in every household. Simultaneously, a certain effectiveness of such activities in the field of environmental protection cannot be questioned. Enterprises, as well as financial institutions, publish so-called ecological balances in which they inform about changes in the use of resources emphasising ecological effects of these savings.

Certain standards of measurement and comparison of resource use and pollutant emissions have already been worked out. One of the proposals, which is used in practice, has been presented in Table 1.1.

Table 1.1. Environmental Performance Indicators (EPI)

ENVIRONMENTAL PERFORMANCE INDICATORS (ACCORDING TO VFU STANDARD)	ABSOLUTE	RELATIVE
Use of electric energy	KWh	kWh/employee
Use of heating energy	KWh	kWh/m <sup>2</sup>
Water consumption	m <sup>2</sup>	L/employee/day
Paper consumption total	tons (t)	tons/employee
Paper type in % of total		%
Copier paper consumption		A4 pages/employee
Waste total	tons (t)	kg/employee
Waste categories in %		%
Total business transport	millions of kilometres (km)	km/employee
Transport carrier in % of total		%
CO <sub>2</sub> emissions total	tons (t)	Kg/employee

Source: Environmental Reporting of Financial Service Providers. (2001). Verein fuer Umweltmanagement in Banken, Sparkassen und Versicherungen e.V., p. 3.

## 4.2. INFORMATION POLICY

The subject of environmental protection is widely used in marketing and public relations. In general, the pro-ecological activities already undertaken are presented in these activities in order to become distinguished on the market. In the case of having an offer connected with environmental protection this is clearly shown in marketing campaigns. Its purpose is to draw attention to the product because it is commonly known that society favours pro-ecological behaviour. This is similar in the functioning of public relations. Financial institutions have been undertaking decisive actions in order to create an ecological image of a given financial institution. The “green” image is to be helpful in the gaining of society’s friendly attitude to the activity of a financial institution, to make it interested in the offer and, in effect, strengthen the market position of an institution and, consequently, increase the value of the company. It can be assumed that a financial offer connected with the financing of environmental protection should facilitate a formation of a favourable ecological image of the company.

The publication of so-called environmental reports is an information effect of an environmental management system, which contains an information policy. A publication of this type includes a description of the total of activities of a given financial institution for natural environment protection. The aims of environmental reporting are the following:<sup>5</sup>

- to assure public acceptance,
- to strengthen the confidence of stakeholders,
- to inform and motivate staff,
- to document environmental activities,
- to create competitive advantages,
- to identify the cost-reduction potential.

It is considered that a correct ecological report in a financial institution should have the following layout:

- a) general information:
  - foreword,
  - general information on the bank,
  - environmental policy of the company,
  - summary/assessment;
- b) operating ecology:
  - methodology for obtaining data, system boundaries,
  - input/output amounts for relevant flows of materials and energy,

---

<sup>5</sup> VfU (2002) information materials.

- environmental goals and measures/goal attainment,
- operating ecology over the years;
- c) product ecology:
  - lending business and its environmental impact,
  - deposit business and its environmental impact,
  - capital investment and its environmental business,
  - environmental goals and measures/goal attainment,
  - product ecology over the years;
- d) environmental management system:
  - organisation and responsibilities,
  - controlling,
  - commitment of employees,
  - environmental goals and measures/goals attainment,
  - commitment in environmental organisations and associations,
  - environmental costing,
  - environmental management system over the years;
- e) communication and dialogue with stakeholders:
  - environmental communication with stakeholders,
  - feedback offers,
  - environmental sponsoring, environmental prizes, other support activities;
- f) summary:
  - most important environmental goals and measures,
  - goals achieved during report term,
  - milestones in environmental protection.<sup>6</sup>

Financial institutions publish ecological reports and other elaborations more and more often. They inform about their own engagement for the benefit the natural environment.

## 5. CLASSIFICATION OF PRO-ECOLOGICAL ACTIVITY IN A FINANCIAL INSTITUTION

At the beginning of our considerations on the engagement of financial institutions in natural environment protection it should be stated that financial institutions can be divided into those engaged to some extent in the protection of the environment and those not engaged but doing only as much as needed to observe the environmental protection regulations.

Commercial financial institutions engaged in the protection of the natural environment may support the protection in a variety of ways. The activity of

---

<sup>6</sup> Based on VfU (2002) information materials.



financial institutions in the scope of supporting the protection of the environment can be initially arranged, which has been illustrated in Schema 1.2. It seems, that such a scope of activity for the protection of the environment can be isolated which is directly connected with the economic activity of a given institution and such a scope of activity which is not directly connected with economic activity. The former scope of activity for the protection of the environment may include:

- taking ecological risk into account in the financing of economic undertakings,
- financing pro-ecological economic undertakings,
- gaining financial means for the financing of pro-ecological economic undertakings,
- organisation of work and management processes,
- marketing,
- public relations.

The scope of pro-ecological activity not related directly to the economic activity of a given institution could contain e.g., voluntary financing of ecological organisations and initiatives (sponsoring).

The previously presented example of classification of pro-ecological activity is not the only one. The pro-ecological activity of financial institutions in respect of the criterion of direct flow of financial capital designed for the financing of environmental protection can also be classified (Schema 1.3.). The more so as, in many cases, a financial institution is expected to engage financially in natural environmental protection.

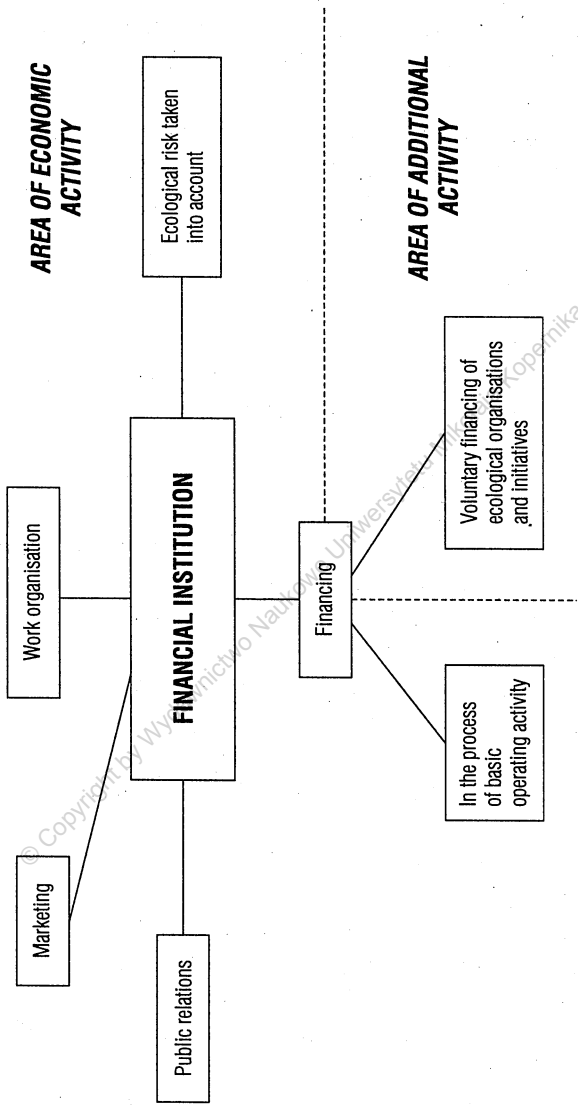
One could include the following in the scope of the pro-ecological activity directly connected with the capital flow for the financing of environmental protection:

- financial operations connected with a given financial institution's economic activity performed (operating activity) e.g.:
  - a) taking ecological risk into account in the financing of economic undertakings,
  - b) financing pro-ecological economic undertakings,
  - c) gaining funds for the financing of pro-ecological economic undertakings on the market,
- financial operations not related to the economic activity of a given financial institution e.g.:
  - a) voluntary financing of ecological organisations and initiatives.

However, one could include the following in the scope of pro-ecological activity not directly connected with the flow of financial capital for the protection of the environment:

- organisation of work and management processes,
- marketing,
- public relations.

Schema 1.2. The classification of the financial institution's activity considering the criterion of its connection with economic activity



Source: Author's own elaboration.

In the cases of pro-ecological activity there occurs (or does not occur; see ecological risk) a shift of financial means for the financing of environmental protection either by means of financing a pro-ecological economic undertaking or by an undertaking of an ecological character (e.g. a donation for a nature reserve), or an undertaking of an indirectly ecological character, e.g. educational, cultural. Attention should be paid here to the fact that in the case of taking ecological risk into account in the financing of an economic undertaking and finding that this doesn't comply with certain ecological standards, a shift of financial resources is not made.

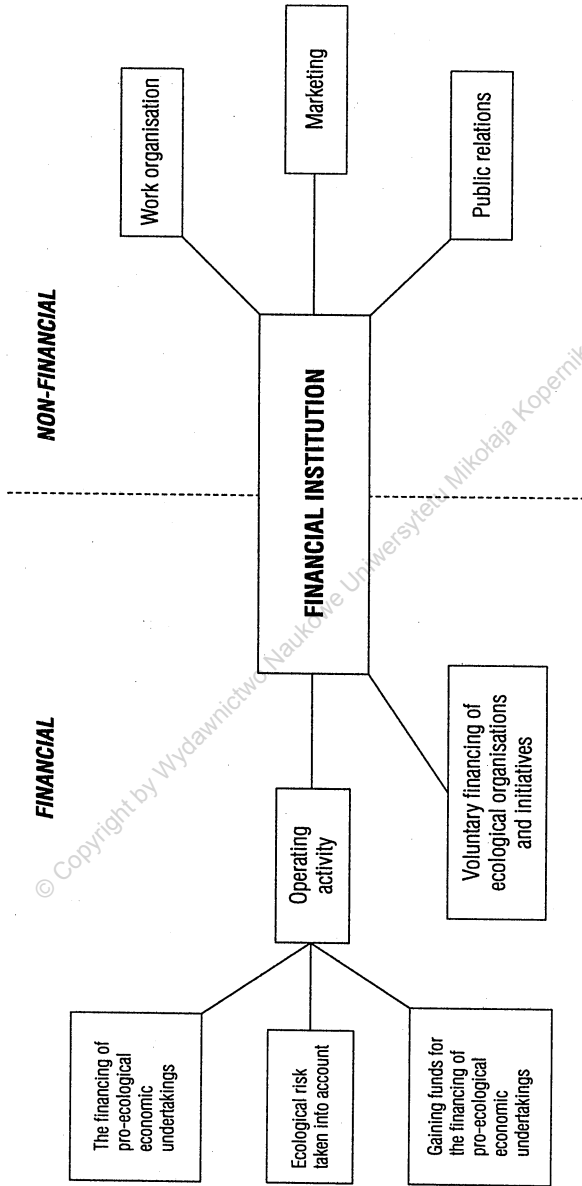
### **5.1. CLASSIFICATION OF FINANCIAL INSTITUTIONS IN RESPECT OF THEIR ENGAGEMENT IN THE FINANCING OF ENVIRONMENTAL PROTECTION: THE OFFER CRITERION**

The classification of financial institutions in respect of the criterion of engagement in the financing of environmental protection by means of having a commercial offer at their disposal is a basic classification in this book. It seems purposeful for financial institutions, which are engaged in the financing of environmental protection, to be classified in respect of the criterion of the degree of engagement of a given financial institution in the financing of environmental protection. In this case, the scope in which the basic economic activity of a given institution, e.g. performing a financial activity, is subject to the purpose of financing environmental protection, is considered a degree of engagement. The degree can be defined by analysing the institution's offer available on the market. Such an offer contains the gaining of financial means for the financing of pro-ecological economic undertakings and the financing of such undertakings. In other words, this is a financial offer of a financial institution connected with the financing of pro-ecological economic undertakings. It can be defined as an ecological financial offer. The ecological financial offer consists most frequently of: preferential credits, special purpose funds deposits, titles of participation in investment funds, bonds, and shares.

Bearing in mind the criterion of having a financial offer at one's disposal, connected with the financing of environmental protection, one can distinguish three basic groups of financial institutions (Schema 1.4.).

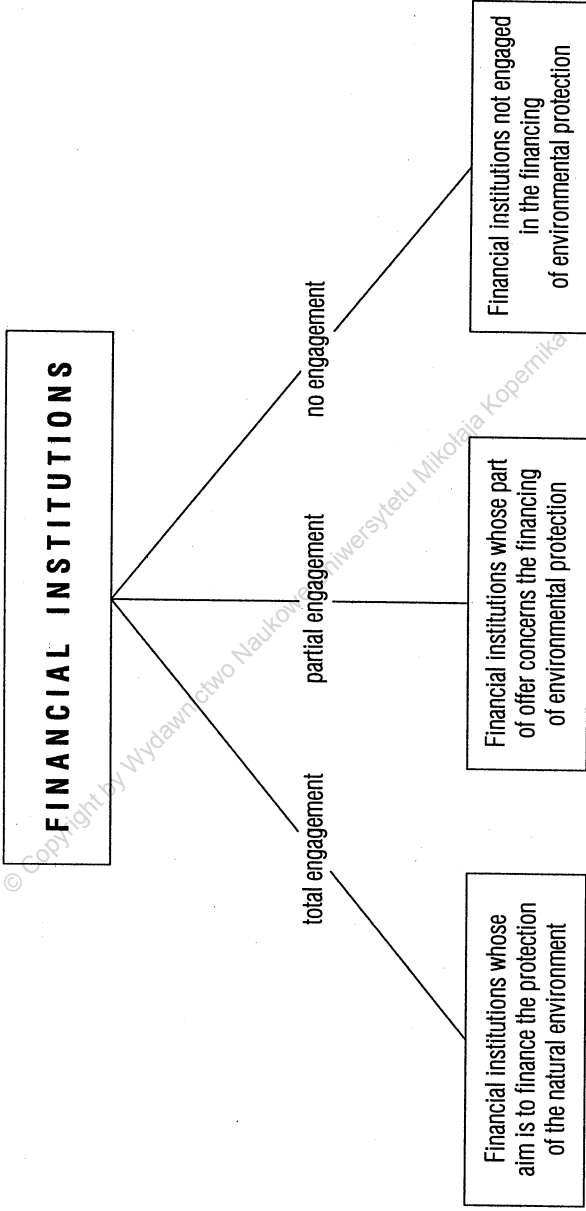
The first group contains financial institutions specialising in the gaining of capitals for the financing of ecological economic undertakings, i.e. such institutions in whose total operational activity the ecological criterion is taken into account. The activity of these institutions includes the gaining of capitals and investing them in order to finance pro-ecological economic undertakings or others, yet compatible with the standards of environmental protection stipulated in legal regulations. The activity of these institutions may include one or several fragmentary financial markets, such as the bank market, the market of investment

Schema 1.3. The classification of a financial institution's pro-ecological activity considering the criterion of the flow of financial means designed for the financing of environmental protection



Source: Author's own elaboration.

Schema 1.4. The classification of financial institutions in respect of their engagement in the financing of environmental protection



Source: Author's own elaboration.

funds and other markets (for example, one of the ecological German banks where, in addition to operations on the bank market, an ecological investment fund was created as well as financial co-operation with ecological insurers and financial advisors was established).

The second group of financial institutions are those in which only a part of their wide financial offer concerns financial operations connected with the financing of environmental protection. It can be said that the ecological criterion is taken into account in only part of the offer (exemplified by banks whose offer contains special purpose deposit programmes from which ecological economic undertakings are financed). This proves that also in typical financial institutions advantages of engagement in the financing of environmental protection have been noticed. It can be observed that the broad basic economic activity of these institutions within typical financial transactions makes offering better conditions for the functioning of the financing of an ecological offer possible. This group of financial institutions, which are engaged in the financing of environmental protection to a certain degree only (generally a very small range of offer), may include very many commonly known financial institutions. These institutions have at their disposal a financial offer connected with the financing of environmental protection also in order to create their own ecological image more effectively.

The third group of financial institutions contains those which are not engaged in the financing of natural environment. They do not have at their disposal an offer connected with the financing of environmental protection. Admittedly, it may happen that a given institution transfers financial capital for environmental protection but these initiatives are not connected with adapting financial instruments to this end.

To summarise, it should be claimed, considering financial institutions engaged in the financing of environmental protection, that on today's financial market one can distinguish various financial institutions which specialise in the financing of the natural environment and such financial institutions in which only part of their offer is used for the financing of environmental protection.

The following belong to these specialist institutions:

- ecological banks,
- investment fund companies which have titles of participation in ecological investment funds on offer,
- eco-rating agencies,
- companies which offer ecological insurance,
- financial advisory institutions and brokerage firms,
- investment clubs,
- companies offering the management of asset portfolios.

In the group of institutions where there also occurs an offer of financing environmental protection one can also find almost all kinds of financial institutions. It is quite a numerous group. It can be claimed that if in the financial

institutions which do not specialise in the financing of environmental protection an offer connected with environmental protection can be proposed and it is a numerous group, then, hopefully, it is possible to take the ecological criterion in other financial institutions into account. Therefore, a possibility opens to make greater changes on today's international financial market for the future benefit of the natural environment.

In both types of financial institutions where engagement in the financing of natural environment protection can be found, the following financial instruments can be indicated in their offer:

- shares,
- bonds,
- commercial papers,
- loans,
- banking accounts (current accounts, deposits accounts, savings accounts),
- units in investment funds.

## 5.2. OTHER CLASSIFICATIONS OF PRO-ECOLOGICAL ACTIVITY OF FINANCIAL INSTITUTIONS

The pro-ecological activity of financial institutions can be characterised considering other criteria, as well.

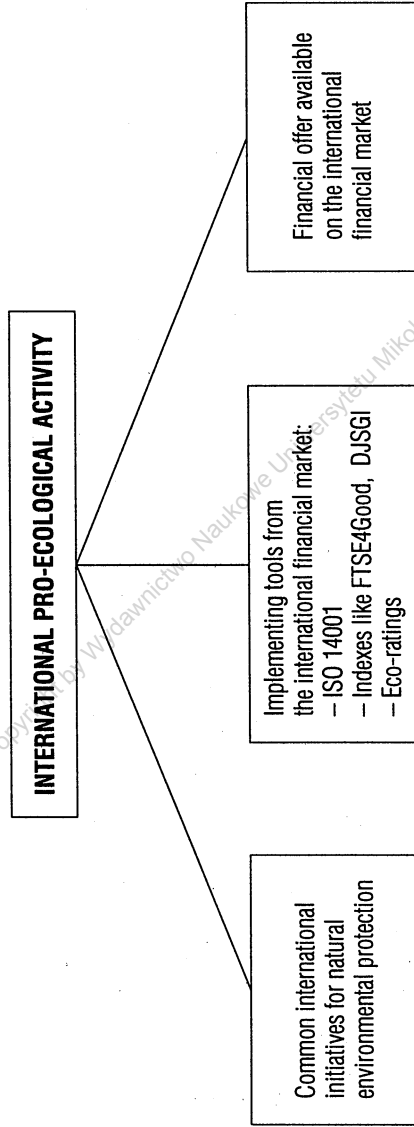
One of the criteria is that of international co-operation. Financial institutions cooperate with each other also in the attainment of pro-ecological aims, although, obviously not in every case international co-operation is necessary. The pro-ecological activity of financial institutions can be classified as that of international and that of national character.

It is also possible, bearing in mind the aspect of co-operation, to classify pro-ecological activity of financial institutions into that which is carried out in co-operation with other institutions and that carried out by the financial institution itself.

It seems that it would be justified to analyse more closely the activity of financial institutions in respect of its international dimension. This is particularly important in the globalisation epoch. International co-operation has a quite diversified character (Schema 1.5.). It may concern:

- joint initiatives for the protection of the environment (e.g. UN Declaration "The Bank and the Protection of the Environment"),
- using the tools acknowledged on the international financial market and confirming the compliance with certain standards in the natural environment (certificates and standards, e.g., ISO 14000, eco-rating, including economic subjects in appropriate indexes, e.g., FTSE4Good, Dow Jones Sustainability Index),
- a financial institution's offer, which is available on the international financial market.

Schema 1.5. The activity of pro-ecological financial institutions in the international dimension – selected aspects



Source: Author's own elaboration.



It is possible to indicate still other examples of pro-ecological activity of financial institutions considering:

- the profitability criterion: commercial and preferential solutions,
- the criterion of the use of public financial resources: solutions with the use of public financial capital and without their use,
- the criterion of universality: wide-range and limited-range universal solutions (depositing money in a bank is available for many customers but a commissioned portfolio management is available to wealthy customers only).

Another possible criterion for division is a classification of pro-ecological activity in consideration of the type of institution in which it is applied. It is, then, possible to distinguish between a pro-ecological activity of a bank character, typical of investment fund companies and another.

## 6. BANKS

### 6.1. FOREWORD

The previously presented systematisation of activities obviously concerns the banking institution as well. Banks are very important for the functioning of the international financial market. On many domestic financial markets they remain a dominating financial institution.

Pro-ecological changes in the economy and on financial markets exert influence on banking institutions. Simultaneously, the idea of sustainable development is becoming more and more popular. Today it is discussed that banks must function according to the principle of sustainable banking. This denotes the functioning of a bank according to the principles of sustainable development while it remains a socially responsible institution.

An advancement of ecologisation is an effect of the growing popularity of environmental protection and principles of social responsibility in banks. One of the more interesting scopes of this process is the influence of environmental protection on the basis of banking operations and activities.

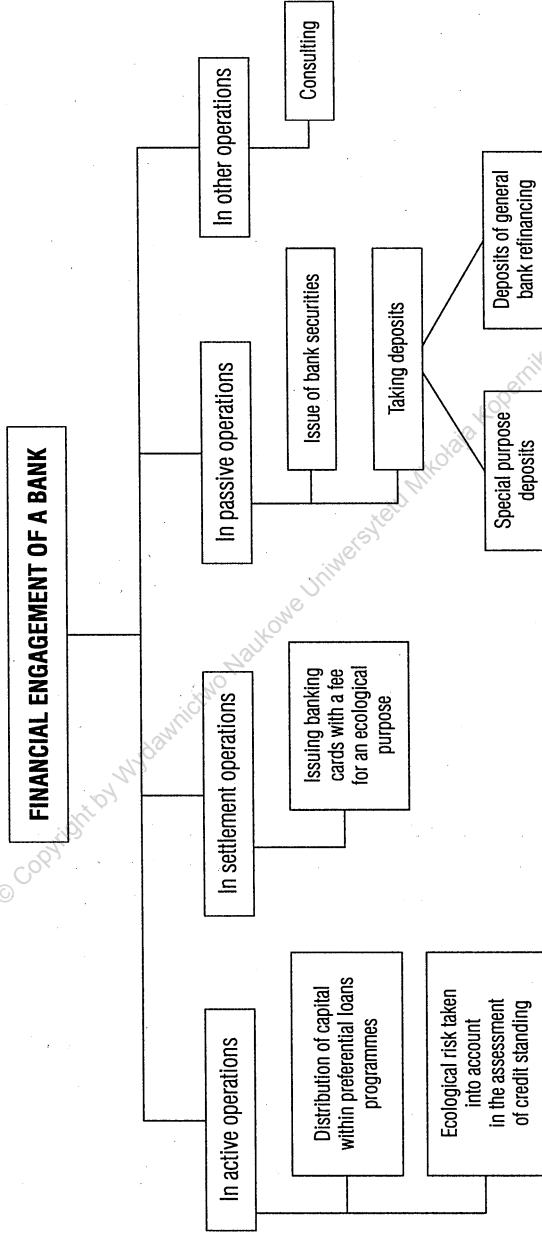
### 6.2. ENVIRONMENTAL PROTECTION IN BANKING OPERATIONS

Continuing the considerations on the support of the environmental protection by a bank by means of actions which are in the scope of the basic banking activity it is possible to arrange these actions according to the criterion of banking operations and activities<sup>7</sup> (Schema 1.6.).

---

<sup>7</sup> See: the listing of banking activities according to Polish law – Banking Act of 1997, August 29 with later amendments, articles 5 and 6.

Schema 1.6. Direct participation of a bank in the financing of environmental protection according to the criterion of the bank operations and activities (selected examples)



Source: Author's own elaboration.

Within the scope of active banking operations it is possible to distinguish, among others:

- a distribution of financial means within preferential loan programmes,
- recognition of ecological credit risk in credit standing.

Within the settlement banking operations it is possible to distinguish, among others:

- issuing banking (payment) cards.

Within the passive banking operations it is possible to distinguish:

- taking deposits,
- issuing bank securities.

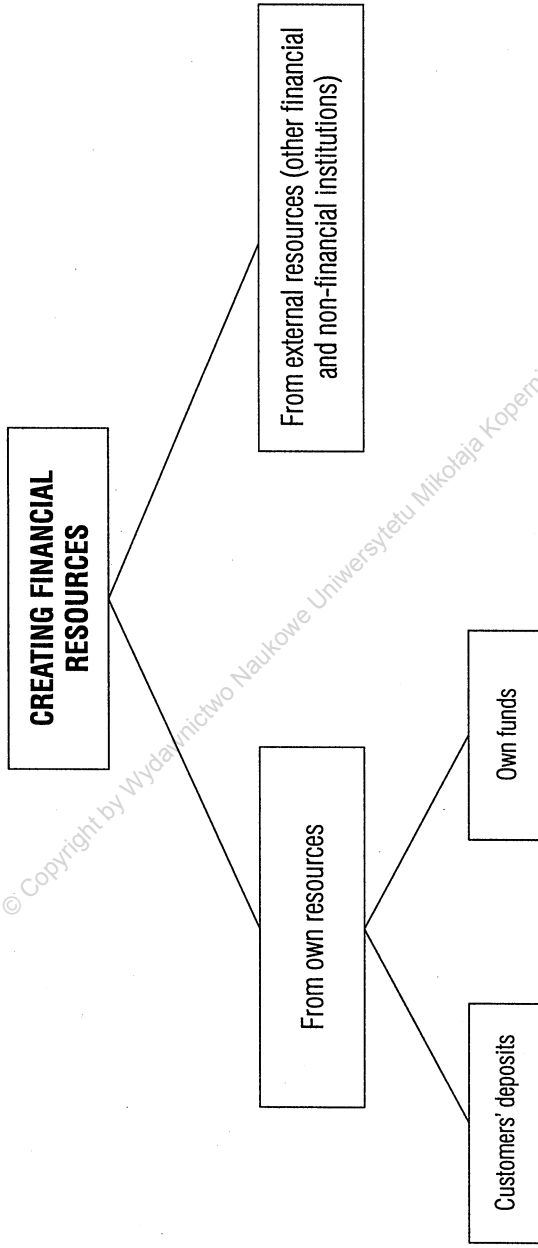
Within the remaining banking operations it is possible to indicate consultancy (although, considering its link with other scopes of banking operations it would be difficult to underline the independence of this type of activity in the support of environmental protection).

The mechanism of creating preference loan is already quite commonly known for distribution of financial means within preference loan programmes may concern the financial resources designed for the financing of pro-ecological economic undertakings accumulated independently by the bank or distributed in co-operation with another institution which was assigned tasks in the financing of environmental protection and entrusted of definite funds (Schema 1.7.). In the former case the bank creates its own financial resources, which it is ready to design for the financing of this type of undertakings. They can be created by means of isolating some resources from the general pool of deposits or from the bank's own funds. In creating bank's own financial resources special purpose deposit products may be used. The funds obtained from these special products are designed exclusively for the financing of pro-ecological economic undertakings. A distribution of financial means within preference loan programmes may, as has already been mentioned, be carried out owing to co-operation with other institutions. Then these institutions provide a bank with funds designed for preference loans. Banks are used as a channel of distribution for public or private capital designed for the financing of pro-ecological economic undertakings. Bank loan procedures are particularly useful in the evaluation of the feasibility of economic projects as far as credit standing, repayment security, and borrower monitoring are concerned.

Preference loan lines on the commercial market denote an additional advantage for banks in competing for the customer.

Preferential loans for economic undertakings, which are environmentally friendly, are granted in principle when the use of cheaper financial capital creates an opportunity to balance market conditions for an enterprise. Preferences may concern, among other things, surcharges to loan interest, a lower bank fee or amortisation of part of the credit. Preferences may also concern a simplified loan procedure in order to facilitate the availability of financial resources.

Schema 1.7. Creating financial resources within preferential loan programmes



Source: Author's own elaboration.

The scope of preferences should be calculated in such a way that the preferences should be effective and should make the attainment of an aim possible. Under no circumstances, however, should preference credits be understood as breaking the principles of credit risk management, including breaking the principles of borrowers credit-worthiness. The principle of borrowers credit-worthiness is one of the basic principles of the functioning of a banking enterprise.

Taking ecological risk into account and the management of this risk is particularly important in the functioning of a modern financial institution and a modern bank. Taking ecological risk into account in a bank's credit activity is now one of the most common manifestations of recognition of the requirements of environmental protection in the whole banking sector. It should be remembered that ecological risk may denote not only credit risk but also a risk of a bank's activity. Therefore, it should be perceived in a broader perspective as well.

Ecological risk, which occurs in a borrower, is an integral part of the credit risk. Such a perception is no longer questioned. It is not possible to speak about a fair analysis of credit risk without considering the ecological aspect in a borrower's activity.<sup>8</sup> Ecological risk management has already become a standard in modern banks.

In the bank service of enterprises this concerns both corporate and investment banking. Analysing the components of ecological risk it can be observed that the bank's environmental risk denotes:

- credit risk,
- liability risk,
- reputation risk.

This respect of the regulation of environmental protection and ecological attitudes of communities may denote for a borrower a risk of the lack of starting or continuation of economic activity, and in effect a credit risk. The dependence between environmental risk and credit risk described in this way is the most

---

<sup>8</sup> Klein, C. M. (1996). Auch der Umweltschutz bringt attraktive Renditen, Boerse Online, 48; Czaja 88; von Boehm-Bezing, C.-L. (1996). Eine nachhaltige Entwicklung. Die Rolle der Banken, conference 'Umwelt und Finanzdienstleistungen', Koeningswinter 04–05.07.1996; Juncker, K. (1991, November 29). Umweltschutz – ein Bankgeschäft, seminar 'Umwelt und Banken', Frankfurt am Main; Ackermann, J. (1997, May 21). Die strategische Bedeutung der Umweltrisiken bei Kreditvergaben an die Industrie, Zuerich; Borys, G. (2000). Ryzyko ekologiczne w działalności banku, Warsaw: Biblioteka Menedżera i Bankowca; Hansen, S. and Zaugg, B. (1994). Umwelt-Chancen und -Risiken im Kreditgeschäft, Schweizer Bank, 10; Łyszczak, M. (1996). Innowacje finansowe w zakresie ochrony środowiska. (Vol. 732). (p. 61). Wrocław: AE; Rohe, B. F. (1992). Beim Umweltschutz sachlich – ein Ansatz der Banken, Die Bank, 5; Manski, E. (1992). Oekologische Kriterien der Kreditvergabe, Die Bank, 11; Gwizdała, J. (1997). Źródła finansowania ochrony środowiska w gospodarce rynkowej Polski. In K. Piotrowska-Marczak and M. Wypych (Eds.), Finanse i bankowość – przekształcenia systemowe (p. 225). (Vol. I). Łódź: Absolwent; ecological risk in banking activity also described Borys, Ryzyko ekologiczne w działalności banku.

frequently mentioned dependence between the ecological risk and the bank operational risk. This, however, is not the only dependence. Liability risk may arise when a bank takes ownership of property in case of bankruptcy of the bank's customer. The bank, as the owner, takes responsibility for the clean-up of any environmental problems at its own cost (e.g. land sanation, waste utilisation, etc.). Such a risk does occur, then. The risk of losing good reputation, if it turns out that the financed activity is harmful the environment, is not a lesser risk (reputation risk).

It is no wonder that modern banks take every effort to reduce environmental risk. An evaluation of ecological risk is carried out by banks themselves or by means of commissioned external experts. In addition, analysts are trained, teams of analysts specialising in the evaluation of environmental risk are appointed and reviews of credit portfolio in respect of environmental risk are conducted.

In the case of bank settlement operations a possibility to adopt an active attitude by a bank in the scope of supporting environmental protection can also be shown. There is such a possibility in spite of the fact that in the case of bank settlement operations it is the bank that finds it relatively difficult to support the financing of natural environment protection because the bank only executes its customers' payment orders. In active and passive operations a bank has much more freedom in shaping its own commercial policy with a simultaneous regard of ecological preferences. In spite of this one can show examples of bank activities for the financing of environmental protection by means of settlement operations made with the use of the bank's pricing policy for bank activities carried out with the use of selected financial instruments (e.g. the issuing of banking cards).

In the scope of passive banking operations examples of activities for the support of environmental protection have been least frequent so far. Capitals for the financing of ecological economic undertakings are accumulated quite rarely. The gaining of new monetary resources by banks takes place by means of the taking deposits including the issuing of bank securities. Considering the scope of financing environmental protection, deposits gained by banks for the financing of the environment protection can be divided into:

- deposits serving a general refinancing of a bank,
- special purpose deposits.

In the first case the deposits are used for a general refinancing of a bank when its whole operational activity is subordinated to the support of natural environmental protection. This concerns the so-called ecological banks. All deposits accepted by the banks are related to the financing of environmental protection. The second case consists of deposits accepted for a definite indication of what purpose in the scope of environmental protection will be financed by these deposits.

The deposit activity is important as it serves to increase the capital mass designed for the financing of pro-ecological undertakings. However, the kinds

of bank operations described so far, such as active and settlement operations, have been used for an ecologically rational use of capitals. However, as is commonly known, one of the main problems in the ecological restructuring of the economic system is primarily lack of capital. Hence, there is a particular usefulness of bank activity directed to the gaining of capitals for the financing of ecological economic undertakings.

The independent activities of banks which support environmental protection in the scope of banking operations have been presented above.

Banks and other commercial institutions can also support the financing of natural environment protection not only independently but also by taking advantage of the position of an owner or a co-owner of different financial enterprise (Schema 1.8.). As the considerations in this publication concern commercial financial institutions which function on the financial market, one should concentrate on those enterprises which are commercial financial institutions (e.g. foundations are not such). It turns out, that banks are frequently owners or co-owners of the financial institutions which finance environmentally friendly economic undertakings while performing their own economic activity. Such institutions include, among others, investment fund companies where ecological investment funds are offered.

### 6.3. THE CONCEPT OF THE ECOLOGICAL BANK

An interesting concept of gaining capitals for an ecological economic undertaking is by using the institution of the bank which takes the ecological criterion into account in its entire operational activity. There are a few specialist banks of this type on the financial market. They are referred to as ecological banks.<sup>9</sup> The concept of an ecological bank should be considered as one the most inspiring in banking.

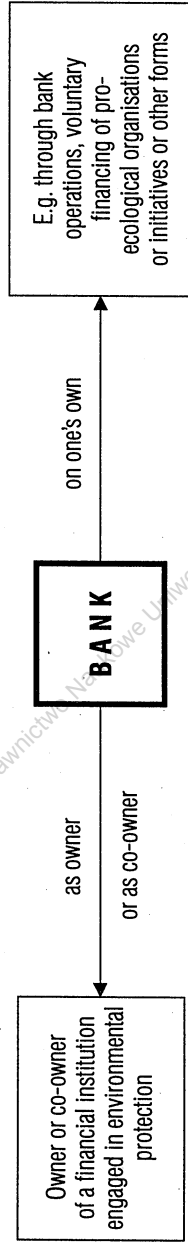
In relation to different philosophies of activity, strategy, and functioning, two types of ecological banks can be differentiated.

The first type is defined as eco-ethical or alternative and indication of the purpose of their functioning is an authorisation to use these qualifications. They finance not only undertakings connected with environmental protection but also cultural, educational and social. The financing of these undertakings is frequently done on privileged terms by means of resources collected from customers or a bank's own resources. Commercial principles of the functioning of the bank are not taken into account to such an extent as is the case in commercial banks.

---

<sup>9</sup> W. L. Jaworski identified four dimensions of banks' specialisation: operational, functional, territorial and industrial. Hence, ecological banks fall under industrial specialisation here. See Jaworski, W. L. and Krzyżkiewicz, Z. and Kosiński, Z. (1993). *Banki. Rynek, operacje, polityka.* (2<sup>nd</sup> ed.). (p. 15). Warsaw: Poltext.

Schema 1.8. Engagement of a bank in natural environment protection



Source: Author's own elaboration.

© Copyright by Wydawnictwo Naukowe Uniwersytetu Mikołaja Kopernika



Generally, the eco-ethical criterion is considered more important than the economic one. Alternative banks function thanks to the customers who expect such a procedure with capital. It is a group of customers who also take the ecological criterion into account and are ready to resign from the profit or its part. Alternative banks carry out their own ecological deposit and credit preference programmes. Deposit preferences denote taking deposits at a rate lower than the market rate. The money accumulated are designed both for definite credit programmes and for general refinancing of a bank.

The other type of ecological bank is the one where the ecological criterion is equally important as the principles of banking operations. The operational activity of the bank is concentrated on the financing of undertakings connected with environmental protection jointly with the activity typical of a commercial bank. For the functioning of the bank a group of customers ready to resign from their profits, or part of it, is not necessary. Preference loan programmes are financed from own funds, deposits collected or they are co-financed by third-party institutions.

The selection of pro-ecological economic undertakings is an important aspect of the functioning of ecological banks. The banks employ specialists in ecological evaluation of undertakings or their activity may be supported by special teams consisting of specialists in definite areas and appointed by banks. The teams are referred to as ecological councils and they provide opinions on the ecological quality of the undertakings financed.

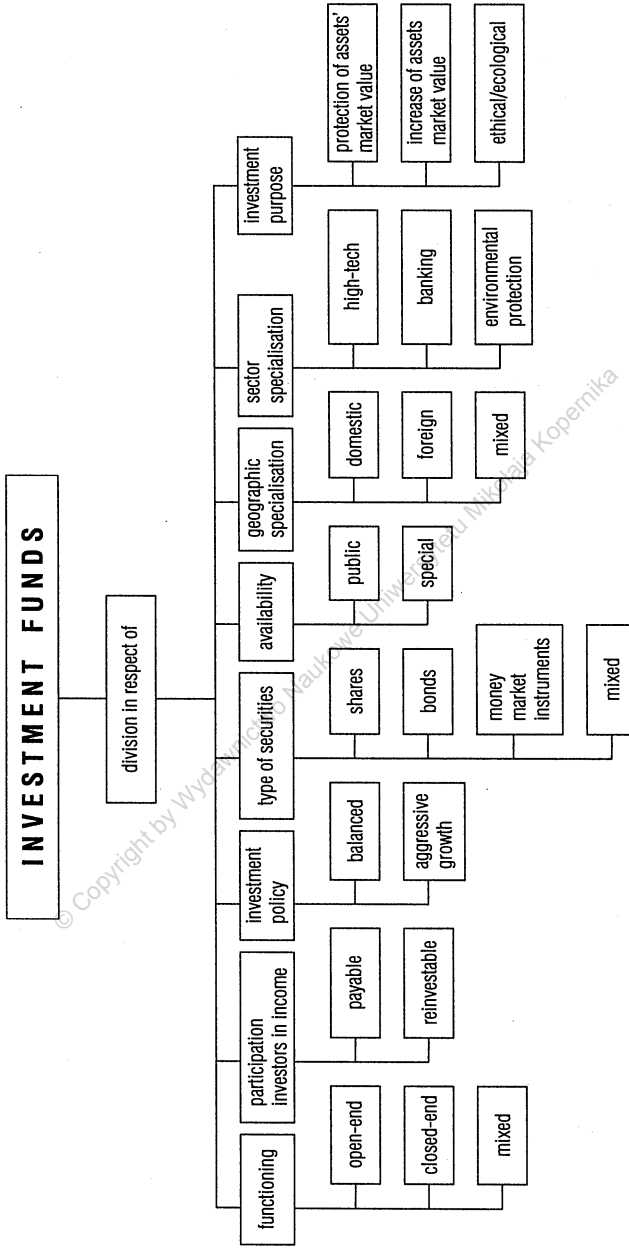
## 7. INVESTMENT FUNDS COMPANIES

### 7.1. FOREWORD

One of the essential features of today's international financial markets is a growing popularity of investment funds. The offer of investment funds assures the investors wide opportunities to invest on the financial market with a view to individual investment preferences in the scope of, among others, risk, expected return rate, operation line, geographical area, financial instrument, etc. A variety of investment funds is an unquestioned advantage on the investment fund market. Schema 1.9. presents a general classification of investment funds. It may be assumed that in consideration of the commonly known advantages of investment funds this market will continue to develop intensively. It is the advantages of investing by means of investment funds and their variety that make a wide use of investment funds in the process of financing pro-ecological economic undertakings possible.

In the case of investment fund companies it is possible to speak about engagement in the financing of environmental protection when, in the companies

Schema 1.9. Investment fund classification



Source: Author's own elaboration.

offer, there is an investment fund where financial resources collected are invested with a view to the ecological aspect.

On the international financial market many investment fund companies and institutions of a similar scope of activity offer an opportunity to invest not only with a view to the economic criterion but also considering some other criteria which are important for the investors. Social responsible investment (SRI: the qualification "ethical investment" is also used) is popular. In the decision-making process concerning investing, in this case the following scopes of the functioning of an issuer are taken into account: attitude towards employees, disabled, the natural environment, animals, minorities rights, etc.

Investment fund companies offer specialised investment funds referred to as SRI more and more often. The ecological criterion is an important investment criterion in the investment funds of a SRI type.

## 7.2. ECOLOGICAL INVESTMENT FUNDS

The ecological investment fund is an investment fund in which financial resources collected from the participants of the fund are invested in respect of economic criteria and also ecological ones at least as they are perceived by the participants and managers of the fund.

Ecological investment funds (EFI) are a particular type of investment funds. Ecological investment funds function like other investment funds the only difference being that they invest in shares, bonds, and other financial assets of the issuers (enterprises, municipalities) which are recognised as natural environmentally friendly. The selection of values for an investment fund portfolio is subject to two unquestioned principles:

1. The position of the issuer must give a prospect of profits from investing in his securities.
2. The issuer must fulfil the ecological criteria imposed by the fund.

The definition of the ecological investment fund presented above requires some explanation. Ecological investment funds operate on fully commercial terms but ecological criteria are also taken into account in the investment process. It is the managers or advisory firms themselves who decide to what degree issuers should fulfil the requirements of environmental protection. Sometimes the principles of asset selection are subject to a stricter control by the authorities which supervise the institutions of the financial market. It is so, e.g. in Germany where Bundesaufsichtsamt für Kreditwesen plays this role for investment funds (and also banks). Generally, however, there are no regulations to define the notion of ecological investments on the financial markets by investment funds. Nevertheless, at least investors and managers must be convinced that ecological criteria in the investment process are met. This is, obviously, not precise. Some help in the qualification of what enterprises can be acknowledged as

environmentally friendly is most often obtained from eco-rating agencies or other specialist research institutions. Specialist stock indexes, which identify suitable issuers and describe the value of investments performed, are also useful. It is, among others, according to eco-rating evaluation and ecological indications that enterprises are selected which can be an object of interest for the ecological fund management. Shares, bonds, and other securities issued by such enterprises (possibly municipalities) are acquired by ecological investment funds as long as they fulfil economical criteria as well.

The origin and development of ecological investment funds on the international financial market is a response to investors' needs. This is because more and more individual and institutional investors are interested in profiting from their invested money, at the same time in supporting natural environmental protection. Such perception of investment is more and more popular in the west. In order to gain customers-investors, even renowned international financial institutions are engaged in the process of creation and management of ecological investment funds.

In course of time investment principles have become clearer and opportunities to select issuers of securities owing to the development of eco-rating have increased. The same is true of ecological stock indexes (in principle socially responsible investment indexes) ISO 14000 standards or else respecting the environmental protection standards in the enterprises themselves (at least for fear of losing customers who have paid attention, to an ever greater extent, to ecological features of products and services). The growing ecological awareness of communities and popularity of environmental protection is, of course, also conducive to the development of the market of ecological investment funds.

The ecological investment funds where the principles of a typical investment fund are linked with the ecological criterion, are an offer not only for investors who take the ecological criterion into account, but also for those who are indifferent towards this criterion but are potentially interested in the so-called eco-industry.

The advantages of ecological investment funds are typical advantages of investment funds such as: deposit diversification, liquidity, managers' knowledge and experience, investor's time savings, access to selected markets. Making use of all the advantages is possible even if the investor's financial engagement is low. These features add to the attractiveness of this form of investing. As its disadvantage, however, one may consider a limited influence of particular investors on deposit selection. It has only indirect influence on the investment policy through investing in the fund or withdrawing from an investment.

Ecological investment funds discipline issuers who are under constant observation by investors. Another advantage of this form of investing is the creation of demand for issues of ecological securities. The investments of the ecological funds are also a good public form of ecological presentation of

companies. This definitely serves to promote the principles of respecting the natural environment in the economy. A unit of participation in an ecological investment fund may then be an attractive and effective form of financing ecological economical undertakings.

### 7.3. THE CLASSIFICATION OF ECOLOGICAL INVESTMENT FUNDS

Ecological investment funds may already be given a general classification with a view to selected criteria (see Schema 1.10.).

One of the basic divisions of ecological investment funds is a division in consideration of the subject of investment. Ecological investment funds, like other investment funds, are divided into bonds, shares, and mixed funds. This means that the accumulated money are invested in bonds, shares, or both of these kinds of instruments simultaneously. In ecological investment funds the resources collected are also invested on the monetary and derivatives markets. It can also be added that the means accumulated may be invested either on the domestic or international market, either globally or in selected countries.

The division into ecological investment funds and eco-ethical investment funds may be regarded as one of the most important divisions.<sup>10</sup> Investing the accumulated money in eco-ethical investment funds exceeds investing in ecological economic undertakings. Other important and ethical, in the opinions of investors and fund managers, investments are chosen. This division can be extended because investment funds in which the financial capital accumulated are invested in the values of enterprises recognised as socially responsible are becoming more and more popular. It should be stressed that on the American and British markets the qualification "ethical funds" is used and it also includes the funds, which invest in the protection of the environment. Terminological discrepancies, regardless of the actual profile of the investment, are conducive to discrepancies in the assessments concerning the number of ecological investment funds on the international financial market and the value of the financial capital accumulated in them.

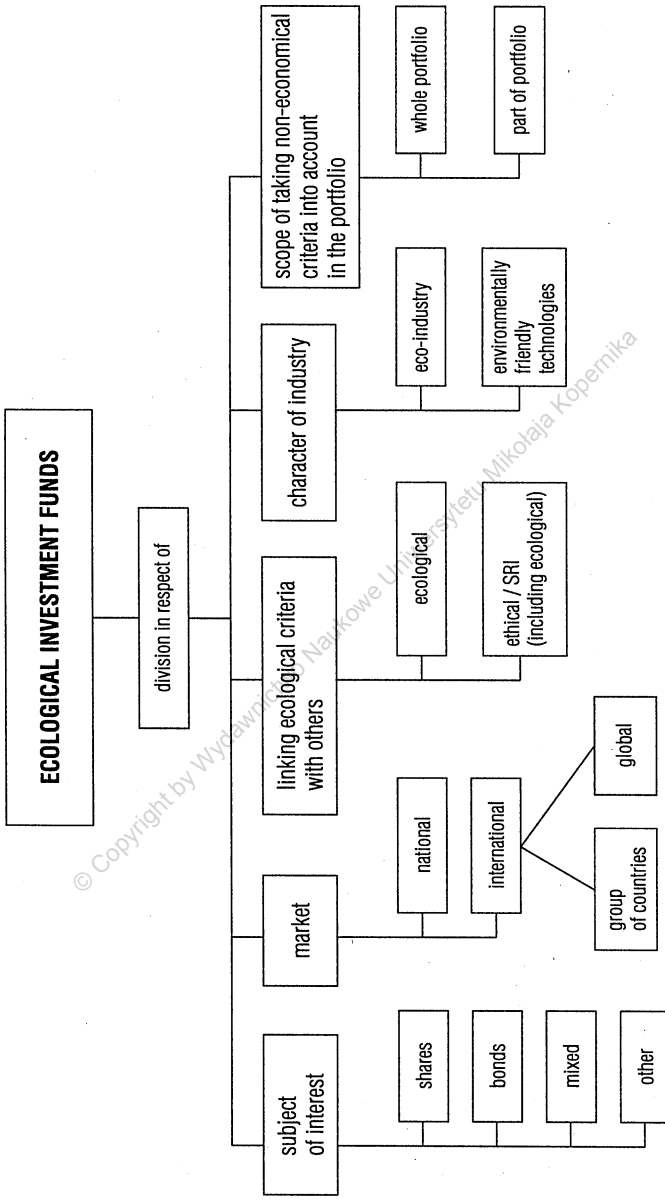
In addition, it is the application of the notion of ethics itself that complicates the explanation of the subject of investing with the use of investment funds. This is so because ethics is an ambiguous notion.

Yet another division of ecological investment funds is that in which two categories can be isolated: investing in ecological technologies (e.g. in companies specialising in treatment of water, air, and earth, recycling, etc.) called investing in the so-called eco-industries and those investing in the companies in which the

---

<sup>10</sup> Wild, H. (1997, March 21). Ethical obligations. *Investors Chronicle*; Deml, M. and Baumgarten, J. and Bobikiewicz, L. (1994). *Gruenes Geld*. (p. 134). Wien: Service Fachverlag.

Schema 1.10. A general classification of ecological investment funds in respect of the selected criteria



Source: Author's own elaboration.

requirements of environmental protection are met to a high degree in the production or service process, although their activities are not connected with environmental protection.<sup>11</sup>

The last of the divisions, which deserves a closer description, is the division of funds in consideration of the degree of using the ecological criterion in a portfolio. Thus, funds can be divided into those in which ecological criterion is obligatory for the whole portfolio and those in which ecological criteria are used for part of the portfolio and others, but not contradictory to ecological, are used for the remaining part.

## 8. OTHER FINANCIAL INSTITUTIONS ENGAGED IN THE FINANCING OF ENVIRONMENTAL PROTECTION

As has been mentioned earlier, in addition to banks and investment fund companies there are many other financial institutions in which it is possible to indicate examples of a financial offer connected to the financing of environmental protection. Good examples are companies managing the asset portfolio of their customer (asset management), investment advisory companies, as well as investment clubs, brokerage houses, advisory companies, insurance companies, eco-rating agencies, and other. In general, the services of these companies, with the exception of insurance agencies, constitute an offer addressed to the wealthier, or more active, part of their customers.

It is justifiable to present briefly a few types of the financial institutions mentioned.

Securities portfolio management, a service of the asset management type, is a form of investing with the ecological criterion taken into account but for which a large capital is required. The customer who entrusts his assets defines the principles according to which the portfolio should be managed. Investing in the assets of enterprises friendly to the natural environment is mentioned amongst these principles.

Financial advisory companies, as well as brokerage houses, in which trading the values of companies friendly to the natural environment, which are outside the stock turnover is possible, also play a certain role in the financing of environmental protection on the financial market.

Investment clubs are also an interesting form of joint investment. The clubs gather a small number of individuals who are decided to join their assets and invest jointly. These clubs are joined by the investors who, in addition to entrusting

---

<sup>11</sup> Demuth, M. and Bustorf, H. and Thiel, O. (1995). Investmentfonds. (p. 61). Wiesbaden: Gabler Verlag.

their own capitals, can also participate in the process of information gathering, evaluation, and finally in the decision-making process.<sup>12</sup> Membership in an investment club does not have to require a greater capital engagement than in the case of an investment fund, but this depends on each individual club. The investment club is an attractive opportunity to invest. A high educational value of this form of investment and the participant's possibility to influence the investments made should be stressed. This is what makes investment clubs different from investment funds in which investment decisions are made by a manager and the investor has no direct influence on these decisions. Investment clubs arouse a certain interest in individual investors. In some countries investment clubs are quite popular. There are also investment clubs with ecological aspects taken into consideration in their investment policies.

The companies conducting eco-rating are also an essential part of the financial market on which financial transactions supporting the financing of the natural environment and pro-ecological economic undertakings are made.

The insurance market is also an integral part of the financial market. Ecological risk is also taken into account on this market. The interest of citizens in environmental protection has also been observed in the insurance sector. There are insurance agencies, which offer so-called ecological policies, but relations with ecology do not consist in insuring against ecological disasters and similar events. These relations should rather be sought in the investment activity conducted by insurance agencies. Here the insured is certain that the dues paid are invested with the ecological criterion taken into account. Such companies invest in principle in units of participation in ecological investment funds or in shares and bonds of the issuers recognised at fulfilling the requirements of environmental protection. As long as this is admitted by the regulations concerning insurance activity they may invest directly in ecological economic undertakings or in the so-called ecological fixed assets<sup>13</sup> (buildings and constructions built from materials not harmful to man's health are considered as ecological properties: their energy system is energy saving, they are in symbiosis with the environment<sup>14</sup>). This does not exhaust the ecological offer of insurance agencies but is their basis. Sometimes in insurance agencies environmental protection is supported by means of discounts to customers who actively support the protection of the environment. In the case of individuals, there is a possibility to reduce their dues for non-smoking.<sup>15</sup>

---

<sup>12</sup> Deml, M. and Gelbrich, J. and Prinz, K. and Weber, J. (1996). Rendite ohne Reue (p. 90). Frankfurt: Eichborn; letter from J. Penzenstadler, Director General of the Verband Oesterreichischer Investmentklubs of December 1996 to the author.

<sup>13</sup> Versicherungen. (1996). Oeko-Invest, 107.

<sup>14</sup> Conrads, J. (1994). Geldanlage mit sozialer Verantwortung (p. 69). Wiesbaden: Gabler Verlag.

<sup>15</sup> Deml, Gelbrich, Prinz, Weber 93.



The idea of using insurance on the ecological financial market should be positively assessed. This certainly serves to strengthen the financing of environmental protection by the market.

## 9. THE SECURITIES MARKET

On today's international financial market a significant part of financial transactions is made on the securities market. The activity of banks, investment fund companies, eco-rating companies, investment clubs, advisory firms, and other financial institutions as well as individual investors and issuers engaged in the financing of pro-ecological economic undertakings is concentrated to a considerable degree on the securities market. A greater part of transactions serving this purpose is made on the international securities market.

On the securities market there are many issuers for whom the instruments described can be used in order to assess the usefulness of their issues for the financing of pro-ecological economic undertakings and to recognise them as environmentally friendly. The ecological selection of enterprises is made on the basis of an analysis of ecological effects of the process of supply, production, co-operation, ecological features of the products manufactured or services rendered. If the ecological evaluation is positive, the enterprise is acknowledged as environmentally friendly.<sup>16</sup> Such issuers are now participants of the market equal to financial institutions. In order to carry out pro-ecological economic undertakings all kinds of securities are issued on the market, among them most frequently occur shares, bonds, and commercial papers.

Securities are excellent financial instruments. Mass financial transactions on a global scale are possible because the use of securities assures a certain standardisation of capital portions in the form of shares, bonds, commercial papers, and others. Standardisation consists in that the basic rights and obligations of issuers and investors, turnover rules, principles of pricing and other parameters are known. The turnover costs of capital formed in this way are low. However, capital standardisation itself would not suffice to make mass contracts on the global scale. Standardisation of risk, i.e. assuring the possibility to compare the risk of investing in securities of various issuers from all over the world would be necessary. This risk standardisation makes it possible to make such a comparison in a short time. In other words, risk standardisation is the commonly known credit-rating. This, however, is not the end of standardisation processes on today's international financial market. Currently, ecological risk in international transactions is quickly gaining importance. The process of standardisation of

---

<sup>16</sup> Of course, what is and what is not ecological remains disputable.

ecological risk is taking place and new tools for the evaluation and measurement of this risk are being developed. Their use facilitates more and more common transactions designed for the financing of pro-ecological economic undertakings.

As has been mentioned, on the international securities market new tools have appeared which facilitate the assessment of ecological risk and at the same time facilitate making the process of financing pro-ecological economic undertakings easier. These tools include: standards of ecological quality, eco-rating, and specialised stock indexes. These tools make it possible to take investment decisions which are burdened with a lower ecological risk of failure. Standards of ecological quality, stock indexes, and eco-rating are the tools which serve a synthetic evaluation of ecological quality according to selected, standardised, and recognised criteria, which are presented in public. The ecological image of a company shaped by its public relations services should not be mistaken for the evaluation made by a specialised eco-rating agency, the obtaining of the ISO 14000 certificate or with taking into account the company's shares in a specialised stock index.

The obtaining of certificates of management quality concordant with the requirements of the natural environment is becoming more and more important on the international financial market. The popular certificates include the ISO 14000 standards and EMAS (Environmental Management and Audit Scheme). On the international financial market the ISO standard is very often used.<sup>17</sup> The use of ISO 14000 standard makes it possible to evaluate the compliance of economic undertaking management systems with the requirements of environmental protection. In other words, the ISO 14000 certificate informs about the attainment of the ecological level of management.

In turn, eco-rating, or ecological rating, is an evaluation and classification of an economic undertaking in consideration of its compliance with the requirements of natural environment protection. Eco-rating should be carried out systematically against standardised criteria.<sup>18</sup> The assessment given should be presented in public by giving a certain symbol in a suitable scale. Taking into account the above qualification of ecological rating it is possible to define this rating as a public and systematic evaluation and classification of ecological quality of an undertaking against selected and standardised criteria. The idea of eco-rating resembles credit-rating but is not so popular and respected as credit-rating. Thinking of investing compliant with the principles of sustainable development the need to extend the scope of eco-rating is voiced. The definition of sustainability rating has already been used. In a system of evaluation perceived

---

<sup>17</sup> EMAS is preferred in European Union. See Borys, *Ryzyko ekologiczne w działalności banku*, p. 75.

<sup>18</sup> See also Bueschgen, H. E. and Everling, O. (1996). *Handbuch Rating* (p. 684). Wiesbaden: Gabler Verlag.

in this way not only ecological questions, but also social, would undergo control in agreement with the notion of the socially responsible enterprise.

Eco-rating and ISO 14000 standards evaluation can be compared. Thus, the evaluated areas of the functioning of an economic undertaking in the case of ISO 14000 standards and eco-rating are convergent. It is thought that both types of ecological evaluations are a form of ecological risk evaluation. Currently, the ISO 14000 standards are gaining importance. It can be assumed that the ISO 14000 standards constitute the most important eco-rating assessment. In relation to the remaining systems of eco-rating assessment, ISO is not gradable. In the case of eco-rating assessment, one could obtain either a high or a low grade of ecological quality but as far as the ISO certificate is concerned, one has it or not.

Other tools for assessment of quality and ecological value of an economic undertaking include specialised ecological stock indexes (known also as stock indexes of socially responsible investing: SRI). The so-called ecological stock index is a specialised index constructed on the basis of the values of selected issuers. It makes identification of pro-ecological economic undertaking on the securities market and measurement of investment value added over time possible. Thus, ecological stock indexes play a dual role on the international financial market. Inclusion of a given issuer's shares in the index is information for the interested participants of the market that the issuer has been acknowledged as environmentally friendly against some fixed criteria. This favours a creation of supply for the values of these issuers on the part of the investors who take the requirements of environmental protection into account. The idea of using not only the ecological index but also the stock index to describe stock-quoted companies, which are socially responsible, and act in accordance with the principles of sustainable development (sustainability index) is becoming more and more popular recently. Numerous conceptions of an ecological stock index and a stock index for socially responsible companies have already been worked out. Some of them have been successfully used on the international financial market.

## CHAPTER 2

# BANKING TOWARDS NATURAL ENVIRONMENT PROTECTION

### 1. FOREWORD

The implementation of the principles of Corporate Social Responsibility (CSR) is now an obvious necessity for the most important economic institutions, including the financial ones. Environmental protection is an integral part of the CSR policy. Respecting environmental protection is an unquestionable principle on the international bank market today.

One can point to a number of initiatives undertaken by banks for this purpose. In this chapter selected initiatives of banks will be introduced, such as:

- selected international initiatives,
- the creation of an integrated system of managing relationships with the natural environment,
- selected initiatives concerning the organisation of labour and saving resources,
- application of standards, evaluations and share indexes,
- taking ecological risk in financial operations into account,
- the creation of an offer related to the financing of pro-ecological economic undertakings,
- the functioning of ecological banks.

The activities undertaken by banks are to convince customers, shareholders and contracting parties that the requirements of respecting the natural environment by a given banking institution should be recognised. The initiatives described are diverse in relation to each other regarding the effectiveness of the influence on the natural environment. However, their common advantage is that they bring a bank establishment closer to the desirable state of the functioning in accordance with the rules of sustainable development. On the international financial market the opinion that it is necessary for a modern bank to function according to the rules of sustainable development is becoming more and more popular. With reference to this, even the notion of sustainable banking is used.

In this chapter, in consideration of the large number of pro-ecological examples of initiatives of banks, which can be shown on the international banking market, their presentation is limited to selected initiatives of selected banks only.

## 2. SELECTED INTERNATIONAL INITIATIVES

Many international-scale activities aimed at the engagement of banks in the support of environmental protection have already been initiated on today's international banking market. These activities are of various nature, range and effectiveness. These pro-ecological activities are sometimes inspired and co-ordinated by international business, social or political organisations. An example of the activities inspired and co-ordinated by business is, e.g., the World Business Council for Sustainable Development (WBCSD), which co-operates with the UNO, the World Trade Organization (WTO) and the Organisation for Economic Co-operation and Development (OECD) as well as with the Business Action for Sustainable Development (BASD), which came into being on the initiative of the International Chamber of Commerce (ICC) and the afore-mentioned WBCSD. International pro-ecological undertakings concerning the sector of financial services only are also well known. On the international insurance market the UN declaration «Environment and Insurance Industry» is also well known. However, in this elaboration attention is focused on the better-known UN declaration «Banking and Environment» and on the activities within the UN Environmental Programme for financial institutions. These are the initiatives of a decisive character and of the widest range on the financial market.

### 2.1. UN DECLARATION (UNEP)

The UN declaration “Banking and Environment” (“UNEP Statement by Financial Institutions on the Environment and Sustainable Development”) is commonly known. The declaration was worked out in 1992. Till April 2002 it was signed by 192 banks from 49 countries,<sup>19</sup> mainly from Germany: 52 banks. Among the signatories are many significant banks of the international financial market. Their presence confirms the importance of the problem of the engagement of financial institutions in the global ecological policy. This also confirms the pro-ecological quality of transformations on the international financial market.

In this declaration signatories commit themselves, among others, to:

- the recognition of the idea of sustainable development as a fundamental economic rule,

---

<sup>19</sup> Full list in appendix 2.

- the recognition of the role of the financial service sector in the implementation of the idea of sustainable development,
- complying with the regulations of law in the scope of environmental protection,
- the recognition of ecological risk,
- paying attention to the attitudes of customers of financial institutions concerning environmental protection,
- organisation of work processes in compliance with the requirements of environmental protection,
- the ecological verification of financial services offered,
- informing about implementation of a pro-ecological policy in a financial institution,
- conducting a dialogue about environmental protection with various social circles.<sup>20</sup>

Although it is difficult to overestimate the effectiveness of the Declaration, it is unquestionably a serious step towards the engagement of the institution of international financial market in the implementation of the idea of sustainable development and an integration of these institutions in achieving this purpose.

It may be added that banks from Poland are also found among the signatories.<sup>21</sup>

## 2.2. UNEP INTERNATIONAL CONFERENCES: FINANCIAL INSTITUTIONS AND THE PROTECTION OF THE ENVIRONMENT

International conferences are a perfect forum for exchanging ideas, reflection, and experience concerning a wider participation of financial institutions in the implementation of the idea of sustainable development, including the environmental protection. Good examples of continuous co-operation on the international scale are, among others, conferences of the United Nations Environmental Program UNEP. One of them took place in November 2000 in Frankfurt. The subject of the conference was the use of the institution of the financial market in natural environment protection.

The conference was co-organised by Deutsche Bank AG, one of the greatest banks in the world today, which points to the growing importance of the problem of engagement of banking and finance in the environmental protection on our Earth. Among the participants of the conference were many leading financial institutions: insurance companies, investment funds companies and, obviously, banks as well as representatives of the world of scientists, politics, and institutions connected with the environmental protection.

<sup>20</sup> The text of the declaration in appendix 1.

<sup>21</sup> Letter from K. Pietraszkiewicz, Director General of the Union of Polish Banks of 19.09.1995 to the author.

The importance of the conference was proved by a great number of renowned important banks, such as: Barclays Bank, Bayerische Hypotheken und Vereinsbank, Bayerische Landesbank, Asian Development Bank, Bank Sarasin, Citigroup, Credit Suisse, Den Norske Bank, Deutsche Bank, Development Bank of Japan, Dresdner Kleinwort Benson, The European Bank for Reconstruction and Development, European Investment Bank, ING, Japan Bank for International Cooperation, Lloyds TSB, Merrill Lynch, Morgan Stanley, Rabobank, Raiffeisen Zentralbank, Royal Bank of Canada, Swedbank, Royal Bank of Scotland, World Bank with International Financial Corporation (IFC), UBS, Westpac Banking Corporation. The Swedish bank Skandinaviska Enskilda Banken (SEB), currently an important shareholder of the Polish Bank Ochrony Środowiska, was also present, as well as BOŚ S.A.

### **3. INTEGRATED AND COMPLEX SYSTEMS OF MANAGING THE RELATIONSHIPS OF A BANK WITH THE NATURAL ENVIRONMENT: ENVIRONMENTAL MANAGEMENT SYSTEM**

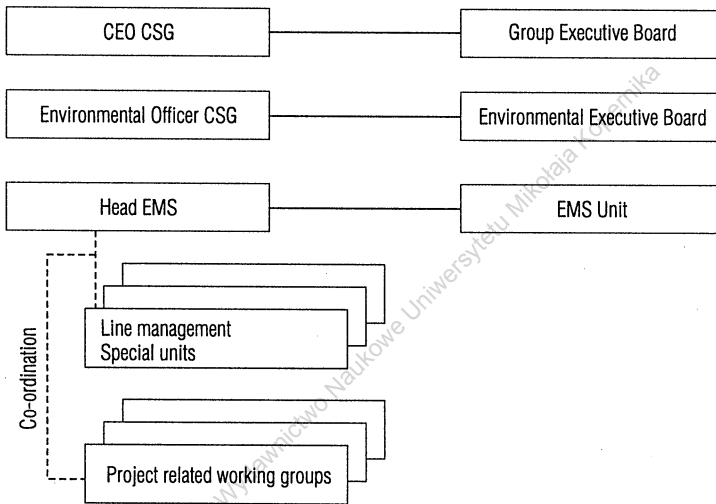
In modern banks the relations between a bank institution and the natural environment are arranged in an integrated and complex system of management of relationships with the natural environment.

The Environmental Management System implemented by Credit Suisse Group is a good example of organisation of an integrated system of management of relationships with the natural environment. The group is a world-leading bank in the management of relationships with the natural environment. It was one of the first banks to obtain the ISO 14001 certificate. In Schema 2.1. the organisation of an integrated system of management of relationships with the natural environment in Credit Suisse Group has been presented.

In Credit Suisse Group the Chief Executive Officer (CEO) is responsible for approving the CSG Environmental Policy and the annual environmental management review. The ultimate decision-making power for environmental matters lies with the CEO. The next level is Group Environmental Officer. He/she is designated by CEO from the ranks of the Executive Board. The Group Environmental Officer is responsible for a Group-wide implementation of the CSG Environmental Policy and representation of CSG on important issues within the organisation and externally. He/she manages the Environmental Executive Board (EnxB) also, which comprises the Environmental Officers from the Executive Boards of the respective business units and from the CSG Corporate Centre. The area of responsibility of Environmental Executive Board is ensuring that environmental activities of CSG units comply the CSG Environmental Policy. The EnxB is setting the environmental objectives for the whole Group, ensuring ecological control and monitoring of environmental activities of CSG. On behalf of the Environmental Officer and EnxB the Head of Environmental Management

Services co-ordinates environmental activities within the CSG: environmental protection, control and development of the environmental management system, promotion of environmental products, provision of in-house specialist support services, internal and external communication. The specialists responsible for individual fields of environmental activities, such as ecological risk in credit business, property and insurance, green investment funds and energy belong to the relevant line management and specialist units. When necessary, CSG call up the project-specific working groups and collaborate with external experts.<sup>22</sup>

Schema 2.1. Environmental management responsibilities at CSG



Source: Environmental Report 1999/2000. (2001). Credit Suisse Group, p. 11.

It is worth noting that CSG has a long practice in recognising the requirements of environmental protection, which favourably distinguishes this banking institution. The beginning of pro-ecological activity in Credit Suisse can be dated back to the 1970s and the consistency in these activities has led to a coherent, integrated and complex system of management of relations with the natural environment. The following can be regarded as the most important achievements of Credit Suisse Group in this scope in the years 1976–2000:<sup>23</sup>

- 1976–1979 – planning and construction of the Uetlihof complex in Zuerich (pioneering decisions with regard to insulation, environmentally friendly construction, fixtures and fittings and “green buildings”, good public transport links);

<sup>22</sup> Environmental Report 1999/2000. (2001). Credit Suisse Group, p. 11.

<sup>23</sup> Environmental Report 1999/2000, p. 16.



- 1977 – start of the 10-year energy saving initiative throughout Switzerland with remedial action to tackle major problem areas;
- 1977 – institutionalisation of energy accounting;
- 1986 – launch of Fellowship Fund (UK), the first Credit Suisse fund with environmental criteria;
- 1989 – creation of the full-time post of Head of Environmental Management Services;
- 1990 – the protection of the environment becomes an explicit part of the corporate philosophy stipulated in the Credit Suisse Guiding Principles;
- 1990 – introduction of an investment fund with a focus on green technology;
- 1992 – signature of the ICC Business Charter for Sustainable Development and the UNEP Statement by Banks on the Environment and Sustainable Development;
- 1994 – creation of an Environmental Risk unit at Credit Suisse;
- 1994 – creation of an environmental unit at Winterthur;
- 1995 – first environmental performance evaluation of the two largest Credit Suisse location in Zuerich and Geneva;
- 1995 – the Executive Board approves the Environmental Policy, the Guiding Principles on Energy Use and the Environmental Standards;
- 1995 – signature of the UN Statement of Environmental Commitment by the Insurance Industry;
- 1996 – realisation of the ecological controlling strategy;
- 1996 – first environmental report for Credit Suisse (Switzerland) 1995/1996;
- 1997 – Credit Suisse Group (Swiss location) becomes the first major bank to achieve ISO 14001 certification;
- 1997 – entry into force of agreements and contracts with suppliers and service providers of environmental relevance;
- 1999 – environmental report 1997/1998 receives second prize in the Swiss Association for Environmentally Conscious Management rating;
- 1999 – CSG becomes the banking industry's leading sustainability company on the Dow Jones Sustainability Group Index;
- 2000 – CS First Boston introduces an Environmental Risk Policy;
- 2000 – re-certification of ISO 14001. ISO 14001 certificate for banking business and locations worldwide and for insurance business and locations in Switzerland.

It is no wonder that a long and consistent policy of shaping their relationships with natural environment has resulted in the achievement of a position of world ecological leader in banking.

An essential element of integrated and complex management of the relationships with natural environment is co-ordination of pro-ecological activities between a bank and external institutions. In many banks this is a serious scope

of co-ordination. As an example, the scope of co-operation between the Royal Bank of Scotland<sup>24</sup> and selected external institutions can be given.

On the international level Royal Bank of Scotland co-operates with:

- United Nations Environment Programme,
- International Chamber of Commerce,
- Scotland Europe/European Information Services.

On the country level:

- Department of Environment, Food and Rural Affairs,
- Department of Trade and Industry,
- British Banker's Association,
- Council of Mortgage Lenders,
- Environmental Best Practice Programme,
- Institute of Business Ethics,
- The Chartered Institute of Building,
- Construction Confederation,
- Construction Industry Research & Information Association,
- Building Research Establishment,
- Economic & Social Research Council,
- Association of Commuter Transport,
- The Scottish Executive,
- The Environment Council,
- EarthWatch Institute,
- Forum for the Future,
- Green Alliance.

On the regional and local level:

- West Lothian & Edinburgh Chambers of Commerce,
- The City of Edinburgh Council,
- Southend-on-Sea Borough Council,
- London Borough of Enfield Council,
- EU/Stirling Centre for Further Education,
- Transform Scotland,
- Transport 2000,
- East of Scotland Water.

As results from the presented data, the scope of co-operation between a bank and external institutions is quite extensive and requires co-ordination.

Considering the co-operation of financial institutions with external organisations in the scope of natural environment protection it can be noticed that there also are inter-bank organisations for supporting the natural environment protection. It is a very interesting fact, which confirms a growing engagement

---

<sup>24</sup> Internet, [http://www.rbs.co.uk/group info environment/review/influencing.htm](http://www.rbs.co.uk/group%20info%20environment/review/influencing.htm)

of bank institutions and people employed there in activities aimed at natural environment protection. The following institutions can be listed as examples: the German VFU: Verein fuer Umweltmanagement in Banken, Sparkassen und Versicherungen e.V. (English: the First Industry-Specific Association for Environmental Management in Banks, Savings Banks and Insurance Companies) or the British Bankers' Association.

#### 4. ORGANISATION OF WORK PROCESSES

Within integrated and complex systems of management of relationships with the natural environment pro-ecological principles of work organisation are implemented, which are at the same time intended to improve health and safety conditions at work. Water consumption, electric energy, heat energy, gas, and paper use are subject to control and, if necessary, to reduction. Emissions of harmful substances into the atmosphere as a result of the activities of offices and business trips (car, airline, train) and the production of other pollutants are also analysed. Table 2.1. shows data concerning the management of resource usage in the Swiss bank UBS. Ecological reviews of estates occupied by banks in which banking activities are performed are also subject to ecological reviews. This is a so-called ecological audit of immovables. Office equipment, machines, electronic devices, furniture and carpets are also inspected in respect of ecology.

Obviously, similar activities are conducted in other banks. For example, in the Dutch bank ING, within the system of Health, Safety and Environmental Management Systems, the use of energy, water and other resources (paper, heat energy) is reduced. Still other similar activities take place in other banks, like in German HypoVereinsbank in the programme "Healthy Office". Implementation of the principles of pro-ecological work organisation and reduction of resource use is managed and controlled in an ongoing manner. In the HSBC bank an Environmental Management Unit is functioning, which is placed in the structure of the financial department.<sup>25</sup> One can even speak of eco-controlling, as is the case in HypoVereinsbank.

In the financial service sector one can point two examples of co-operation in the scope of setting up the principles of measurement and comparison of the amounts of resource use and pollutant emission. The standards worked out are improved. The functioning of the previously mentioned German organisation VFU is a good example of co-operation of financial institutions in the scope of joint standards. The work of the Union concerns such problems as: ecological

---

<sup>25</sup> Letter from I. Godfrey-Davies, Director of the Group Corporate Relations HSBC of 13.08.2002 to the author.

reports of financial institutions, ecological balances, ecological credit risks.<sup>26</sup> The Union also suggested some solutions which are used in many banks already, among others, it worked in 11 environmental performance indicators (EPI) concerning:

- energy,
- water,
- paper,
- waste,
- traffic,
- emissions.<sup>27</sup>

Table 2.1. Environmental Performance Indicators – UBS AG in Switzerland (excl. affiliates), 1997

SPECIFICATION	ABSOLUTE VALUE	RELATIVE VALUE	DATA QUALITY
1	2	3	4
Employees	34,500 EMP		good
Bank area	1,801,000 m <sup>2</sup>		good
Balance sheet	1,016,524 m CHF		very good
Electricity consumption	251,000 MWh	7,300 kWh/EMP	very good
Percentage computing centres	64,300 MWh	25.6%	very good
Percentage solar energy	120 MWh	0.05%	very good
Heat consumption	187,000 MWh	104 kWh/m <sup>2</sup>	very good
Percentage district heating	13,900 MWh	7.4%	very good
Water consumption	811,200 m <sup>3</sup>	94 l/EMP/day 450 l/m <sup>2</sup>	good very good
Paper consumption	8,700 t	252 kg/EMP	very good
Recycled paper	700 t	8%	very good
Chlorine-bleached paper	400 t	4%	very good
Chlorine-free paper	7,600 t	88%	very good
Copper/printer paper	366 m sheets A4	10,600 sheets A4/EMP	very good
Waste disposal	9,850 t	285 kg/EMP	medium
Refuse	3,450 t	35%	medium
Paper (recycl.)	4,820 t	49%	medium
Cardboard (recycl.)	630 t	6%	medium
Recyclable materials (misc.)	290 t	3%	medium
Special/hazardous waste	660 t	7%	medium

<sup>26</sup> Letter from H. Bendels from Verein fuer Umweltmanagement in Banken, Sparkassen und Versicherungen e. V. of 28.08.1996 to the author.

<sup>27</sup> They have already been discussed in chapter 1.

1	2	3	4
Business travel	102 m km	3,000 km/EMP	good
Flight km.	64 m km	63%	good
Rail km.	28 m km	27%	medium
Road km.	10 m km	10%	medium
Carbon dioxide CO <sub>2</sub>	97,900 t	2,800 kg/EMP	very good

Source: Our commitment to the environment. Extract from the UBS Environmental report 1998–99. (2000). Switzerland: UBS, p. 11.

## 5. STANDARDS, STOCK INDEXES AND ECO-RATINGS

In order to measure the engagement of companies and financial institutions in activities for the protection of natural environments certain tools recognised on the international scale are used. These are, among others, qualitative standards, stock indexes and eco-rating. The usage of the tools described should be acknowledged as evidence of the growing importance of environmental protection in the functioning of financial institutions and in the management of their value.

The commonly known standard ISO 14001 is already used on the international bank market. Renowned banks decided to undertake efforts aimed at achieving this standard. Currently the following banks have it: Deutsche Bank AG and Dresdner Bank AG, the British Barclays Bank, the Belgian BBL (the property of Dutch ING), the Swiss bank UBS, Austrian Raiffeisen Landesbank and Oesterreichische Nationalbank and many others.

In the Swiss capital group Credit Suisse Group whose main part is Credit Suisse, while implementing the standard ISO 14001, they set a goal for themselves until the year 2004:

- reduction of heat energy consumption by 10%,
- reduction of electric energy consumption by 10%,
- reduction of paper use by 15%,
- designing 60% of the paper used for recycling,
- designing 15% of paper used for photocopiers for recycling.<sup>28</sup>

The afore-mentioned banks set some standards for the remaining banks owing to their position on the international market. It can be expected then that also other banks will undertake efforts in order to obtain the ISO 14001 standard.

<sup>28</sup> Letter from I. Godfrey-Davies, Director of the Group Corporate Relations HSBC of 13.08.2002 to the author.

Moreover, the publication of so-called reports and ecological balances is becoming a new standard.<sup>29</sup> Financial institutions inform in them about their own relationships with the natural environment and initiatives connected with it. In turn, in their ecological balances, they inform about the use of resources in the economic process, such as: electrical energy, heat energy, water, paper and others.

Another manifestation of pro-ecological activity of a financial institution which is an element of management of the value of the company with acknowledgement of the requirements of environmental protection are efforts for including the shares of a given financial institution in suitable indexes which inform about the engagement of this institution in the environmental protection. These indexes are very useful in the evaluation of this part of the international market whose companies feel socially responsible, and this refers not only to pro-ecological behaviour. Such indexes include, among others, the well-known indexes of Dow Jones Sustainability Group Index (DJSGI) and the latest group FTSE4Good. In the case of taking into account the shares in the above-mentioned indexes, this is adequately publicised.<sup>30</sup>

The fact that numerous banking and financial institutions have been recognised in Dow Jones Sustainability Index and FTSE4Good should be considered as characteristic.

The Dow Jones Sustainability Index has made an allowance for UBS, Deutsche Bank, FoereningsSparbanken, Lloyds TSB Group, ABN AMRO, BNP Paribas, Barclays, HSBC Holdings, HypoVereinsbank, Abbey National, Royal Bank of Scotland, UniCredito Italiano, Grupo Santander Central Hispano, Societe Generale.

In the FTSE4Good indexes are, e.g.: Deutsche Bank, Commerzbank, HypoVereinsbank, Danska Bank, BNP Paribas, Credit Lyonnais, Allied Irish Bank, ABN AMRO, ING Group, Skandinaviska Enskilda Banken, Credit Suisse, UBS, Barclays, HSBC Holding, Lloyds TSB Group, Westpac Banking Corp., Royal Bank of Canada, Citigroup, Yasuda Fire & Marine Insurance, Goldman Sachs Group, Mellon Financial Corp., Merrill Lynch and others.

On the international market also eco-rating evaluations or even a wider assessment of the sustainability rating type are used. The eco-rating system resembles a well-known system of credit rating. The use of eco-rating makes it easier for companies to have an orientation in the scope of identification of

---

<sup>29</sup> See Our commitment to the environment. Extract from the UBS Environmental Report 1998–99 and Environmental report 2000. Promoting sustainability. (2001). HypoVereinsbank. Letter from H. Bendels from Verein fuer Umweltmanagement in Banken, Sparkassen und Versicherungen e.V. of 28.08.1996 to the author.

<sup>30</sup> Sustainable business conduct – a benchmark for forward-looking companies, Press release HVB Group, Munich, 2.08.2002; Speech by R. E. Breuer on the 11<sup>th</sup> Meeting of the Board of Trustees of the Forum for Future Energies, Berlin, February 2001.

subjects conducive to the protection of the environment and, consequently, facilitates investment of capital. There many agencies which conduct eco-rating. They include, among others, the Oekom agency, or the Innovest.<sup>31</sup> The Innovest rated a few dozen banks from the ecological perspective. In turn, the Oekom agency rated dozens of banks and insurance agencies, among others: Allied Irish Bank, Banco Bilbao Vizcaya, Banco Santander Central Hispano, Bank Austria, Bank Ochrony Środowiska, Banque Nationale de Paris (BNP), Barclays Bank, Commerzbank, Credit Lyonnais, Credit Suisse, Den Danske Bank, Deutsche Bank, Dresdner Bank, HSBS Holdings, HypoVereinsbank, ING, Julius Baer, Lloyds TSB, National Westminster Bank, Paribas, Royal Bank of Scotland, Skandinaviska Enskilda Banken, Societe Generale, Svenska Handelsbanken, Sumitomo Mitsui Banking, UBS, UniCredito Italiano, Bankgesellschaft Berlin, Bayerische Landesbank, Landesbank Baden-Wuerttemberg, Landesbank Hessen-Thuringen, Landesbank of Saar, Landesbank Sachsen, Landesbank Schleswig-Holstein, Norddeutsche Landesbank, Westdeutsche Landesbank, AXA, Allianz, CGU, Fortis, Gerling, Muenchener Rueckversicherungs, Norwich Union, Prudential, Storebrand, Swiss Re, Victoria Versicherungen and many others. Ecological and eco-ethical banks were also subject to eco-rating: ABS Alternative Bank Schweiz, Banca Popolare Etica, Ekobanken, Freie Gemeinschaftsbank BCL, GLS Gemeinschaftsbank, Oekobank, ShoreBank Pacific, Triodos Bank, UmweltBank and others.

Many different kinds of bank assessments of the sustainability type are used. They are quite popular. The “best-in-class” type assessment of banks according to Henderson Global Investors of Great Britain is one of the examples.<sup>32</sup> The results concerning sustainability rating of several European banks are shown in Table 2.2.

Table 2.2. ‘Best-in-class banks’ according to the Henderson SRI survey

COMPANY NAME	COUNTRY	STRENGTHS*
1	2	3
Dexia (Credit Local de France)	France	2.3.5.6.7.8.
Commerzbank AG	Germany	1.2.3.5.7.8.
DG Bank	Germany	1.3.7.8.
HypoVereinsbank	Germany	1.5.6.7.8.

<sup>31</sup> Innovest Strategic Value Advisors.

<sup>32</sup> Giuseppe, J. (2001). Assessing the “triple bottom line”. Social and environmental practices in the European banking sector. In J. J. Bouma and M. Jeucken and L. Klinkers. Sustainable banking. The greening of finance (p. 96–113). Sheffield: Greenleaf Publishing in association with Deloitte & Touche.

1	2	3
Allied Irish Banks	Ireland	1.3.5.7.8.9.
Argentaria	Spain	1.2.3.5.6.
Banco Central Hispanoamericano	Spain	1.2.3.4.7.6.
Lloyds TSB	Great Britain	1.2.3.5.6.7.9.
National Westminster	Great Britain	1.3.5.7.8.
Royal Bank of Scotland	Great Britain	1.2.3.4.5.6.7.8.
<p>* Where:</p> <ol style="list-style-type: none"> <li>1. Responsible lending</li> <li>2. Progressive workplace practices</li> <li>3. Good housekeeping</li> <li>4. Ethical business policy</li> <li>5. Supporting community initiatives</li> <li>6. Progressive workplace practices in overseas operations</li> <li>7. Proactive environmental stance</li> <li>8. Good disclosure</li> <li>9. Responsible financing of trade to developing countries and/or debt relief</li> </ol>		

Source: Bouma, J. J. and Jeucken, M. and Klinkers, L. (2001). Sustainable banking. The greening of finance (p.100). Sheffield: Greenleaf Publishing in association with Deloitte & Touche.

It results from the above that financial institutions, including banks, are a frequent object of eco-rating and sustainability rating. One can, however, show an example, where banks themselves developed a system of sustainability rating for the purpose of assessment of investments in ecological and social respect. The Swiss cantonal bank Zuercher Kantonalbank is an example where a sustainability rating system has been worked out for the assessment of states, cities, international institutions and companies.<sup>33</sup>

## 6. TAKING ECOLOGICAL RISK INTO ACCOUNT

As has already been mentioned, taking into account ecological risk in the management of credit risk and the management of bank operating risk is a standard in modern banks. The activities of Credit Suisse in the area of ecological risk management can be presented in more detail.

<sup>33</sup> Investing Responsibility. Environmental and Social Research of Zuercher Kantonalbank. (2002, May). Material received from the bank.



In Credit Suisse there is Environmental Risk Unit<sup>34</sup> whose task is to diagnose and assess ecological risk in analysed credit transactions. Additionally, all credit transaction are verified in the bank with a view to credit risk.<sup>35</sup>

Similar activities were undertaken in other banks. For example, in Hypo-Vereinsbank as early as 1994 environmental risk assessment was introduced and ecological verification of credit portfolio conducted.<sup>36</sup> In turn, in Societe Generale a group of specialists in ecological matters works in the risk department. In banks operating on a lesser scale ecological assessment as an element of credit risk assessment was also introduced. The Swiss cantonal bank Zuercher Kantonalbank, where the Environmental Credit Risk Management Unit was created in 1996, can be an example.<sup>37</sup>

Banks are also engaged in the assessment of ecological risk faced by exporters and investors. Deutsche Bank offered its customers this form of supporting their business.

An example of taking ecological risk into account in investment banking is the activity of UBS Warburg. In this bank, as in other investment banks, ecological risk is examined in complex investment transactions.<sup>38</sup>

The recognition of ecological risk brings advantages not only for the bank. Paying attention to ecological risk informs entrepreneurs not only of the necessity to take additional risk into account, but also may point to additional possibilities which result from the functioning in modern economy where the requirements of environmental protection are acknowledged. Naturally, it should be reminded, that natural environment itself and, consequently, mankind are the beneficiaries of the recognition of ecological risk.

## 7. THE BANK OFFER

### 7.1. FOREWORD

An essential example of supporting environmental protection by a financial institution is the preparation of the offer for customers who take into account the ecological aspect in the investing process. Such an offer, in which at the same time economic and ecological criteria are considered, can be qualified as an ecological financial offer. Having such an offer at one's disposal is a solid argument as far as the environment is concerned. This confirms a given

---

<sup>34</sup> Credit Suisse Group Sustainability Report 2001. (2002). Credit Suisse, p. 14.

<sup>35</sup> Credit Suisse Group Environmental Report 2000. (2001). Credit Suisse, p. 7.

<sup>36</sup> Environmental Report 2000. Promoting Sustainability. (2001). HypoVereinsbank, p. 13.

<sup>37</sup> Investing Responsibility. Environmental and Social Research of Zuercher Kantonalbank. (2002, May).

<sup>38</sup> Our commitment to the environment. Extract from the UBS Environmental Report 1998-99.

institution's actual and definite engagement in the environmental protection. As has already been mentioned, this offer comprises e.g. preferential loans, special purpose deposits, capital products, participation units in investment funds, asset management services, insurance services and others.

At this point the ecological bank offer will be presented, in particular deposit offers, capital market and investment fund market offers.

Banks frequently have a relatively wide ecological financial offer at their disposal. It often comprises typical bank services but it seems that more often banks have proposals concerning the capital market or investment fund market. In such cases they are ecological financial offers proposed by a whole capital group which includes the bank, too. This makes it possible to take advantage of the "ecological effect" both for the capital group and for the bank. For instance, a bank operating in capital groups takes advantage of investment funds while offering participation units in so-called ecological investment funds. One can point to numerous examples of such banks, e.g. Credit Suisse, UBS, Deutsche Bank, ABN AMRO, SEB, ING, BfG Bank, Erste Bank, Sparkasse Oberoesterreich, Bank Sarasin, Bank Pictet and others. Another example concerns offers of the asset management range where securities portfolios are managed allowing for the ecological requirements of their customers. This offer is found in UBS, Credit Suisse, Bank Sarasin, Dresdner Bank and ING. Issues of investment certificates issued for the purpose of financing pro-ecological economic undertakings are still another bank offer for customers who take the ecological criterion into consideration. The following offers of ecological certificates of banks are known: BNP Paribas, Dresdner Bank, Westdeutsche Landesbank, UBS Warburg, Merrill Lynch, ABN AMRO.<sup>39</sup>

## 7.2. EXAMPLES OF BANK OFFERS

An excellent example of co-operation within a bank sector for the purpose of financing the environmental protection is Swiss banking. The engagement of Swiss banks in the financing of pro-ecological economic undertakings is conspicuous in comparison with banks in other countries. It is characteristic that two greatest Swiss banks, UBS and Credit Suisse, have at their disposal a bank offer in which connection with the financing of pro-ecological economic undertakings takes place. The offer of the greatest Swiss global banks for environmental protection is supplemented by an offer of cantonal banks and a private bank group.

The following reasons for generating interest in the financing of pro-ecological economic undertakings were indicated in UBS:

- a growing demand for financial products which would respond to the ecological preferences of customers,

---

<sup>39</sup> *Focus-Money* (2002), 10 – special edition.

- the conviction that enterprises distinctive for ecological reasons are more attractive objects of deposits in a long perspective,
- the implementation of bank assumptions relating to environmental protection in the field of bank operations.<sup>40</sup>

In 2001 ten financial products connected with the supporting of the environmental protection and other social purposes<sup>41</sup> were offered in UBS. In its asset management offer 776 million CHF were managed with an allowance made for ecological and social criteria. The following investment funds belonged to it: UBS (Lux) Equity Fund – Eco Performance and UBS “Eco Hakase” which was offered on the distant Japanese market where great interest in ecological investing was found. It is the UBS bank “Eco Hakase” fund that is an inspiring example of global activity of modern bank groups. In this case, a long-lasting experience of the Swiss bank group was used in the utilisation of financial instruments for the purpose of financing pro-ecological economic undertakings and a demand for this type of offer on the distant Asian market.<sup>42</sup>

The Credit Suisse group has at its disposal an interesting financial offer concerning the financing of ecological economic undertakings. The offer is accessible on the international financial market, in countries where the Credit Suisse group operates. It comprises, among other things, the financing of ecologically advanced projects, participation units in ecological investment funds, ecological aspects in the offer of private banking taken into account. Credit Suisse was one of first banks to offer participation units in an ecological investment fund. Credit Suisse investment funds, such as: CS EF (Lux) Global Sustainability and CS Fellowship Fund are well known on the ecological market.

Swiss cantonal banks do not belong to the group of the strongest and commonly known Swiss banks, however, they occupy an important position in the Swiss banking system. Cantonal banks also have an ecological financial offer at their disposal. The offer of two cantonal banks can be introduced as an example. These are Basellandschaftliche Kantonalbank (BLKB) and Zuercher Kantonalbank (ZKB). The mentioned banks operate on Switzerland’s important socio-economic areas, i.e. the region of Basel and the city of Zurich. As early as in 1990s these banks offered ecological savings accounts and ecological bonds. These instruments were connected with the financing of the environmental protection.

In 1991, in Basellandschaftliche Kantonalbank, private customers, companies and institutional investors were proposed a possibility of investing with regard to the ecological criterion. The new offer consisted in the presentation of ecological savings accounts and ecological bonds. Resources accumulated by means of these tools were designed for ecological loans. The interest on ecological

---

<sup>40</sup> Letter from I. Schumacher, from Schweizerischer Bankverein of 07.08.1997 to the author.

<sup>41</sup> UBS 2001: Environmental performance in figures. (2002). Material received from the bank.

<sup>42</sup> Our commitment to the environment. Extract from the UBS Environmental Report 1998–99.

deposit instruments and bonds amounted to one percentage point below the interests on typical economical accounts and bonds in this bank.<sup>43</sup> In this way the bank could grant preferential loans for ecological purposes. Independently of this offer the bank created its own ecological fund in which resources were also designed for ecological loans. Accumulated financial resources as a result of ecological bank products constituted a small part of the bank liabilities.

Another local Swiss bank in which customers are offered the possibility to finance ecological economic undertakings is Zuercher Kantonalbank.

From 1991 ecological financial instruments in the form of savings accounts are offered in the cantonal bank. Accumulated resources on these accounts have been used for preferential loans. Like in the Basle cantonal bank, also in Zuercher Kantonalbank the offer of products connected with the financing of environmental protection constituted a small fragment of the bank offer.<sup>44</sup> As the bank management admits, ecological products constituted a marginal activity of the bank, about 1 per mille of loans and deposit transactions. However, this activity was assessed as very important for the image of the bank in the local society. The bank management claims, that as a local bank of the Zuerich community, it must offer a possibility of ecological financial investments for its ecologically sensitive customers.<sup>45</sup> According to the data of Zuercher Kantonalbank in 2001 the assets administered by this bank with ecological criteria taken into account (assets under green management) had the value of 242 million CHF, which makes up 0.35% of administered assets.<sup>46</sup> However, it results from these data that in the years 2000–2001 the value of assets administered with an allowance made for ecological criteria doubled. Another excellent example of commonly understood pro-ecological activity of the bank is the elaboration, in Zuercher Kantonalbank, of a system of a classification and evaluation of the sustainability rating type for states, international institutions, cities and companies. In this way, an independent system of evaluation facilitating taking investment was set up.

The above-mentioned examples of pro-ecological initiatives of both cantonal banks on the financial market do not exhaust the subject of engagement of Swiss cantonal banks in the financing of the natural environment. Among the latest undertakings is the launching of the ecological investment fund Swissca Green Invest at Swissca Holding. This company is a common property of the Swiss cantonal banks set up for the purpose of offering investment funds to supplement the financial offer of these banks. A new ecological investment fund for customers of cantonal banks was launched in 1998 in co-operation with the World Wide Fund for Nature (WWF). Another ecological investment fund was established in the year 2001: the Swissca Green Invest Balanced.

---

<sup>43</sup> Basellandschaftliche Kantonalbank. (1996). *Geschäftsbericht 1995*, p. 43.

<sup>44</sup> Letter from H. S. Schwarz from Zuercher Kantonalbank of 21.01.1997 to the author.

<sup>45</sup> Umweltprodukte der ZKB. (1996). *Jahresbericht 1995*; letter from H. S. Schwarz.

<sup>46</sup> Internet, <http://www.zkb.ch/zkb/nachhaltigkeit-en/environmental.html>

Another group of Swiss banks engaged in operations aimed at the financing of environmental protection was a group of Swiss private banks. The most active private banks include bank Pictet & Cie and Bank Sarasin.

The following ecological funds belong to bank Pictet & Cie:

- Pictet Sustainable Equities – Switzerland (established in 1999),
- Pictet Global Sector Fund Water (2000).

And the following to Bank Sarasin:

- Sarasin Oeko-Sar (1994),
- Sarasin ValueSar Equity (1999),
- Sarasin New Energy Fund (2000),
- Sarasin FairInvest-Universal (2001).

Banks in other countries also undertook efforts to mark their presence on the financial market of the financing of environmental protection with the application of bank products and services.

The Dutch bank – group ING has a complex offer in which criteria of sustainable development are taken into account. The ING Group performs its activity in the global dimension and according to the Dutch bank data, in about 30% of the units of the bank group worldwide, customers applied for this type of offer.<sup>47</sup> Table 2.3. shows the ecological financial offer of ING with the specification of the type of offer, unit of bank group in which the offer is distributed and market on which the offer is found in supply.

Table 2.3. The ecological financial offer of the group ING in 2001

PRODUCT	BUSINESS UNIT	COUNTRY
Sustainable mutual funds/ /socially responsible investment funds	ING Investment Management ING Bank Postbank BBL Aeltus	Europe/Australia Netherlands Netherlands Belgium/Luxembourg/France USA
Green financing	Postbank Groen RVS	Netherlands
Environmental risk insurances	Nationale-Nederlanden	Netherlands
Green building mortgages	ING Bank	Netherlands
Consulting/advising on environmental/ /sustainability issues	ING Bank Baring Asset Management	Netherlands UK
Innovative environmental-related projects	ING Structured Finance ING Real Estate	Netherlands Netherlands

Source: ING in Society 2001. (2002). ING Group, p. 18.

<sup>47</sup> ING in Society 2001. (2002). ING Group, pp. 15–16.

It can be admitted that the offer of the ING Group is wide enough and several proposals of this Dutch bank are worth presenting. Ecological investment funds are an essential part of the offer. Participation units were offered in five subjects belonging to the bank group (ING Investment Management, ING Bank, Postbank, BBL Bank Brussels Lambert, Aeltus) on the European, Australian and American markets. Till the end of 2001 about 300 million EUR<sup>48</sup> were accumulated in ecological investment funds. On the Australian market the fund ING Sustainable Investments Global Share the Trust was offered, but on the American market ING introduced a new offer of co-operation with asset management companies managing funds of the SRI type (Socially Responsible Investment): Calvert, Pax World, Citizens. Euromarket remains, however, the most important market for ING in the scope of the ecological investment funds offer, which confirms the value of accumulated capitals in European ecological investment funds of the ING Group. The ecological financial offer of the ING Group is also an offer of asset management services. Baring Asset Management, which is part of ING Group, offers its own services on the British market to pension funds. Besides, the ING Group possesses ecological risk insurance in its offer, the financing of ecologically advanced projects, financial advising with ecological aspects allowed for.

Additionally, selected proposals of other banks can be presented.

The German Deutsche Bank offers, among other things, financial advising on the use of ecologically advanced technology and the utilisation of assistance resources for pro-ecological investments and investments through DWS Investment into the alternative energy fund (DWS New Energies Basket 25+). Another possibility of ecological financial investments with Deutsche Bank is the engagement of capitals in Deutsche Immobilien Leasing which proposes the financing of wind electric energy production. In the offer of Eurohypo AG, which is a mortgage bank of Deutsche Bank, loans for ecological renovation of immovables, as well as assessment of ecological risk connected with investments in immovables are proposed.<sup>49</sup> In another subject of the Deutsche Bank group, Schiffshypothekenbank zu Luebeck (SHL), ecological aspects are also taken into account. Ships, which may cause risk to the natural environment, are not financed.<sup>50</sup> However, the investment fund company DWS, which is also part of the Deutsche Bank group, has the investment fund Panda-Renditefonds at its disposal. It was launched in co-operation with the World Wide Fund – Germany (WWF). Part of the purchase charge for titles of participation is transferred for

---

<sup>48</sup> ING in Society 2001, pp. 17–18.

<sup>49</sup> Sustainability. Oekonomie, Oekologie, gesellschaftliche Vreantwortung. (2000). Frankfurt: Deutsche Bank, p. 21.

<sup>50</sup> Sustainability. Oekonomie, Oekologie, gesellschaftliche Vreantwortung, s. 29.

the financing of environmental protection projects. One of the latest initiatives of the Deutsche Bank group within the ecological financial offer is the creation of the investment fund DWS Sustainability Leaders Fund based on Dow Jones Sustainability World Index. The selection of investments is based on economic, social and ecological criteria. Negative criteria for the selection of the investment are also used in this fund, e.g.: issuers from the armaments sector, tobacco industry, alcohol industry and gambling sector are excluded. Other German banks are also engaged in the financing of environmental protection through ecological investment funds.

Other examples include, among others, a HypoVereinsbank bank – group with the fund Hypo Global Value and the group BfG Bank fuer Sozialwirtschaft with the Luxinvest Oeko-Pensions fund.

Among the German banks engaged in the offering of ecological investment funds one can point to not only well-known German universal banks, but also to small private banks, such as Fuerst Fugger Privatbank from Augsburg and Privatbank Sal. Oppenheim from Cologne.

Other recognised bank groups in which the offer of ecological investment funds was introduced comprise, among others, a group of Austrian banks, such as Erste Bank (the investment fund company Erste Sparinvest) with the fund Ethik-Stock and Umwelt-Stock, Raiffeisen with the fund Raiffeisen Ethik Aktien Fonds as well as Sparkasse Oberoesterreich with funds S Ethik Aktien and S Ethik Bond.

Still another example of an activity of a banking institution in the offering of financial products connected with the financing of environmental protection is the activity of the Swedish bank Skandinaviska Enskilda Banken (SEB). The capital group of this bank offers ecological investment funds, among other, e.g.: SEB Invest OekoRent, SEB Invest OekoLux (both launched in Luxemburg) or Fund Miljo (Finland). Moreover, this bank possesses 47.04% of shares of the Polish ecological bank – Bank Ochrony Środowiska.

In turn, Dresdner Bank offers, among other things, asset management services. About 10% of Dresdner RCM Global Investors assets in London are administered with a view to the criteria of social responsibility investment at the request of institutional customers. Another example is the specialist financial institution Groenbank, set up by ABN AMRO, which is engaged in the financing of pro-ecological projects by gaining funds through issues of securities.

Another example of financial operations performed for the purpose of financing environmental protection is giving loans, thanks to which selected undertakings of ecological character can be supported. Deutsche Ausgleichsbank (DtA) and Kreditanstalt fuer Wiederaufbau (KfW) are examples of banks where loan programmes for ecological purposes are implemented. The loans offer of Kreditanstalt fuer Wiederaufbau is quite wide and comprises the following loans programmes: KfW Environment Programme, KfW CO<sub>2</sub> Reduction Programme,

100,000 Roofs Solar Power Programme, Programme for Renewable Energy.<sup>51</sup> Both KfW and DtA are banks with a special status, and these programmes occupy a small part of their activity. The financial resources both banks have at their disposal are also distributed by means of other German banks, e.g. Commerzbank, Deutsche Bank and others. The European Investment Bank loans programmes are also distributed by means of selected European commercial banks.

The idea of investment certificates is also interesting. They are issues designed for the financing of pro-ecological economic undertakings. The certificate is a security issued on the basis of a set of shares of selected companies whose value guarantees the repayment of the certificate. When choosing a given certificate an investor knows which companies (issuers) he co-finances. An important French bank BNP Paribas offered investment certificates on the capital market "Umwelt: ethik24-Zertifikat", "alternative energy", "water". Similar products were also offered by Westdeutsche Landesbank – certificates: "Brennstoffzellen", "New energy activ", "Wassertechnik activ"; Dresdner Bank – certificate "alternative energy"; UBS Warburg – certificate "Fuel Cell II"; ABN AMRO – certificate "New energy" and Merrill Lynch – certificate "SAM Top 50 Sustainability". Ecological indexes are useful in the construction of certificates. HypoVereinsbank issued a certificate based on Dow Jones Sustainability Group World Index.<sup>52</sup> Dow Jones STOXX Sustainability-Index was used by Westdeutsche Landesbank,<sup>53</sup> as well as investment bank Merrill Lynch.

The proposal of Citibank can also be regarded as an interesting initiative. Citibank and Environmental Defense have created a special product: Environmental Defense Platinum Master Card. For every purchase made with this card a contribution is made to Environmental Defense<sup>54</sup> at no cost to the cardholder.<sup>55</sup> It is a very unique concept for the financing of environmental protection.

## 8. THE ECOLOGICAL BANK

A separate issue is the functioning of the so-called ecological banks in which operational activity is subordinate to the main aim, namely the financing of the protection of the environment. There are already various banks

<sup>51</sup> Environmental Report 2000. (2001). Kreditanstalt fuer Wiederaufbau, pp. 17–18.

<sup>52</sup> Environmental Report 2000. Promoting sustainability. (2001). HypoVereinsbank, p. 18.

<sup>53</sup> Letter from F. Borstelmann and U. Schulte zu Sodingen from Westdeutsche Landesbank of 22.07.2002 to the author.

<sup>54</sup> Environmental Defense is a non-profit organisation based in New York. ED represents more than 300,000 members and is involved in solution of the most urgent environmental problems.

<sup>55</sup> Internet, <http://www.citigroup.com/citigroup/corporate/environment/high.htm>



acknowledged as ecological. The Bank Ochrony Środowiska S.A. in Poland and the UmweltBank AG in Germany are the two most prominent ecological banks. There are three reasons to claim this:

- efficient connection of organisational and operational principles of a commercial bank with the financing of the protection of the environment,
- relatively large sums on the profit & loss account and balance sheet,
- shares quoted on the stock exchange.

In both banks the rules of commercial banking have been efficiently connected with the financing of the protection of the environment. The banks work as typical commercial banks but specialise in the financing of the protection of the environment and in pro-ecological economic undertakings. Additionally, protection of the environment is taken into account in the entire operating activity of the bank. In the course of their activity, both banks have gained numerous customers and worked out large sums in the profit & loss account and balance sheet. They are quite big financial institutions of a relatively stable market position. They are also the only banks which specialise in the financing of the protection of the environment and have their shares quoted on stock exchanges. This is an additional advantage in the gaining of customers and financing of the protection of the environment and an approval of the quality of these banking institutions in their satisfaction of the standards of conducting an economic activity.

In this publication three ecological banks will be presented more closely: the German UmweltBank AG, the Dutch Triodos Bank and the Polish Bank Ochrony Środowiska (in Chapter 5 concerning the Polish financial market).

## 8.1. PRESENTATION OF SELECTED ECOLOGICAL BANKS

### 8.1.1. UMWELTBANK AG

UmweltBank AG was established in 1997 and in 2001 its stocks were admitted to the stock exchange in Frankfurt, in the Freiverkehr segment. This bank is in the developmental phase. At the end of 2001 its balance-sheet total amounted to 322 million EUR, the value of loans given was 181 million EUR, and the value of collected deposits 209 million EUR.<sup>56</sup> The bank employed 102 persons at the end of 2001.

In UmweltBank the requirements of environmental protection are complied with both in the work organisation and in the activity performed by the bank. In the bank the socio-ecological system of management Umwelt- und Sozialmanagement is in place. The idea of functioning of Umwelt- und Sozialmanagement is presented in Schema 2.2. The essential elements of the system of socio-ecological management

---

<sup>56</sup> Geschäftsbericht UmweltBank 2001.

is the Ecological Council (UmweltRat) appointed at the bank and plenipotentiaries for ecological (Umweltbeauftragte) and social (Sozialbeauftragte) affairs. The aim of the Ecological Council is to advise the management on the matters of the bank's ecological policy and co-operate with the management in its implementation.

This bank has interesting deposit products in its offer. They comprise both current and savings accounts: UmweltPluskonto, UmweltSparbuch, UmweltSparvertrag, UmweltSparbrief. In the distribution of the bank there are also participation units in Swiss and Swedish ecological investment funds: Sarasin ValueSar Equity, Sarasin OekoSar Portfolio, SEB Invest OekoLux, SEB Invest OekoRent. UmweltBank assures its customers that financial capital gained will be designed for the financing of pro-ecological undertakings, such as: renewable energy, construction friendly to the natural environment, pro-ecological farming, reduction of pollutants, energy saving. In UmweltBank a notion of an ecological guarantee of a financial product was even formulated: "Oekologische Produktgarantie". Schema 2.3. presents the idea of gaining financial resources from customers for the financing of pro-ecological economic undertakings with assuring the certainty that the resources will be designed for pro-ecological purposes.

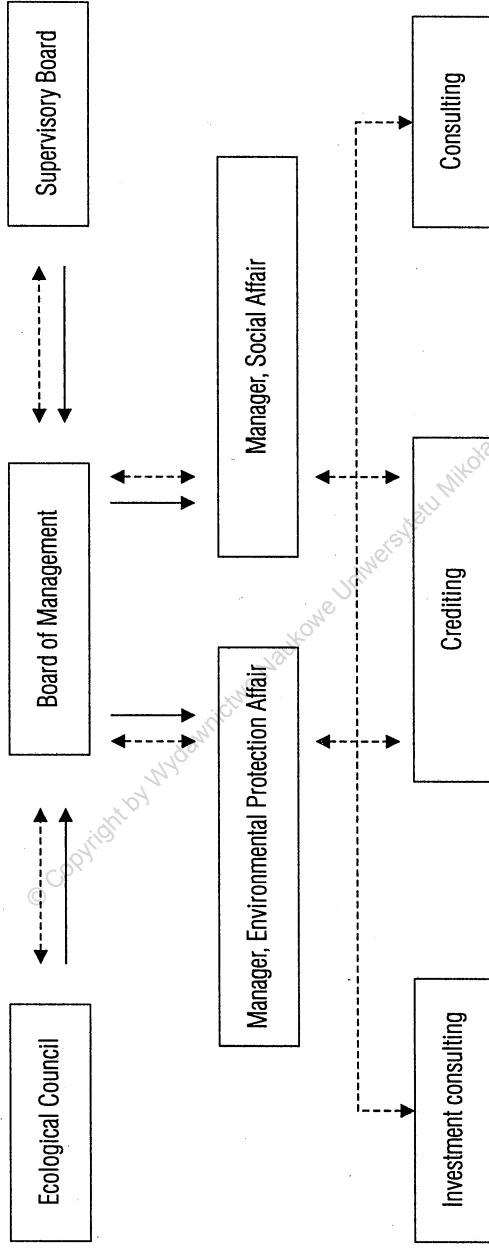
The offer of this bank also comprises loans, including preferential ones, whose cost is dependent on the level of the allowance for the requirements of the protection of natural environment. The higher the assessment of ecological values of the undertaking credited, the lower interest on the loan can be offered to the customer by UmweltBank. Ecological assessment is presented in points. Table 2.4. presents a fragment of a bank credit offer with an allowance for the prices of preferential loan in consideration of ecological values of the credited undertaking. In 2001 UmweltBank financed over 1,800 projects with loans, and the value of the loan portfolio grew up by nearly 40% in 2000–2001. Chart 2.1. represents the structure of the loan portfolio of UmweltBank in 2001 according to the values of loans given.

Table 2.4. The loan offer of UmweltBank with an allowance for lower prices for the ecological quality of a credited undertaking (November 2002)

MARK	MATURITY	%
Over 9	5 years	4.65
8–4	5 years	4.75
3–1	5 years	4.89
Over 9	10 years	5.13
8–4	10 years	5.22
3–1	10 years	5.37

Source: Bank & Umwelt (2002). 30.

Schema 2.2. Socio- and eco-management in UmweltBank

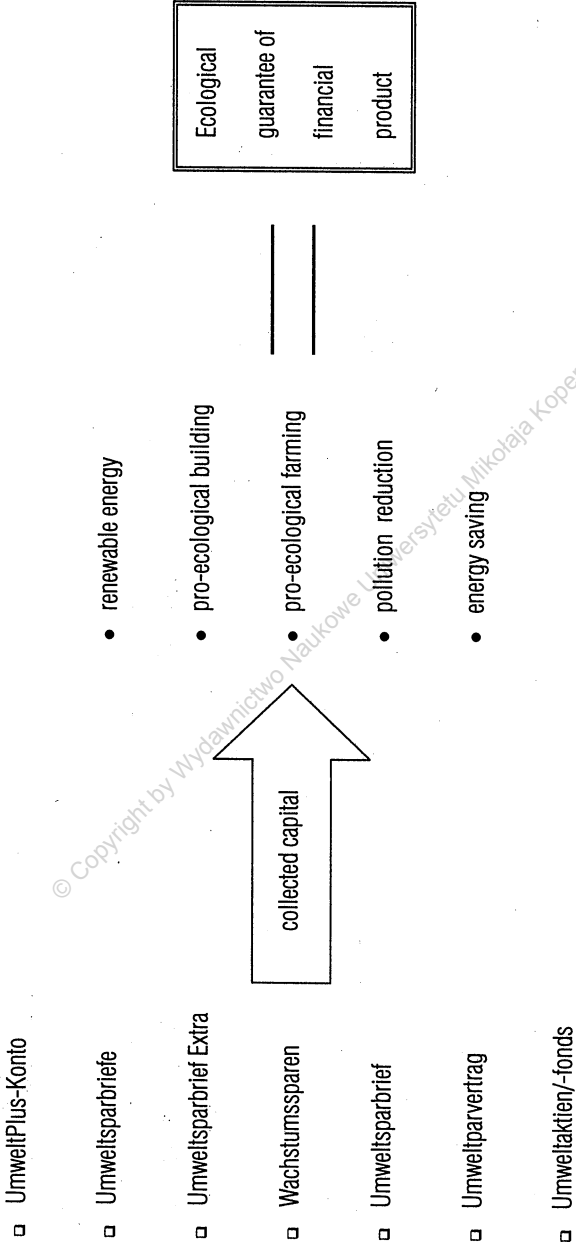


Where:

---> Information flow  
 —> Consulting

Source: UmweltBank (2002), p. 30.

Schema 2.3. Ecological guarantee of the financial product (the idea of designing financial resources for pro-ecological purposes)



Source: UmweltBank (2002): p. 26.

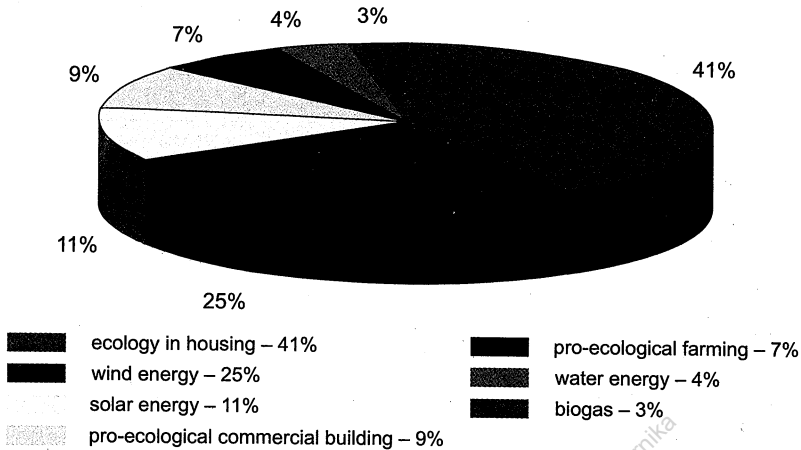


Chart 2.1. The structure of the loan portfolio of UmweltBank in 2001 according to the values of loans given

Source: Geschäftsbericht 2001. (2002). UmweltBank, p. 27.

The activity of UmweltBank brings measurable ecological effects. In the course of several years of its functioning the bank made a contribution in the protection of the natural environment. The contribution to the reduction of carbon dioxide CO<sub>2</sub> emissions can be an example. In 1997–2001, thanks to the functioning of the bank, CO<sub>2</sub> emissions were reduced by more than 420 thousand tonnes (Chart 2.2.). Evidently, the pro-ecological organisation of office work in the bank, which also brings ecological effects, is of great importance. The effects of pro-ecological organisation of office work in the bank in 2000–2001 are presented in Table 2.5.

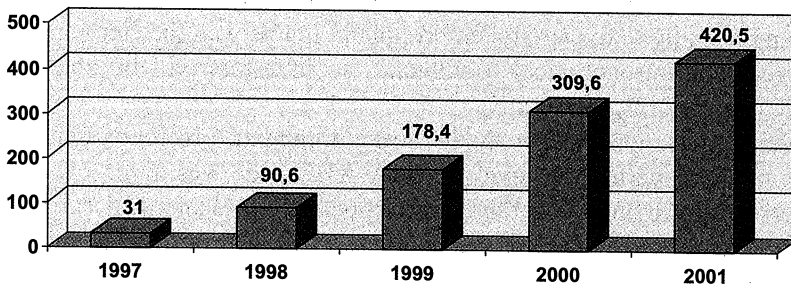


Chart 2.2. Reduction of carbon dioxide emissions thanks to the functioning of UmweltBank in 1997–2001

Source: Geschäftsbericht 2001. (2002). UmweltBank, p. 28.

Table 2.5. Basic data concerning pro-ecological organisation of office work in UmweltBank in 2000–2001

SPECIFICATION	UNITS	2000	2001	CHANGE (%)
Electric energy consumption				
Total electric energy consumption	kWh	36,561	33,175	-9.3
Electric energy consumption per one employee	kWh/MA	406	325	-20.0
Own electric energy (solar)	kWh	7,739	8,952	+14.8
Water consumption				
Total water consumption	m <sup>3</sup>	397	343	-13.6
Water consumption per one employee	m <sup>3</sup> /MA	4.41	3.36	-23.8
Thermal energy				
Total heat energy consumption	kWh	80,040	64,432	-19.5
Heat energy consumption on 1 m <sup>2</sup>	kWh/m <sup>2</sup>	77.79	62.62	-19.5
Heat energy per one employee	kWh/MA	889.33	631.69	-27.5
Paper consumption (without recycling paper)				
Total paper consumption	kg	53,358	39,771	-29.4
Paper consumption per one employee	kg/MA	636	390	-37.7
Paper consumption compare with total assets	kg/Mio.DM	135.48	55.39	-59.1
Waste				
Total waste	kg	-	5,816	-
Waste per one employee	kg/MA	-	57	-

Source: *Geschäftsbericht 2001, (2002)*. UmweltBank, p. 36.

Another example of a pro-ecological activity of the German ecological bank is the stock index UBAI. In 2002 UmweltBank proposed index UBAI – UmweltBank-AktienIndex constructed on the basis of shares of 18 German companies quoted on the stock exchange which fulfil the requirements of a company friendly to the natural environment. In this way the German financial market received an ecological benchmark, so investors will be able to make investment decisions more easily.

Owing to its own engagement in the environmental protection UmweltBank was eco-rated at the highest level of AAA. The grade was given by the Swiss Zuercher Kantonalbank. The following scopes of pro-ecological activity were taken into account in the assessment process of the UmweltBank with suitable weights given to them:

- the policy of the company (weight 15%),
- the management process (weight 15%),
- the enterprise/production (weight 10%),
- products (30%),

- collaborators (15%),
- claim groups (15%).

This high grade in ecological rating given to UmweltBank by another bank, experienced in supporting the environmental protection, is a confirmation of engagement and pro-ecological effectiveness of the German ecological bank.

### 8.1.2. TRIODOS BANK

Another eco-ethical bank is the Dutch Triodos Bank<sup>57</sup>. Triodos Bank exemplifies a well-organised bank which, linking business with social and ecological requirements, develops its activity and brings profits. The bank was established in 1980 as a fully licensed and independent bank in the Netherlands with 540,000 EUR in share capital. In 1993 Triodos Bank opened a branch in Belgium and in 1995 in Great Britain. In this way the bank operates in three countries, which deserves distinction. The remaining eco-ethical banks do not perform such an expansive activity on the international scale. By the end of 2001 the bank employed 190 people: 117 in Holland, 30 in Belgium and 43 in Great Britain.

The mission of Triodos Bank is defined as follows:

*Triodos Bank seeks to contribute to a more people-orientated society – one which respects people, the environment and culture.*

*Triodos Bank finances enterprises which add social, environmental and cultural value, with the support of depositors and investors who wish to encourage the development of responsible business working for social renewal.*

*Triodos Bank includes social and ethical – as well as financial – perspectives in its business practices. This threefold approach is the source of the name Triodos “tri hodos” which means threefold way.*

Key financial figures, which described the bank in the year 2001 are as follows (amounts in thousands of EUR):

- liability capital 73,528,
- funds entrusted 667,181,
- loans 328,965,
- balance sheet total 758,990,
- total income 19,571,
- net profit 2,364.

Additional financial data (per share in EUR):

- net asset value 65,
- net profit 2.16,
- dividend 1.50.

Triodos Bank offers a wide range of products and services which have been developed to support enterprises which respect financial-economic terms

<sup>57</sup> Triodos Bank NY. (2002). Annual Accounts 2001.

and add social, cultural and environmental value. The bank offers deposits, loans, investment funds, private banking and other products and services.

The size of business lending in year 2001 increased to 329 million EUR and the number of loans increased to 2,457. The bank financed five basic sectors in three countries. Respective data are presented in Tables 2.6. and 2.7.

Table 2.6. Sectoral structure of loan portfolio on December 31, 2001

SPECIFICATION	AMOUNTS IN MILLIONS OF EUR	%
Nature & Environment	78.2	24
Social business	60.0	18
Culture and society	24.8	38
North-South	13.9	4
Housing and other	52.1	16
Total	329.0	100

Source: Triodos Bank NV. (2002). Annual Accounts 2001, p. 18.

Table 2.7. Structure of loan portfolio by branch on December 31, 2001

SPECIFICATION	AMOUNTS IN MILLIONS OF EUR	%
The Netherlands	197.0	60
Belgium	52.6	16
Great Britain	79.4	24
Total	329.0	100

Source: Triodos Bank NV. (2002). Annual Accounts 2001, p. 18.

Deposit operations of this bank also deserve a closer presentation. The number of accounts grew in the year 2001 to 57,957. Numerous funds and foundations and other financial institutions engaged in the financing of undertakings concordant with the mission and strategy of the bank are related to Triodos Bank. Suitable data are presented in Tables 2.8. and 2.9.

Table 2.8. Structure of entrusted funds by branch on December 31, 2001 (in millions of EUR)

SPECIFICATION	AMOUNTS IN MILLIONS OF EUR	%
The Netherlands	274.7	41
Belgium	145.1	22
Great Britain	247.4	37
Total	667.2	100

Source: Triodos Bank NV. (2002). Annual Accounts 2001, p. 22.



Table 2.9. The overview of funds entrusted in the Triodos Group on December 31, 2001 (in millions of EUR)

SPECIFICATION	AMOUNTS IN MILLIONS OF EUR
Triodos Bank NV (balance sheet total)	759
Wind Fund Plc (share capital)	5
Triodos Groenfonds NV (share capital)	178
Triodos Meerwaardefonds NV (share capital)	60
Triodos Bank Duurzaam Vermogensbeheer (total under management)	58
Triodos Foundation (balance sheet total)	3
Stichting Triodos-Doen (balance sheet total)	22
Stichting Hivos-Triodos Fonds (balance sheet total)	9
Stichting Solar Investment Fund (balance sheet total)	2
Triodos Venture Capital Fund BV (share capital)	6
Solar Development Capital (share capital)	1
Triodos Values Fund (share capital)	6
Total	1,109

Source: Triodos Bank NV. (2002). Annual Accounts 2001, p. 22.

## CHAPTER 3

# ECOLOGICAL INVESTMENT FUNDS

### 1. FOREWORD

On today's international financial market there is a broad offer of investment funds. Individual and institutional investors have not only free access to the assets of the financial market, but they can also carry out their own aims such as, e.g. linking economic effects of their investments with ecological aims. The functioning of many ecological investment funds makes it possible to implement such an investment policy. What is more, ecological investment funds are not the only form of collective investment. There are also investment clubs with ecological aspects included in their investment policies. One may then assume that investors have now real opportunities to achieve their own aims in the international financial market.

The fact that the market of ecological investment funds is developing so rapidly is a reason for its closer presentation in this publication. The most important national markets will be presented, such as: the United States, Great Britain, Germany, Switzerland, Luxembourg, France and other smaller markets as well as particular ecological investment funds. The functioning of investment clubs will be presented in the final part of the chapter.

### 2. THE DEVELOPMENT OF THE MARKET OF ECOLOGICAL INVESTMENT FUNDS'

In the United States, as early as in the 1920s, it was possible to point to the first examples of investing through investment funds with the allowance for economical as well as ethical criteria. Further intensification in the allowance for ethical aspects could be observed on the American market in the 1970s during the Vietnam War. The case of Dow Chemical is a characteristic example connected with the increasing interest in ethical investing. At that time, many

investors realised that by owning Dow Chemical stocks they also bore responsibility for the use of napalm in Vietnam, because the company was engaged in its production. Paying attention to the worsening condition of human natural environment at the turn of the 1970s provided another impulse for ethical investing. Since then, the attempts to distinguish ethical and ecological investing have also started. Till then, only ethical investing had been mentioned in general, but later it was possible to distinguish clear ecological reasons for investing.

It should be noticed that both ethical and ecological investing is defined as so-called “conscious” or “responsible” investing. Nowadays the comprehensive definition of ethical and ecological funds is still used with reference to those investment funds which follow economical and ethical or ecological criteria on the American and British markets. It can be assumed that the ecological investment funds originated on the basis of the concept of ethical investing and they are a special case of ethical investment funds. The common roots as well as frequently convergent general principles of investing and some nuances in the determination of what is ethical and what is only ecological are the reason for the fact that it is often difficult to distinguish between ethical and ecological investment funds in relation to each other. It also leads to some serious divergences regarding the volume of the money invested in particular funds as well as the number of these funds.

The turn of the 1980s is the next stage in the development of ecological funds, which was supported by the introduction of legal regulations protecting the natural environment. The number of funds increased and the principles of investing in the protection of environment through investment funds were elaborated.

Another stage in the development of ecological investment funds started at the end of 1990s and it was connected with the growing popularity of the concept of socially responsible investing, which also refers to investing in compliance with the ecological criterion. The already-gathered experience in the area of so-called ecological investing and the elaboration of more and more perfect principles of investing in the protection of environment through ecological investment funds had significant importance for the further development of the market of ecological investment funds. This stage in market development is characterised by a quickly growing number of ecological investment funds and the expansion of this type of funds in many countries.

Summing up the hitherto considerations, we can present the views of Bettina Furrer of UBS (Switzerland), Doctor Danuta Dziawgo of the Toruń University (Poland),<sup>58</sup> Stefan Schaltegger from the University of Lueneburg (Germany) and

---

<sup>58</sup> Dziawgo D. (2001). Ecological investment funds and asset management, *EcoFinances*, 3, 4–9.

Frank Figge from the University of Lueneburg and The Pictet & Cie Bank (Switzerland)<sup>59</sup>. These persons distinguish synthetically four stages in the development of ecological investment funds (see Schema 3.1.).

### **Stage I – ethical funds**

In this type of funds the religious convictions of the investors or some universal values based on the high awareness of the investors are taken into consideration. Negative criteria excluding chosen branches such as the arms industry, gambling, the alcohol and tobacco industry, etc. are widely applied in the investment strategy. They are recognised as so-called “sinful” branches.

### **Stage II – technological funds**

The rise of this type of ecological investment funds was connected with the introduction of legal regulations aimed at the protection of the natural environment. The introduction of these regulations created demand for modern technologies which protected the environment in the process of economical management, e.g. sewage treatment plants, filters, recycling, waste material utilisation, etc. Such funds are defined as so-called “technological” funds. These funds invest financial resources in securities of the producers of pro-ecological technologies.

### **Stage III – eco-efficiency funds**

The funds from this group invest capital in ecologically efficient companies. Negative criteria of selection are not widely applied any more, because emphasis has been placed on looking for the most ecologically efficient companies in each industry (eco-efficiency leaders).

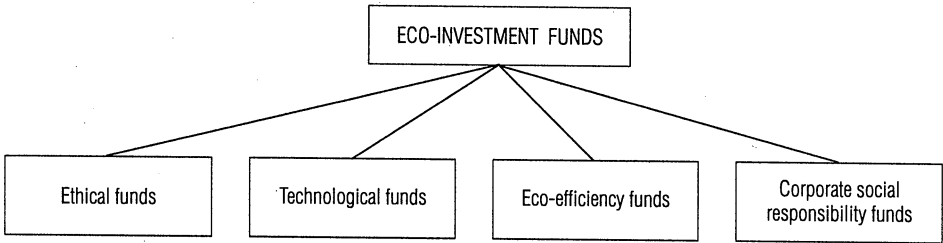
### **Stage IV – funds investing in socially responsible corporations**

The growing popularity of the concept of a socially responsible corporation created demand for investment in those corporations which started to win public trust in regard to the principles applied in economic activity such as respect for the natural environment, respecting the workers’ rights as well as the rights of clients, ethnic minorities, etc. The functioning of companies according to these principles is often supported by adequate legal regulations, but the attitude and conviction of the company’s management towards the above-mentioned basic principles is also important.

---

<sup>59</sup> Schaltegger, S. and Figge, F. (2001). In J. J. Bouma and M. Jeucken and L. Klinkers. Sustainable banking. The greening of finance. Sheffield: Greenleaf Publishing in association with Deloitte & Touche.

Schema 3.1. The stages in the development of eco-investment funds and the framing of their functioning



Source: Author’s own elaboration.

While commenting on the synthetic frame of the individual stages in the development of ecological investment fund it is possible to emphasise the fact that particular stages in the development are based on slightly different conceptions of the functioning of an ecological investment fund. In spite of the growth of the market of the funds, these conceptions still penetrate one another and they are still applied, even if with different intensity and consistency. Therefore, the above frame can be treated as a presentation of the stages of development as well as the conceptions of the functioning of ecological investment funds.

To complement the above considerations, we can also point to two fundamental strategies applied in ecological investment funds in the area of the selection of stocks.

One of the strategies includes the application of the following negative and positive criteria:

- hands-off-approach,
- hands-on-approach.

This is a strategy of elimination and acceptance. The industries in which financial resources are not invested are defined. These are so-called dirty or unethical industries. Among others they include the-already-mentioned arms industry, the alcohol and tobacco industry as well as gambling. The negative list can be supplemented or replaced with a positive list defining those industries in which money is invested, e.g. production of air filters, designing and construction of sewage treatment plants, etc.

Another basic principle in the selection of assets for the portfolio of an ecological investment fund is based on the best-in-class principle. In this strategy, none of the industries is pre-excluded and in every trade it is possible to identify companies which are ecological leaders (eco-efficiency leaders). The application of this strategy makes a wider scope of investment possible. In principle, all industries can be taken into account in these investments.

Ecological investment funds are becoming more and more popular in the international financial market because:

- environmental protection is becoming more and more popular in society,
- the experience in the functioning of ecological investment funds gathered so far has turned out to be useful,
- the principles of ecological investing have become clearer and thus more comprehensible,
- the possibilities of such investments have increased due to the growth in the number of companies which respect the requirements of environmental protection,
- ecological ratings of companies such as ISO 14001, EMAS, eco-rating and stock exchange ecological indexes have become popular.

Ecological investment funds are now functioning in the United States, Great Britain, Germany, Switzerland, Austria, Belgium, Holland, France, Sweden, Finland, Australia and even in Japan. It is estimated that in 2002 there were about 200 ecological investment funds in the international financial market and they had collected approximately 40 billion USD.<sup>60</sup> Table 3.1. presents data regarding ecological funds in chosen markets.

Ecological investment funds are offered by capital groups which include banks, by independent of the banks' investment fund companies, and by other financial institutions. The market of ecological investment funds can be evaluated as a promising one, although currently ecological investment funds represent approximately 1% of the market of investment funds with regard to collected assets in particular national financial markets. The dynamics in the development of the ecological investment funds market certainly deserves paying attention.<sup>61</sup>

Table 3.1. Ecological investment funds in selected financial markets (30.06.2002)

COUNTRY	NUMBER OF FUNDS	VALUE OF COLLECTED MONEY (IN BILLIONS OF EUR)
The United States	49	25
Great Britain	33	3
France	17	0.6
Holland	18	1.4
Germany–Austria–Switzerland–Luxembourg	61	2.6

Source: *Oeko-Invest* (2002), 265 and 268.

<sup>60</sup> 1 billion = 1 thousand million.

<sup>61</sup> Knoerzer, A. (1996). *Oekologische Aspekte im Investment Research* (p. 20). Swiss Banking School 137. Bern–Stuttgart–Wien: Verlag Paul Haupt. R. Wagner, a manager of the BfG Invest fund, was a little more optimistic in his evaluation of the role of ecological investment funds – he evaluated them at less than 1%; see Fonds (1994). *Oeko-Invest*, 56.

### 3. INTERNATIONAL OVERVIEW

Ecological investment funds are already known on the international financial market. In some countries substantial resources have been collected in this type of funds and in other countries such funds are only gaining popularity.

Ecological investment funds were first introduced into the market in the United States and in Great Britain. Therefore, ecological investment funds have so far gathered the greatest financial resources in these two countries. The dynamics in the growth of ecological investment funds on the German, Swiss and French markets should also be appreciated. The growth of these funds in Japan and Holland is remarkable as well. Ecological investment funds are functioning in almost every economically developed country. They have also appeared on the emerging markets, such as Poland, for example.

The following sub-points will present the market of ecological investment funds in the United States, Great Britain, Germany, Switzerland, Austria, Luxembourg, France, Holland and Japan.

#### 3.1. THE UNITED STATES

The first investment fund, which accounted for criteria other than financial ones in its operation, namely ethical criteria, came into being in the United States in 1920s.<sup>62</sup> The first ecological investment funds were also founded in the United States.<sup>63</sup> Currently, dozens of ethical and ecological funds function in the American market (*socially screened funds*). Contrary to the German market and similarly to the British market, ethics and ecology are not distinguished in the American market, which makes it difficult to perform an ecological identification of a given fund. The ecological aim is regarded as one of the ethical aims and they are jointly taken into consideration in the functioning of the fund.

When we bear in mind the difficulty in specifying the concept of “ethical investing”, it is understandable that divergent estimates regarding the number of American ethical and ecological investment funds are often given. According to the estimates of R. Lowry, there were 129 funds as early as in July 1997;<sup>64</sup> whereas conservative estimates of the FIFEGA institute mention about 25 funds

---

<sup>62</sup> Brill, J. A and Reder, A. (1993). *Investing from the heart. The guide to socially responsible investments and money management* (2<sup>nd</sup> ed.). (p. 29). New York: Crown Publishers Inc.

<sup>63</sup> In the USA, ecological and ethical investment funds are combined into one group of so-called Social Responsibility Investment Funds.

<sup>64</sup> Professor R. P. Lowry, of Boston College in the USA, is regarded as one of the experts in the area of the ethical and ecological financial market. Internet, <http://www.goodmoney.com/sefunds.htm>

in the same period.<sup>65</sup> W. Homolka, in turn, estimated that the number of ethical and ecological investment funds at that time amounted to approximately 30.<sup>66</sup> These estimates illustrate well the divergences in the evaluation of the potential of the American market of ecological investment funds. On the basis of the FIFEGA institute's estimates, we can assume that in the middle of 2002 there were approximately 50 funds of this type in the United States. This number can be regarded as reliable. According to FIFEGA's estimates, about 10 new funds appeared in the American market in the period between 2001 and 2002.

Currently, the biggest American ecological investment funds include the funds from the Pioneer group, Pax World, Citizens, Domini and Ariel. However, it should be added that the investment strategy of many ecological investment funds also takes into consideration ethical or social aspects to a large extent.<sup>67</sup>

Table 3.2. presents ecological investment funds in the United States as well as the volume of the capital they have gathered.

Table 3.2. Eco-investment funds in the United States (30.06.2002)

NAME OF FUND	VALUE IN MILLIONS OF USD
1	2
Aquinas Equity Growth	60
Ariel Appreciation	1,481
Ariel Fund	1,246
Calvert SIF Bond (A)	117
Calvert SIF Equity (A)	361
Calvert SIF Balanced (A)	537
Calvert World Int. Equity (A)	159
Capstone SERV Bond	70
Capstone SERV Int.	63
Capstone SERV LC Equity	161
Capstone SERV SC Equity	87
Citizens Core Growth Index (Inst.)	93
Citizens Core Growth Index (Retail)	362
Citizens Emerging Growth	210
Citizens Global Equities	147
Citizens Income	70
Citizens Value	25

<sup>65</sup> Umweltfonds. (1997). *Oeko-Invest*, 141.

<sup>66</sup> W. Homolka is regarded as one of the experts in the area of the ethical and ecological financial market. Homolka, W. (1990). *Umweltfonds* (pp. 32–33). Bonn: Economica Verlag.

<sup>67</sup> As understood by the investors and the management.



1	2
Delaware Social Awareness (A)	24
Delaware Social Awareness (B)	28
Delaware Social Awareness (C)	7
Domini Institutional Social Equity	328
Domini Social Equity	1,154
Dreyfus Premier Third Century	717
Fidelity Select Environmental Services	12
Friends Ivory European Social Awareness	0
Friends Ivory Social Awareness	0
GMO Tobacco-Free Core (III/IV)	505
Green Century Balanced	49
Green Century Equity	32
MMA Praxis Core Stock	136
Neuberger Socially Responsible Fund	84
New Alternatives	47
Parnassus Equity Income	159
Parnassus Fund	385
Pax World Balanced Fund	1,127
Pax World Growth	25
Pioneer Bond (A)	139
Pioneer Fund	5,847
Pioneer Mid-Cap Value (A)	1,125
Pioneer Mid-Cap Value (B)	373
Pioneer Mid-Cap	614
Pioneer Value (A)	4,105
Smith Barney Social Awareness (A)	293
Smith Barney Social Awareness (B)	125
Vanguard Calvert Social Index	102
Walden BBT Domestic Social Index	27
Walden BBT International Social Index	57
Walden Social Equity Fund	26
Women's Equity Fund	13

Source: Oeko-Invest (2002), 268.

### 3.2. GREAT BRITAIN

Traditionally, Great Britain is a significant market of ecological investment funds. It was the British market, after the American, where eco-investment funds developed, like in the USA, into the functioning of ecological investment funds

taking social and ethical aspects into account to a large degree. This makes the exact calculation of the number of funds and assets collected in them difficult. The number of ecological investment funds in Great Britain in mid 2002 was estimated at more than 30, and assets collected in them at over 3,000 million EUR. In Great Britain new eco-ethical investment funds have appeared recently.

The most important ecological investment funds are those of the following groups: Friends Provident, NPI, Scottish, or Jupiter Ecology. A long-time presence of the fund Credit Suisse Fellowship on the British market, which is of Swiss origin, can be indicated. Although ecological investment funds constitute a small part of the market of investment funds in Great Britain, the market of eco-ethical logical investment funds is noticed and its basic functions are fulfilled.<sup>68</sup>

Table 3.3. British ecological investment funds (30.06.2002)

NAME OF FUND	VALUE IN MILLIONS OF EUR
1	2
Abbey Ethical	72
Allchurches Amity A	60
CIS Environ	184
City Financial Acorn Ethical	6
Clearical MedicalEvergreen	33
Clearical MedicalEthical	33
Credit Suisse Fellowship	133
Eagle Star Environmental Opportunities 1	10
Eagle Star Environmental Opportunities 2	5
Friends Provident Conscience	15
Friends Provident Stewardship	851
Friends Provident Stewardship Income	122
Friends Provident Stewardship Intl.	83
FTSE4Good UK Fund	(new)
HalifaxLifeEthical	52
Henderson Ethical A	107
Henderson Ethical I Inc.	?
Henderson Ethical X	?
Jupiter Ecology	237
Norwich Sustainable Future Absolute Growth	(new)

<sup>68</sup> White, M. A. (1996). *Environmental finance: value and risk in an age of ecology* (p. 5). Business Strategy and the Environment; Ryall, C. and Riley, S. (1996). *Appraisal of the selection criteria used in green investment funds* (p. 5). Business Strategy and the Environment.

1	2
Norwich Sustainable Future Corporate Bond	(new)
Norwich Sustainable Future European Growth	(new)
Norwich Sustainable Future Global Growth	(new)
Norwich Sustainable Future Managed	(new)
Norwich Sustainable Future UK Growth	(new)
Norwich UK Ethical	84
NPI Global Care Growth	258
NPI Global Care Income	175
Scottish Equitable Ethical Care	8
Scottish Equitable Ethical Pens.	125
Scottish Equitable Social Responsibilities	5
Scottish Widows Environmental	287
Sovereign Ethical	61

Source: Oeko-Invest (2002), 265.

### 3.3. GERMANY – AUSTRIA – SWITZERLAND – LUXEMBOURG

Ecological investment funds are becoming more and more popular on the financial markets of Germany, Austria, Switzerland, and Luxembourg. The first funds of this kind were founded at the turn of 1980s and 1990s, but their dynamic growth started at the turn of 1999 and 2000 and it still continues. According to the Austrian FIFEGA institute, in the middle of 2002, 61 ecological investment funds already functioned in the area of D-A-CH-L (Deutschland–Austria–Switzerland–Luxembourg). 5 funds were established in the middle of 1999, 11 in 2000, 19 in 2001 and the following 10 by the middle of 2002. Summing up, as many as 4/5 of all the ecological investment funds in the D-A-CH-L area came into being during the last 3.5 years.<sup>69</sup> It should be admitted that this is impressive dynamics. This part of the European market of ecological investment funds can be recognised as very promising; even more promising when we consider the value of collected financial assets. The resources collected in the funds on 30.06.2002 were estimated at 2.6 billion EUR. In the preceding year, about 2.1 billion EUR was collected in approximately 40 funds. The increase of 20% in the number of ecological investment funds during one year only permits us to presume that soon the dynamics of the collected capital will increase as well.

Ecological and ethical investment funds arise more and more interest on the part of investors. The functioning of ecological and ethical investment funds

<sup>69</sup> White, M. A. (1996). Environmental finance: value and risk in an age of ecology (p. 5). Business Strategy and the Environment; Ryall, C. and Riley, S. (1996). Appraisal of the selection criteria used in green investment funds (p. 5). Business Strategy and the Environment.

is clearly visible on the German market, which is the most important one of the D-A-CH-L markets.<sup>70</sup>

Commenting on the situation on the D-A-CH-L market one should pay attention to the following aspects. In comparison to the American or British markets, ecological investment funds on this market seem to be more ecologically oriented. So-called social or ethical aspects are taken into consideration to a smaller extent in their investment strategy. Although the number of ethical and ecological investment funds on the D-A-CH-L market has exceeded the number of funds in the American market, the value of the assets they have collected is smaller. Ecological investment funds with the biggest value of assets on this market include: Pictet Global Sector Fund Water, UBS EF Eco Performance, Sarasin Oeko-Sar, Swissca Green Invest, CS EF (Lux) Global Sustainability, KCD-Union-Renten Plus Nachhaltig DJS Index.

The visible activity of the Swiss capital deserves special attention. The market position of ecological investment funds belonging to Swiss banks such as UBS, Credit Suisse, cantonal banks and private Swiss banks can be given as evidence here. We could also point to the presence of Dutch and Austrian banks. The Swedish bank Skandinaviska Enskilda Banken is also present. This Sweden bank is active not only in the German-speaking area of Europe, but obviously in Scandinavia as well (e.g. Sweden and Finland). While evaluating the role of banking, it should be stated that both German and foreign banking capital is seriously engaged in the market of ecological investment funds.

The functioning of ecological investment funds allows the investors from the D-A-CH-L area to support financially environmental protection through the purchase of securities issued by companies leading in the ecological area. Thanks to these funds, it is possible for the investors to invest in the international market while maintaining the ecological criterion, too. American as well as British and French stocks make a significant proportion of the funds' investments. The significant proportion of American securities in the portfolios of ecological investment funds results from the extensive offer of the American ecological market of stocks, which is conditioned by a strong ecological trend in the American economy.

Table 3.4. Ecological investment funds in Germany, Austria, Switzerland and Luxembourg (30.06.2002)

NAME OF FUND	COUNTRY	FUND SET UP YEAR	VALUE IN MILLIONS OF EUR
1	2	3	4
SEB Invest OekoRent	Luxembourg	1989	50
CS EF (Lux) Global Sustainability	Luxembourg	1990	121

<sup>70</sup> Investment 2002. Daten, Fakten, Entwicklungen (2002). BVI Bundesverband Deutscher Investment- und Vermögensverwaltungs-Gesellschaften e.V.

1	2	3	4
Focus GT Umwelttechnologiefonds	Germany	1990	76
Activest Lux Eco Tech	Luxembourg	1990	47
KD Fonds Oeko-Invest	Luxembourg	1991	29
SEB Invest OekoLux	Luxembourg	1992	48
Sun Life GP Ecological	Luxembourg	1992	5
Sarasin OekoSar	Luxembourg	1994	219
Prime Value Mix	Austria	1995	42
OekoVision	Luxembourg	1996	92
Storebrand Principle Global (A)	Luxembourg	1996	62
Storebrand Principle Global (B)	Luxembourg	1996	
Storebrand Principle Global (C)	Luxembourg	1996	
Gamax Funds Junior	Luxembourg	1997	48
UBS (Lux) EF Eco Performance	Luxembourg	1997	322
Swissca Green Invest	Luxembourg	1998	156
Sarasin Valuesar Equity	Luxembourg	1999	83
JB Mi-Fonds Eco (A&B)	Luxembourg	1999	41
Pictet Sustainable Equities – Switzerland	Luxembourg	1999	10
SAM Sustainability Index Fund	Luxembourg	1999	52
SAM Sustainability Pioneer Fund	Luxembourg	1999	19
Oppenheim Topic DJ Sustainability World Index	Luxembourg	2000	15
Pictet Global Sector Fund Water	Luxembourg	2000	459
Gamax Funds Senior	Luxembourg	2000	10
LIGA-PAX-Balance-Union	Germany	2000	69
Green Effects	Ireland	2000	30
Fairway One-Universal-Fonds	Germany	2000	2
Gerling Select 21	Germany	2000	9
DAB Adviser Meridio Green Balance	Luxembourg	2000	?
Pioneer Funds – Global Environmental & Ethical	Luxembourg	2000	18
Kepler Sustainability	Austria	2000	11
Sarasin New Energy Fund	Luxembourg	2000	9
Sarasin-FairInvest-Universal	Germany	2001	16
KCD-Union-Aktien Nachhaltig DJS-Index	Germany	2001	87
KCD-Union-Renten Plus Nachhaltig DJS-Index	Germany	2001	112
Storebrand Principle Europe Bond	Luxembourg	2001	32
UniSector: NatureTech	Luxembourg	2001	26
MST New Energy Fund	Luxembourg	2001	18
Klassik OekoTrends	Austria	2001	5
Prime Value Aktien Europa	Austria	2001	1
Prime Value Bond Paneuropa	Austria	2001	1

1	2	3	4
Umwelt Stock (ERSTE)	Austria	2001	7
UBS (Lux) EF Future Energy	Luxembourg	2001	17
Spaengler NewEnergy Trust	Austria	2001	9
tfi ECO GLOBAL FUND	Luxembourg	2001	1
SAM Sustainable Water Fund	Luxembourg	2001	?
BB New Energy INVEST	?	2001	1
Lacuna EcoTech New Energy	Luxembourg	2001	1
Superior 3 (Schelhammer & Schattera)	Austria	2001	66
ABN AMRO Socially Responsible Equity Fund	Luxembourg	2001	6
Swissca Green Invest Balanced	Luxembourg	2001	(new)
S Ethik Aktien (Allg. Sparkasse Oberoesterreich)	Austria	2002	(new)
S Ethik Bond (Allg. Sparkasse Oberoesterreich)	Austria	2002	(new)
Raiffeisen-Ethik-Aktien-Fonds	Austria	2002	(new)
Mellon European Ethical Index Tracker	Ireland	2002	11
DVG Stiftungsfonds	Germany	2002	(new)
DLI-GLOBAL QUALITY (Delta Lloyd)	Germany	2002	(new)
DWS Invest Sustainability Leaders	Germany	2002	(new)
Ethik Stock (ERSTE)	Austria	2002	(new)
Hypo Global Value	Austria	2002	(new)
Kepler Ethik Fonds	Austria	2002	(new)

Source: Oeko-Invest (2002), 265.

### 3.4. THE NETHERLANDS

In Holland, about 18 funds, which have collected approximately 1.4 billion EUR (30.06.2002) can be classified as ethical and ecological investment funds. The Dutch market of this type of funds also belongs to the markets with a high dynamics of development. It refers to both the number of funds and the value of collected financial capital. By comparison, in the middle of 2001, about 10 funds with assets amounting to about 0.8 billion EUR functioned in Holland.

The largest ecological investment funds in the Dutch market include ABN AMRO Groen Fonds, ASN Aandelenfonds, ASN Groenprojectenfonds and Robeco Duurzaam Aandelenfonds.

A serious commitment of banking capital is also perceptible in the Dutch market. We can point to the funds belonging to the well-known banking and financial groups such as ABN AMRO and ING.

Table 3.5. Ecological investment funds in the Netherland (30.06.2002)

NAME OF FUND	VALUE OF ASSETS IN MILLIONS OF EUR
ABN AMRO Duurzame Wereld Fonds	56
ABN AMRO Groen Fonds	453
ASN Aandelenfonds	316
ASN Groenprojectenfonds	109
ASN Obligatiefonds	42
Falcon Milieu Aandelen Fonds	
Holland Groen Rentefonds	11
ING Duurzaam Rendement Fonds	63
Meerwarde Depot (Delta Lloyd)	34
OHRA Milieutechnologie Fonds	15
OHRA New Energy Fonds	20
Postbank Duurzaam Aandelenfonds	10
Robeco Duurzaam Aandelenfonds	156
SNS Duurzaam Aandelenfonds	27
SNS Spaarbewust Fonds	
Triodos Meerwaarde Mixfonds	34
Triodos Meerwaarde Obligatiefonds	25
ABF Het Andere Beleggingsfonds	?

Source: Oeko-Invest (2002), 265.

### 3.5. FRANCE

France is another important market for ecological investment funds. About 17 funds function in this market and the value of the assets they have collected exceeds 600 million EUR (30.06.2002). The biggest ethical and ecological French funds include Nord-Sud Developpement and Insertion Emploi. These funds comprise approximately half of the French market of ethical and ecological funds.

Table 3.6. Ecological investment funds in France (30.06.2002)

NAME OF FUND	VALUE OF ASSETS IN MILLIONS OF EUR
1	2
Actions Ethique C	14
Actions Ethique D	6
Actions Sud	7
Biosphere	41
CIC Ecocic	20

1	2
Ecureuil Technologies	13
Epargne Solidaire	8
Eurco Solisarite	30
Faim et Developpement Horizon 2003	10
Faim et Developpement Equilibre	14
Faim et Developpement Tresorerie	23
Insertion Emplois	82
Nord-Sud Developpement C	151
Nord-Sud Developpement D	99
Nouvelle Strategie 50	28
Placements Sciences de la Vie	11
Plural Ethique	24

Source: Oeko-Invest (2002), 265.

### 3.6. JAPAN

Japan has unexpectedly become an important market for ecological investment funds. This is one of those countries in which ethical and ecological funds have appeared relatively lately. However, the dynamics of development of these funds on the Japanese market and the value of their financial assets attract the attention of experts. The Japanese are willing to share their experience. The data provided by Takashi Seo, Kayoko Sakai (Yasuda Fire & Marine Insurance), Masaatsu Takehara (Yasuda Research Institute), Takuo Nishikawa (Nikko Asset Management) as well as Mizue Tsukushi (The Good Bankers)<sup>71</sup> allow us to estimate that the Japanese market of ecological investment funds includes 10 funds, which have collected capitals of more than 1.5 billion EUR.

So far, the greatest number of investment funds in Japan has been founded in the years between 1999 and 2000. We can even speak about the Japanese phenomenon. Serious financial corporations – among others Yasuda, Nikko, Sanwa Bank, Dai-ichi and Sumitomo Bank – are engaged in the market of ecological investment funds. It is possible to point to the Swiss presence again – the UBS Eco-fund “Eco-Hakase”. Other serious funds include Yasuda F & M Green Open “Beech Forest”, Eco-fund from the Dai-ichi group and two Global Eco Growth Funds from the Daiwa group. Nikko Eco-fund, which belongs to Nikko Securities Asset Management, is currently the biggest Japanese ecological investment fund.

<sup>71</sup> A series of meetings in Japanese financial and consultative institutions held by Professor Leszek Dziawgo and Doctor Danuta Dziawgo from Nicolaus Copernicus University in Toruń in September, 2001.



South Korea has also become interested in the success of Japanese ecological investment funds. The Korean visits in Yasuda Fire & Marine Insurance testify to that interest.

Table 3.7. Eco-investment funds in Japan (19.11.2002)

NAME OF FUND	VALUE OF ASSET IN MILLIONS OF JPY
Nikko Eco Fund	42,333
Green Open (Buna no Mori)	7,358
Eco Fund	4,911
Dr. Eco	3,873
Green Wing	2,960
Wing of Tomorrow (Asu no Hane)	4,396
Sea & Sky (Umi to Sora)	1,174
Nikko Globe A	1,984
Nikko Globe B	1,135
Mrs. Green A	3,014
Mrs. Green B	4,935

Source: Data obtained from Good Bankers, Japan.

### 3.7. OTHER MARKETS

Recently, eco-ethical funds have appeared on new markets, e.g. in Poland. They have been present for a long time in Belgium, Canada, Sweden, Finland, Denmark, Norway and Australia. It can be expected, bearing in mind the growing popularity of the subject of environmental protection and socially responsible corporation, that the importance of these funds will grow. Table 3.8. shows eco-ethical funds in selected countries.

Table 3.8. Eco-ethical investment funds in selected countries (2000)

COUNTRY	FUNDS
1	2
Australia	Australia Ethical (Friends Provident Australia) August Investments Managed Trust Green Chip YWCA Ethical Investment Trust
Belgium	Bacob Stimulus Defensive Bacob Stimulus Dynamic KB Eco Fund KB Equisafe Ethinvest 1 VMS Luxinter Ethifond

1	2
Canada	Canadian Ethical Dynamic and Responsible Clean Environment Mutual Funds Crown Commitment Fund Desjardins Environment Fund Desjardins Ethical Investment Fund Ethical Growth Fund Ethical Money Market Fund Ethical Income Fund Ethical North American Equity Fund Ethical Balanced Fund Investors Summa Fund (Investors Group)
Danmark	Danske Invest Miljo DK Invest Aktier Miljo
Norway	Skandia MiljoInvest Green Norway Fund Global Environmental Fund
Sweden	Ansvar Sverige Aktiefonds Miljo Fonden SE NB Hjart & Lungfond Skandia Ethical Selection SV Kyrkans VP-fond

Source: Deml, M. and Weber, J. (2001). Gruenes Geld (pp. 167–169). Muenchen: ALTOP.

## 4. SELECTED ECOLOGICAL INVESTMENT FUNDS

### 4.1. UBS (LUX) EQUITY FUNDS – ECO PERFORMANCE\*

The eco-ethical fund UBS (Lux) Equity Funds – Eco Performance is a part of offer of Swiss banking group UBS. The fund was launched in 1997 and the collected capital (487 million CHF as of 31 March 2002) is invested globally in shares of companies that achieve best outstanding performance in environmental terms (eco-leaders) and financial terms.

The investment strategy is based on positively formulated criteria due to the rule “best-in-class”. Each company is reviewed for its adherence to following criteria:

- products of company have a constructive use, serve peaceful purposes and strive for sustainability,
- company respects and is committed to the propagation of human rights,
- company protects the nature and the environment,
- internalisation of external costs in company,

\* Materials obtained from UBS (Lux) Equity Fund – Eco Performance.

- treatment of employees and people in general in company,
- active and open communication in company,
- company respects environmental and employment legislation.

In the portfolio of the fund are included the following shares (main position

– March 2002):

- Johnson & Johnson (US) – 4.1%,
- 3M (Minnesota Mining & MFG) (US) – 3.6%,
- Bank of America (US) – 2.9%,
- Verizon (US) – 2.6%,
- Bristol Myers Squibb (US) – 2.4%,
- others e.g.: Astropower, Tomra Systems, Vestas, Whole Foods Market, Green Mountain Coffee.

#### 4.2. PICTET GLOBAL WATER FUND\*

The fund is in the offer of Pictet & Cie private Swiss bank. This bank is known as pro-ecological. The Pictet Global Water is one of ecological funds in the bank. Money collected in the fund is invested in companies connected with widely perceived water management. This sector of economy has been chosen because in the opinion of fund managers water management creates the opportunity for huge profits in a medium or long time. Moreover, water management is closely connected with the environmental protection. These reasons may make investors interested in investments in the above-mentioned economy sector. The money collected from investors amounted to 267 million EUR on 20.11.2002.

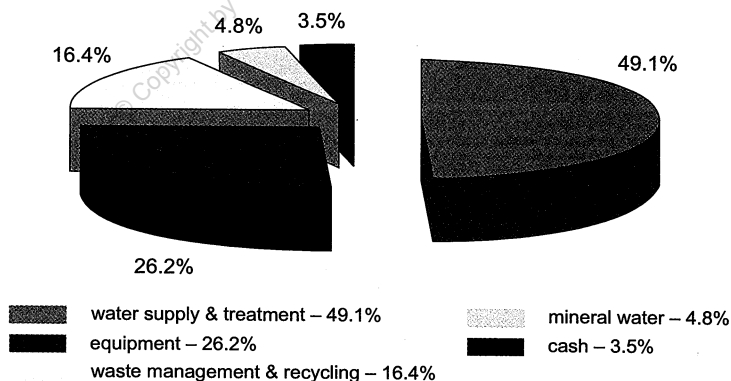


Chart 3.1. Sectoral structure of the Pictet Global Water Fund portfolio on November 20, 2002

Source: Materials obtained from the fund.

\* Materials obtained from funds of 20.11.2002.

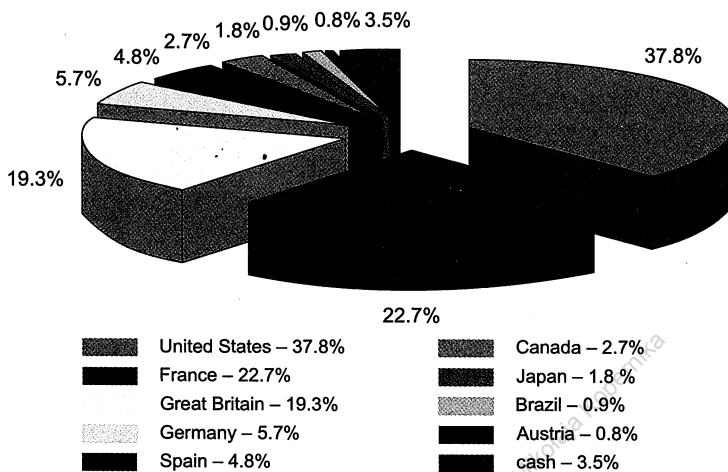


Chart 3.2. Geographical structure of the portfolio of Pictet Global Water Fund on November 20, 2002

Source: Materials obtained from the fund.

Table 3.9. Largest ten positions in portfolio on November 20, 2002

COMPANY'S NAME	PERCENT OF TOTAL FUNDS
Vivendi Environment	9.0
Suez	7.9
United Utilities	6.2
RWE	4.9
Groupe Danone	4.8
Severn Trent	4.8
Waste Management	4.7
Republic Services	4.3
Kelda Group	3.6
ITT Industries	3.6
Total	53.8

Source: Internet, <http://www.pictet-fund-account.com>

### 4.3. VALUESAR EQUITY

Eco-ethical investment fund ValueSar Equity is one of eco-ethical funds of Bank Sarasin & Cie. This fund invests capital (83 million EUR as at 30.06.2002) globally in shares of companies that are developed sustainably as eco-leaders due to the rule “best-in-class”. Some industries are excluded: weapons industry, nuclear energy, automobile industry, chlorine- and agro-chemistry. Key figures are presented in Table 3.10.

Table 3.10. Portfolio structure of ValueSar Equity on June 30, 2002 (in EUR)

NAME OF COMPANY	NO. OF SECURITIES	CURRENCY	MARKET VALUE	% OF NET ASSETS
1	2	3	4	5
SHARES			70,436,645.05	93.29
3M	14,000	USD	1,744,680.85	2.31
ABN AMRO	85,493	EUR	1,572,216.27	2.08
AWG	160,000	GBP	1,356,778.12	1.80
Adecco	20,000	CHF	1,202,367.25	1.59
Ahold	49,726	EUR	1,059,163.80	1.40
Aixtron	30,000	EUR	381,300.00	0.51
Astropower	30,150	USD	599,945.29	0.79
Aviva	120,000	GBP	975,955.17	1.29
BG Group	350,000	GBP	1,540,636.97	2.04
BT Group	200,000	GBP	777,063.83	1.03
BWT	35,000	EUR	838,250.00	1.11
Barclays	142,000	GBP	1,208,519.27	1.60
Baxter International	37,000	USD	1,666,312.06	2.21
Beiersdorf	6,500	EUR	799,500.00	1.06
Cadbury Schweppes	160,000	GBP	1,212,466.26	1.61
Canon	20,000	JPY	765,614.15	1.01
Citigroup	30,000	USD	1,177,811.55	1.56
East Japan Railway	150	JPY	711,108.51	0.94
Fannie Mae	24,000	USD	1,793,313.07	2.38
Geberit	3,000	CHF	856,890.69	1.13
Heidelberger Druckmaschinen	20,000	EUR	840,000.00	1.11
Henkel	11,000	EUR	777,700.00	1.03
Herman Miller	60,000	USD	1,234,042.55	1.63
Home Depot	30,000	USD	1,116,413.37	1.48
IBM	27,000	USD	1,969,604.86	2.61
ING Group	75,000	EUR	1,950,000.00	2.58

1	2	3	4	5
Intel	52,000	USD	962,553.19	1.27
J.M. Smucker	440	USD	15,214.99	0.02
Jenbacher	55,000	EUR	970,750.00	1.29
Johnson & Johnson	31,500	USD	1,667,872.34	2.21
Kyocera	15,000	JPY	1,109,126.46	1.47
McGraw-Hill Companies	18,000	USD	1,088,753.80	1.44
NTT DoCoMo	250	JPY	623,223.44	0.83
Neg Micon	27,000	DKK	836,018.72	1.11
New Energies Invest	7,000	CHF	890,214.21	1.18
Novartis	27,000	CHF	1,201,789.19	1.59
Novo Nordisk – B	40,000	DKK	1,340,860.94	1.78
Philips Electronics	36,000	EUR	1,017,720.00	1.35
Procter & Gamble	19,000	USD	1,719,047.62	2.28
Reed Elsevier	110,000	EUR	1,518,000.00	2.01
SAP	14,500	EUR	1,439,125.00	1.91
STMicroelectronics	40,000	EUR	1,011,600.00	1.34
Schlumberger	29,800	USD	1,403,951.37	1.86
Sonoco Products	41,000	USD	1,176,413.37	1.56
Sony	15,000	JPY	802,373.77	1.06
Starbucks	60,000	USD	1,510,638.30	2.00
Stericycle	19,000	USD	681,651.47	0.90
Stora Enso R.	54,000	EUR	766,260.00	1.02
Strayer Education	11,500	USD	741,033.43	0.98
Svenska Cellulosa – B	34,000	SEK	1,225,421.03	1.62
Swiss Re	19,000	CHF	1,880,058.97	2.49
Swisscom	5,000	CHF	1,472,355.82	1.95
Synthes Stratec	1,650	CHF	1,021,128.07	1.35
Tesco	420,000	GBP	1,544,414.36	2.05
Timberland – A	20,000	USD	725,835.87	0.96
Tokyo Gas	280,000	JPY	787,923.44	1.04
Tomra Systems	45,000	NOK	358,199.34	0.47
UBS	33,000	CHF	1,679,811.78	2.23
Unilever	18,500	EUR	1,226,550.00	1.62
Vestas Wind Systems	42,000	DKK	1,153,463.51	1.53
Whole Foods Market	24,000	USD	1,172,522.80	1.55
William Demant	28,000	DKK	738,819.76	0.98
WindWelt	22,282	EUR	113,029.10	0.15
Zurich Financial Services	3,500	CHF	715,265.70	0.95

1	2	3	4	5
OPTIONS			2,151,470.00	2.85
	53,000	EUR	762,670.00	1.01
	28,000	EUR	1,388,800.00	1.84
OTHERS			2,914,125.97	3.86

Source: Sarasin Investmentfonds SICAV (2002). Unaudited semi-annual report 30.06.2002, pp. 47–48.

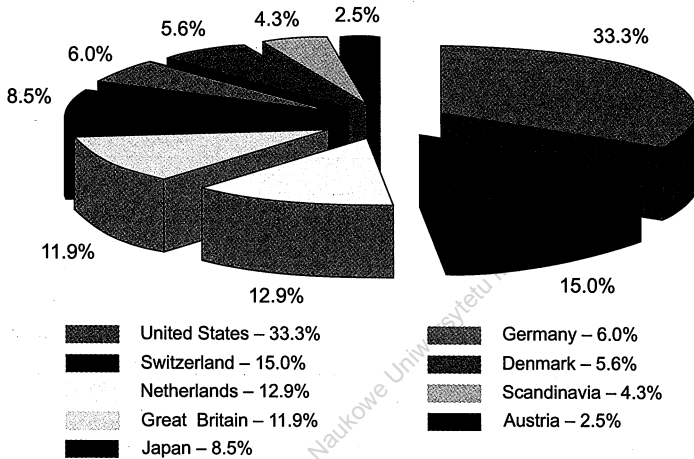


Chart 3.3. Geographical allocation of equities and similar investments on June 30, 2002  
Source: Sarasin Investmentfonds SICAV (2002). Unaudited semi-annual report 30.06.2002, p. 48.

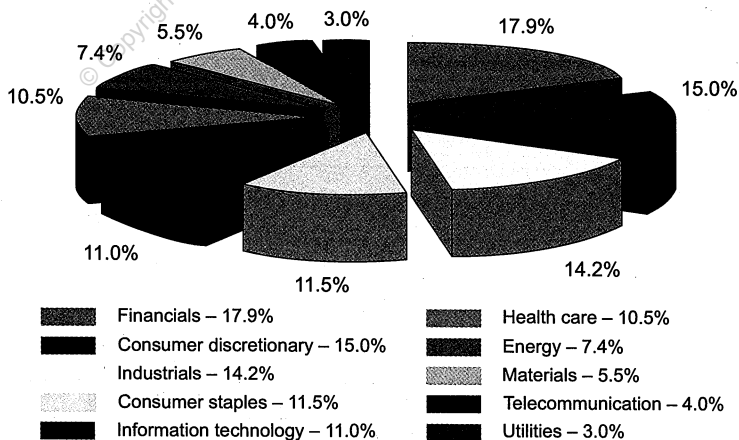


Chart 3.4. Sectoral structure of the portfolio of Sarasin ValueSar Equity on June 30, 2002  
Source: Sarasin Investmentfonds SICAV (2002). Unaudited semi-annual report 30.06.2002, p. 48.

#### 4.4. OEKOSAR

The eco-ethical fund OekoSar is another fund of eco-ethical investment funds group of Bank Sarasin & Cie. The fund invests capital (219 million EUR as at 30.06.2002) globally in shares and bonds of companies classified as eco-leaders due to the rule "best-in-class". Key figures are presented in Table 3.11.

Table 3.11. Portfolio structure of Sarasin OekoSar on June 30, 2002 (in EUR)

NAME OF THE COMPANY	NO. OF SECURITIES	CURRENCY	MARKET VALUE	% OF NET ASSETS
1	2	3	4	5
<b>SHARES</b>			<b>94,742,613.56</b>	<b>45.29</b>
3M	18,000	USD	2,243,161.09	1.07
Adecco	36,972	CHF	2,206,352.74	1.06
Ahold	94,727	EUR	2,005,370.59	0.96
Aixtron	60,000	EUR	756,000.00	0.36
Aviva	155,000	GBP	1,260,608.76	0.60
AWG	200,000	GBP	1,695,972.64	0.81
Barclays	200,000	GBP	1,702,139.82	0.81
Baxter International	20,000	USD	900,709.22	0.43
Beiersdorf	14,000	EUR	1,722,000.00	0.82
BG Group	400,000	GBP	1,760,727.96	0.84
BT Group	500,000	GBP	1,760,727.96	0.84
BWT	60,000	EUR	1,476,000.00	0.87
Cadbury Schweppes	240,000	GBP	1,818,699.39	0.87
Canon	60,000	JPY	2,296,842.46	1.10
East Japan Railway	200	JPY	948,144.68	0.45
Fannie Mae	30,000	USD	2,241,641.34	1.07
Geberit	6,750	CHF	1,928,004.69	0.92
Heidelberger Druckmaschinen	30,000	EUR	1,242,300.00	0.59
Henkel	35,000	EUR	2,474,500.00	1.18
Herman Miller	72,400	USD	1,489,078.01	0.71
Home Depot	53,000	USD	1,972,330.29	0.94
IBM	29,000	USD	2,115,501.52	1.01
ING Group	105,000	EUR	2,712,150.00	1.30
Intel	65,000	USD	1,203,191.49	0.58
Johnson & Johnson	40,000	USD	2,117,933.13	1.01
Kyocera	18,000	JPY	1,330,951.76	0.64
McGraw-Hill Companies	30,000	USD	1,814,589.67	0.87
Novartis	30,000	CHF	1,325,120.24	0.63



1	2	3	4	5
Novo Nordisk – B	60,000	DKK	2,011,291.41	0.96
NTT DoCoMo	595	JPY	1,483,271.79	0.71
Philips Electronics	65,000	EUR	1,825,200.00	0.87
PowerPulse Holding	37,727	CHF	0.00	0.00
Reed Elsevier	110,000	EUR	1,507,000.00	0.72
SAP	18,000	EUR	1,786,500.00	0.85
Schlumberger	35,000	USD	1,648,936.17	0.79
Starbucks	65,000	USD	1,636,524.82	0.78
Stericycle	45,000	USD	1,619,452.89	0.77
STMicroelectronics	70,000	EUR	1,711,700.00	0.85
Stora Enso R.	150,000	EUR	2,128,500.00	1.02
Svenska Cellulosa – B	55,000	SEK	1,982,298.72	0.95
Swatch Group	30,000	CHF	2,687,984.47	1.29
Swiss Re	28,000	CHF	2,770,613.22	1.33
Swisscom	8,000	CHF	2,350,328.74	1.12
Synthes Strattec	3,000	CHF	1,815,792.17	0.87
Tesco	473,291	GBP	1,740,374.81	0.83
Timberland – A	35,000	USD	1,270,212.77	0.61
Tokyo Gas	500,000	JPY	1,407,006.14	0.67
Tomra Systems	150,000	NOK	1,193,997.81	0.57
UBS	55,000	CHF	2,779,114.12	1.33
Unilever	40,000	EUR	2,654,000.00	1.27
Versiko	43,000	EUR	307,450.00	0.15
Vestas Wind Systems	70,000	DKK	1,922,439.18	0.92
Whole Foods Market	35,000	USD	1,709,929.08	0.82
Zurich Financial Services	10,000	CHF	2,030,014.84	0.97
<b>BONDS</b>			<b>92,195,123.58</b>	<b>44.11</b>
Council of Europe Develop. Fund 93 (6%; 22.01.03)	2,000,000	CHF	1,394,555.59	0.67
Denmark 97 (6%; 15.11.09)	30,000,000	DKK	4,255,618.00	2.04
Denmark 93 (7%; 15.12.04)	23,000,000	DKK	3,274,406.66	1.57
Deutsche Telecom Intl. Finance 00 (6.125%; 06.07.05)	1,500,000	EUR	1,488,115.50	0.71
Deutschland S. 99 99 (3.750%; 04.01.09)	7,500,000	EUR	7,091,250.00	3.39
Eurofima 96(6%; 11.12.06)	8,000,000	DEM	4,298,119.98	2.06
Eurofima 93(6.125%; 01.10.03)	5,000,000	NLG	2,326,422.26	1.11
Freddie Mac EMTN 00 (5.750%; 15.09.10)	7,000,000	EUR	7,249,396.00	3.47
ING Verzekeringen 00 (3.750%; 29.12.05)	5,000,000	CHF	3,497,270.13	1.67
KFW 99 (3.50%; 15.07.04)	3,000,000	EUR	2,968,608.00	1.42
KFW Intl. Finance 00 (6.375%; 07.12.05)	2,000,000	GBP	3,188,120.21	1.52

1	2	3	4	5
Kommunalkredit Austria EMTN 01 (3.125%; 30.07.04)	4,000,000	CHF	2,761,092.21	1.32
Kommunalkredit EMTN 01 (3%; 19.11.08)	10,000,000	CHF	6,780,317.57	3.24
LB Baden-Wuerttemberg S. 230 00 (5.50%; 02.04.07)	8,000,000	EUR	8,251,064.00	3.95
LB Baden-Wuerttemberg FRN EMTN 02 (18.07.05)	4,000,000	CHF	2,721,648.04	1.30
Nederlandse Waterschapsbank 99 (2.50%; 30.03.07)	7,000,000	CHF	4,686,716.01	2.24
Oppland Energi Produktion 97 (3.50%; 27.05.03)	4,050,000	CHF	2,793,127.00	1.34
Sweden 99 (3.50%; 20.04.06)	6,500,000	EUR	6,292,650.00	3.01
Sweden S. 1035 93 (6%; 09.02.05)	35,000,000	SEK	3,947,182.75	1.89
Umwelt Wasserwirtschaftsfonds 93 (4.375%; 04.11.05)	11,000,000	CHF	7,877,273.67	3.77
Unilever EMTN 01 (4.750%; 07.06.04)	5,000,000	EUR	5,052,170.00	2.42
OPTIONS			4,013,000.00	1.92
Bank Sarasin & Cie Warrants Nokia EUR 28.00 (02.08.02)	100,000	EUR	1,439,000.00	0.69
Bank Sarasin & Cie Kyoto Energy Basket (18.08.03)	52,000	EUR	2,574,000.00	1.23
OTHERS			18,147,045.72	8.68

Source: Sarasin Investmentfonds SICAV (2002). Unaudited semi-annual report 30.06.2002, pp. 67–69.

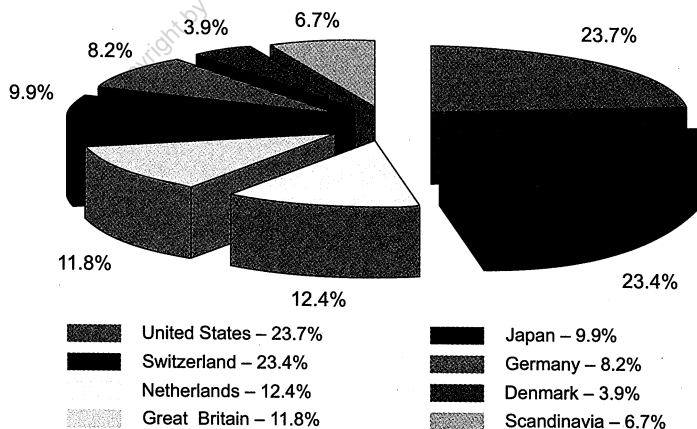


Chart 3.5. Geographical allocation of equities and similar investments on Sarasin OekoSar on June 30, 2002

Source: Sarasin Investmentfonds SICAV (2002). Unaudited semi-annual report 30.06.2002, p. 70.

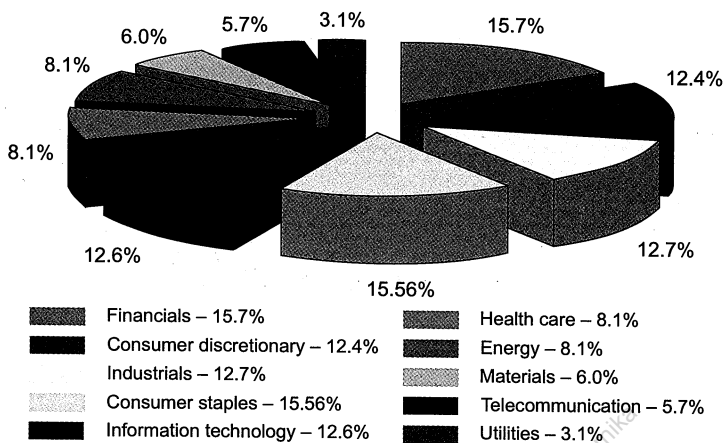


Chart 3.6. Sectoral structure of the portfolio of equities and similar investments in Sarasin OekoSar on June 30, 2002

Source: Sarasin Investmentfonds SICAV (2002). Unaudited semi-annual report 30.06.2002, p. 70.

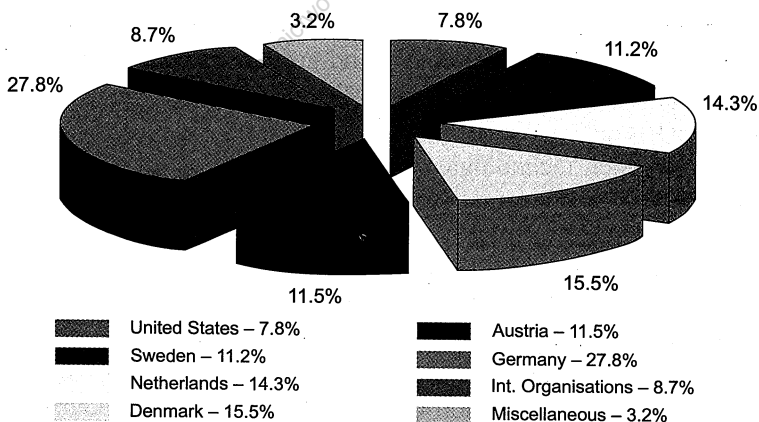


Chart 3.7. Geographical allocation of bonds in Sarasin OekoSar on June 30, 2002

Source: Sarasin Investmentfonds SICAV (2002). Unaudited semi-annual report 30.06.2002, p. 71.

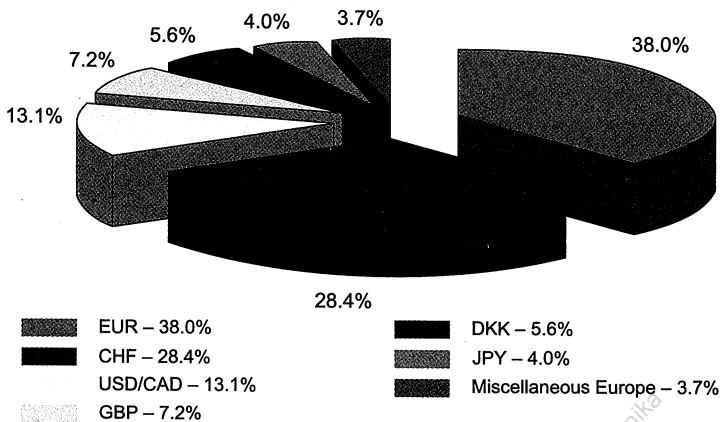


Chart 3.8. Currency allocation of investments on Sarasin OekoSar on June 30, 2002  
 Source: Sarasin Investmentfonds SICAV (2002). Unaudited semi-annual report 30.06.2002, p. 70.

#### 4.5. JUPITER ECOLOGY FUND\*

Jupiter Ecology Fund was the first authorised green unit trust to be launched in the UK (1988). The fund invests capital (GBP 124 million as of 01.08.2002) worldwide in companies which are leaders in environmental issues. Top ten position in portfolio of Jupiter Ecology Fund are presented in Table 3.12.

In investment policy fund uses the following criteria, e.g.:

a) **positive criteria:**

- environmental technologies and services,
- health care products and services,
- public transport,
- telecommunication and information technologies,
- adherence to health, safety and environmental policy standards,
- management of operations to ensure minimal environmental impact,
- publication of social and environmental performance reports,
- worldwide implementation of codes of conduct for labour standards,

b) **negative criteria:**

- manufacturing of armaments, alcoholic drinks, tobacco products,
- publication of pornographic material,
- generation of nuclear power,
- operation of gambling facilities.

\* Internet, <http://www.jupiteronline.co.uk/funds/products/ecolfund.htm>

Table 3.12. Top ten holdings of Jupiter Ecology Fund (01.08.2002)

COMPANY NAME	PERCENT OF TOTAL FUNDS
Cranswick	9.72
Intercare Group	6.79
RPS Group	6.04
Whatman	4.61
Henlys Group	4.20
Vestas Wind Systems	4.12
Nordex AG	3.65
Go-Ahead Group	3.55
FirstGroup	3.52
National Express	2.83
Total	49.03

Source: Internet, <http://www.jupiteronline.co.uk/funds/products/ecolfund.htm>

#### 4.6. SWISSCA GREEN INVEST

The eco-ethical investment fund is one of the investment funds of Swissca Holding, which is an investment company of Swiss cantonal banks. Swissca Green Invest (fund size CHF 173 million as at 30.11.2002) invests worldwide in shares of eco- and social leading companies. The fund co-operates with World Wide Fund Switzerland and Zuercher Kantonalbank. Key data of Swissca Green Invest are presented in Table 3.13. and on Charts 3.9. and 3.10.

Table 3.13. Top ten positions in the portfolio of Swissca Green Invest (30.11.2002)

NAME OF COMPANY	PERCENT
Bank of America	5.28
3M	5.01
Johnson & Johnson	4.42
IBM	4.14
Gillette	3.95
Swisscom	2.70
Unilever	2.33
Bristol Myers Squibb	2.13
GlaxoSmithKline	2.09
Oestgerr. Elektr.-Wirtschaft	2.07

Source: Internet, <http://www.swissca.ch>

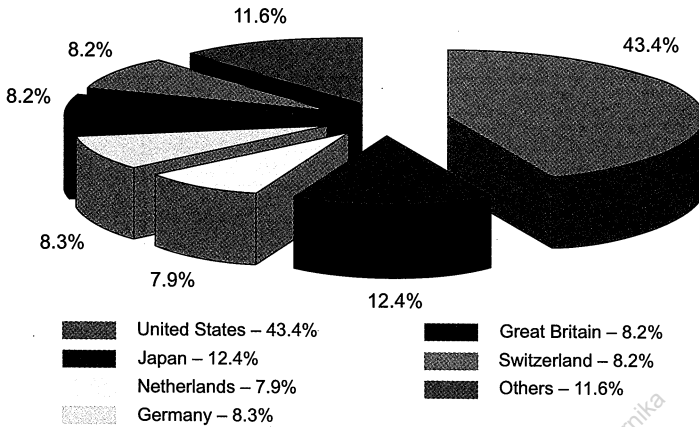


Chart 3.9. Geographical allocation of the portfolio in Swissca Green Invest on November 30, 2002

Source: Internet, <http://www.swissca.ch>

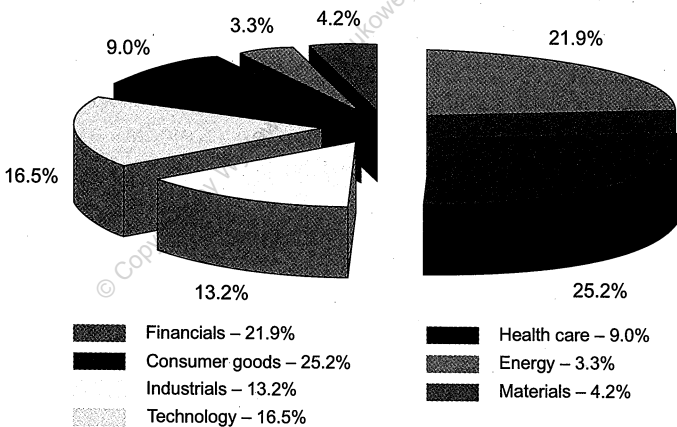


Chart 3.10. Sectoral structure of the portfolio of Swissca Green Invest on November 30, 2002

Source: Internet, <http://www.swissca.ch>

### 4.7. DWS

The investment fund company DWS is part of the Deutsche Bank capital group. In 2002 DWS offered participation units in eco-ethical investment fund DWS Invest Sustainability Leaders. The fund generally excludes the sector of

armaments companies and the tobacco, alcohol, and gambling companies. The value of resources in the fund was almost 12.4 million EUR on 30.06.2002. Detailed data concerning the value of the fund can be found in Table 3.14.

Table 3.14. Portfolio structure of DWS Invest Sustainability Leaders on June 30, 2002

SPECIFICATION	NO. SHARES	MARKET VALUE (EUR)	%
1	2	3	4
<b>FRANCE</b>		393,210	3.17
Aventis S.A.	3,300	230,835	1.86
Societe Generale	2,500	162,375	1.31
<b>GERMANY</b>		1,529,396	12.34
BASF AG	4,000	185,160	1.49
Bayer AG	6,900	218,316	1.76
Bayerische Motoren Werke AG	3,000	124,350	1.00
DaimlerChrysler AG	4,400	214,280	1.73
Deutsche Bank AG	3,000	210,270	1.70
RWE AG – A	5,000	199,150	1.61
SAP AG	1,000	97,920	0.79
Schering AG	2,500	158,950	1.28
Siemens AG	2,000	121,000	0.98
<b>JAPAN</b>		678,429	5.48
Canon Inc.	4,000	152,947	1.24
Hitachi Ltd.	25,000	163,540	1.32
Ito-Yokado Co. Ltd.	2,000	101,290	0.82
Rohm Co. Ltd.	700	105,704	0.85
Sony Corp.	2,900	154,988	1.25
<b>NETHERLANDS</b>		554,632	4.48
Royal Dutch Petroleum Co.	4,000	222,000	1.79
Schlumberger Ltd.	3,500	168,382	1.36
Unilever NV	2,500	164,250	1.33
<b>SWITZERLAND</b>		670,304	5.41
Nestle S.A.	2,000	461,393	3.72
UBS AG	4,200	208,911	1.69
<b>GREAT BRITAIN</b>		1,661,422	13.41
BP Plc	80,000	673,953	5.44
GlaxoSmithKline Plc	20,000	434,729	3.51
HSBC Holdings Plc	17,600	204,426	1.65
Royal Bank of Scotland Group Plc	7,800	220,721	1.78
WPP Group Plc	15,000	127,593	1.03

1	2	3	4
UNITED STATES		3,645,674	29.42
3M Co.	1,700	212,990	1.72
Alcoa Inc.	3,000	98,281	0.79
Baxter International Inc.	4,000	180,303	1.46
Citigroup Inc.	10,000	403,033	3.25
CTI Molecular Imaging Inc.	20,000	405,460	3.27
Du Pont (E.I.) de Nemours & Co.	4,900	222,209	1.79
Duke Energy Corp.	2,000	61,314	0.50
Electronic Data Systems Corp.	6,000	232,963	1.88
GlobalSantaFe Corp.	7,000	199,242	1.61
Home Depot. Inc.	7,000	265,349	2.14
Intel Corp.	5,000	95,804	0.77
Johnson & Johnson	6,000	321,173	2.59
Pfizer Inc.	13,000	484,510	3.91
Procter & Gamble Co.	5,000	463,043	3.74
Shares total		9,133,067	73.71

Source: DWS Invest Sustainability Leaders (2002), p. 9. DWS.

Table 3.15. Top ten position in portfolio of DWS Invest Sustainability Leaders on June 30, 2002

COMPANY	%
BP Plc	5.44
Pfizer Inc.	3.91
Procter & Gamble	3.74
Nestle S.A.	3.72
GlaxoSmithKline Plc	3.51
CTI Molecular Imaging Inc.	3.27
Citigroup Inc.	3.25
Johnson & Johnson	2.59
Home Depot Inc.	2.14
Siemens AG	0.98

Source: DWS Invest Sustainability Leaders (2002), p. 9. DWS.



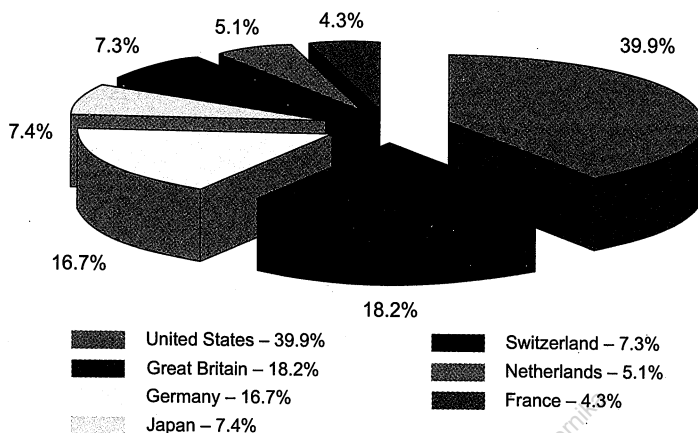


Chart 3.11. Geographical allocation of shares in DWS Invest Sustainability Leaders on June 30, 2002

Source: Unaudited semi-annual report 30.06.2002, p. 9. DWS.

## 5. ECO-ETHICAL INVESTMENT CLUBS

The idea of investment concerning investment clubs is quite popular on the international financial market. Investment clubs as well as investment funds are a good opportunity for common investments. In some countries there are investment clubs which take into consideration ecological aspects in their investment policy. For investors it offers an additional opportunity to investment according to their ecological opinions.

### 5.1. INVESTMENT CLUB SISYFOS

The motto of Investment Club Sisyfos is: *Every corporation can always improve their performance due to our criteria: our work is therefore a Sisophean one.* According to this policy, the name of the club came from Sisyphus.

Investment Club Sisyfos from Sweden is one of investment clubs in whose investment policy are included economic criteria as well as non-economic ones. Sisyfos is socially responsible investment club. Its activity is concerned with handling ethical issues, among other environmental issues, in the corporations in which they hold shares. Club Sisyfos argues that it is necessary to control on how profit is made: the members of the club do not want to maximise profit at any cost.<sup>72</sup>

<sup>72</sup> Based on information received from Sisyfos.

Sisyfos was established in 1993 with 32 members. The club has two aims, according to the statutory agreement:

1. promoting a sustainable development in four dimensions through an active ownership. The corporations in which the club holds shares should do as much as possible to contribute to:
  - an ecologically sustainable development,
  - gender equality in working life and in corporate decision-making bodies,
  - justice in relation to the people and the environment in the third world,
  - research and development in order to promote a quicker conversion of industry and society towards a social and ecologically sustainable world.
2. the appreciation of shares should be equal to the appreciation of ordinary funds holding shares over a business cycle.

In Sisyfos' opinion all corporations can be improved and action is the best way to do it: a passive buy-and-sell strategy may have short-time media consequences but it does not promote a long-term sustainable development. Sisyfos members prefer a well-informed and constructive dialogue with company instead of unproductive confrontation or passive buy-and-sell actions.

The investment Club Sisyfos is actively engaged through its shares in corporations that are influential, both materially and symbolically, for the development of a sustainable future: Volvo, H&M, and Nordea, among others. Sisyfos collects information and knowledge directly from corporations it invests in, from competitors, codes of conduct, through various media. They push for improvement of the corporations through systematic and measurable activities: concrete, goal-oriented and measurable environmental policies and environmental programmes, concrete equal representation programmes as well as the functioning systems of codes of conduct and an inspection of suppliers in third world countries. They write letters to them with questions and put demands at their shareholder meetings. They also use the shareholders' advocacy policy. They have written to the boards and presented themselves and their priority and asked what they are doing in some fields. For example:

- environment – do they have a policy, are they certified with ISO 14000 or EMAS?
- equal opportunities – do they have a programme how to get more women on the board? If their line of business is dominated by men, do they work actively to get more women?
- trade – if they trade with countries in the third world, is it based on just relations in economy and do they accept trade unions?
- R&D – do they invest in researches and development? How much and with what kind of aims?

The investment club Sisyfos is an excellent example for investment activity of a small group of individual, ecological investors.

## CHAPTER 4

# SECURITIES MARKET

### 1. FOREWORD

An essential part of transactions concerning the financing of pro-ecological economic undertakings takes place on the international securities market. There are many institutions engaged in this type of transactions, such as banks, investment funds, asset management institutions, pension funds, brokerage houses, investment clubs, individual investors, advising companies, eco-rating agencies, insurance companies, and issuers. Commonly used are such tools of investment stocks as shares, bonds, investment certificates, commercial papers, etc. Tools to assess and measure ecological risk (ecological quality) are also used.

Observing the changes on the contemporary international market a great increase in the importance of ecological and social aspects in financial transactions negotiated cannot be unnoticed. This can be proved not only by many offers from financial institutions and a great turnover volume made with taking into consideration the ecological and social criterion, but also recent legal regulations. One of them was introduced in 2000 by the British government for trade pension funds of the public sector. These funds were obligated to consider ethical, social and ecological factors in the process of investment decision-making.<sup>73</sup> This is very characteristic.

In the chapter below examples of tools for the assessment and measurement of ecological risk are presented, such as ecological stock indexes and eco-rating. Issuers acknowledged as pro-ecological and defined as ecological are also presented. Examples of stocks issues, such as shares, bonds, etc., which are the subject of the turnover in transactions relating to pro-ecological economic undertakings are also presented.

---

<sup>73</sup> Internet, <http://www.societyandbusiness.gov.uk/government/activities/dfid/pension.htm>

## 2. INDEXES

For a long time attempts have been made to introduce eco-ethical indexes to the stock market. They would help with the assessment of ecological quality and value measurement of investments (e.g. indexes: Good Money – Good Money Industrial Average GMIA and Good Money Utility Average GMUA, Domini 400 Social Index, etc.). However, only recently there has been an essential development in this area. At present there are indexes with a good construction relating to methodology. These indexes are also appreciated by investors. On the international securities market the most important are so-called ecological stock indexes or indexes responsible for proper social investment:

- Dow Jones Sustainability Group Index (DJSGI, introduced in 1999),
- FTSE4Good (introduced in 2001).

In addition to these two indexes, there are also other ecological stock indexes (indexes of responsible investment). One of them is the NAI index as well as the UBAI index introduced in 2002. The UBAI index is UmweltBankAktienIndex and it covers the shares of 18 German companies which are quoted on the stock exchange, and fulfil the requirements of an enterprise friendly to the natural environment.<sup>74</sup>

### 2.1. DOW JONES SUSTAINABILITY INDEX

Dow Jones Sustainability Group Indexes (DJSGI) were launched in September 1999. The DJSGI is fully integrated with the Dow Jones Global Index and any component of the DJSGI is also a component of the DJGI. The Dow Jones Sustainability Group Indexes track the performance of the top 10% of the companies in the Dow Jones Global Index which are leaders in terms of sustainability. The selection process is based on corporate sustainability assessment. Three groups of criteria are taken into account in the assessment process: economic, environmental and social. In this process particular attention is paid to the sustainability opportunities and risk. In 1999 the DJSGI index family consisted of one global index (DJSGI World Index), three regional indexes (DJSGI Europe Index, DJSGI North America Index, DJSGI Asia Pacific Index) and one country index (DJSGI USA Index). For each of them four narrower, specialised sustainability indexes were prepared, from which alcohol industry, gambling industry, tobacco industry and all these industries were excluded (see Table 4.1.). During one year, since the launch of the DJSGI, nearly 20 DJSGI-licenses have been issued to the financial institutions, e.g. for Skandinaviska

---

<sup>74</sup> Bank & Umwelt (2002), 30.

Enskilda Banken, Banque General de Luxembourg, Rothschild & Cie Gestion, DWS, Fuerst Fugger Privatbank, Suedwestdeutsche Genossenschafts-Zentralbank, HypoVereinsbank, Credit Suisse First Boston, ING Fund Management and others.

Table 4.1. Global and Regional Indexes (2000)

SPECIALISED INDEXES	DJSGI WORLD	DJSGI EUROPE	DJSGI NORTH AMERICA	DJSGI ASIA PACIFIC	DJSGI USA
Ex. tobacco	X	X	X	X	X
Ex. alcohol	X	X	X	X	X
Ex. gambling	X	X	X	X	X
Ex. tobacco, alcohol, gambling	X	X	X	X	X

Source: Dow Jones Sustainability Group Index Guide (2000, September), p. 6.

In October 2001 a new group of sustainability indexes of Dow Jones Group Index was launched: Dow Jones STOXX Sustainability Index (DJSI STOXX) and Dow Jones EURO STOXX Sustainability Index (DJSI EURO STOXX). The Dow Jones STOXX Sustainability Indexes track the financial performance of the top 20% of the companies in the Dow Jones STOXX 600 Index in terms of sustainability. For both indexes DJSI STOXX and DJSI EURO STOXX specialised, narrower sub-indexes are available that exclude companies from tobacco, alcohol, gambling, armaments and firearms industry.

## 2.2. FTSE4GOOD

One of the most prestigious indexes used for the assessment of companies' corporate responsibility is FTSE4Good. It is the most recent index of this type which was introduced in 2001. Its importance is supported by such institutions as the Financial Times and London Stock Exchange, which were the initiators of this index. FTSE4Good index is the useful tool for identification and measurement of the value of companies which are treated as socially responsible. The following criteria are taken into consideration in the selection process: relation to natural environment, relation to customers, compliance with and support for human rights. In FTSE4Good index some industries are excluded from the idea: tobacco industries, weapon industries, nuclear energy companies, and companies involved in the extraction of uranium.

FTSE4Good is designed to work in four areas of the benchmark type: FTSE4Good Global Index for the global market, FTSE4Good US Index for the American market, FTSE4Good Europe Index for the European market, and FTSE4Good UK Index for the British market, and in four areas of the tradable index type: FTSE4Good Global 100 Index, FTSE4Good USA 100 Index, FTSE4Good Europe 50 Index, and FTSE4Good UK 50 Index (Table 4.2.).

Table 4.2. FTSE4Good Index Group

BENCHMARK INDICES	TRADABLE INDICES	CURRENCY
FTSE4Good Global Index	FTSE4Good Global 100 Index	USD
FTSE4Good USA Index	FTSE4Good USA 100 Index	USD
FTSE4Good Europe Index	FTSE4Good Europe 50 Index	EUR
FTSE4Good UK Index	FTSE4Good UK 50 Index	GBP

Source: Internet, <http://www.ftse4good.com>, 31.10.2002.

### 2.3. INDEX NAI\*

Natur-Aktien-Index stock exchange index (NAI) was worked out by Oeko-Invest-Verlag (Austria) and editors of the monthly magazine "Natur & Kosmos" (Germany), and introduced to the market on 01.04.1997. It is quite a popular index in the German-speaking part of Europe. This index covers the shares of 20 issuers. American shares are taken into special consideration because of their 40% index value. The rest 60% belongs to companies from Germany, Denmark, France, Great Britain, Netherlands, Norway, Japan, and Austria (for 1 to 2 values). In this index  $\frac{3}{4}$  of all companies are issuers which have been present on the market for a long time and have an annual income of minimum 50 million EUR. To be accepted to the NAI index the issuer's shares must fulfil not only economic conditions but also others, such as ecological or ethical. The choice of shares for the index takes place according to the catalogue of positive and negative criteria. At least two positive criteria must be fulfilled for the share to be accepted in the index.

This is the catalogue of positive criteria:

- the offer of products and services which essentially influences the solution of key ecological and social problems of mankind,
- industry leader in product quality,
- industry leader in the technological quality of the production and sales process,
- industry leader in taking care of social aspects in the production and sales process.

Negative criteria are also taken into consideration in the selection process. In the index the values which comprise one of the negative criteria cannot be accepted. Examples of negative criteria are as follows:

- production or sales of nuclear energy or technology used for the production of nuclear energy,
- production or sales of weapons and armament (also if over 50% of turnover is made by technological equipment which is used for armament),

---

\* Materials received from FIFEGA – Forschungsinstitut fuer ethisch-oekologische Geldanlagen, Vienna 2002.

- production of genetically modified goods,
- sales of genetically modified goods,
- production of goods which are especially destructive for the natural environment and human health,
- lack of information concerning the use of sources in the economic activity (e.g. the consumption of water or energy),
- compulsory work of children,
- discrimination of women or ethnic minorities.

These are only a few chosen negative criteria. Ecological and social criteria are also taken into consideration. This procedure is similar to the activities concerning other stock exchange indexes relating to corporate responsibility investments. In the selection process capital and other connections among economic subjects are also very important.

For various reasons the composition of the index was changed in 1997–2002, e.g. the shares of the issuers which were taken over by other companies were withdrawn; there was also a withdrawal of shares which were no longer accepted in the stock exchange turnover or the shares of the issuers whose shares essentially decreased their income in the stock exchange turnover. Shares of new issuers were introduced to these places.

The composition of the NAI index is presented in Table 4.3.

Table 4.3. Issuers included in NAI index (on 30.06.2002)

COUNTRY	COMPANY	BRANCH
1	2	3
United States	AstroPower	solar battery production
Great Britain	Body Shop	cosmetics
France	Boiron	medicaments
Germany	Condomi AG	condome production
United States	Fannie Mae	mortgage financing
United States	Gaiam	internet trade
Netherlands	Grontmij	consulting
United States	Herman Miller	furniture production
United States	Horizon Organic Holding	dairy
United States	Interface	floor carpets
Austria	Jenbacher AG	energy systems
Austria	Mayr-Melnhof Karton AG	wrapping/recycling
Denmark	NEG Micon	wind turbines
Great Britain	Severn Trent	water supply
Japan	Shimano	bicycle gear-shifters
United States	Timberland	shoes, clothes

1	2	3
Norway	Tomra Systems	equipment for glass package purchasing
United States	Transmeta	micro processors
Netherlands	Triodos Groentfonds	pro-ecological project financing
Germany	WEDECO AG	water supply

Source: Materials received from FIFEKA – Forschungsinstitut fuer ethisch-oekologische Geldanlagen, Vienna 2002.

## 2.4. UMWELTBANK-AKTIENINDEX UBAI

In 2002 a new ecological stock exchange index was introduced. It was prepared by the German ecological bank, UmweltBank. In the new index, marked as UmweltBank – AktienIndex – UBAI, there were only shares of German companies, which were accepted as environmentally friendly. This index describes only the German market of ecological companies. There are shares of 18 industries, among them 14 companies engaged in the production of renewable energy. The composition of the UBAI index is presented in Table 4.4.

Table 4.4. Companies in UBAI index

COMPANY NAME	STOCK EXCHANGE
B.A.U.M.	Frankfurt
Cargolifter	Frankfurt
EnergieKontor	Frankfurt
farmatic	XETRA
Nordex	XETRA
Plambeck	XETRA
P&T Technology	Frankfurt
Repower	XETRA
S.A.G.	Frankfurt
Solar-Fabrik	Frankfurt
SolarWorld	Frankfurt
Solon	Frankfurt
sunways	XETRA
unit energy	Frankfurt
UmweltBank	Frankfurt
Umweltkontor	XETRA
Wedeco	Frankfurt
WindWelt	Frankfurt

Source: UmweltBank (2002). Internet, <http://www.umweltbank.dee/kurse/html>



### 3. ECO-RATING

On the international financial market there are many agencies where an ecological analysis of activities of companies is made and then an eco-rating assessment takes place. These institutions have worked out their own method of economic analysis. In Innovest the EcoValue'21 method is used with the grading system from the highest mark AAA to the lowest CCC. Oekom has also its own method in which marks are from the highest A+ to the lowest D-.

Because of the growing popularity of the corporate social responsibility concept, eco-rating becomes more and more popular. At present sustainability rating becomes very important and eco-rating is its part.

#### 3.1. ECOLOGICAL RATING AGENCY – OEKOM GESELLSCHAFT FUER OEKOLOGISCHE KOMMUNIKATION GmbH

Oekom Gesellschaft fuer Oekologische Kommunikation GmbH with the headquarters in Munich is a German ecological rating agency. Oekom agency rates companies in the area of corporate responsibility rating whose part is ecological rating. In the general assessment of corporate responsibility rating the following criteria are taken into consideration: social sustainability, cultural sustainability (socio-cultural rating) and environmental sustainability (environmental rating). Socio-cultural rating as well as environmental rating compose the corporate responsibility rating. In Schema 4.1. the process of assessment for companies to gain corporate responsibility rating is presented. The overall analysis is graded on a twelve-point scale from A+ to D-.

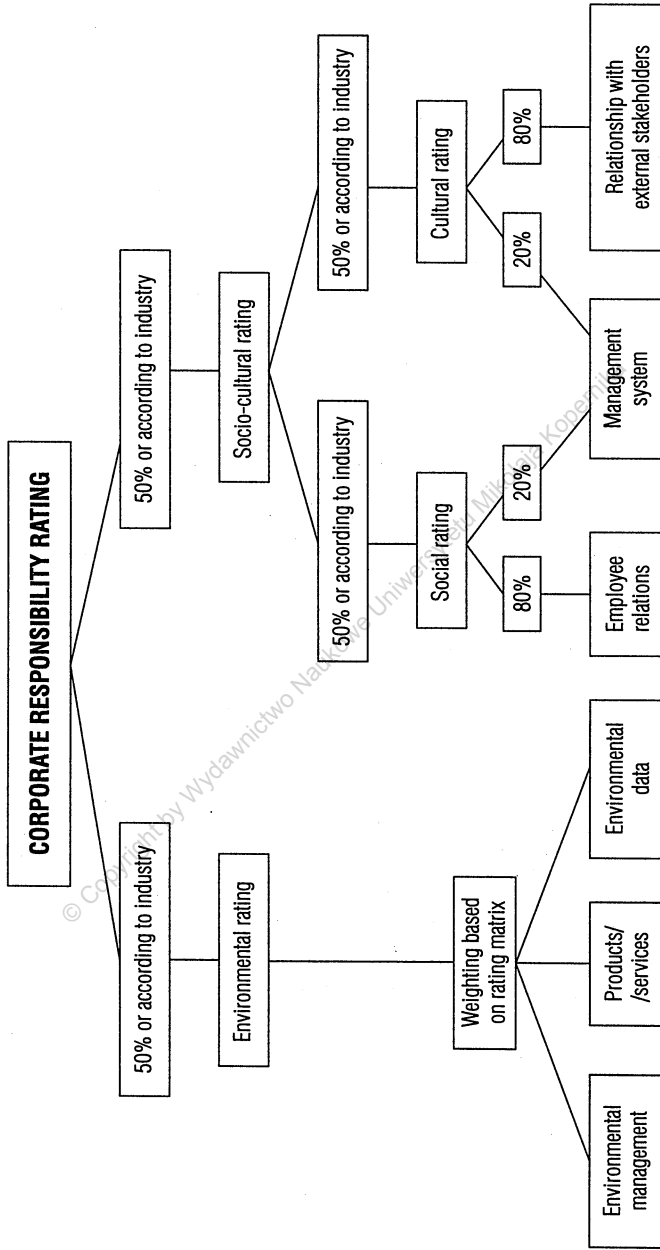
A+: the company acts in a particularly progressive manner,

D-: few or no positive environmental, social or cultural activities worth noting were identified.

In the process of environmental evaluation the following areas are taken into account:

- environmental management  
(e.g. environmental goals, environmental audits, eco-controlling, environmental managers);
- development of ecological products and services  
(e.g. assessment of direct and indirect environmental impact of products and services – reducing consumption of non-renewable resources, use of environmentally sound materials, avoidance of harmful substances, recyclability, durability and other data);

Schema 4.1. Schema of Corporate Responsibility Rating



Source: Oekom research, p. 3.

— environmental data

(energy and water consumption, volume and type of waste, atmospheric issues – data on resource consumption and emissions are assessed in relation to a base parameter like turnover, employees and others).

The environmental activities of a company are evaluated on a 12-point scale which ranges from A+ to D-. The description of the scale is the following:

A+: the company's environmental activity is especially progressive within the industry,

D-: few or no positive environmental activities worth noting were identified.

For the final environmental evaluation of a company very important is weighting of investigated areas, which depends on the classification of the industry. The environmental significance of each industry is different. The industries are analysed according to:

— environmental impacts of the production processes,

— environmental impacts of the production and services.

In the assessment process all industries are classified in five categories.

Oekom evaluated hundreds of companies from the automobile industry, banking, energy, food and beverages, insurance, electronic, Internet and software, media, oil & gas, telecommunications, textiles, water supply & treatment.

## 4. ECOLOGICAL ISSUES AND ECOLOGICAL ISSUERS

On the international financial market there are many issues of securities, which are connected with the financing of environmental protection. They usually include shares, bonds, certificate of deposits, commercial papers. These are government, municipal or international institutions' issues as well as issues of banks and big companies. The choice for investors appreciating ecological criteria increases, and thanks to such tools as stock indexes, eco-rating or ISO 14000 procedures it becomes easier.

### 4.1. EXAMPLES OF GOVERNMENT AND MUNICIPAL ISSUES

On the international financial market there are many government and municipal bonds issues which may be of interest to investors taking into consideration ecological criteria in their investment processes. Among government issues there are issues from the countries in which natural environment protection is very important. Good examples are Denmark, Sweden, Finland, Germany and Austria. Selected government issues with credit rating and sustainability rating of the Swiss cantonal bank Zuercher Kantonalbank (ZKB) are presented in Table 4.5.

In Zuercher Kantonalbank (ZKB) sustainability rating has been worked out for government issues and issues of international institutions, cities, and

companies. The system of grades is a facilitation for investors and it is appreciated on the financial market. The scale of sustainability rating is from 1 to 10, in which 10 is the highest grade. Sustainability rating covers grading in “environmental” and “social” areas in which there is a comparison of grades gained by the assessed subject with some average grade typical of the graded subject category, e.g. grading environmental government issues covers: energy, water, resources, greenhouse effect, air pollution, bio-diversity, mobility and environmental policy. In the “social” area the following components are taken into consideration: political stability, human rights, wealth, healthcare, education, innovation and equality. From the data published by Zuercher Kantonalbank it is concluded that Germany has received sustainability-rating grade at the level of 8.02, which is the total of the environmental rating grade 8.41 and the social rating grade 7.63.<sup>75</sup>

Table 4.5. Selected government bond issues recognised as pro-ecological

ISSUER	YIELD (%)	MATURITY	PRICE ON 15.10.02	EFFECTIVE YIELD (%)	S&P'S CREDIT-RATING	ZKB RATING
Denmark	4.625	04.09.08	102.27	4.18	AAA	9.48
Sweden	3.500	20.04.06	99.91	3.52	AA+	9.22
Austria	4.000	15.07.09	98.01	4.34	AAA	8.70
Finland	5.475	04.07.13	105.02	4.76	AAA	8.12
Germany	4.125	04.07.08	100.20	4.08	AAA	8.02

Source: Sandscheper, K. (2002). *Strenge Massstaebe. Focus-Money*, 10.

Very interesting issues are the Austrian share issues described as *Umweltanleihen*. In Austria financial resources designed for the re-financing of pro-ecological activities are collected. These resources are collected by bonds issues. Bank Kommunalkredit Austria was appointed for the collection and management of financial resources and also for the management of *Umweltanleihen* bonds issues. More money is given to activities, which have a more essential ecological impact than the ones described by law. First finances are given to projects which avoid pollution or the use of resources. Then, projects which plan the use or utilisation of wastes etc. are considered. This procedure is described as “*Vermeiden vor Verwerten vor Entsorgen*”.<sup>76</sup> *Umweltanleihen* issues in 1996–2001 are presented in Table 4.6.

<sup>75</sup> *Sustainability ratings for countries. Comparison of OECD countries*. (2002, February). Zuercher Kantonalbank.

<sup>76</sup> *Oeko-Invest* (2001), 236.

Table 4.6. Austrian eco-bonds (Umweltanleihen) in 1996–2001

SPECIFICATION	YIELD	STOCK EXCHANGE
Umweltanleihe 1996–2003	6.125	Frankfurt
Environmental FRN 1999–2005	4.923	Luxembourg
Umweltanleihe 1993–2005	6.250	Vienna
Umweltanleihe 1997–2007	6.125	Muenchen/Frankfurt
Umweltanleihe 1998–2008	5.875	Muenchen/Frankfurt
Umweltanleihe 1998–2013	5.250	Frankfurt
Environmental Bond 1997–2003	5.250	Luxembourg
Environmental FRN 1999–2007	4.884	Luxembourg
Environmental FRN 2000–2005	4.90875	Luxembourg
Environmental FRN 2000–2010	4.959	Luxembourg
Environmental FRN 2000–2003	4.892	Luxembourg
Environmental FRN 2000–2005	4.917	Luxembourg
Environmental FRN 2001–2004	5.4975	Luxembourg

Source: Oeko-Invest (2001), 236.

Public bond issues cover municipal bond issues, too, e.g. Polish municipal bond issues which are described in detail in Chapter 5 considering Polish financial market.

#### 4.2. ISSUERS: ENTERPRISES AND INSTITUTIONS

Most of the offer on the international financial market for investors taking into account ecological criteria in their investment projects are issues of enterprises. There are hundreds of companies whose issues are treated as related to the financing of environmental protection, which can be concluded from the objective of the issuance or from the economic activity of the issuer. Below, there are selected examples of issuers which are classified as ecological are presented. Eurofima is described in more detail as a perfect example of changes which take place on the contemporary financial market in the area of international co-operation, the use of tools for international finance and bank market, and solution of selected economic questions on the European scale. One of such questions is natural environment protection. The aims and organisation of Eurofima, its functioning, the use of financial tools, efficiency, and position on the international financial market may be very inspiring. Eurofima is an example of an interesting concept of international co-operation and financial integration in Europe.

Moreover, attention is also paid to other issuers such as: Tomra Systems, StoraEnso, Shimano.

#### 4.2.1. EUROFIMA – EUROPEAN COMPANY FOR RAILROAD ROLLING STOCK FINANCING

Eurofima is an international financial institution established in 1956 with its headquarters in Basle, Switzerland. Eurofima's shareholders are national railways of a few European countries. Eurofima was established for a limited period of time. At first it was 50 years. However, in 1984 its functioning was prolonged for the next 50 years, to 2056.

Eurofima's aim is to finance railway equipment used by railways which are members of the organisation. The financing process covers the following stages: cumulating the financial needs of shareholders for the purchase of railway equipment, gaining funds on the international financial market and financing the purchase of railway equipment. With the help of Eurofima a few thousand items of railway equipment was purchased for railways. The financing is carried out on commercial principles. The financial transactions between Eurofima and national railways are protected by government guarantees of the respective countries.

Eurofima is estimated as very effective international financial institution. It is proved not only by the prolongation of its activities, increasing the total assets (in December 2000 – nearly 19.2 billion USD) and growing number of activities. Its share capital has increased from 31.3 million USD to 1.63 billion USD (1962, 1970, 1976, 1984, 1990, 1993, 1997).<sup>77</sup> The number of shareholder has also increased. At first, in 1956, 14 railways were its shareholders, in 1957 also the railways in Turkey and Greece joined Eurofima. In the 1990s Eurofima was joined by countries from Central and Eastern Europe: Hungary – 1992, Croatia and Slovenia – 1994, Bosnia and Herzegovina and Macedonia – 1996 and Bulgaria 1999. Slovakia joined Eurofima in 2001.

In 2000 there were railways of 22 countries in the shareholder group. The most important shareholders of Eurofima are German railways (Deutsche Bahn) – 24.90% of share capital, French railways (SNCF) – 24.90%, Italian railways (FS) – 13.50%, Belgian railways (SNCB) – 9.8%. Detailed data concerning shares are presented in Table 4.7. Every year Eurofima pays its shareholders a dividend calculated according to their share capital, its amount is established at a maximum of 4%. These are huge amounts of money, e.g. in 2000, 12.67 million USD dividend was paid which was nearly 47% net profit worked out by Eurofima.

---

<sup>77</sup> Share capital is paid in 20%.

Table 4.7. Participation of Eurofima's share capital on December 31, 2001

COUNTRY	SHARE IN EQUITY (%)
Deutsche Bahn AG	24.90
French National Railways	24.90
Ferrovie dello Stato S.p.A.	13.50
Belgian National Railways	9.80
Netherlands Railways Ltd.	5.80
Spanish National Railways	5.22
Swiss Federal Railways SFR	5.00
Community of Yugoslav Railways	2.30
Swedish State Railways	2.00
Luxembourg National Railways	2.00
Austrian Federal Railways	2.00
Portuguese Railways	1.00
Hellenic Railways Organization	0.20
Hungarian State Railways Ltd.	0.20
Croatian Railways	0.20
Slovenian Railways	0.20
Railways of Bosnia and Herzegovina	0.20
Bulgarian State Railways	0.20
Railways of the Slovak Republic	0.20
Railways of the Former Yugoslav Republic of Macedonia	0.10
Turkish State Railways	0.04
Danish State Railways	0.02
Norwegian State Railways	0.02

Source: Geschaeftsbericht 2001. (2002). Eurofima.

Eurofima is a recognised issuer on the international financial market.<sup>78</sup> At the same time it is a great example of “pushing” banks out of their traditional functions, understood as accepting deposits and giving credits. Eurofima's financial operations are made first of all with the use of securities, for the purpose of capital collecting as well as investing surpluses. Only in few scopes the institution uses credits and bank accounts. In the case of Eurofima the traditional role of banks is limited.

Eurofima is an active payer on the international financial market. It is known as a perfect user of such instruments as short- and long-term debt securities. Credit-rating and other instruments of financial risk limiting are used effectively.<sup>79</sup>

<sup>78</sup> Information obtained during Prof. Leszek Dziawgo's and Dr. Danuta Dziawgo's meeting with Eurofima's Vice Presidents P. Phan and J. P. Deriaz in Basel/Switzerland on 29.09.2000.

<sup>79</sup> SWAP, financial derivative, option, FRA.

Realising its statutory objective, Eurofima collects money for its activity first of all by issuing bonds. Every year on the international financial market in turnover there are a few dozen Eurofima's euro-issues. In 1999 there were 109 issues in 12 currencies with the total value of 14.23 billion USD. In the most recent and audited calculations for the year 2000<sup>80</sup> there are 99 euro-issues also in 12 currencies with the total value of 12.62 billion USD. These issues are very differentiated according to bond constructions, percentage, currency, maturity, market in which they are traded. Detailed data are found in Table 4.8. For example, in 1999 new commitments were made in 9 currencies (over 2.56 billion USD) and in 2000 in 7 currencies (over 2.03 billion USD).<sup>81</sup> In latest available and audited specifications for the year 2000 there are 99 euro-issues also in 12 currencies are listed of the total value of 12.62 billion USD. These issues very diversified regarding the construction of the bond and interest, currency, issue date and the market on which they are traded. Detailed data are presented in the Table 4.8. For example, in 1999 new liabilities were incurred in ten currencies (more than 2.56 billion USD equivalent) and in 2000 in 7 currencies (more than 2.03 billion USD equivalent).

In euro-issues not only basic currencies are used, but also, among others, such currencies as the Polish zloty (100 million PLN issue) or even the South-African rand (100 million ZAR issue). However, Eurofima chooses carefully not only currencies but also markets in which issues are placed. It is proved by the popularity of Eurofima's euro-issues in "Yankee", "Matador", or "Samurai" bonds.

In Eurofima there is active management of their own debts, e.g. in 1999 they paid-back their own debts from the international financial market in the amount of about 619 million USD. This decision was taken because the selected operations could be financed more cheaply on new market conditions.

In addition to euro-bonds Eurofima uses, among others, credits but not to a significant degree. All debts of Eurofima are denominated in 13 currencies. The currency structure of these debts is presented in Chart 4.1. The currency structure of euro-issues has the greatest influence on the currency structure of Eurofima's debts.

Table 4.8. The number of Eurofima's euro-bonds being in turnover on the international financial market in particular currencies in 1999–2001 on December 31

CURRENCY	31.12.1999	31.12.2000	31.12.2001
1	2	3	4
EUR*	66	59	57
CHF	19	18	15

<sup>80</sup> Geschaeftsbericht 1999. (2000). Eurofima.

<sup>81</sup> Geschaeftsbericht 2000. (2001). Eurofima.



1	2	3	4
USD	5	4	3
JPY	5	4	2
CAD	5	5	3
GBP	2	2	3
SEK	2	2	2
AUD	1	1	2
DKK	1	1	1
PLN	1	1	1
ZAR	1	1	1

\* In the number of Euro bonds are also included the issues which were originally issued in the following currencies: ATS, DEM, ESP, FRF, ITL, LUF, NLG, PTE, ECU.

Source: Geschaeftsbericht on years 1999, 2000, 2001. Eurofima.

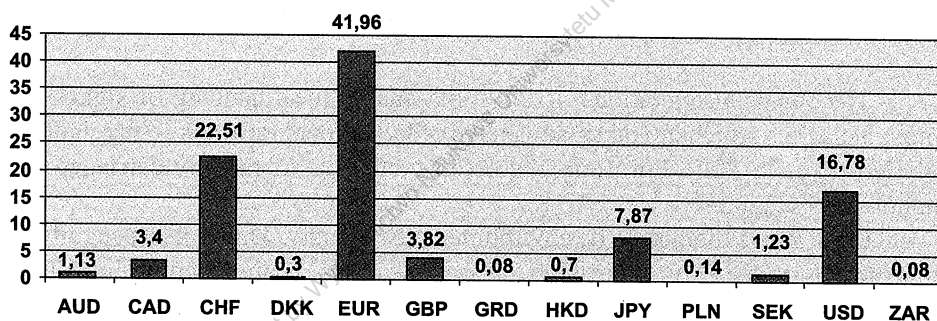


Chart 4.1. Currency structure of Eurofima's debts in 31.12.2001

Source: Geschaeftsbericht 2001. (2002).

Eurofima's euro-bonds are very popular on the international financial market. High rating of credit-rating has great influence on this demand. According to international credit-rating agencies, Moody's Investors Service and Standard & Poor's Corporation, Eurofima's issues are rated with tripple A (shares: Aaa, AAA; Commercial Papers: P-1, A-1). A good international position of Eurofima in the area of financial guarantee is created not only by the quality of the issuer and the issue but also by the shareholders, because 64.82% of Eurofima's share capital is represented by countries having the best class of credit-rating, which is AAA. If only A class of credit-rating was taken into consideration, then 94.96% of shareholders has such a mark. These facts are important for international transactions. More data concerning grading in credit-rating of Eurofima's shareholders are shown in Table 4.9.

Table 4.9. Rating of the member states parties of Eurofima on December 31, 2001

COUNTRY	MOODY'S INVESTORS SERVICE	STANDARD & POOR'S
Germany, France, Netherlands, Switzerland, Luxembourg, Austria, Denmark, Norway	Aaa	AAA
Spain	Aaa	AA+
Italy	Aa3	AA
Belgium, Sweden	Aa1	AA+
Portugal	Aa2	AA
Greece, Slovenia	A2	A
Hungary	A3	A-
Croatia, Slovakia	Baa3	BBB-
Bulgaria	B1	BB-
Turkey	B1	B-
Yugoslavia, Bosnia and Herzegovina, Former Yugoslav Republic of Macedonia	-	-

Source: Geschäftsbericht 2001. (2002).

The financial operations of Eurofima enable the financing of significant movable assets which are taken advantage of by national railways – shareholders of Eurofima. In 2001 Eurofima possessed thousands of railway carriages and hundreds of engines.

Eurofima is thought to be environmentally friendly. This is because railway transport is treated by environmental organisations as more environmentally friendly than motor cars, and because Eurofima finances the purchase of modern railway equipment, it is supported by ecologists.

Ecological assessment of Eurofima's activities is not only by intuition, e.g. in June 1996 Eurofima was under eco-rating procedure. Oekom institute from Munich gave it 3+ in the grading scale from -5 to +5. Such a rating is treated as high.

Positive mark from eco-rating situates Eurofima's eco-bonds in the investment portfolio of ecological investment funds, which are investments funds in which according to investors' wishes both economic and ecological criteria are taken into consideration. Many eco-funds and investment clubs have in their portfolio Eurofima's bonds. In the FIFEGA institute Eurofima's bonds are supported as friendly to the environment.

Eurofima's bonds are so attractive that they are purchased not only by investors taking care of their ecological aspect. Most bonds are bought by typical investors. However, this does not ignore their ecological value. It is optimistic that capitals involuntarily invested in an ecological way, are used for the advantage of investments treated as ecological.

International co-operation in Eurofima concerns many areas at the same time. These are first of all finances, but also transport, and even environmental protection, as a perfect side effect of this co-operation. These are certainly the areas where, from a certain scale, international co-operation is advised and carried out effectively.

In the area of international financial co-operation in Eurofima there is effective composition of the use of such financial instruments as: currencies, bonds, short-time debt documents, credit-rating, derivatives and government guarantees. Eurofima is the example which presents a clever connection of instruments from the area of public finances (government guarantees) and the instruments of commercial financial market, and the management of them.

#### 4.2.2. SELECTED EXAMPLES OF ECOLOGICAL ISSUERS

The Japanese Shimano Inc. company is a popular example of an ecological company. Bicycle parts, such as, e.g. gear shifters and brakes, constitute most of this company's production. The bicycle is a means of transport and recreation, which is treated as friendly to the environment. Therefore, as a company engaged in bicycle production it may be treated as an ecological company. Shimano has a considerable share in the world market of bicycle parts, which is also determined by the production quality.

Another example of the famous companies which are classified in the eco-sector in the economy is Tomra Systems from Norway. Tomra is listed on most important sustainability ratings and indexes (Dow Jones Sustainability Group Index and FTSE4Good). The motto of Tomra is "helping the world recycle". The company design and operating system consists of machines and services to return used beverage containers for reuse or recycling. The special machines produced by Tomra are reverse vending machines (RVMs) which utilise advanced technology to identify, sort, collect used beverage containers and to provide refund to the customer.

Tomra has over 40,000 RVMs installed in 40 countries. The best markets for Tomra are Europe (Norway, Germany, Denmark, Finland), USA and South America. The new market for Tomra is Japan, where Seiyu – the Japan's fifth largest retailer, has planned to use Tomra's RVMs for collecting PET containers, cans and other packaging materials.

Tomra offers service (e.g. call-centre, online-support system) and consulting like "Bottle-Consulting" for companies interested in the packaging process.

One more example of an eco-company is Stora Enso established from a merger of the Swedish company Stora and the Finnish company Enso. The company is classified in the sector of forestry & paper. The company is leading manufacturers of pulp and sawn goods, food packaging, graphic board, publication, fine and industrial paper. The company is an owner of plants in

Finland and Sweden and in seven other countries. StoraEnso is the environmental leader in its sector. Each stage of the production, transport and co-operation with partners is controlled and company is trying to improve the ecological efficiency successfully. The company uses modern and environmentally friendly technologies. Moreover, StoraEnso is one of the first Nordic companies which started to present some data about social issues.

### 4.3. OTHER FINANCIAL INSTRUMENTS

As it has been mentioned, besides shares and bonds, other financial instruments are issued, which may be interesting for investors who take into account ecological criteria in their investment process. Investment certificates may be described on the basis of the certificate "Umwelt: ethik 24-Zertifikat" issued by the group BNP Paribas in 2002. The certificate is quoted on stock exchanges in Frankfurt, Berlin, and Stuttgart.

An investment certificate is a security issued on the basis of shares of selected companies whose value guarantees the repayment of this certificate. An investor who purchases the certificate knows in which companies he invests. In the case of the certificate "Umwelt: ethik 24-Zertifikat" the investor invests in companies engaged in environmental protection. 24 such companies have been selected on the international market. Shares of those companies are arranged in three groups. The shares of 8 most important companies have the weighting of 6.25% each in the composition of the certificate. The shares of the next 8 companies have the weighting of 4.17% each, and the shares of the other 8 companies have the weighting of 2.08% each. Detailed data concerning the composition of shares on the basis of which the certificate was issued are presented in Table 4.10. and in Charts 4.2. and 4.3.

Table 4.10. Initial portfolio of shares for the certificate "Umwelt: ethik 24-Zertifikat"

COMPANY	COUNTRY	WEIGHT (%)
1	2	3
Ballard Power Systems Ins.	Canada	6.25
CANON Inc.	Japan	6.25
Severn Trent plc	Great Britain	6.25
SHIMANO Inc.	Japan	6.25
Tomra Systems ASA	Norway	6.25
Vestas Wind Systems A/S	Denmark	6.25
Vivendi Environnement	France	6.25

1	2	3
Whole Foods Market Inc.	USA	6.25
AstroPower Inc.	USA	4.17
Ionics Inc.	USA	4.17
NEG Micon A/S	Denmark	4.17
SGS S.G. d. Surveillance S.A.	Switzerland	4.17
Kurita Water Industries Ltd.	Japan	4.17
Transmeta Corporation	USA	4.17
Koninklijke Wessanen NV	Netherlands	4.17
Energy Conversion Devices Inc.	USA	4.17
Boiron S.A.	France	2.08
Grontmij N.V.	Netherlands	2.08
Arkopharma	France	2.08
Nordex AG	Germany	2.08
Techem AG	Germany	2.08
United Natural Foods Inc.	USA	2.08
Weedeco AG Water Technology	Germany	2.08
Wild Oats Markets Inc.	USA	2.08

Source: Umwelt: ethik 24-Zertifikat. Investment in eine Oekonomie der Nachhaltigkeit. (2002). BNP Paribas, p. 4.

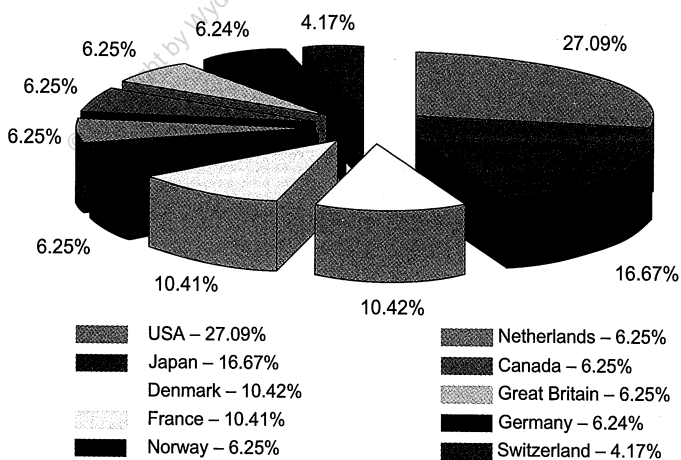


Chart 4.2. Geographical structure of "Umwelt: ethik 24-Zertifikat" shares

Source: Umwelt: ethik 24-Zertifikat. Investment in eine Oekonomie der Nachhaltigkeit. (2002). BNP Paribas, p. 5.

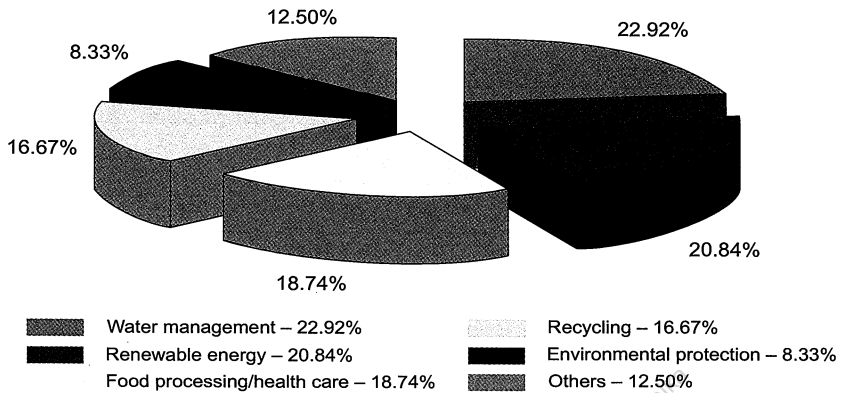


Chart 4.3. Industry structure of the share set “Umwelt: ethik 24-Zertifikat”

Source: Umwelt: ethik 24-Zertifikat. Investment in eine Oekonomie der Nachhaltigkeit. (2002). BNP Paribas, p. 5.

Choosing the companies whose shares are in “Umwelt: ethik 24-Zertifikat” the following principles have been taken into consideration:

- over 50% of company’s turnover should be from the economic activity connected with the environmental protection (e.g. renewable energy),
- no engagement in nuclear energy, armaments, alcohol industry, tobacco industry, children’s work,
- no more than 25% engagement in other company which does not fulfil the acceptance criteria of the certificate “Umwelt: ethik 24-Zertifikat”.

## CHAPTER 5

# COMMERCIAL FINANCIAL INSTITUTIONS AND THE PROTECTION OF THE NATURAL ENVIRONMENT IN POLAND

### 1. FOREWORD

Poland is becoming one of the more important emerging markets. Poland's forthcoming accession to the European Union makes the Polish market even more attractive and worth a closer analysis.

The importance of environmental protection is already noticed on the Polish financial market, although the activity of Polish pro-ecological financial institutions is limited. Polish financial institutions are adapting many of the solutions introduced on the western financial markets; however, the adaptation of the solutions referring to the relations between financial institutions and the protection of natural environment has barely started. We can assume that this process will be easier, because the majority of financial institutions in Poland is already owned by foreign institutions.

It should be pointed out, however, that financial institutions in Poland do not only adapt western solutions. It is possible to indicate a small number of original and verified Polish solutions which can make a perfect pattern to follow for western financial markets. The Polish Bank Ochrony Środowiska S.A., which is still very strongly engaged in environmental protection in Poland, can be regarded as such a good pattern.<sup>82</sup> The offer of two other Polish stock quoted banks directed to those customers who allow for the criterion of environmental protection in the process of saving and investing is another example. The first

---

<sup>82</sup> It should be mentioned that another bank, which had the financing of environmental protection as one of its aims, used to function in Poland. It was a small Bank of Energetics Development and Environmental Protection "Megabank" S.A. in Warsaw (BREiOŚ "Megabank" S.A.). This bank no longer exists.

pension fund, whose investment strategy takes the ethical aspect into consideration, has also appeared on the market. Moreover, one of the investment fund companies has offered an investment fund whose capital is partly invested in environmental protection technologies. In addition, it is possible to indicate interesting issues of securities combined with the financing of pro-ecological investments on the Polish financial market.

Thus, it is certainly possible to discuss the necessity and legitimacy of a comprehensive, international exchange of experience regarding the role of financial institutions in the support of environmental protection, including subjects from Poland.

This chapter will present:

- selected examples of pro-ecological behaviour on the part of Polish financial institutions such as banks and investment fund companies,
- the Polish ecological Bank Ochrony Środowiska S.A.,
- business offers of financial institutions related to the financing of environmental protection,
- selected issues of shares and bonds on the securities market,
- results of unique surveys taken on a representative sample of Polish society regarding the perception of environmental protection in the operation of financial institutions as well as the creation of a business offer related to environmental protection in view of the pro-ecological attitudes of the customers. Such surveys were taken twice in Poland, in 1997 and 2002.

## 2. PRO-ECOLOGICAL ATTITUDES IN FINANCIAL INSTITUTIONS

A banking establishment is a dominant type of a financial institution on the Polish market. Therefore, the analysis of pro-ecological attitudes in Polish financial institutions regards banks in the first place. The issue of environmental protection is not unknown to Polish banks. The UN declaration of 1992 entitled 'Banking and Environment' was signed in 14 Polish banks. The declaration was signed by the following banks: Bank Handlowy S.A. (this bank signed the declaration as early as 1992 and it was the first Polish bank to sign it),<sup>83</sup> Bank Depozytowo-Kredytowy S.A., Bank Gdański S.A., Bank Ochrony Środowiska S.A., Bank PeKaO S.A., Bank Przemysłowo-Handlowy S.A., Bank Rozwoju Eksportu S.A., Bank Śląski S.A., Bank Zachodni S.A., Polski Bank Inwestycyjny S.A., Pomorski Bank Kredytowy S.A., PKO BP, Powszechny Bank Gospodarczy S.A. and Powszechny Bank Kredytowy S.A. Consequently, an Interbank Group

---

<sup>83</sup> Letter from K. Pietraszkiewicz, Director General of the Union of Polish Banks of 13.12.1996 to the author.



for Ecology was established. The group's task was to exchange information and experience in the area of ecological risk in granting loans.<sup>84</sup> In 2002, ten years after the signing of the declaration, 8 signers remained as a result of the privatisation and restructuring of the Polish banking sector:

- Bank Handlowy w Warszawie S.A.,
- Bank PeKaO S.A.,
- Bank Ochrony Środowiska S.A.,
- Bank Przemysłowo-Handlowy PBK S.A.,
- Bank Rozwoju Eksportu S.A.,
- ING Bank Śląski S.A.,
- Bank Zachodni WBK S.A.,
- Bank PKO BP S.A.

Unfortunately, the pro-ecological activity of Polish banks has been very limited so far. Part of the banks allows for the credit risk in their credit operations and this procedure has even been formalised to some extent. It is also possible to show examples of ecological sponsoring which usually supports such areas as ecological education, science, publishing, protection of rare species of plants and animals and dissemination of knowledge regarding the condition of the environment. Examples of other forms of pro-ecological activity of banks are also known, e.g. consultations with interested institutions and bodies.<sup>85</sup>

Unfortunately, none of the Polish banks possesses environmental protection certificates (e.g. ISO 14001), although taking pattern after the banks from Western Europe, Polish banks begin to pay attention to pro-ecological activities which are internal in nature.

As it has been mentioned before, the major part of the Polish financial market is in the hands of foreign capital. It should accelerate the pro-ecological and socially responsible reorientation in the activity of the banks. Deutsche Bank Polska S.A. is a good example here. This bank adopted the principles of operation which are binding in the mother company, i.e. Deutsche Bank. Among others, it means respect for environmental protection.<sup>86</sup>

The offer of banks related to the financing of environmental protection looks quite good. Some Polish banks also participate in the distribution of the

---

<sup>84</sup> Letter from K. Pietraszkiewicz, Director General of the Union of Polish Banks of 19.09.1995 to the author; see also the UN declaration entitled "Banking and Environment" – a declaration issued by the banks regarding the matters of environmental protection and the possibilities of sustainable development. According to G. Borys, meetings within this group of banking cooperation practically died down in 2000; see Borys, G. (2003). *The Pro-ecological Reorientation of Polish Banks in the light of the United Nations Declaration: 'Banking and Environment'*. In L. Dziawgo and D. Dziawgo (Eds). *Finance & Natural Environment*. Toruń: TNOiK.

<sup>85</sup> Letter from K. Szwarc, President of the Bank Rozwoju Eksportu S.A. of January 1997 to the author; Stodulski, W. *Rola banków w finansowaniu ochrony środowiska w Polsce*, p. 140.

<sup>86</sup> Pokojska, M. (2002). *Globalnie etyczny*. *Gazeta Bankowa*, 39.

preferential loans projects designed for the financing of pro-ecological economic undertakings, in which the supplementary payment to the interest is covered thanks to the co-operation with an external financing subject.<sup>87</sup>

Three banks have offered to their customers deposit products linked to environmental protection financing, too. It should be added that, interestingly enough, those banks which signed the UN declaration are not the only institutions that show interest in creating a banking offer related to the financing of environmental protection.

Currently, this is the scope of engagement of Polish banks in the support of environmental protection including the financing of environmental projects. This engagement is not sufficient. In spite of that, the efforts to support the activities aiming at environmental protection in some Polish banks should be appreciated.

## 2.1. ECOLOGICAL RISK AND CREDIT RISK

A little more attention can be paid to the allowance for ecological risk in the management of credit risk in Polish banks. This is done in a formal and informal way. It is done formally in several banks, e.g. in Bank Ochrony Środowiska S.A., Bank Rozwoju Ekspertu S.A. and Bank Handlowy in Warsaw S.A.<sup>88</sup> However, the awareness of the necessity for the consideration of the requirements of environmental protection in the analysis of credit risk is visible in many other banks, although informally.

Professor Grażyna Borys has carried out very interesting research regarding ecological risk in Polish banking.<sup>89</sup> She claims that the banks regard the following factors as the basic identifiers of ecological risk in their analysis of credit worthiness:

- the customer's activity in a industry which is particularly burdensome for the environment,
- location in a particularly degraded area when a unit of local government is a potential borrower,
- the ecological reputation of a potential borrower,
- the compliance by the customer with the environmental protection law,
- charging the customer with significant ecological commitments and costs of environmental protection,
- possession of a certificate confirming the implementation of an environmental management system,

---

<sup>87</sup> *Źródła finansowania inwestycji ekologicznych w Polsce. Przewodnik.* (1996). (pp. 105–170). Warsaw: Amerykańska Agencja Rozwoju Międzynarodowego; Borys (2003).

<sup>88</sup> S. Czaja mentions the same banks as well as Wielkopolski Bank Kredytowy S.A. in the case of foreign credit lines; see Czaja 91–92; Stodulski, W. The role of banks in environmental protection in Poland, p. 199.

<sup>89</sup> Professor Grażyna Borys is recognised in Poland as an expert in the area of ecological risk.

- the customer's engagement in investments which are particularly burdensome for the environment.<sup>90</sup>

The research carried out by Professor Grażyna Borys leads to the conclusion that the banks most often point to the following identifiers of ecological risk: the customer's activity in the which is particularly burdensome for the environment and charging the customer with significant ecological commitments and costs of environmental protection.<sup>91</sup> In order to minimise the ecological risk in credit transactions, some of the banks apply the following methods of control and constraining the ecological risk:

- refusal to grant a loan,
- inclusion of special clauses into the loan agreement,
- co-operation with the customers in order to find a solution to the problem.<sup>92</sup>

It seems that so far accounting for the ecological risk has been the most common way of engagement in environmental protection on the part of a Polish banking institution.

### 3. BANK OCHRONY ŚRODOWISKA S.A.

#### 3.1. GENERAL INFORMATION ABOUT THE BANK

Poland, which is one of most important emerging markets, is also a country where one of the best-organised ecological banks has been operating for a long time, namely the Polish Bank Ochrony Środowiska S.A. (BOŚ S.A.), established in 1991. It is a universal commercial bank specialised in the financial service of projects aimed at environmental protection. The shares of the bank have been quoted on the Warsaw Stock Exchange on the primary market since 1997. The principal owners of the bank are (2002): the Skandinaviska Enskilda Banken AB – 47.04% and the National Fund of Environmental Protection and Water Management – 44.36%. At the end of 2001 the particular items of its balance were as follows: the balance sheet total nearly 5.2 billion PLN (1.27 billion EUR)<sup>93</sup>, credit portfolio 3.65 billion PLN (0.9 billion EUR), total deposits 4.35 billion PLN (1.1 billion EUR). The Bank Ochrony Środowiska S.A. has 56 outlets at its disposal in Poland.

Since 1998 the bank has been assessed by the international agency Fitch IBCA, which gave BOŚ S.A. credit-rating on the "BBB-" level in 2001. The shares of Bank Ochrony Środowiska are included in a standard portfolio of environmentally related securities presented by FIFEGA – Forschungsinstitut

---

<sup>90</sup> Borys (2003).

<sup>91</sup> Borys (2003).

<sup>92</sup> Borys (2003).

<sup>93</sup> 1 EUR = around 4.10 PLN.

fuer Ethisch-Oekologische Geldanlagen in Austria and were included in the special stock market index NAI.

Table 5.1. includes detailed information regarding the bank's subsidiaries.

Table 5.1. Shares in subsidiaries with associated entities and other entities (2001)

COMPANY NAME	SCOPE OF ACTIVITY	SHARE CAPITAL HELD (%)	VOTES AT GENERAL SHAREHOLDERS' MEETING (%)
<b>SHARES IN SUBSIDIARIES AND ASSOCIATED ENTITIES</b>			
Dom Maklerski BOŚ	Brokerage house	99.89	99.89
Towarzystwo Finansowe BOŚ	Financial agency services, auxiliary activities related to insurance and pension fund	100.00	100.00
Eko-Efekt	Consulting and other business activities related to environment protection	30.00	30.00
Powszechne Towarzystwo Emerytalne 'Epoka' (in liquidation)	Management of an open-end pension fund and representation before third parties	40.24	40.24
Polsko-Amerykańska Korporacja Ochrony Środowiska PAKTO	Services and trade activities related to environment protection	26.00	26.00
Bielskie Zakłady Graficzne (in bankruptcy)	Printing and publishing services	34.32	34.32
<b>SHARES IN OTHER ENTITIES</b>			
INTELEXPORT S.A.	Construction and assembling services, manufacturing goods, rendering services	17.01	7.6
CARBOLEASING	Leasing services with special focus on the mining sector	10.00	10.00
Bałycka Agencja Poszanowania Energii S.A.	Promotional and business activities related to energy conservation	2.15	2.15
Środkowoeuropejskie Centrum Ratingu i Analiz 'CERA' S.A.	Preparation and publication of economic studies regarding Poland, other countries, banks as well as local self-government bodies for the public rating purposes	0.83	0.83
Warszawska Giełda Towarowa	Futures and real-time transactions regarding trade of goods	0.57	0.57

Source: Annual Report 2001 (2002). (pp. 58, 61). Warsaw: BOŚ.

### 3.2. THE PRO-ECOLOGICAL ACTIVITY OF THE BANK

The mission of Bank Ochrony Środowiska S.A. includes the rendering of complex financial and consultative services to the subjects implementing projects related to environmental protection. This mission is implemented within the frames of the functioning of a commercial bank with the combination of economic

efficiency and the widely understood social interest.<sup>94</sup> More than 50 bank's employees specialise in environmental engineering. The specialists in environmental protection matters gained their qualifications and experience not only in the bank but also in government offices, design offices, investment projects by companies and research institutes. Some of them have a record of research contributions. The expert group is led by the Bank's Chief Ecologist.<sup>95</sup>

The bank is engaged in environmental protection activity in many ways:

- granting credits for pro-ecological investments,
- capital engagement in companies acting in favour of environmental protection,
- consulting in the area of legal, economic and technical aspects of environmental protection,
- gaining financial resources for environmental protection projects,
- service of pro-ecological funds and organisations,
- sponsoring projects aimed at raising ecological awareness of the society,
- membership in organisations acting for the purpose of environmental protection.<sup>96</sup>

This is a wide scope of the bank's pro-ecological activity. The financial offer of the bank regarding the financing of pro-ecological economic undertakings, including the offer to gain capital for this purpose, deserves special attention. It is this offer that emphasises a unique character and potential know-how of the bank.

### 3.3. CREDIT OFFER – PREFERENTIAL ECOLOGICAL LOANS

Bank Ochrony Środowiska offers a wide range of loan products as a one of universal banks in Poland. The customers of the bank include corporations, individual persons, banks as well as national and local government institutions. The structure of the customers is presented in Table 5.2.

Table 5.2. Structure of loan outstanding by segment

ITEM	31.12.2001 (MILLIONS OF PLN)	STRUCTURE (%)
1	2	3
Financial borrowers, of which:	228.6	6.3
— banks	0.1	0.0
— other financial institutions	228.5	6.3
Non-financial borrowers, of which:	2,682.1	73.5
— personal customers	598.5	16.4
— corporate customers	2,083.6	57.1

<sup>94</sup> Letter from B. Kozal, Director of Ecological Projects and Municipalities Service of 27.11.2001 to the author.

<sup>95</sup> Environmental protection report 2001 (2002). (p. 4). Warsaw: BOŚ.

<sup>96</sup> Environmental protection report 2001 (2002). (p. 4). Warsaw: BOŚ.

1	2	3
Government, of which:	738.8	20.2
— central government institutions	0.5	0.0
— local government institutions	738.3	20.2
Total loan outstanding	3,649.5	100.0

Source: Annual Report 2001 (2002). (p. 21). Warsaw: BOŚ.

A very special advantage of the bank's loan products offer includes the offer of preferential loans granted in order to finance investment projects related to environmental protection. Preferential pro-ecological loans are granted in co-operation with such institutions as the National Fund for Environment Protection and Water Management, Provincial Funds for Environment Protection and Water Management, the European Fund for the Development of Polish Villages ("Counterpart Fund"), The M. Rataj Polish Countryside 2000 Foundation, Bank Gospodarstwa Krajowego, the World Bank and others.<sup>97</sup> The value of preferential loans granted amounted to approximately 260 million EUR at the end of 2001, which accounted for about 30% of the loan portfolio of the bank. Bank Ochrony Środowiska has brought in an important contribution to the financing of environmental protection in Poland. For years, the ecological loans of BOŚ have accounted for several per cent of the national expenditure for environmental protection. Table 5.3. shows the structure of the bank's loan portfolio with the allowance for pro-ecological loans.

Table 5.3. Structure of loan outstanding by type

ITEM	31.12.2001 (MILLIONS OF PLN)	STRUCTURE (%)
Investment loans (other than environmental)	984.8	27.0
Environmental loans	1,097.5	30.1
Business activity loans	1,409.6	38.6
Consumer loans	157.6	4.3
Total loan outstanding	3,649.5	100.0

Source: Annual Report 2001 (2002). (p. 20). Warsaw: BOŚ.

The most important partner for BOŚ S.A. in financing of environmental protection in lending of preferential loan is the National Fund of Environmental Protection and Water Management. In co-operation with the National Fund banks offer special loan lines to finance the following types of investment, e.g.:

<sup>97</sup> For example Wierchosławice Municipal Fund for Environmental Protection and Water Management.

- building small and home waste treatment plants,
- building sanitary sewage systems,
- building or modernising water treatment plants,
- waste management,
- utilising renewable electric and heat energy sources,
- adaptation to gas burning of combustion engines and their purchase for installation in city or public transport buses in cities.<sup>98</sup>

The next important partner for the bank are Voivodship Funds of Environmental Protection and Water Management in 16 provinces of Poland. Other example of co-operation with partners in financing the environmental protection is managing of special grants of Global Environmental Facility (GEF) of World Bank: "Substituting gas for coal-burning heaters in small and medium-sized boiler plants" and "Improving power efficiency in new residential buildings".

In Table 5.4. is presented the structure of preferential loans of BOŚ S.A. in 2000.

Table 5.4. The amounts of loans granted by the Bank Ochrony Środowiska in co-operation with donors in 2000

LOAN GRANTED	AMOUNT [PLN ,000]
In co-operation with the National Fund	99,046
In co-operation with Voivodship Funds	29,994
Consortiums with Voivodship Funds	3,291
In co-operation with the Municipal Funds	67
Using money supplied by The M. Rataj Polish Countryside 2000 Foundation	180
Using money supplied by the Counter-part Fund European Fund for the Development of Polish Villages	2,238
Total	134,817

Source: Environmental protection report 2001 (2002). (p. 8). Warsaw: BOŚ.

### 3.4. ECOLOGICAL RESULTS

During the first ten years of its existence, Bank Ochrony Środowiska achieved significant ecological results by financing pro-ecological projects with preferential loans. According to the data of BOŚ S.A., the ecological results were the following:

- dust emission was reduced nearly by 120,000 tons a year,
- gaseous emission was reduced by more than 415,000 tons a year,

<sup>98</sup> Environmental protection report 2001 (2002). (p. 5). Warsaw: BOŚ.

- waste treatment plant throughput was increased by more than 2 million m<sup>3</sup> per day,
- sewage system length was increased by 3,900 km,
- waste landfill capacity was increased by more than 13 million m<sup>3</sup>.<sup>99</sup>

The detailed data according environmental benefits of bank activity are presented in Table 5.5.

Table 5.5. Environmental benefits arising from completed projects BOŚ S.A. financed in 1991–2001

PERIOD	REDUCTION IN EMISSIONS			THROUGHPUT SEWAGE TREATMENT (m <sup>3</sup> /d)	LENGTH, SEWERAGE SYSTEMS (km)	CAPACITY WASTE DEPOSAL SITES (m <sup>3</sup> )
	DUST (Mg/a)	SO <sub>2</sub> (Mg/a)	NO <sub>x</sub> (Mg/a)			
1991–1993	14,000	4,600		432,000	189	561
1994	25,000	10,000	78	211,211	102	592
1995	10,360	3,200	5,500	258,613	347	2,400
1996	17,980	165,217	5,890	150,631	796	1,604
1997	27,210	132,521	6,571	287,309	627	3,233
1998	10,314	35,922	1,769	311,619	434	2,140
1999	10,491	37,880	1,140	294,134	394	1,014
2000	4,486	4,240	294	148,026	624	880
2001	1,394	419	120	221,014	369	1,452
Total	121,235	393,999	21,362	2,314,558	3,882	13,876

Source: Environmental protection report (2002). (p. 29). Warsaw: BOŚ.

The investment projects completed only in 2000 gave the following results:

- dust emission was reduced nearly by 4,500 tons a year,
- SO<sub>2</sub> emission was reduced by more than 4,000 tons a year,
- NO<sub>x</sub> emission was reduced nearly by 300 tons a year,
- waste treatment plant throughput was increased nearly by 150,000 m<sup>3</sup> per day,
- sewage system length was increased by 624 km,
- waste landfill capacity was increased by 880,000 m<sup>3</sup>,
- the amount of treated/salvaged waste was increased by more than 200,000 tons a year,
- primary energy consumption was reduced by 27,850 GJ a year,
- electric energy generated using renewable energy sources amounted to 6,368 MWh a year.<sup>100</sup>

<sup>99</sup> Environmental protection report 2001 (2002). (p. 13). Warsaw: BOŚ.

<sup>100</sup> Environmental protection report 2001 (2002). (p. 13). Warsaw: BOŚ.



These are tangible achievements of the bank in the financing of environmental protection.

### 3.5. DEPOSIT OFFER

As a universal bank BOŚ offers a wide range of deposit products as well. The bank collects capital from banks, financial institutions, personal customers, corporate customers, central government institutions, local government institutions. BOŚ is also an issuer of certificates of deposit (CD) "Ekobonus". Certificates of deposit are an example of a very new deposit product on the Polish financial market. The bank's deposit structure is presented in Table 5.6.

Table 5.6. Structure of deposits by segments

ITEM	31.12.2001 (MILLIONS OF PLN)	STRUCTURE (%)
Financial institutions, of which:	865.3	19.9
— banks	506.7	11.6
— loans from foreign banks	334.0	7.7
— financial institutions other than banks	24.6	0.6
Non-financial institutions, of which:	2,495.3	57.3
— personal customers	1,493.5	34.3
— corporate customers	931.8	21.4
— 'Ekobonus' CDs	70.0	1.6
Government institutions, of which:	992.9	22.8
— central government	14.9	0.4
— local government institutions	175.4	4.0
— special purpose funds, including finance entrusted to the bank to fund lending	802.6	18.4
Total deposits	4,353.5	100.0

Source: Environmental protection report 2001 (2002) (p. 22). Warsaw: BOŚ.

Bank Ochrony Środowiska also offers special purpose deposits, which are financially linked to the financing of specific initiatives in the area of environmental protection. These are very original offers. The special purpose deposits, well known under the name of Ekolokata, can be given as excellent examples. These are special purpose deposits, which are combined with sponsoring a project in the protection of a chosen endangered species. For every deposit the bank appropriates, from its own resources, a certain amount for the financing of another selected project. So far, the following products have been offered:

- the Ekoplus deposit,
- the Ekolokata deposits,
- the Jubilee deposit,
- the deposit with a buzzard,
- the deposit with a hedgehog,
- the deposit with a gopher.

The Ekoplus deposit was a three-month deposit with a fixed interest rate offered to individual persons, companies and local government units. The deposit was offered during the period between April 1st and June 30th, 2000. The bank committed itself to transfer, from its own resources, a sum amounting to 1% of the interest cost for every deposit for the project in the protection of the lynx in the Kampinoski National Park. The bank transferred 155,369 PLN in total.

The Ekolokata deposit, as deposits with fixed interest rate for the period of 1, 3 or 6 months, were offered till December 31st, 2000. For each deposit, the bank transferred 0.50 PLN for the project of the protection of owls in the Roztocze National Park. In total, 39,742.50 PLN was transferred.

The Jubilee Deposit was introduced to commemorate ten years of existence of Bank Ochrony Środowiska S.A. It was a deposit with floating interest rate for the period of 100 days. For each deposit, the bank transferred the sum of 0.50 PLN for the project of the protection of porpoise implemented by the Gdańsk University's Sea Station of the Institute of Oceanography. In total, 17,738 PLN was transferred.

The deposit with a buzzard was offered in autumn 2001. It was a three-month deposit with float interest rate. The surplus for the project of buzzard protection implemented by the Committee for the Protection of Eagles was transferred according to similar principles. In total, 22,281 PLN was transferred.

The deposits with a hedgehog and a gopher are the most recent special purpose deposits linked to the financing of natural environment protection. The mechanism is similar to that in the preceding deposits. For example, the deposit with a hedgehog is a three-month and a six-month deposit with variable interest rate. For each deposit, the bank transfers 0.50 PLN for the protection of hedgehogs in the Wielkopolski National Park.<sup>101</sup>

Moreover, BOŚ S.A. issues banking certificates of deposits called "Ekobonus". At the end of 2001, the value of the issued certificates of this kind amounted to 70 million PLN (1.6% of the total deposits of the bank).<sup>102</sup> The Ekokonto savings and settlement accounts is another product of Bank Ochrony Środowiska S.A.<sup>103</sup>

---

<sup>101</sup> Letter from R. Pawlicka, Director of Detailed Banking Department in Bank Ochrony Środowiska S.A. of 12.08.2002 to the author. For example, Wierzchosławice Municipal Fund for Environmental Protection and Water Management.

<sup>102</sup> *Annual Report 2001 (2002)*. Warsaw: Bank Ochrony Środowiska.

<sup>103</sup> Letter from B. Kozal.

### 3.6. EVALUATION OF THE BANK'S ACTIVITY

Bank Ochrony Środowiska is a unique financial institution, which in its activity considers the economical and ecological criterion at the same time. The efficiency of this solution, which has been tested on a universal commercial bank, is a serious Polish achievement and is a Polish patent of its kind in the area of environmental protection financing with the preservation of market mechanisms. At the same time, Bank Ochrony Środowiska is an important commercial bank on the Polish banking market. A serious engagement of a foreign shareholder in the functioning of the bank also testifies to its attractiveness. The Swedish bank Skandinaviska Enskilda Banken – SEB possesses as much as 47.04% of the bank's equity.

Another Polish success connected with Bank Ochrony Środowiska was the introduction of the bank's shares into the Warsaw Stock Exchange. This fact should be recognised not only as an enormous success of Polish banking, but in the first place as a Polish success in the area of environmental protection on the international scale.<sup>104</sup>

In addition to the inflow of capital, the event was a marketing effect, which was difficult to overestimate.

It was the first bank in the world, supporting environmental protection to such an extent, whose shares were quoted on a stock exchange and could be freely purchased on the market. It creates another possibility for the customers to invest with the allowance for the ecological aspect through a direct purchase of the Bank Ochrony Środowiska's shares.

Summing up, we can conclude that the financing of environmental protection was skilfully combined with the principles of functioning of a commercial bank by the Polish Bank Ochrony Środowiska. At the same time, the public market of securities, including the stock exchange, was used and foreign capital was engaged but without gaining the majority of votes in the stock-quoted company. In a word, it was an excellent example of using various types of commercial financial operations combined with the financing of pro-ecological economic undertaking.

## 4. BUSINESS OFFER OF FINANCIAL INSTITUTIONS COMBINED WITH FINANCING OF ENVIRONMENTAL PROTECTION

### 4.1. BANKING OFFER

Considering the offer of the Bank Ochrony Środowiska and the offer of two other Polish banks, whose shares are quoted in the stock exchange, we can

---

<sup>104</sup> See Dziawgo, L. (1996). The securities market – from socialism to continuous trading and eurobonds. In Z. Wiśniewski (Ed.), The adjustment of Polish companies to the market economy (pp. 60–61). Toruń: UMK.

confirm that the Polish banking market has already gained some experience in banking products combined with financing environmental protection.

LG Petro Bank S.A. (now 99.5% of the shares belongs to the Nordea bank) was one of the banks which paid attention to the pro-ecological attitudes of the customers. The initiative of LG Petro Bank S.A. introducing the deposit product of EkoLokata should be recognised as interesting. EkoLokata is a special purpose deposit, because for each such deposit the bank transfers to the local fund of environmental protection and water management (provincial and communal funds) the sum initially amounting to 0.3% of the deposit's value which is then lowered to 0.1%.<sup>105</sup> It is the intention of the bank's management that the capital being transferred should remain in the funds which are adequate to the place in which the customer opened his account. The offer of EkoLokata referred to three-month and six-month deposits and it has been valid since September 3, 1997. There are two reasons for the introduction of the ecological financial instrument. The first reason is the endeavour to increase the amount of gained capital. The bank expects that this aim will be achieved considering the attractive rate of interest and the care of the Polish society for the condition of natural environment. The conviction of the bank's management as to the necessity of undertaking activities aiming at the protection of natural environment is the second reason.<sup>106</sup> Subsequently, the bank introduced so-called EkoLokata Bis. Describing substantial results of LG Petro Bank's initiative regarding the offer of EkoLokata deposits one should mention the refinancing of the "Action for Saving Wild Animals", which was initiated among others by the European Ecological Centre of Environmental Protection League. In 1999, within the frames of this action, the bank transferred 10,000 PLN to the Centre of Birds' Rehabilitation at the Compound of Forest Schools in Zagdańsk and 15,000 PLN for the project of reconstruction of the white-tailed eagle's nests as well as the protection of white stork's nests. LG Petro Bank continued to finance the projects in 2001 as well.<sup>107</sup> It should also be added that, within the promotion of EkoLokata and in co-operation with the European Ecological Centre, the bank offered to its customers so-called "European Green Card", which entitles the holders to obtain discounts while buying tickets for museums and national parks.<sup>108</sup>

The case of Kredyt Bank S.A., in turn, is a case on the border of sponsoring and banking accounting and deposit operations. In May, 1998, the bank offered to young people Visa Elektron Junior cash cards, which were combined with

---

<sup>105</sup> It follows from the data that this sum was then lowered to 0.005%. Internet, <http://www.lgpetro.com.pl/lokaty/ekolokata.html>

<sup>106</sup> Letters from Ł. W. Bald, vice Director of Detailed Banking Department of the LG Petro Bank S.A. of 15.09.1997 and 12.08.1998 to the author.

<sup>107</sup> Internet, [http://www.lgpetro.com.pl.kim\\_jestesmy/dzialania\\_prospoleczne.html](http://www.lgpetro.com.pl.kim_jestesmy/dzialania_prospoleczne.html)

<sup>108</sup> Internet, [http://www.lgpetro.com.pl.kim\\_jestesmy/dzialania\\_prospoleczne.html](http://www.lgpetro.com.pl.kim_jestesmy/dzialania_prospoleczne.html)

a project supporting environmental protection. The assumptions of the offer were the following: half of the charge for the issue of the card (3.50 PLN) was transferred to the Gdańsk University's Sea Station of the Institute of Oceanography at Hel in order to finance the project of the reproduction of grey seals in the Baltic Sea. In 1998, 24,000 PLN was transferred to the Sea Station and 27,000 PLN in 1999.

The project was introduced, because studies had shown that young people between 13 and 18 years of age were interested in ecological issues. The educational aspect had also been taken into consideration, because it was expected that the parents would choose a product promoting positive values for their children.

Kredyt Bank S.A. supported the project of the Sea Station at Hel in 1998 and 1999. The co-operation did not continue in the following years, because the bank engaged in supporting Polish culture.<sup>109</sup> According to the bank, another reason for the case of co-operation was the status of Bank Ochrony Środowiska S.A., which was better associated with environmental protection (due to its name for example) and had also developed co-operation with the Sea Station at Hel refinancing the project of porpoise's protection in the Baltic Sea.<sup>110</sup>

#### 4.2. THE OFFERS OF PENSION AND INVESTMENT FUNDS

The Arka-Invesco pension fund from the Arka-Invesco Universal Pension Society and the Epoka pension fund from the Epoka Universal Pension Society were the first institutional investors to pay attention to the ethical and ecological aspect of their investments. The shareholders of Arka-Invesco PTE included the American Amvescap financial group (80% of the shares) and the Episcopate of Poland (20% of the shares). The Epoka fund paid attention to the ecological aspect in the first place. This fact is not surprising, because Bank Ochrony Środowiska S.A. was one of the shareholders of Epoka PTE (40.172% of the equity). Unfortunately, neither fund won sufficient share of the market and they were merged with other pension societies.

In the meantime, new interesting offers for pro-ecological investors had appeared on the Polish market of investment funds. The first investment fund whose investment strategy accounted for environmental protection had offered its units of participation. To some extent, this fund can be treated as an ecological investment fund. This is a completely new offer on the Polish money market. The appearance of the first offer of an ecological investment fund on the Polish market should be regarded as a very positive sign of the influence of western

---

<sup>109</sup> Co-financing of the following film productions: "Ogniem i mieczem", "Quo vadis", "W pustyni i w puszczy", "Pan Tadeusz", "Zemsta".

<sup>110</sup> Letter from B. Budzyńska-Bartosik, Head of the Retail Clients' Department in Kredyt Bank S.A. of 12.08.2002 and 20.08.2002 to the author.

tendencies in Poland. It could also be mentioned here that many foreign companies operating on the Polish market of investment funds possess knowledge and experience in the area of management of ecological investment funds. The following subjects can be included in this group: Credit Suisse, ING, ABN AMRO and Deutsche Bank.

#### 4.2.1. THE UNI XXI CENTURY INVESTMENT FUND

The Uni XXI Century investment fund is the first investment fund on the Polish financial market, which can be recognised as partly ecological. The Uni XXI Century investment fund belongs to the Union Investment Society of Investment Funds. The shareholders of the society are the following:

- Union Fonds Holding AG from Germany (70% of the shares),
- the Polish Bank Gospodarki Żywnościowej (30% of the shares).

The Union Investment Society of Investment Funds has already offered several investment funds on the Polish market. The funds include shares and bond funds as well as money market funds.

The investment strategy of the Uni XXI Century fund assumes that the financial capital gained from the investors will be invested in equal parts into the shares of five sectors of the world economy which are regarded as promising for the future. The following sectors were included in this list (Chart 5.1.):

- information technology,
- biotechnology,
- health protection,
- environmental protection,
- optics.

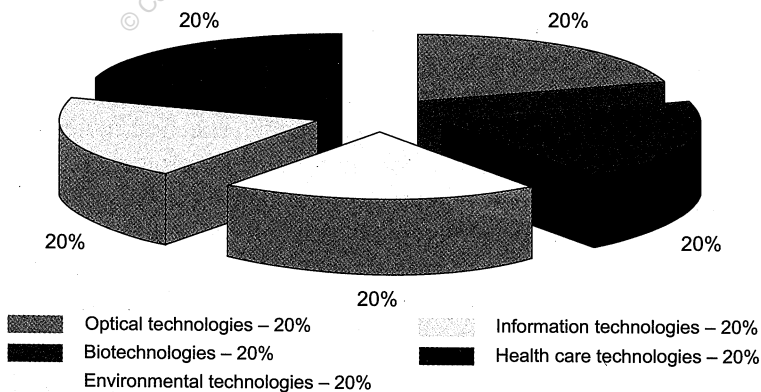


Chart 5.1. A model composition of the Uni XXI Century fund's portfolio

Source: Uni XXI Century. (2002). Materials obtained from the fund.

As of 31st December, 2001 the fund had accumulated 10,160 million PLN. The obtained capital was invested in shares in the first place and a small proportion was invested in instruments like ADR and GDR. Securities from the United States and from Germany make the largest part of the fund's portfolio. Securities from France, Switzerland and Great Britain occupy further positions in the structure of investments. The most important items in the fund's portfolio are shown in Chart 5.2. while Table 5.7. contains a detailed presentation of the investment portfolio. Chart 5.3. presents the monetary structure of the investment.

The share of the issuers from the sector of environmental protection in the investment portfolio of the fund amounts to approximately 20% (among others, the issues of Vivendi and RWE were purchased).

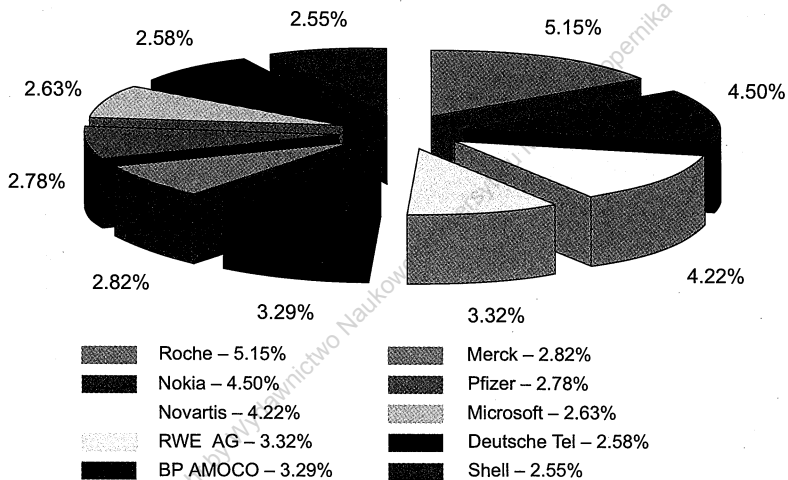


Chart 5.2. Top ten holdings on June 30, 2002

Source: Uni XXI Century. (2002). Materials obtained from the fund.

Table 5.7. The investment portfolio of the Uni XXI Century fund (31.12.2002)

SPECIFICATION	No. SHARES/ ADR/GDR	MARKET VALUE (IN THOUSAND PLN)	SHARE IN TOTAL ASSETS (%)
1	2	3	4
SHARES	104,283.00	8,269.84	81.40
BELGIUM		32.54	0.32
ION BEAM APPS	500	32.54	0.32
DENMARK		37.80	0.37
VESTAS WIND SYSTEMS	350	37.80	0.37
FINLAND		305.98	3.01
NOKIA CORPORATION	3,000	305.98	3.01

1	2	3	4
FRANCE		721.32	7.10
AIR LIQUIDE	80	44.35	0.44
AVENTIS	120	33.70	0.33
CAP GEMINI SOGETI	310	88.54	0.87
L'OREAL	100	28.49	0.28
SANOFI-SYN	150	44.27	0.44
SUEZ LYONNAISE DES	950	113.76	1.12
VIVENDI UNIVERSAL	1,700	368.21	3.62
SPAIN		41.91	0.41
AGUAS DE BARCELONA	850	41.91	0.41
NETHERLAND		168.22	1.65
PHILIPS ELEC	150	17.63	0.17
QIAGEN NV EURO ORDS	1,800	134.08	1.32
STMICROELECTRONICS	130	16.51	0.16
JAPAN		397.33	3.91
KADOKAWA SHOTEN	400	24.26	0.24
KURITA WATER	1,000	49.33	0.49
KYOCERA CORP	100	25.92	0.25
NEC	1,000	40.54	0.40
NTT DOCOMO	1	46.69	0.46
OLYMPUS OPTICAL	1,000	57.15	0.56
SANKYO CO LTD	1,000	68.07	0.67
SONY CORP	300	54.48	0.54
TERUMO CORP	600	30.89	0.30
CANADA		60.62	0.60
TROJAN	1,000	15.77	0.16
NORTEL NETWORKS	1,500	44.85	0.44
GERMANY		1,854.42	18.25
AIXTRON AG	580	51.78	0.51
BASF AG NPV	1,180	173.92	1.71
BAYER S.A.	850	106.87	1.05
DEGUSSA AG	1,050	107.24	1.06
DEUTSCHE TEL AG	5,300	362.12	3.56
E. ON AG	560	115.18	1.13
ENERGIE KONTOR AG	400	16.27	0.16
FRESENIUS AG PREF	140	45.82	0.45
HIGHLIGHT COMMUNI	1,100	13.06	0.13
INFINEON	350	28.97	0.28
LINDE AG NPV	120	19.31	0.19
RWE AG NPV	670	100.17	0.99
SAP AG NPV ORDS	760	394.03	3.88



1	2	3	4
SCHERING AG NPV	500	105.83	1.04
SIEMENS AG	600	158.17	1.56
UMWELTKONTOR RENEWAB	700	19.23	0.19
WADECO WATER NPV	300	36.45	0.36
NORWAY		26.58	0.26
TOMRA SYSTEM ASA	700	26.58	0.26
UNITED STATES		2,875.75	28.33
AMGEN INC	450	101.24	1.00
AOL TIME WARNER	840	107.49	1.06
ASTROWPR	500	80.58	0.79
ATT CORP	320	23.14	0.23
ATT WIRELESS SERVICE	2,402	137.59	1.35
BIOGEN INC	503	121.17	1.19
BRISTOL MYRS SQUIB	400	81.32	0.80
BROADCOM	160	26.07	0.26
CHECK POINT SOFTWARE	190	30.21	0.30
CISCO SYSTEMS	3,000	216.58	2.13
ECOLAB INC	700	112.31	1.11
ELI LILY CO	200	62.62	0.62
EMC CORP	650	34.82	0.34
FUELCELL ENERGY INC	450	32.54	0.32
GENENTECH INC	290	62.71	0.62
HEWLETT PACKARD	350	28.66	0.28
IMMUNEX CORP	320	35.35	0.35
INTEL CORP	1,100	137.91	1.36
INTL BUSINESS	250	120.55	1.19
JOHNSON & JOHNSON	550	129.58	1.28
MEDIMMUNE INC	150	27.72	0.27
MERCK & CO INC	1,000	234.39	2.31
MICROSOFT	640	169.02	1.66
MILLIONENNIUM PHARM	300	29.31	0.29
MOTOROLA	1,000	59.87	0.59
ORACLE CORP	1,400	77.07	0.76
PFIZER	1,200	190.63	1.88
PHARMACIA CORP	200	34.00	0.33
SCHERING PLOUGH	400	57.10	0.56
SCM MICROSYSTEMS	1,000	59.70	0.59
SIEBEL SYS INC	1,200	133.84	1.32
SOLETRON CORP	650	29.23	0.29
SUN MICROSYSTEMS	1,300	63.74	0.63
TEXAS INSTRUMENTS	200	22.32	0.22

1	2	3	4
WALT DISNEY	380	31.39	0.31
WORLDCOMI COA	600	33.68	0.33
SWITZERLAND		566.68	5.58
NOVARTIS	2,000	285.12	2.81
ROCHE HLDGS AG	1,000	281.56	2.77
SWEDEN		140.05	1.37
ERICSSON LM TELEFON	6,000	129.48	1.27
MUNTERS AB	160	10.57	0.10
GREAT BRITAIN		892.64	8.78
BP AMOCO GBP	10,000	308.24	3.03
GLAXOSMITHKLINE	2,400	238.69	2.35
SHELL TRNSPT	8,500	231.58	2.28
VODAFONE GROUP PLC	11,000	114.13	1.12
ITALY		88.30	0.87
TELECOM ITALIA MOBIL	4,000	88.30	0.87
ADR & GDR	490	108.54	1.07
CHINA		20.91	0.21
CHINA MOBILE ADR	300	20.91	0.21
KOREA SUD.		87.63	0.86
SAMSUNG ELECT GDR	190	87.63	0.86
OTHER ASSETS		1.781.44	17.53

Source: Financial Statements Union Investment on 31.12.2001. pp. 52–53.

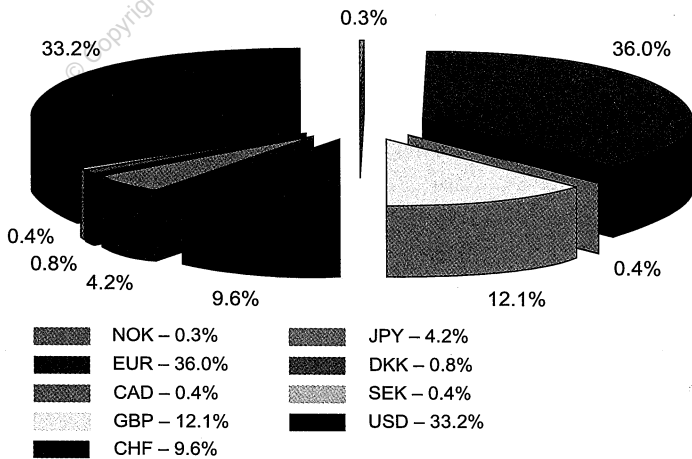


Chart 5.3. The monetary structure of the Uni XXI Century fund's portfolio (30.06.2002)

Source: Uni XXI Century. (2002). Materials received from the fund.

## 5. SECURITIES MARKET

### 5.1. FOREWORD

It is already possible to find issues of stocks on the Polish financial market which can be interesting for those investors who want to allow for the ecological aspect in their investments. The issues of stocks fulfilling the condition of ecological utility can be classified in the following way depending on the type of the issuer:

- issues of companies,
- issues of banks,
- local government issues.

The issues of ecological issuers can also be classified according to the kind of the securities issued. We distinguish shares and bonds on the capital market of securities; whereas, certificates of deposit and commercial papers are distinguished in the money market of securities.

A pro-ecological investor has an even wider choice on the Polish market of securities. This fact facilitates investments for both individual and institutional investors. It can be expected that the offer of pro-ecological issues will widen. Thus, the Polish market will become even more interesting.

### 5.2. EXAMPLES OF ISSUES

In the case of the issues of companies, the shares issues of the following stock quoted companies can be emphasised:

- Rafako,
- Prochem,
- Budimex,
- Polifarb Cieszyn – Wrocław,

and many others.

The above-mentioned companies insist on the ecological advantages of chosen products, technologies and investments. For example, the following projects have been regarded as interesting: production of modern boilers in the Rafako company, designing sewage treatment plants in the Prochem company and construction of sewage treatment plants by Budimex. Polifarb Cieszyn – Wrocław can be another example. The company has declared that it will earmark 31% of the income from the issue of the B series stocks for the widening to its line of products of high ecological qualities.<sup>111</sup>

---

<sup>111</sup> Dziawgo, L. (1996). Ekologiczne fundusze inwestycyjne na rynku finansowym Republiki Federalnej Niemiec, *Ekonomia i Środowisko*, 1, pp. 79–80.

Unfortunately, this activity is not widely known, although it should be admitted that managers of companies are becoming more willing to give information regarding the subject of environmental protection in the functioning of the companies they manage.<sup>112</sup>

It is also possible to indicate interesting opportunities to invest on the Warsaw Securities Exchange including the requirements of environmental protection. A number of companies have ISO 14001 certificate, which is some advice for investors.

Table 5.8. List of companies whose shares are quoted at the Warsaw Stock Exchange, divided into particular markets

PRIMARY MARKET	SECONDARY MARKET	FREE MARKET
Amica	Apator	Fasing
Cersanit	Groclin	
Dębica	Hydrobudowa	
Elektrobudowa	PollenaE	
Ferrum	Polna	
GPRD	Yawal	
HydroGd		
Kable Holding		
Kęty		
Kogeneracja		
Mennica		
MostostalWar		
PKN Orlen		
Rafako		
Sanok		
Stalprod		
Stomil		
ZEW		
Żywiec		

Source: Modrzyński, P. (2003). ISO 14001 w polskich spółkach giełdowych. Unpublished materials.

<sup>112</sup> As early as 1994 r. the author sent questions to the ten stock-quoted companies about the relationship company-environment. Many answers were obtained of a different degree of minuteness of detail.

The issue of bonds by Zespół Elektrociepłowni Gdańsk S.A. was a good example of an non-public issuer. Modernisation of the block No. 2 in EC II Gdańsk was planned for the period between 1995 and 1997 and it was supposed to bring production and ecological results. It was estimated that the investment was worth 127.3 million PLN.

As early as in 1994, the author sent surveys to companies then quoted at the stock exchange with questions regarding the relation between the companies and the environment. He obtained a number of answers with varying degrees of circumstantiality.

The following sources of financing were given: a loan from BOŚ, a loan from National Fund for Environmental Protection and Water Management as well as the company's own shares and bonds worth 21 million PLN. The issue of 602 three-year bonds, each with the nominal value of 35,000 PLN, was planned.<sup>113</sup>

The shares of Bank Ochrony Środowiska S.A. are of primary importance among the securities issued by banks. It is expected that this bank will become the leader of the future Polish market of ecological securities (*green chips*). A Polish universal bank specialised in financing environmental protection, which is a stock company at the same time, raises understandable interest of foreign ecological investors. In March, 1997, the bank's stocks were included into a model portfolio of ecological securities prepared by the FIFEGA institute.<sup>114</sup> Next, in April 1997, the stocks of Bank Ochrony Środowiska were included into the index of the stock market – Natur Aktien Index NAI – which was elaborated by the same institute.<sup>115</sup>

“Ekobonus” certificates of deposit issued by Bank Ochrony Środowiska S.A. are also interesting as banking securities for ecological reasons. These are short-term banking securities traded in the money market.

Bonds issued by local governments can be given as another example of securities. The most recent interesting issues for pro-ecological purposes include:

- the town and commune of Śrem – 2.5 million PLN,
- the commune of Lubasz – 2.5 million PLN,
- the commune of Osieczna – 3.5 million PLN,
- the town and commune of Ruciane-Nida – 2.5 million PLN,
- the town of Tczew – 15 million PLN,
- the town and commune of Wieruszów – 2 million PLN,
- the commune of Krzeszyce – 1 million PLN,
- the commune of Szamocin – 1.2 million PLN,
- the town of Krasnobród – 1.9 million PLN.

---

<sup>113</sup> Letter from K. Kosiorek, Director of Economics and Financial Department in Zespół Elektrociepłowni Gdańsk S.A.

<sup>114</sup> Dispositionen. (1997). *Oeko-Invest*, 133.

<sup>115</sup> NAI. (1997). *Oeko-Invest*, 134.

The financial capital gained thanks to these issues were ear-marked for financing the construction of sewage systems, sewage treatment plants and dumping grounds. The market of municipal bonds can be a very interesting alternative for pro-ecological investors in a similar way as in other countries.

## 6. POLISH SOCIETY'S INTEREST IN ECOLOGICAL INVESTING

### 6.1. RESULTS OF SELECTED SURVEYS

A series of surveys regarding pro-ecological attitudes in Polish society have been carried out in Poland. Many of these surveys were carried out with the allowance for some detailed conditions (the costs of environmental protection, the impact on the labour market, the taxes, etc.). There is no need to present a bigger number of the surveys. The conclusions drawn on the basis of the surveys regarding pro-ecological attitudes of the Poles are very promising, even though the results should, as usual, be evaluated with some caution. Polish society certainly appreciates the importance of natural environment. The positive attitude towards environmental protection on the part of the Poles is subject to some fluctuations in time and, to some extent, it is dependent on the circumstances (e.g. recession, unemployment, etc.); however, the pro-ecological orientation of the Poles is a matter of fact. Moreover, the support of environmental protection given by the Polish society is not naive. A significant section of society pays attention to some circumstances connected with the support of environmental protection and conditions its support on the allowance for these circumstances in the policy of environmental protection.

In January, 1997, surveys regarding the attitudes of Polish society in view of the pollution of the natural environment were carried out. The results of the surveys are worth quoting, because they are related to financial issues. The people who took part in the surveys were asked the following question: 'Would I give over a certain part of my income if I was convinced that the money would be spent for environmental protection?'

The following answers were given to the question: I definitely agree – 13%, I quite agree – 42%, I quite disagree – 19%, I definitely disagree – 11%, I do not know/It is difficult to say – 14%. Thus, the majority of the Polish society permits personal financial engagement in environmental protection (55% definitely agrees or quite agrees) if it is convinced that the financial capital will be spent for this purpose. The minority of the people who took part in the survey did not support the idea the diminution of their income for the purpose of financing environmental protection (30% disagrees or definitely disagrees). Only 11% of the participants declared that in an emphatic way.

Other surveys carried out by Demoskop in 2000<sup>116</sup> also led to similar results. The participants were asked if they would agree to pay 10% more for a detergent other than they usually used if it was more favourable for the natural environment. 59% of the participants expressed their approval. Similarly, when they were asked if they would pay 10% more for electrical energy if it was produced as solar and wind energy or from some other renewable source, 52% of the participants expressed approval. Fewer positive answers were given to the following question: would you decide to pay 10% more for fuel if the money was spent on the reduction of air pollution. 46% of the participants said 'yes'. The results of the surveys should be regarded as promising.

## **6.2. COMPLEX QUESTIONNAIRE SURVEYS REGARDING THE INCLUSION OF THE ECOLOGICAL CRITERION IN THE OFFER OF FINANCIAL INSTITUTIONS**

### **6.2.1. FOREWORD**

Taking into consideration the possibilities to use the financial market for the financing of environmental protection and bearing in mind society's involvement in this process, it seems necessary to conduct a survey of the public opinion. Attempts at conducting such surveys are made in many countries.

In Poland, unique, complex and simultaneously successful surveys have been conducted on a representative sample of Polish society. In this way, on one of the most important emerging markets, the society's approach towards pro-ecological engagement of financial institutions and a financial offer connected with the financing of environmental protection were identified.

The results of the survey have made a more complex analysis of the issue possible and they may be useful in the creating of financial institutions' offers earmarked for individual investors who take into consideration the ecological criterion in addition to the economic one.

### **6.2.2. THE RESULTS OF 1997 AND 2002 SURVEYS**

The surveys conducted in Poland were aimed at gaining preliminary knowledge about the perception of the engagement of financial institutions in environmental protection and the readiness of individuals to invest with respect to ecological criterion. Therefore, the surveys dealt with the demand side of the market. The first survey was conducted on March 4–11, 1997 on a representative

---

<sup>116</sup> Świadomość ekologiczna Polaków. (2000). EkoBus. Warsaw: Demoskop. The survey was conducted on April 15–18, 2000.

sample of Polish adults of 1,213 people. The survey was repeated 5 years later on April 5–8, 2002 on a representative sample of Polish adults at the number of 1,044 people. The survey was based on the questionnaire method, created by the Author of the project and conducted at his request by CBOS (The Public Opinion Research Centre).

The results of the survey are presented in the following categories:

- for the whole sample (1,213 person years 1997 and 1,044 person years 2002),
- for persons who declared having savings (496 person years 1997 and 193 person years 2002).

This enables to generate crucial information. This enables us to generate opinions typical of the whole population, then typical of the people who have savings and, finally, to find out the preferences of those people who have no savings at the moment but who could have free capital in the future.

The questions were formulated in the simplest possible way in order to be understood by respondents from the representative sample of society. It was necessary to conduct the survey on such a broad spectrum of the society. Not always are the answers given to similar questions in 1997 and in 2002 compatible. It is so due to some changes of rules about answering questions in the survey of 2002. The changes are marked at respective questions.

An analysis of the answers collected was aimed at grasping the basic proportions. Too detailed an analysis was avoided assuming that at this stage of a preliminarily survey of the perception of involvement in environmental protection and the readiness of people to invest based on ecological criterion and the conditions of such an investment, it will lead to too detailed reflections.

Moreover, a more substantial preliminary interpretation of basic proportions will be justified. Many collected answers require a further detailed survey for a correct commentary and a proper diagnosis.

Table 5.9. Question 1A. Citizens can get involved in environmental protection in many ways. Which of the following ways do you consider most appropriate? [It is possible to choose more than one positive answer with evaluating the degree of their importance]

SPECIFICATION	1997		2002	
	TOTAL (1213)	RESPONDENTS WITH SAVINGS (496)	TOTAL (1044)	RESPONDENTS WITH SAVINGS (193)
1	2	3	4	5
a) Getting and propagating the knowledge about environmental protection	64.5%	70.2%	58.0%	64.8%
b) Buying goods produced with respect to the environment	59.1%	67.6%	62.5%	66.9%
c) Voting for candidates and parties which include in their programs the issue of environmental protection	30.8%	36.4%	28.0%	26.2%



	1	2	3	4	5
d) Saving money in bank accounts, bonds, etc. which are invested in business activities fostering environment		32.8%	42.7%	16.6%	23.1%
e) Another way		8.7%	10.0%	6.8%	11.6%
f) Citizens should not get involved in environmental protection. It should be done by institutions and organisations specially appointed for it		16.1%	7.5%	14.6%	11.8%

On the basis of the presented data for 1997 we can see that a crucial part of respondents (almost 33%) chose investments connected with environmental protection as a possibility to become involved in environmental protection. The same opinion is also expressed by almost 43% of savers. Such a result may be considered high. It supports people's high readiness to invest – save with taking into account ecological criteria. Therefore, it is worth noticing that in the questionnaire the form of supporting environmental protection by means of ecological investments is inferior only to the forms of supporting the environment by education and consumption. Citizens' support of environmental protection by education is ranked number one. The next of the forms is consumption with respect to the requirements of environmental protection. Next, as mentioned before, investing connected with environmental protection and the 4<sup>th</sup> form is taking part in the political life by means of elections and voting for parties and candidates with an appropriate programme. 5 years later, in 2002, the situation looks different. A significant drop of interest in the environmental protection can be noticed. It may be a result of a definitely worse economic situation in 2002. Also, a lower percentage of answers for the remaining spheres of civic activities connected with environmental protection such as collecting and propagating environmental protection education, political activity, or taking advantage of the financial market offers has been noticed. The highest decrease is connected with the use of offers of the financial market connected with environmental protection, namely 17% for all the respondents and 23% for those owning savings.

However, it can be said further that these are relatively high indications for such a form of activities for the benefit of environmental protection. It can also be added that activity in this field dropped from the 3<sup>rd</sup> place in 1997 to the 4<sup>th</sup> in 2002, ranked behind consumption, education and political activity.

In general, answers related to consumer attitudes towards environmental protection stayed at the same level, even during the worse period in the economy. This fact is even more optimistic when we look at the increase of positive answers of all the respondents between 1997 and 2002. Moreover, this activity was ranked number one by the respondents leaving behind education which was in the leading position in 1997.

Table 5.10. Question 1. Should banks and mutual fund/investment companies offer 'ecological' products, i.e. those which lead to environmental protection (e.g. bank deposits from which pro-ecological enterprises are financed)?

SPECIFICATION	PERCENTAGE OF INDICATIONS IN SURVEY 2002	
	TOTAL (1044)	RESPONDENTS WITH SAVINGS (193)
a) Yes	77.8%	84.2%
b) No	18.3%	14.4%
c) It is hard to say	3.9%	1.4%

The question was asked only in the 2002 survey. The results in Table 5.10. imply that social acceptance of this type of financial offers is crucial. The data is more promising than that which was presented in the Table 5.11. related to the next question and connected with readiness to respect the engagement of financial institutions in environmental protection when choosing an institution in which savings will be kept. To sum up, financial offers connected with environmental protection will find acceptance on the market and definitely they should not create too negative reactions. The results may be acknowledged as optimistic but they should be treated with some caution.

Table 5.11. Question 2. If you were choosing the form of saving your money, would you take into consideration the factor whether a given bank, mutual fund/investment company or the issuer of securities is engaged in environmental protection?

SPECIFICATION	1997		2002	
	TOTAL (1213)	PEOPLE WITH SAVINGS (496)	TOTAL (1044)	PEOPLE WITH SAVINGS (193)
a) Definitely yes	16.1%	23.7%	7.4%	8.3%
b) Rather yes	29.6%	35.6%	22.0%	26.6%
c) Rather not	19.1%	22.1%	29.0%	31.8%
d) Definitely no	8.3%	9.7%	17.8%	21.3%
e) It is hard to say	26.9%	8.8%	23.8%	12.1%

It is worth noticing that in 1997 almost 46% respondents (definitely yes, rather yes), were ready to take into consideration the choice of the financial institution which is engaged in environmental protection, in contrast to about 27% respondents who express the opposite opinion (rather no, definitely no). Among the respondents with savings, this percentage is even higher – over 59% were ready to consider the ecological engagement of institutions, whereas the opposite opinion is expressed by almost 32%.

The question was repeated in 2002. In comparison to 1997, the readiness to consider the engagement of financial institutions in environmental protection drop to 29% for the whole all respondents and to 35% for those owning savings (yes, rather yes). The percentage of individuals who are not willing to pay attention to the engagement to financial institutions in environmental protection when consigning their savings to them has decreased – respectively 45% and 53%. Despite that, it can be said that quite a large group of individuals in 2002 as high as 1/3 respondents appreciates the engagement of financial institutions in environmental protection. The number is hard to be neglected.

The presented data concerning the respondents' of readiness to consider the environment of a financial institution in environmental protection are promising. It is worth noticing, though, that the notion of involvement in environmental protection has not been clearly defined. The respondents' answers should be interpreted as a sign of approval for the involvement of financial institutions in the effort towards environmental protection.

Table 5.12. Question 3. Which form of investing your savings would you choose if they were to finance environmental protection? [It is possible to choose more than one positive answer with evaluating the degree of their importance]; [It refers to those whose answer to question no. 2 was positive i.e. they chose answer a) or b)]

SPECIFICATION	PERCENTAGE OF INDICATIONS IN SURVEY 1997	
	TOTAL (554)	RESPONDENTS WITH SAVINGS (294)
a) Bank deposits	49.5%	48.5%
b) Bonds	17.0%	20.1%
c) Shares	17.3%	14.5%
d) Share certificates (mutual funds shares and investment companies shares)	7.1%	9.7%
e) Others	0.9%	0.8%
f) It is hard to say	8.4%	6.6%

SPECIFICATION	PERCENTAGE OF INDICATIONS IN SURVEY 2002*	
	TOTAL (1044)	RESPONDENTS WITH SAVINGS (193)
a) Bank deposits	32.5%	40.1%
b) Bonds	9.9%	16.0%
c) Shares	5.7%	5.6%
d) Share certificates (mutual fund shares and investment companies shares)	4.5%	6.5%
e) Others	1.7%	2.7%
f) It is hard to say	45.6%	29.3%
g) Refusal to answer	0.1%	–

\* The question was asked to the whole group and only one answer could be chosen.

Relying on the results presented in Table 5.12. it is possible to speak of a high level of trust to bank deposits of the respondents who were ready to consider the involvement of a financial institution in ecology. Almost half of the respondents from the general group and from the group with savings choose bank deposits as an appropriate instrument for collecting funds for the financing of ecological projects. Other financial instruments taken into account by the respondents were bonds and shares. A low esteem for participation in an investment fund is noticed in all the groups of respondents.

The question was repeated in 2002, although in a little different form (see the commentary to the tables). However, some conclusions can be drawn from the answers. In 2002 a similar balance of answers was acquired. Bank deposits are still most popular than bonds, which come next. It is worth noticing, though, that within the group of savings owners participation in an investment fund in 2002 was more common than in shares. The above-mentioned result may be considered promising, bearing in mind the increasing popularity of ecological investment funds.

The above-mentioned distribution of preferences concerning financial instruments appropriate for gaining individual customers' funding for financing ecological projects may be considered an important guideline about the order of introducing individual instruments on the market. Regardless of the content of the question asked about the usefulness of a financial instrument in ecological investing it may be assumed that respondents, in their answers, gave an indication of their own preferences about individual financial instruments, which does not necessarily have to change the picture of a situation when it comes to choosing the right instrument for ecological investments.

Table 5.13. Question 4. Would you tend to invest your money in financial deposits or bank deposits to be used for the purpose of financing environmental protection even if you had less profit from them than from other deposits but at the same level of risk?

SPECIFICATION	1997		2002	
	TOTAL (1213)	RESPONDENTS WITH SAVINGS (496)	TOTAL (1044)	RESPONDENTS WITH SAVINGS (193)
a) Definitely yes	5.9%	9.8%	5.7%	5.7%
b) Rather yes	23.7%	29.9%	19.4%	21.4%

It may be assumed that both in 1997 and in 2002 a relatively large group was ready to invest using an offer connected with the financing of environmental protection even if it generated a lower income than other investments. A decrease of this readiness is visible after five years in 2002. However, the above results can be considered promising. It may also be assumed that there is a group of people in the Polish society which is stable in its size and with firm pro-ecological attitudes as far as their own finances are concerned, especially in the 'definitely yes' category.

Having asked the question about the readiness to give up income it is obvious that it will be appropriate to ask another one about the part of income one would be willing to give up in the process of ecological investing. The question was also asked.

Table 5.14. Question 5. How much lower profit would you accept? [It refers to those whose answer to question no. 5 was positive i.e. they chose answer a) or b)]

SPECIFICATION	1997		2002	
	TOTAL (359)	RESPONDENTS WITH SAVINGS (198)	TOTAL (262)	RESPONDENTS WITH SAVINGS (52)
By 5%	63.4%	65.4%	74.0%	69.2%
By 10%	22.5%	21.2%	12.6%	19.2%
By 20%	2.0%	1.0%	3.4%	5.8%
It is hard to say	12.0%	12.3%	9.9%	5.8%

Commenting on the data from 1997, it is possible to say that the highest tolerance towards resigning from a part of income considers the lowest range, which was foreseeable. The result for all categories of respondents is similar. Over 60% of respondents in each category accepting a resignation from the income in investing with respect to the ecological aspect, are ready to give up on the income, but only up to 5% of it. Over 20% respondents agreeing to resign from part of their income would even be ready to sacrifice 10% income from investments. Only few are ready to resign from a greater part of their income, whereas in 2002 the readiness to resign from a part of income dropped significantly. More respondents than before ready to resign from a part of income would accept a drop of income by only 5%. Also, indications concerning resignation from 10% income dropped quite drastically also in the total number of respondents. However, the readiness for resignation from 20% income increased. This is an intriguing result. Therefore, it is necessary to look at the data collected cautiously.

Table 5.15. Question 6. Do you think your savings are currently used for environmental protection i.e. only the businesses which do not engage in any activities against the environment are financed with this money?\* [People who did not have any savings were excluded]

SPECIFICATION	RESPONDENTS WITH SAVINGS	
	1997 (496)	2002 (193)
a) Yes	11%	6.5%
b) No	55%	35.9%
c) It is hard to say	34%	57.6%

\* Refers to savings owners.

The data presented in Table 5.15. can be interpreted as a test on ecological attitude of financial institutions in customers' opinion. Mainly in banks, as they dominate the Polish financial market. The majority of bank customers were convinced that the financial resources collected were not used by banks for the financing enterprises with respect of environmental protection regulations. The distribution of answers to a question asked was also an indication of a serious negligence of banks in the creating of their own ecological image among customers. The results for 2002 should be assessed as even more pessimistic. The group of people who believe that financial institutions do not use their financial resources properly from the ecological point of view has decreased, yet the number of people favourably estimating bank activities in the same matter has also dropped. It is worth noticing, the percentage of respondents without any opinion in this matter has also increased.

To sum up, the majority of customers do not consider banks, or more generally, financial institutions, trustworthy in ecological matters. It confirms a really small involvement of financial institutions in environmental protection in their customers' opinion.

Financial institutions were assessed as not trustworthy from the ecological point of view. This fact leads to sad reflections. Certainly, the so-called 'ecological image' of financial institutions, including banks, requires hard work from public relations and marketing departments of the banks.

In order to highlight the importance of the data included in Table 5.14. a few most often expressed opinions from 2002 justifying the respondents' opinion on lack of trust for the ecological attitude of financial institutions are given. Thus, 7.1% respondents have never heard of banks caring for the environment; 4.7% respondents think banks and investment funds care only for their own financial results; 2.9% think no improvement in the environment is noticeable; 1.4% do not trust quoting dishonesty and scandals; 1.3% believe that in Poland no attention is paid to environmental protection. Only 1.5% respondents admitted they knew that banks and investment funds financing environmental protection.

Table 5.16. Question 7. Do you know any Polish or foreign industrial, commercial or service companies (including banks, investment funds, share-quoted companies) which particularly foster environmental protection? Name them

SPECIFICATION	1997		2002	
	TOTAL (1213)	RESPONDENTS WITH SAVINGS (496)	TOTAL (1044)	RESPONDENTS WITH SAVINGS (193)
a) Yes	7.8%	13.8%	7.7%	16.0%
b) No	92.2%	86.2%	91.9%	84.0%
c) It is hard to say	-	-	0.4%	-

Analysing the data included in the above table one can say that respondents knew few firms they would be ready to call ecological. This was the case in both 1997 and 2002. The best informed were the respondents from the group with saving. Analysing the data on should pay attention to a crucial problem of society's little knowledge of the of firms involved in environmental protection (assuming the respondents' opinion concerning the positive ecological evaluation of a given firm is justified). The problem concerns establishing the actual state and making an assessment a firm from the ecological point of view (and in future also monitoring of firms chosen ecologically). Eco-rating would certainly be very useful here.

Table 5.17. Question 8. Do you think those who invest their savings in business activities fostering environmental protection should have an opportunity to be tax-exempt?

SPECIFICATION	TOTAL (1213)	RESPONDENTS WITH SAVINGS (496)	OTHERS (717)
a) Yes	84.2%	87.9%	81.6%
b) No	7.6%	8.1%	7.3%
c) It is hard to say	8.2%	4.0%	11.1%

The question was asked in 1997 only. Commenting on the data contained in Table 5.17. it should be stated that the society is ready to accept tax exemption for those investing their savings in companies fostering environmental protection. It is accepted to the highest degree by respondents from the group with savings.

### 6.2.3. GENERAL ASSESSMENT OF SURVEY RESULTS

The research conducted in 1997 and 2002 on a representative sample of Polish society aimed at an introductory reconnaissance of the problem of perceiving by the Polish society the involvement of financial institutions in environmental protection, society's readiness to invest with the ecological criterion taken into account as well as a preliminary formulation of conditions on which such an investment could take place. The results of the survey can be very useful in creating an offer for customers, which would be connected with the financing of environmental protection.

When commenting on the collected results one should be cautious of interpreting them. It should be borne in mind that for all the received answers to each question asked, further detailed researches can be conducted. Keeping this in mind it is possible to say that the research results are very promising.

It turns out that a significant part of respondents accept a possibility to support ecological changes by their own investing with respect to ecological criterion and not limiting themselves to only ecological education, socio-political

activities or to consumption of goods with respect to environmental protection requirements. The overwhelming majority of the respondents also expressed their conviction that financial institutions should offer their customers products and services connected with environmental protection. A crucial part of the respondents admit that when deciding to invest money they are ready to respect the involvement of a given financial institution in environmental protection. Moreover, preferences of the investors respecting the environmental protection criterion concerning financial instruments were defined. Also, a group of investors ready to respect the ecological criterion in the process of investing was identified and a degree of readiness to resign from a part of income in the process of ecological investing in case of such a need was described. Apart from this it was stated that among respondents with savings there is a conviction that their savings generally are not invested with respect to environmental protection in financial institutions which are in charge of the savings. The state of society's knowledge on the subject of companies which can be treated as ecological was defined. A positive opinion of society on the matter of tax releases for investors investing with respect to ecological criterion is also known.

It is worth pointing out that, as a rule, within the group with savings pro-ecological attitudes are more often shown than in the general group.

It is noticeable that the subject of environmental protection within the context of saving in 2002 lost its popularity. It may result from a definitely worse economic situation in 2002 in comparison to 1997. At it is known, the question of environmental protection is more dependent on the state of economy and its social expectations connected with. Unemployment and vague economic perspectives could influence the results of the research. Certainly, it is worth continuing this type of research and repeat it in the years of better economic situation.



## CONCLUSION

The book draws attention to the potential of commercial financial institutions and the mechanisms of the financial market as well as the possibilities to use them in the process of financing the protection of the natural environment.

On the international financial market, it is already possible to observe numerous cases of engagement by financial institutions in the protection of natural environment and creation of their positive ecological image in order to maintain or gain new customers. Specific cases of framing the strategy of development by a financial institution in compliance with the principles of sustainable development are already known. The managers of such institutions apply a wide range of measures in order to confirm the stable and substantial engagement of their institutions in the protection of natural environment and to convince their shareholders, customers and contracting parties. This is an important aim because this conviction influences the market value of their companies. This is one of the reasons why many renowned banks are engaged in ecological investment funds or offer financial products linked to the financing of pro-ecological economic undertakings as well as other initiatives to the benefit of the natural environment. In addition, well-organised ecological commercial banks have appeared on the market.

There are divergent estimates regarding the value of the capitals, which are managed and invested on the international financial market with the allowance for the ecological criterion. Many reliable sources inform about large amounts of money. There are similar divergent estimates regarding the number of commercial financial institutions engaged and the scope of their engagement in environmental protection. The considerations regarding amounts and numbers are tempting; however, now it is possible to assume that the fact that the process of creating a new quality (i.e. respect for natural environment) on the international financial market has already started is the most important phenomenon. Regardless of the initial volume of the market of financial ecological transactions, this process is already irrepressible.

The above-mentioned process of adapting new financial institutions to the functioning in a society, which recognises the requirements of natural environment, is in progress. It can be expected that the process of the adaptation of financial institutions to the functioning in such a society will proceed at a faster rate than it has happened so far. New and perhaps more efficient international initiatives supporting the engagement of financial institutions in environmental protection will probably be undertaken. The scope of application of such instruments as ecological certificates, ecological indexes and eco-rating will become even wider. It can also be expected that the offer of international financial institutions will include a larger number of proposals, which will take the pro-ecological expectations of the clients into consideration.

The new ecological trends on the international financial market are also perceptible in Poland, which is one of the most important emerging markets. The organisation and functioning of Bank Ochrony Środowiska S.A., the biggest ecological bank, is an unquestioned Polish success. Another achievement is the fact that surveys regarding the possibilities to engage society in the financing of environmental protection through the financial market are carried out in Poland.

The use of the financial market as well as its institutions, instruments and mechanisms for co-operation in the protection of natural environment remains an important challenge. The possibility to use the money market and to engage financial institutions in the protection of natural environment is a widely discussed issue and finding possible solutions would be very promising.

Globalisation and international co-operation create additional chances that the concept of using commercial financial institutions for the financing of environmental protection will be elaborated. The process of exchanging ideas, reflections and experience in the area of a wider participation of financial institutions in the implementation of the concept of sustainable development is proceeding. More attention is paid to the growing importance of the issue of the engagement of commercial financial institutions in the protection of the Earth's environment.

## APPENDIX 1

# UNEP STATEMENT BY FINANCIAL INSTITUTIONS ON THE ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

(Revised version, May 1997)

We members of the financial services industry recognize that sustainable development depends upon a positive interaction between economic and social development, and environmental protection, to balance the interests of this and future generations. We further recognize that sustainable development is the collective responsibility of government, business, and individuals. We are committed to working co-operatively with these sectors within the framework of market mechanisms toward common environmental goals.

### **1. Commitment to Sustainable Development**

- 1.1. We regard sustainable development as a fundamental aspect of sound business management.
- 1.2. We believe that sustainable development can best be achieved by allowing markets to work within an appropriate framework of cost-efficient regulations and economic instruments. Governments in all countries have a leadership role in establishing and enforcing long-term common environmental priorities and values.
- 1.3. We regard the financial services sector as an important contributor towards sustainable development, in association with other economic sectors.
- 1.4. We recognize that sustainable development is a corporate commitment and an integral part of our pursuit of good corporate citizenship.

### **2. Environmental Management and Financial Institutions**

- 2.1. We support the precautionary approach to environmental management, which strives to anticipate and prevent potential environmental degradation.

- 2.2. We are committed to complying with local, national, and international environmental regulations applicable to our operations and business services. We will work towards integrating environmental considerations into our operations, asset management, and other business decisions, in all markets.
- 2.3. We recognize that identifying and quantifying environmental risks should be part of the normal process of risk assessment and management, both in domestic and international operations. With regard to our customers, we regard compliance with applicable environmental regulations and the use of sound environmental practices as important factors in demonstrating effective corporate management.
- 2.4. We will endeavor to pursue the best practice in environmental management, including energy efficiency, recycling and waste reduction. We will seek to form business relations with partners, suppliers, and subcontractors who follow similarly high environmental standards.
- 2.5. We intend to update our practices periodically to incorporate relevant developments in environmental management. We encourage the industry to undertake research in these and related areas.
- 2.6. We recognize the need to conduct internal environmental reviews on a periodic basis, and to measure our activities against our environmental goals.
- 2.7. We encourage the financial services sector to develop products and services which will promote environmental protection.

### **3. Public Awareness and Communication**

- 3.1. We recommend that financial institutions develop and publish a statement of their environmental policy and periodically report on the steps they have taken to promote integration of environmental considerations into their operations.
- 3.2. We will share information with customers, as appropriate, so that they may strengthen their own capacity to reduce environmental risk and promote sustainable development.
- 3.3. We will foster openness and dialogue relating to environmental matters with relevant audiences, including shareholders, employees, customers, governments, and the public.
- 3.4. We ask the United Nations Environment Programme (UNEP) to assist the industry to further the principles and goals of this Statement by

---

providing, within its capacity, relevant information relating to sustainable development.

3.5. We will encourage other financial institutions to support this Statement. We are committed to share with them our experiences and knowledge in order to extend best practices.

3.6. We will work with UNEP periodically to review the success in implementing this Statement and will revise it as appropriate.

We, the undersigned, endorse the principles set forth in the above statement and will endeavor to ensure that our policies and business actions promote the consideration of the environment and the sustainable development.

Source: Internet, [www.ubs.com/e/](http://www.ubs.com/e/)

APPENDIX 2

**LIST OF SIGNATORIES  
TO THE UNEP STATEMENT BY FINANCIAL INSTITUTIONS  
ON THE ENVIRONMENT & SUSTAINABLE DEVELOPMENT  
(BY COUNTRY, AS OF MARCH 2003)**

Listed alphabetically by company

Number of Signatories: 201 plus 2 Associate; Members in 48 Countries

**Albania**

American Bank of Albania – Banka Amerikane e Shqiperise

**Andorra**

Banca Internacional D'Andora – Banca Mora Credit Andorra

**Angola**

Banco Africano de Investimentos

Banco Nacional de Angola

**Argentina**

Banco Frances

**Australia**

National Australia Bank

VicSuper Pty. Ltd.

Westpac Banking Corporation

**Austria**

Bank Austria

Bank Fuer Tirol und Vorarlberg Aktiengesellschaft

Bankhaus Carl Spengler & Co. Aktiengesellschaft

Creditanstalt-Bankverein  
Kommunalkredit Austria AG  
Osterreichische Investitionskredit Aktiengesellschaft  
Osterreichische Kommunalkredit Aktiengesellschaft  
Raiffeisen Zentralbank Austria AG

**Brazil**

Banco do Estado de Sao Paulo S.A.  
Banco Nacional de Desenvolvimento Economic e Social  
BBV Brasil

**Bulgaria**

Balkanbank Ltd.

**Canada**

Bank of Montreal  
Canadian Imperial Bank of Commerce  
Desjardins Group/Mouvement des caisses Desjardins  
Export Development Canada  
Royal Bank of Canada  
Scotia Bank (The Bank of Nova Scotia)  
Toronto-Dominion Bank

**Chile**

Banco BHIF

**China**

Bank of Shanghai

**Colombia**

Banco Ganadero

**Cyprus**

Bank of Cyprus

**Denmark**

Den Danske Bank, A/S

**France**

Banque Populaire du Haut-Rhin  
Caisse des depots  
Dexia  
Société Générale Group

**Germany**

Bankhaus Bauer AG  
Bankhaus C.L. Seeliger  
Bankhaus Max Flessa & Co.  
Bankverein Werther AG  
Bayerische Handelsbank AG  
Bayerische Hypo- und Vereinsbank  
Bayerische Landesbank Girozentrale  
Beneficial Bank AG  
Bezirkssparkasse Heidelberg  
BfG Bank AG  
B. Metzler seel. Sohn & Co. KGaA  
Commerzbank AG.  
Conrad Hinrich Donner Bank AG  
DEG – German Investment and Development Company  
Degussa Bank GmbH  
Delbrueck & Co., Privatbankiers  
Deutsche Ausgleichsbank  
Deutsche Bank AG  
Deutsche Bank Saar  
Deutsche Pfandbrief- und Hypothekenbank AG  
Deutsche Postbank AG  
Dresdner Bank AG  
DZ Bank  
Eurohypo AG  
Europdische Hypothekenbank der Deutschen Bank  
Fuerstlich Castell'sche Bank, Credit-Casse  
Hamburgische Landesbank Girozentrale  
Hesse Newman Co Bank (BNL Group)  
HKB Hypotheken- und Kommunalkredit Bank  
Investitionsbank des Landes Brandenburg  
Kreditanstalt fuer Wiederaufbau  
Kreissparkasse Duesseldorf  
Kreissparkasse Goepfingen  
Landesbank Baden-Wuerttemberg  
Landesbank Schleswig-Holstein Girozentrale  
LBS Badische Landesbausparkasse  
Merck Finck & Co.  
M. M. Warburg & Co.  
Sal. Oppenheim jr. & Cie  
SchmidtBank KGaA  
Schroeder Muenchmeyer Hengst AG



Schwaebische Bank AG  
Service Bank GmbH & Co. KG  
Sparkasse Heidelberg  
Sparkasse Leichlingen  
Sparkasse Staufen  
Stadtsparkasse Hannover  
Stadtsparkasse Muenchen  
Stadtsparkasse Wuppertal  
UBS Private Banking Deutschland AG  
UmweltBank AG  
Vereins- und Westbank AG  
Volksbank Siegen-Netphen eG  
WestLB

**Greece**

Commercial Bank of Greece

**Hungary**

Budapest Bank RT.  
National Savings and Commerical Bank Ltd.

**Iceland**

Landsbanki Islands

**India**

Bank of Baroda

**Ireland**

Bank of Ireland Group

**Italy**

Banca Monte dei Paschi di Siena S.p.A  
Credito Italiano  
Istituto Nazionale di Credito Agrario S.p.A.  
SanPaolo IMI S.p.A

**Japan**

Development Bank of Japan  
Good Bankers Co. Ltd.  
Nikko Asset Management Co. Ltd.  
Nikko Cordial Corporation  
Shiga Bank  
Sumitomo Mitsui Banking Corporation

**Jordan**

Arab Bank, PLC  
Export Bank of Africa Ltd.  
Middle East Investment Bank, S.G. Group

**Kenya**

Kenya Commercial Bank Group

**Kuwait**

National Bank of Kuwait SAK

**Mexico**

Banco Nacional de Obras y Servicios Publicos SNC  
BBV Probrusa

**Morocco**

BMCE Bank

**The Netherlands**

Algemene Spaarbank voor Nederland  
FMO – Netherlands Development Finance Company  
Rabobank  
Triodos Bank

**Nigeria**

FSB International Bank plc

**Norway**

Den norske Bank ASA

**Peru**

Banco Continental

**The Philippines**

Bank of Philippine Islands  
Development Bank of the Philippines  
Global Business Bank  
Land Bank of the Philippines  
Metropolitan Bank and Trust Company  
Philippine Bank of Communications (PB Com)  
Planters Development Bank  
Rizal Commercial Banking Corporation

**Poland**

Bank Depozytowo-Kredytowy S.A.  
Bank Gdański S.A.  
Bank Ochrony Środowiska S.A.  
Bank Handlowy w Warszawie S.A.  
Bank Polska Kasa Opieki S.A.  
Bank Przemysłowo-Handlowy S.A.  
Bank Rozwoju Eksportu S.A.  
Bank Śląski S.A.  
Bank Zachodni S.A.  
National Fund for Environmental Protection and Water Management  
Polski Bank Inwestycyjny S.A.  
Pomorski Bank Kredytowy S.A.  
Powszechna Kasa Oszczędności – Bank Państwowy S.A.  
Powszechny Bank Gospodarczy S.A. w Łodzi  
Powszechny Bank Kredytowy S.A.

**Portugal**

Banco Comercial Português  
Banco Portuges do Atlantico S.A.  
IPE Capital, S.A.

**Puerto Rico**

BBV Puerto Rico

**Romania**

Romanian Commercial Bank S.A.

**Russia**

Econatsbank

**Slovenia**

Kreditna banka Maribor d.d.

**Spain**

Banca Catalana S.A.  
Banco Bilbao Vizcaya S.A.  
Banco del Comercio S.A.  
Banesto, Banco Espagnol de Credito  
BBV Privanza, Banco S.A.  
Caixa Cataluyna  
Finanzia, Banca de Credito S.A.  
Santander Central Hispano

**Sweden**

Ekobanken-Din Medlemsbank  
JAK – Jord, Arbete, Kapital  
Nordea AB (Nordic)  
Skandinaviska Enskilda Banken  
Svenska Handelsbanken  
Swedbank AB

**Switzerland**

Bank Sarasin & Cie  
Banque Cantonale de Geneve  
Basellandschaftliche Kantonalbank  
Black Emerald Group  
Credit Suisse Group  
EPS Finance Ltd.  
Luzerner Kantonalbank  
Sustainable Asset Management  
UBS AG  
Zuercher Kantonalbank

**Thailand**

Thai Investment and Securities Co. Ltd

**Turkey**

Finansbank  
Garanti Leasing

**Uganda**

Uganda Commercial Bank

**United Kingdom**

Abbey National Plc.  
Barclays Group Plc.  
CDC Group Plc.  
Cooperative Bank  
Friends Provident Life Office  
HSBC Holdings Plc.  
ISIS Asset Management<sup>2</sup>  
Lloyds TSB Bank  
NatWest Group  
Prudential Plc.  
Royal Bank of Scotland Plc.

---

Standard Chartered Plc.  
Woolwich Plc.

**United States of America**

Calvert Group  
Citigroup  
Community Capital Bank  
EBI Capital Group LLP  
FleetBoston Financial  
Innovest Strategic Value Advisor Inc.  
Republic National Bank

**Venezuela**

Banco Provincial  
Corporacion Andina de Formento

---

**Associate Members**

Coopers & Lybrand, United Kingdom  
Ecosecurities, United Kingdom

Source: Internet, [http://www.unepfi.net/fii/signatories\\_country.htm](http://www.unepfi.net/fii/signatories_country.htm)

## BIBLIOGRAPHY

- Ackermann, J. (1997, May 21). Die strategische Bedeutung der Umweltrisiken bei Kreditvergaben an die Industrie, Gerling Consulting Gruppe Schweiz, Zuerich.
- Annual Report 2001 (2002). Warsaw: Bank Ochrony Środowiska.
- Bank & Umwelt (2002), 30.
- Banking Act from 1997, August 29 with later changes. (2002).
- Basellandschaftliche Kantonalbank. (1996). Geschäftsbericht 1995.
- Boehm-Bezing C.-L. von (1996). Eine nachhaltige Entwicklung. Die Rolle der Banken, seminar 'Umwelt und Finanzdienstleistungen', Koeningswinter 04–05.07.1996.
- Borys, G. (2000). Ryzyko ekologiczne w działalności banku, Warsaw: Biblioteka Menedżera i Bankowca.
- Bouma, J. J. and Jeucken, M. and Klinkers, L. (2001). Sustainable banking. The greening of finance. Sheffield: Greenleaf Publishing in association with Deloitte & Touche.
- Breuer, R. E. speech on the 11<sup>th</sup> Meeting of the Board of Trustees of the Forum for Future Energies, Berlin, February 2001.
- Brill, J. A. and Reder, A. (1993). Investing from the heart. The guide to socially responsible investments and money management (2<sup>nd</sup> ed.). New York: Crown Publishers Inc.
- Bueschgen, H. E. and Everling, O. (1996). Handbuch Rating. Wiesbaden: Gabler Verlag.
- Conrads, J. (1994). Geldanlage mit sozialer Verantwortung. Wiesbaden: Gabler Verlag.
- Credit Suisse Group Environmental Report 2000. (2001). Credit Suisse.
- Credit Suisse Group Sustainability Report 2001. (2002). Credit Suisse.
- Czaja, S. (1996). Rola banków w finansowaniu ochrony środowiska przyrodniczego w Polsce. Poznań: Zeszyty Naukowe Wyższej Szkoły Bankowej. (Vol. 1).
- Deml, M. and Baumgarten, J. and Bobikiewicz, L. (1994). Gruenes Geld. Wien: Service Fachverlag.
- Deml, M. and Gelbrich, J. and Prinz, K. and Weber, J. (1996). Rendite ohne Reue. Frankfurt: Eichborn.
- Deml, M. and Weber, J. (2001). Gruenes Geld. Muenchen: ALTOP.
- Demuth, M. and Bustorf, H. and Thiel, O. (1995). Investmentfonds. Wiesbaden: Gabler Verlag.
- Dispositionen (1996). Oeko-Invest, 124.
- Dispositionen (1997). Oeko-Invest, 133.
- Dow Jones Sustainability Group Index Guide (2000, September).

- DWS Invest Sustainability Leaders (2002). DWS.
- Działalność gospodarcza a ochrona środowiska przyrodniczego. Biuro Badań i Wdrożeń Ekologicznych. Białystok 1992.
- Dziawgo, D. (2001). Ekologiczne fundusze inwestycyjne i asset management, EkoFinanse, 3.
- Dziawgo, L. (1996). Ekologiczne fundusze inwestycyjne na rynku finansowym Republiki Federalnej Niemiec, Ekonomia i Środowisko, 1.
- Dziawgo, L. (1996). The securities market – from socialism to continuous trading and eurobonds. In Z. Wiśniewski (Ed.), The adjustment of Polish companies to the market economy. Toruń: UMK.
- Environmental protection report 2001. (2002). Warsaw: BOŚ.
- Environmental Report 1999/2000. (2001). Credit Suisse Group.
- Environmental Report 2000. (2001). Kreditanstalt fuer Wiederaufbau.
- Environmental Report 2000. Promoting sustainability. (2001). HypoVereinsbank.
- Environmental Reporting of Financial Service Providers. (2001). Verein fuer Umweltmanagement in Banken. Sparkassen und Versicherungen e.V.
- Focus-Money (2002), 10 – special edition.
- Fonds (1994). Oeko-Invest, 56.
- Geschaeftsbericht 1999. (2000). Eurofima.
- Geschaeftsbericht 2000. (2001). Eurofima.
- Geschaeftsbericht 2001. (2002). Eurofima.
- Geschaeftsbericht 2001. (2002). UmweltBank.
- Giuseppi, J. (2001). Assessing the “triple bottom line”. Social and environmental practices in the European banking sector. In J. J. Bouma and M. Jeucken and L. Klinkers. Sustainable banking. The greening of finance. Sheffield: Greenleaf Publishing in association with Deloitte & Touche.
- Gwizdała, J. (1997). Źródła finansowania ochrony środowiska w gospodarce rynkowej Polski. In K. Piotrowska-Marczak and M. Wypych (Eds.), Finanse i bankowość – przekształcenia systemowe. (Vol. I). Łódź: Absolwent.
- Hansen, S. and Zaugg, B. (1994). Umwelt-Chancen und -Risiken im Kreditgeschaef, Schweizer Bank, 10.
- Homolka, W. (1990). Umweltfonds. Bonn: Economica Verlag.
- ING in Society 2001. (2002). ING Group.
- Internet, <http://www.citigroup.com/citigroup/corporate/environment/high.htm>
- Internet: <http://www.csg.ch/ecoreport> 98
- Internet, <http://www.ftse4good.com>, 31.10.2002
- Internet, <http://www.goodmoney.com/sefunds.htm>
- Internet, <http://www.jupiteronline.co.uk/funds/products/ecolfund.htm>
- Internet, [http://www.lgpetro.com.pl.kim\\_jestesmy/dzialania\\_prospoleczne.html](http://www.lgpetro.com.pl.kim_jestesmy/dzialania_prospoleczne.html)
- Internet, <http://www.lgpetro.com.pl/lokaty/ekolokata.html>
- Internet, <http://www.pictet-fund-account.com>
- Internet, [http://www.rbs.co.uk/group\\_info\\_environment/review/influencing.htm](http://www.rbs.co.uk/group_info_environment/review/influencing.htm)
- Internet, <http://www.societyandbusiness.gov.uk/government/activities/dfid/pension.htm>
- Internet, <http://www.swissca.ch>
- Internet, <http://www.zkb.ch/zkb/nachhaltigkeit-en/environmental.html>
- Investing Responsibility. Environmental and Social Research of Zuercher Kantonalbank. (2002, May). Material received from the bank.

- Investment 2002. Daten, Fakten, Entwicklungen (2002). BVI Bundesverband Deutscher Investment- und Vermoegensverwaltungs-Gesellschaften e.V.
- Jaworski, W. L. and Krzyżkiewicz, Z. and Kosiński, Z. (1993). Banki. Rynek, operacje, polityka. (2<sup>nd</sup> ed.). Warsaw: Poltext.
- Juncker, K. (1991, November 29). Umweltschutz – ein Bankgeschaefit, 'Umwelt und Banken', Frankfurt am Main.
- Klein, C. M. (1996). Auch der Umweltschutz bringt attraktive Renditen, Boerse Online, 48.
- Knoerzer, A. (1996). Oekologische Aspekte im Investment Research. Swiss Banking School 137. Bern–Stuttgart–Wien: Verlag Paul Haupt.
- Letters from Ł. W. Bald, vice Director of Detailed Banking Department of the LG Petro Bank S.A. of 15.09.1997 and 12.08.1998 to the author.
- Letter from H. Bendels from Verein fuer Umweltmanagement in Banken, Sparkassen und Versicherungen e.V. of 28.08.1996 to the author.
- Letter from F. Borstelmann and U. Schulte zu Sodingen from Westdeutsche Landesbank of 22.07.2002 to the author.
- Letter from B. Budzyńska-Bartosik, Head of the Retail Clients' Department in Kredyt Bank S.A. of 12.08.2002 and 20.08.2002 to the author.
- Letter from I. Godfrey-Davies, Director of the Group Corporate Relations HSBC of 13.08.2002 to the author.
- Letter from K. Kosiorek, Director of Economics and Financial Department in Zespół Elektrociepłowni Gdańsk S.A. of 06.05.1997 to the author.
- Letter from B. Kozal, Director of Ecological Projects and Municipalities Service Department of 27.11.2001 to the author.
- Letter from R. Pawlicka, Director of Detailed Banking Department in Bank Ochrony Środowiska S.A. of 12.08.2002 to the author.
- Letter from J. Penzenstadler, Director General of the Verband Oesterreichischer Investmentklubs of December 1996 to the author.
- Letter from K. Pietraszkiewicz, Director General of the Union of Polish Banks of 19.09.1995 to the author.
- Letter from I. Schumacher, from Schweizerischer Bankverein of 07.08.1997 to the author.
- Letter from H. S. Schwarz from Zuercher Kantonalbank of 21.01.1997 to the author.
- Letter from K. Swarc, President of the Bank Rozwoju Eksportu SA of January 1997 to the author.
- Łyszczak, M. (1992). Finanse jednostek gospodarczych w nowych warunkach ustrojowych. In B. Poskrobko (Ed.), Działalność gospodarcza a ochrona środowiska przyrodniczego (p. 272). Biuro Badań i Wdrożeń Ekologicznych: Białystok 1992
- Łyszczak, M. (1996). Innowacje finansowe w zakresie ochrony środowiska. (Vol. 732). Wrocław: AE.
- Manski, E. (1992). Oekologische Kriterien der Kreditvergabe, Die Bank, 11.
- Materials obtained from UBS (Lux) Equity Fund – Eco Performance.
- Materials obtained from VfU (2002).
- Materials received from FIFEGA – Forschungsinstitut fuer ethisch-oekologische Geldanlagen, Vienna 2002.
- Materials received from Sisyfos.
- NAI. (1997). Oeko-Invest, 134.



- Oeko-Invest (2001), 236.
- Oeko-Invest (2002), 265.
- Oeko-Invest (2002), 268.
- Opolski, K. and Polkowski, K. (1997). Stosowanie koncepcji zarządzania przez jakość (TQM) w bankach. Bank i Kredyt, 9.
- Our commitment to the environment. Extract from the UBS Environmental report 1998–99. (2000). Switzerland: UBS.
- Pokojska M. (2002). Globalnie etyczny. Gazeta Bankowa, 39.
- Rohe, B. F. (1992). Beim Umweltschutz sachlich – ein Ansatz der Banken. Die Bank, 5.
- Ryall, C. and Riley, S. (1996). Appraisal of the selection criteria used in green investment funds. Business Strategy and the Environment.
- Sandscheper, K. (2002). Strenge Masstaebe. Focus–Money, 10.
- Sarasin Investmentfonds SICAV (2002). Unaudited semi-annual report 30.06.2002.
- Schaltegger, S. and Figge, F. (2001). In J. J. Bouma and M. Jeucken and L. Klinkers. Sustainable banking. The greening of finance. Sheffield: Greenleaf Publishing in association with Deloitte & Touche.
- Sustainability. Oekonomie, Oekologie, gesellschaftliche Vreantwortung. (2000). Frankfurt: Deutsche Bank.
- Sustainability ratings for countries. Comparison of OECD countries. (2002, February). Zuercher Kantonbank.
- Sustainable business conduct – a benchmark for forward-looking companies, Presse release HVB Group, Monachium, 2.08.2002.
- Świadomość ekologiczna Polaków. (2000). EkoBus. Warsaw: Demoskop. The survey was conducted on April 15–18, 2000.
- Triodos Bank NV. (2002). Annual Accounts 2001.
- UBS 2001: Environmental performance in figures. (2002). Material received from the bank.
- Umwelt: ethik 24-Zertifikat. Investment in eine Oekonomie der Nachhaltigkeit. (2002). BNP Paribas.
- Umwelt und Banken, Erklaerung der Banken zu Umwelt und langfristig tragfaehiger Entwicklung. (1992). Deutsche Bank. Conference in Frankfurt 04.05.1992.
- UmweltBank (2002). Internet, <http://www.umweltbank.dee/kurse/html>
- Umweltfonds (1997). Oeko-Invest, 141.
- Umweltprodukte der ZKB. (1996).
- Unaudited semi-annual report 30.06.2002. DWS.
- Ungepruefter Halbjahresbericht Sarasin Investment SICAV, 30.06.1995.
- Uni XXI Century. (2002). Materials obtained from the fund.
- Versicherungen. (1996). Oeko-Invest, 107.
- White, M.A. (1996). Environmental finance: value and risk in an age of ecology. Business Strategy and the Environment.
- Wild, H. (1997, March 21). Ethical obligations. Investors Chronicle.
- Źródła finansowania inwestycji ekologicznych w Polsce. Przewodnik. (1996). Warsaw: Amerykańska Agencja Rozwoju Międzynarodowego.

## LIST OF SCHEMATA

Schema 1.1.	The hierarchy of activities of a financial institution for natural environment protection .....	20
Schema 1.2.	The classification of the financial institution's activity considering the criterion of its connection with economic activity .....	26
Schema 1.3.	The classification of a financial institution's pro-ecological activity considering the criterion of the flow of financial means designed for the financing of environmental protection .....	28
Schema 1.4.	The classification of financial institutions in respect of their engagement in the financing of environmental protection .....	29
Schema 1.5.	The activity of pro-ecological financial institutions in the international dimension – selected aspects .....	32
Schema 1.6.	Direct participation of a bank in the financing of environmental protection according to the criterion of the bank operations and activities (selected examples) .....	34
Schema 1.7.	Creating financial resources within preferential loan programmes	36
Schema 1.8.	Engagement of a bank in natural environment protection .....	40
Schema 1.9.	Investment fund classification .....	42
Schema 1.10.	A general classification of ecological investment funds in respect of the selected criteria .....	46
Schema 2.1.	Environmental management responsibilities at CSG .....	56
Schema 2.2.	Socio- and eco-management in UmweltBank .....	75
Schema 2.3.	Ecological guarantee of the financial product (the idea of designing financial resources for pro-ecological purposes) .....	76
Schema 3.1.	The stages in the development of eco-investment funds and the framing of their functioning .....	85
Schema 4.1.	Schema of Corporate Responsibility Rating .....	122

## LIST OF TABLES

Table 1.1.	Environmental Performance Indicators (EPI) .....	22
Table 2.1.	Environmental Performance Indicators – UBS AG in Switzerland (excl. affiliates), 1997 .....	60
Table 2.2.	‘Best-in-class banks’ according to the Henderson SRI survey .....	63
Table 2.3.	The ecological financial offer of the group ING in 2001 .....	69
Table 2.4.	The loan offer of UmweltBank with an allowance for lower prices for the ecological quality of a credited undertaking (November 2002) .....	74
Table 2.5.	Basic data concerning pro-ecological organisation of office work in UmweltBank in 2000–2001 .....	78
Table 2.6.	Sectoral structure of loan portfolio on December 31, 2001 .....	80
Table 2.7.	Structure of loan portfolio by branch on December 31, 2001 .....	80
Table 2.8.	Structure of entrusted funds by branch on December 31, 2001 (in millions of EUR) .....	80
Table 2.9.	The overview of funds entrusted in the Triodos Group on December 31, 2001 (in millions of EUR) .....	81
Table 3.1.	Ecological investment funds in selected financial markets (30.06.2002) .....	86
Table 3.2.	Eco-investment funds in the United States (30.06.2002) .....	88
Table 3.3.	British ecological investment funds (30.06.2002) .....	90
Table 3.4.	Ecological investment funds in Germany, Austria, Switzerland and Luxembourg (30.06.2002) .....	92
Table 3.5.	Ecological investment funds in the Netherland (30.06.2002) .....	95
Table 3.6.	Ecological investment funds in France (30.06.2002) .....	95
Table 3.7.	Eco-investment funds in Japan (19.11.2002) .....	97
Table 3.8.	Eco-ethical investment funds in selected countries (2000) .....	97
Table 3.9.	Largest ten positions in portfolio on November 20, 2002 .....	100
Table 3.10.	Portfolio structure of ValueSar Equity on June 30, 2002 (in EUR) ...	101
Table 3.11.	Portfolio structure of Sarasin OekoSar on June 30, 2002 (in EUR) ..	104
Table 3.12.	Top ten holdings of Jupiter Ecology Fund (01.08.2002) .....	109
Table 3.13.	Top ten positions in the portfolio of Swissca Green Invest (30.11.2002) .....	109
Table 3.14.	Portfolio structure of DWS Invest Sustainability Leaders on June 30, 2002 .....	111
Table 3.15.	Top ten position in portfolio of DWS Invest Sustainability Leaders on June 30, 2002 .....	112

Table 4.1.	Global and Regional Indexes (2000) .....	117
Table 4.2.	FTSE4Good Index Group .....	118
Table 4.3.	Issuers included in NAI index (on 30.06.2002) .....	119
Table 4.4.	Companies in UBAl index .....	120
Table 4.5.	Selected government bond issues recognised as pro-ecological .....	124
Table 4.6.	Austrian eco-bonds (Umweltanleihen) in 1996–2001 .....	125
Table 4.7.	Participation of Eurofima's share capital on December 31, 2001 .....	127
Table 4.8.	The number of Eurofima's euro-bonds being in turnover on the international financial market in particular currencies in 1999–2001 on December 31 .....	128
Table 4.9.	Rating of the member states parties of Eurofima on December 31, 2001 .....	130
Table 4.10.	Initial portfolio of shares for the certificate "Umwelt: ethik 24-Zertifikat" .....	132
Table 5.1.	Shares in subsidiaries with associated entities and other entities (2001) .....	140
Table 5.2.	Structure of loan outstanding by segment .....	141
Table 5.3.	Structure of loan outstanding by type .....	142
Table 5.4.	The amounts of loans granted by the Bank Ochrony Środowiska in co-operation with donors in 2000 .....	143
Table 5.5.	Environmental benefits arising from completed projects BOŚ S.A. financed in 1991–2001 .....	144
Table 5.6.	Structure of deposits by segments .....	145
Table 5.7.	The investment portfolio of the Uni XXI Century fund (31.12.2002) .....	151
Table 5.8.	List of companies whose shares are quoted at the Warsaw Stock Exchange, divided into particular markets .....	156
Table 5.9.	Question 1A. Citizens can get involved in environmental protection in many ways. Which of the following ways do you consider most appropriate? .....	160
Table 5.10.	Question 1. Should banks and mutual fund/investment companies offer 'ecological' products, i.e. those which lead to environmental protection (e.g. bank deposits from which pro-ecological enterprises are financed)? .....	162
Table 5.11.	Question 2. If you were choosing the form of saving your money, would you take into consideration the factor whether a given bank, mutual fund/investment company or the issuer of securities is engaged in environmental protection? .....	162
Table 5.12.	Question 3. Which form of investing your savings would you choose if they were to finance environmental protection? .....	163
Table 5.13.	Question 4. Would you tend to invest your money in financial deposits or bank deposits to be used for the purpose of financing environmental protection even if you had less profit from them than from other deposits but at the same level of risk? .....	164
Table 5.14.	Question 5. How much lower profit would you accept? .....	165
Table 5.15.	Question 6. Do you think your savings are currently used for environmental protection i.e. only the businesses which do not engage in any activities against the environment are financed with this money? .....	165
Table 5.16.	Question 7. Do you know any Polish or foreign industrial, commercial or service companies (including banks, investment	

---

	funds, share-quoted companies) which particularly foster environmental protection? Name them .....	166
Table 5.17.	Question 8. Do you think those who invest their savings in business activities fostering environmental protection should have an opportunity to be tax-exempt? .....	167

## LIST OF CHARTS

Chart 2.1.	The structure of the loan portfolio of UmweltBank in 2001 according to the values of loans given .....	77
Chart 2.2.	Reduction of carbon dioxide emissions thanks to the functioning of UmweltBank in 1997–2001 .....	77
Chart 3.1.	Sectoral structure of the Pictet Global Water Fund portfolio on November 20, 2002 .....	99
Chart 3.2.	Geographical structure of the portfolio of Pictet Global Water Fund on November 20, 2002 .....	100
Chart 3.3.	Geographical allocation of equities and similar investments on June 30, 2002 .....	103
Chart 3.4.	Sectoral structure of the portfolio of Sarasin ValueSar Equity on June 30, 2002 .....	103
Chart 3.5.	Geographical allocation of equities and similar investments on Sarasin OekoSar on June 30, 2002 .....	106
Chart 3.6.	Sectoral structure of the portfolio of equities and similar investments in Sarasin OekoSar on June 30, 2002 .....	107
Chart 3.7.	Geographical allocation of bonds in Sarasin OekoSar on June 30, 2002 .....	107
Chart 3.8.	Currency allocation of investments on Sarasin OekoSar on June 30, 2002 .....	108
Chart 3.9.	Geographical allocation of the portfolio in Swissca Green Invest on November 30, 2002 .....	110
Chart 3.10.	Sectoral structure of the portfolio of Swissca Green Invest on November 30, 2002 .....	110
Chart 3.11.	Geographical allocation of shares in DWS Invest Sustainability Leaders on June 30, 2002 .....	113
Chart 4.1.	Currency structure of Eurofima's debts in 31.12.2001 .....	129
Chart 4.2.	Geographical structure of "Umwelt: ethik 24-Zertifikat" shares .....	133
Chart 4.3.	Industry structure of the share set "Umwelt: ethik 24-Zertifikat" .....	134
Chart 5.1.	A model composition of the Uni XXI Century fund's portfolio .....	150
Chart 5.2.	Top ten holdings on June 30, 2002 .....	151
Chart 5.3.	The monetary structure of the Uni XXI Century fund's portfolio (30.06.2002) .....	154