

New direction line of Sustainable development and marketing in green banking

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Abstract

“There are two main reasons why today’s money and financial institution system is a cause of unsustainable development: first, it systematically transfers resources from poor to rich; second, the money-must-growth paradigm drives production to ever higher levels.”(James Robertson 1999)

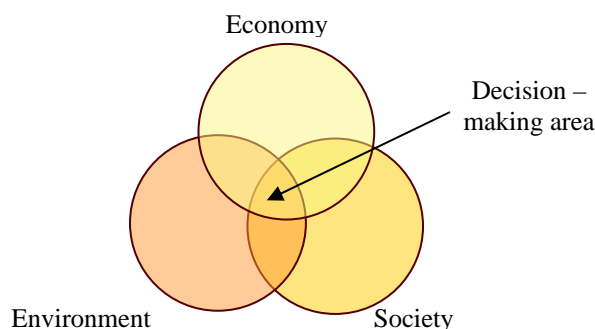
Since the industrial revolution and the appearance of overproduction, degradation of environment has been oversized. Companies and also societies have not care about the negative effects on environment and nature; they have focused only on generating profit and revenue. Nowadays, they have to recognize that the carrying capacity of our Planet is finite, therefore they should not overuse nature. In the last decade, a lot of publications came to light, dealing with the social and environmental responsibility of firms. Contrarily, environmental awareness had developed more slowly in banks and financial institutions than in the manufacturing sector, because these institutions generally consider themselves to be a relative environmentally friendly industry. The goal of this paper is to identify the role of financial institutions in achieving sustainable development. The authors also attempt to show, why and how can this sector become the promoter of sustainability.

Keywords: Environmental Awareness, Financial institutions, Green banking, Green marketing

Introduction

Sustainable development says that we must use our environment on the way we do not obviate the consumption of the next generations (Közös Jövönk, 1998). For that reason, sustainable development means a type of development, which in the same time is environmentally compatible, economically realistic and socially responsible. Environmental awareness requires from economic actors to pay stressed attention to the environmental dimension in their operation, and to analyze ethical and moral considerations too. Namely, society and organizations have to replace their traditional bottom line approach with a triple bottom line view, i.e. they have to make decisions at the intersection of three – economic, social, environmental - dimensions.

Figure 1. The flare of influential factors



In the relevant literature, a number of researches, publications and articles deal with the factors of environmental awareness, the greening process of firms. They suggest the importance of innovation and knowledge management (e.g. Porter – van der Linde 1995; Kemp – Arundel 1998; Hemmelskamp 1997; Gerlach 2003; Hart 1997; Hawken - Lovins - Lovins 1999, etc.), and the significance of eco-management and audit schemes (EMAS, ISO9014). These theoretical proposals have partly been integrated to the operation of companies. In the financial sector the situation is starting to change now. Financial institutions recognize that environment brings both risks and opportunities for them.

Role of banking sector in achieving sustainability

There are two important functions of banking sector by which they can influence the participants of the economy:

- Banks collect the savings from households and firms, and use these savings for further investments and lending activities. Therefore, the banking sector can be seen as a special market, where supply and demand can meet. In this process banks have an intermediary role.
- Banks manage and diversify risks in connection with their operation. Major goal is to minimize the probability of risks. (Risk management represents an important driving force for the greening process).

The contribution of financial instruments in reaching sustainable development is enormous, because in the one hand they are intermediaries between people and organizations with shortages and surplus of capital; R&D activities; supply and demand of insurance; and they manage the risks of their partners and their projects. On the other hand operation and activities of financial institutions have an important effect on the environment (Peeters 2003).

The environmental impacts of financial institutions can be divided to internal and external issues. The environmental effects of internal activities are relative low in comparison to the other sectors of the economy. However, if we consider the size of financial sector, it is clear that the utilization of water, energy, paper, and the amount of waste generated during operation should not been neglected.

Generally, the external activities of financial institutions do not harm the environment. Products and services of banks, insurers, venture capital, private equity firms and asset management companies do not have direct negative effects on the environment. On the other hand because of their investments,

lending, risk management activities, they indirectly take share in the pollution of environment. Unfortunately, it is hard to measure the effects of both the internal and the external activities, although there have been some attempts; the methodology needs to be improved (Kék – Nemecksikné, – Tóth 1998).

There are also some internal and external trends, driving forces, which can motivate the greening process of financial institutions. Figure 2. summarize these factors.

Figure 2.: Driving forces of the greening processes in the financial world



Source: own model based on IFC (2002)

Internal driving forces derive from employees, shareholders and directors of institutions, whose environmental awareness, attitudes, and individual goals are decisive. Economic goals and the reputation of financial institutions are also motivate them to go a step further and contribute to sustainability, because in the one hand new green products and services can provide new markets and higher market share; on the other hand they can reduce the threats of liability risks. External factors are resulted from governments, competitors, customers, NGO's and society. Regulations; requirements and pressures from NGO's and society; the environmental awareness of customers, and the behaviour of competitors play the main role. Consequently, positive and negative synergies are gained.

Greening of Financial Institutions

By the term of green financial institutions, we mean those financial organisations whose internal and external operation (including daily activities, strategic goals, investment policies, products and services, risk management), decision – making processes and the selection processes of stakeholder companies respect the elements and state of nature, and the interests of society. We define several financial institutions, whose role is more and more important in ecological aspect: banks, insurance companies, asset managers, venture capital and private equity companies (Pearce – Ekins 2001).

Financial questions became a key factor in reaching sustainable development. Financial institutions can decide about a lot of projects, they can influence the extension of green investments because their financial power allows them to support environmental and socially responsible behaviour.

In the point of view financing, banks and insurers can be the main driver, and most active partners in pursuing sustainable development. In the last decade many banks started to publish environmental reports and avoid predatory lending practices. They offer new services: environmental advisory services, sustainable development funds, and environmental credit cards. Table 1 shows some examples for green financial products and services.

We differentiate the following potential financial providers of green services.

Insurance and reinsurance companies have to face environmental risks firstly. Through their active and passive risk management tools, they have a key role in adopting sustainable development. They are dealing with the problems from natural catastrophes; global climate changes therefore environmental liability insurance is a significant industry nowadays.

Reinsurance companies – like Munich Re and Swiss Re – are large capital based firms, which are pooling risks. They newly offer sustainability-related products and services: publishing environmental sustainability reports; receive environmental audits, have special law staff in regarding to liability, climate change, genetically modified plants, etc. They offer special solutions for greenhouse gas emissions; develop green certificates; and renewable energy products.

Private equity firms financing larger, established companies, and projects to avoid many risks. They provide long-term equity, so that way they can influence, which project is to be completed.

Table 1.: Green financial products and services

Type of Financial Institutions	Examples
Banks	-UBS has a global environmental risk policy -South-Africa's Standard Bank will provide carbon-finance and trading services
Insurers	- AIA Thailand gives reduced premiums to businesses that educate employees on HIV - Swiss Re offers solutions for greenhouse gas emissions reductions
Private Equity Companies Venture Capital Companies	- TerraCapital invests in commercially viable and sustainable biodiversity enterprises in Latin-America - IFC's Environmental Opportunities Facility invests in small – scale environmentally friendly projects in emerging markets
Asset management	- 55 developed country and indigenous SRI (Socially Responsible Investors) funds with a combined 2,7 billions dollar in assets contain emerging market holdings

Source: IFC (2003): Sustainability and Financial Institutions

Venture capital firms are similar to private equity companies, but they invest in small, young companies (most of the time startups). It is riskier way of financing (but the expected revenue is higher).

Asset management companies – mutual fund companies and institutional investors – are playing key role by operating of public companies, through their long-term, conservative investment strategy. They offer new products to socially responsible investors.

The greening process of these institutions is a multi-phased developing strategy. The first step, in terms of the single-loop learning model, is the appearance of a simple adaptation. The second step is the presence of the double-loop-learning-model, which articulates the emergence of individual covenants. For the third step these covenants become institutional missions, which lead to the birth of a learning organisation (Pataki 1999; Szakály 2000).

Green banking as the outcome of service innovation

The theoretical basis of innovation can be tied to J. A. Schumpeter, who suggests that the essence of innovation is the new combination of production factors, and stresses that this type of aspiration is the typical characteristic of entrepreneurs (Pakucs 1999).

The Schumpeterian „creative destruction” consists of five different categories:

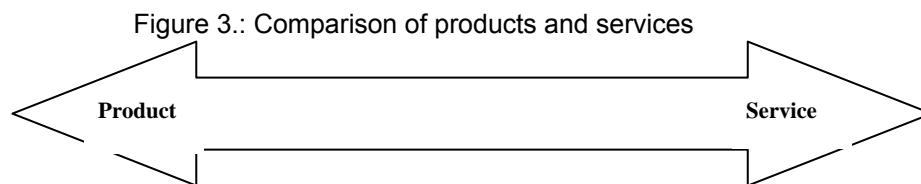
- New – still unknown – production of products and services in an improved quality;
- Introduction of new, still unknown production method(s) in the examined branch, which is not certainly based on new scientific invention and beside these it can be a new commercial technique;
- New placement procedure on a market where the given product and /or service was not yet introduced;
- Opening new purchasing sources of raw materials or semi-finished products whether it existed before or not;
- Foundation or closing down of a new organisation (Schumpeter 1980).

Naturally, different types of definitions exist for innovation. In point of fact, every sphere of science deals with innovation, attempts to take into their researches, and to establish something new about it. In this sense, innovation management has become a multidisciplinary phenomenon. Similarly, the concept of innovation process has been changed significantly. From the simple linear model – whose two end points are the R&D activity and the outputs – studies get to the system approached model of innovation, in which the different activities and the operating environment of firms are not isolated, rather they are in a close relationship (Inzelt 1998). In the latest models, the cooperation of firms, knowledge and innovation transfers between firms and research institutions and universities have a main role. These models stress the interaction between innovative activities and spatial structure of economy. It is well known that innovation is one of the most important elements of economic growth, competitiveness and productivity.

Generally, we distinguish the under mentioned innovation categories according to their type:

- Product innovation: novelty in the products and or services of the firm (naturally this category covers new and modified products and/or services.);
- Process innovation: novelty in connection with the production and distribution processes of products and/or services;
- Social innovation: corporate novelty in connection with the production processes of products and/or services (special regard to human and management conditions), social changes;
- Structural innovation: novelty related to input and/or output markets, and outside (concurrency, customers, suppliers, partners, strategic alliances etc.) connections (Szakály 2002; Thom 1992, 8.p.).

As for the banking sector, these innovation categories can be transformed for banking and near banking services. First, we have to make some differences between products and services, which are characterised in Figure 3.



Distinctive Characteristics	<ul style="list-style-type: none"> • Tangible • Output can be kept in stock • Easily measurable quality • Long reaction time • testable 	<ul style="list-style-type: none"> • Intangible • Output cannot be kept in stock • Hardly measurable quality • Short reaction time • Not testable (based on trust)
Factors of divergence	<ul style="list-style-type: none"> • Weak relationships with consumers • Wide opportunities • Capital intensive 	<ul style="list-style-type: none"> • Strong relationships with consumers • Narrow opportunities • Labour intensive • Regional, national, international markets • Heterogeneity
New dimensions	<ul style="list-style-type: none"> • New quality dimensions • Mass customization 	<ul style="list-style-type: none"> • Personalization • Customers became co-developers

Source: Own model based on Krajevsky-Ritzman (1996)

The comparison of products and services can be divided into three categories. The category of distinctive characteristics is composed of the basic elements that are essential and quasi stable differences. The second group of factors can not be easily separated, because the observable convergence. New tendencies such as globalisation, integration, disintermediation, and deregulation gave birth to new dimensions.

In the service sector the aforementioned innovation categories also exist, but they consist of sector specific elements. Service innovations do not require much R&D activities, often emerge as the result of co-production between the service provider and its client, they can be easily imitated. Additionally,

service innovations are not limited to changes in the service characteristics; they capture changes in the delivery process and client interface (OECD 2000).

In order to explain the greening process in financial services we have to highlight the basis of environmental (green) innovation. Green innovations can be defined in two ways. First, they can be defined with reference to the intention of innovators. In this case, the definition of environmental innovations covers only such innovations, which are developed by the aim of environmental protection (Markusson – Olofsdotter 1999). Using this intention – based definition one can miss those innovations that can contribute to the greener production. The second issue is based on the environmental performance of innovations. According to this, the term of environmental innovations includes new and/or modified processes, techniques, technologies, practices, systems, products and services by which the pollution of environment can be reduced and/or prevented (Kemp – Arundel 1998; Clayton – Spinardi – Williams 1999). In the sense of the latter definition, environmental innovations can be generated by and without the special purpose of environmental protection. Traditional business goals like profitability, quality management and cost reduction can be driving forces too. Therefore, corporate benefits gained by environmental innovations can be combined with environmental benefits.

The operation and the relation with their stakeholders, banks have high influence on the economy. According to the new dimensions in the above detailed comparison, banking activities are innovation-driven. In the financial service sector green innovations can be realized different ways simultaneously.

- Products and services of banks do not pollute the environment directly, but it is widely recognized that the indirect ecological impacts of funding enterprises and projects have to be controlled, managed and followed with attention. There are already some examples for green product/service innovation in financial sphere such as investing in fuel cell companies (utilization of biomass and other renewable energy resources, hydrogen industry, etc.), supporting ecotourism and offering SME loans.
- Green process innovation for banks means that they modify their internal operations, introduce new procedures, methods which serve the idea of sustainability. For example Banco Itaú, one of the largest Brazil banks, use 2200 tons of recycled shredded paper per year (Eco:Fact 2002).
- New methods, principles in production processes and management systems, like the invention and introduction of environmental management systems (EMAS, ISO14000), best practices, and employee’s education can represent green social innovation.
- There are some examples for green structural innovation too, it is a tendency that international development banks from developed countries emerge in the market of developing countries and support environmental policies, activities there (see Table 2).

Table 2: Environmental policies in lending in developing and emerging countries

Institution \ Region	Central and South America	Africa	Central and Eastern Europe	Asia
International development banks	Dark Grey	Dark Grey	Dark Grey	Dark Grey
Subsidiaries of international banks	Medium Grey	Medium Grey	Medium Grey	Medium Grey
Domestic banks	Light Grey	Light Grey	Light Grey	Light Grey
MFI (microfinance institutions)	Light Grey	Light Grey	Light Grey	Light Grey

Scale: the colour of each cell indicates the estimated average application (low, moderate or high) of environmental policies in lending operations in each type of financial institution. The shading shows the degree of confidence about the results (positive or limited evidence):

	low	moderate	high
Positive evidence	Light Grey	Medium Grey	Dark Grey
Limited evidence	Light Grey	Medium Grey	Dark Grey

This table is based on estimates. Differences within each region can be significant. Source: Ecofact AG, 2002, own research

Green marketing issues for the banking sector

In the relevant literature, many terms exist - such as environmental marketing (Coddington 1993), ecological marketing (Fisk 1974; Henion és Kinnear 1976), sustainable marketing (Fuller 1999), green marketing (Peattie 1995; Ottman 1992), greener marketing (Charter és Polonsky 1999) - for explain the relationship between the natural environment, the marketing discipline and the public policy (Prakash 2002).

In this paper, green marketing is used to express a responsible corporate marketing activity which regards environmental issues as the opportunities for further developing and growing, and validates them in all operation areas. In other words, green marketing consists of all activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants, while integrating all short- and long-term, direct and indirect environmental implications of these exchanges, and minimising the negative environmental implications of these exchanges (Polonsky 2000).

According to this, the main goal of green marketing is to transform environmental benefits to competitive advantages through the creation and selling of new, greener products and services. Green marketing also helps corporations to find new ways and methods for satisfying existing market necessities or generating them, to achieve leader position in the competition, and to increase environmental awareness inside and outside of the given corporation. In order to reach efficient and effective operation, corporate marketing must be chime in with corporate strategy. The first basic step of the marketing planning process for green marketing is to identify how environmental issues affect the internal and external business environments. The second step is to evaluate the impact of these forces on the corporate marketing behaviour. In theory successful marketing activity requires bringing the right product to the right place in right time using the right promotion. Changes in behaviour are considered and integrated into strategy and results in the modification of the marketing mix. The last step is monitoring, that is after the modification of marketing mix variables the results must be monitored to ensure that the desired results are achieved. The following table (Table 3) shows the elements and orientations of the green marketing mix.

Table 3: Green marketing-mix

Promotion							
Place	Taking back of used products	Explanation of ecological problems	Information about green products/ services	Environmentally conscious sales promotion	Environmentally friendly PR activity	Information about the environmental effects of corporate performance	Ecological price formulation
	Minimize, prevent the negative environmental effects through the activities of place policy		Environmentally conscious market segment			Price determination In the light of environmental pollution and resource limitation	
	Creation of resource spare sales organizations	Minimize the negative environmental effects, waste and pollution of production processes	Usage of not limited raw materials	Insure the usage of environmentally friendly products by the help of service department	Less raw material, recyclable	Compensate price determination for environmentally friendly products	
Product							
Price							

Source: Szolnoki Gyözőné Karkus Mária: A zöld marketing és gazdasági környezete, Mezőgazda Könyvkiadó, Budapest, 1999, p.140.

Greening the marketing and the marketing mix can be relative easily defined and understood in the manufacturing sector. Firms can green their products/services by introducing new environmentally friendly products / product lines into established categories, by developing new products/services in new categories, by modifying existing product/services attributes and made them greener, or by developing less harmful production processes. Green products/services can be cheaper produced than traditional ones; but it is difficult to forecast how much extra consumers will be willing to pay for them, special price policy is needed. Green promotion policy can stimulate consumer demand for

green products/services, can enhance corporate image. Greening of place policy can involve the consumer market, or can focus on the physical distribution process (Orosdy, 2005).

Determining green marketing for the banking sector is not an easy task. In the banking area marketing activity should be examined in a different way as in the manufacturing sector. In the latter case, generally all parts of the 4P are in balance, while in the prior case promotion and product policy have significantly major role (which comes from the distinctive characteristics of products and services; figure 3.). Although we can not ignore the other two: place and price! It is a tendency that banks should offer a wide range of products and services if they would like to survive the hard competition. Providing green products and/or services can contribute to the success of the differentiation strategy. Nowadays, promotion policy is one of the ways for banks to create positive corporate image, to enhance revenues, and to gain new partnerships. For green banks, every instruments of the communication have to stress the environmentally friendly character of their products and/or services, and emphasize that their operation do not harm the natural environment. Additionally, this kind of promotion policy has two further – interaction and educator - function towards society. Although green marketing can be the source of many possibility, risks should not been neglected.

On the other side, banks have to think about the retail margins on green services. They depend upon a variety of factors, including:

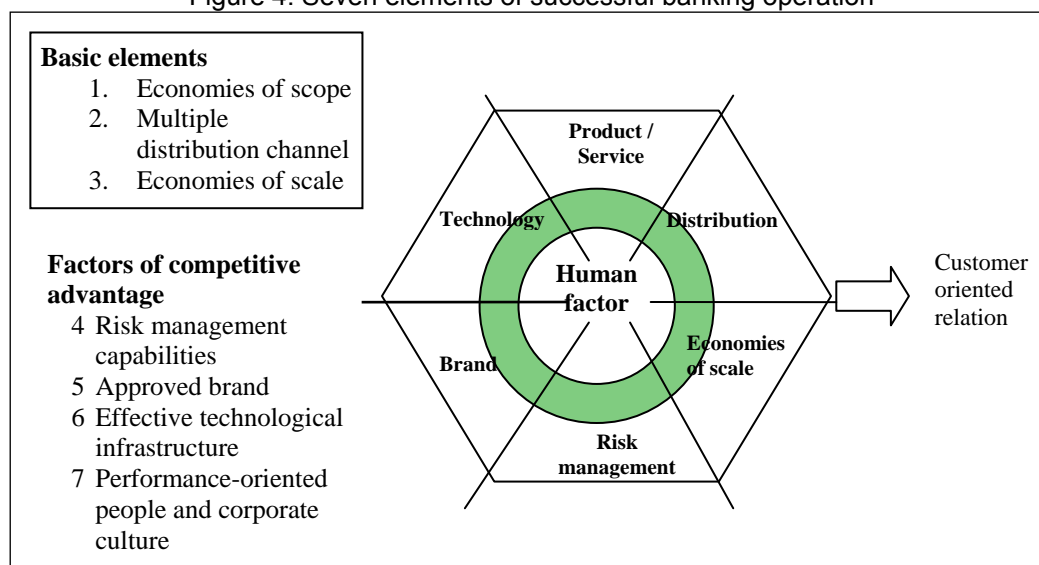
- customer acquisition cost,
- resource availability,
- wholesale cost,
- concentration of customer base,
- competitive market rules.

Green services can offer higher margins, but wholesale costs are higher too.

Future tendency, requirements

The relationships and common activities between the actors will determine the success of the green financial products and services. We figure the relationship between the main influential forces (see figure 4)

Figure 4: Seven elements of successful banking operation



Source: Own model based on Kist (2001)

In the figure elements determine the future success of the banking operation. Banks have to consider economies of scope, economies of scale, they should build up multiple distribution channel. In order to reach competitive advantages, banks should develop their technological infrastructure, create and enhance their risk management capabilities, generate strong brands, and found the performance oriented corporate culture. On the way of the greening process, banks should transform these fundamental dimensions to serve the idea of sustainable development (green area).

Additionally, environmental awareness of the banking sector can create benefits for society by putting pressure on corporate partner. We think it should be an essential requirement to reach a more integrated and sustainable financial system, where new mechanisms enhance global financial security and the three fundament of sustainability. Furthermore, international researches, co-operations, pilot studies, examples for good practices are needed for long-term value creating in environmental quality.

Literature

- 1) Charter, M. – Polonsky, M. J. (1999): Greener Marketing: a Global Perspective on Greening Marketing Practice, 2nd, Greenleaf, Sheffield
- 2) Clayton, A. – Spinardi, G. – Williams, R. et al. (1999): Policies for Cleaner Technology, A New Agenda for Government and Industry, Earthscan: London
- 3) Coddington, W. (1993): Environmental Marketing: Positive Strategies for Reaching the Green Consumer, McGraw-Hill, New York
- 4) ECO:FACT (2002): Towards green banking practices in the South, www.ecofact.ch
- 5) Fuller, D. (1999): Sustainable Marketing: Managerial – Ecological Issues, Sage, Thousand Oaks
- 6) Gerlach, A. (2003): Sustainable Entrepreneurship and Innovation, Conference Proceedings of Corporate Social Responsibility and Environmental Management, Leeds, <http://andersabrahamsson.typepad.com/Sustainable%20Entrepreneurship%20and%20Innovation.pdf>
- 7) Hart, S. (1997): Beyond Greening: Strategies for a Sustainable World; Harvard Business Review, January - February, pp. 67-76.
- 8) Hawken, P. – Lovins, A. B. – Lovins, L. H.(2000): Natural Capitalism, The Next Industrial Revolution, Earthscan Publications Ltd., London
- 9) Hemmelskamp, J. (1997): Environmental Policy Instruments and their Effects on Innovation, European Planning Studies, Vol.2., pp.177-194.
- 10) Henion, K. E. – Kinnear, T.C. (1976): Ecological Marketing, American Marketing Association, Chicago
- 11) IFC (2003): Sustainability and Financial Institutions, www.ifc.org
- 12) Inzelt, A. (1998): Bevezetés az innováció - menedzsmentbe, Műszaki Könyvkiadó: Budapest
- 13) Lee, B.W. – Green, K. (1994): Towards Commercial and Environmental Excellence: A Green Portfolio Matrix, Business Strategy and the Environment, Vol.3; No. 3; pp. 1-9.
- 14) Kemp, R. – Arundel, A. (1998): Survey Indicators For Environmental Innovation, IDEA paper series, 8/1998, Step Group Norway, <http://www.sol.no/step/IDEA>
- 15) Kék, M. – Nemecksikné, ZS. Á. – Tóth, G. (1998): Zöldülő bankok, Bankszemle, 1998/1-2; pp. 73-88.
- 16) Kist, E. (2001): Integrated Financial Services – A Framework for Success: Synergies in Insurance, Banking and Asset Management. The Geneva Papers on Risk and Insurance Vol.26. No.3, pp. 311-322.
- 17) Közös Jövők (1998): Környezet és Fejlődés Világbizottság jelentése, Mezőgazdasági Kiadó: Budapest
- 18) Krajevsky, L.J. – Ritzman, L.P. (1996): Operations Management, Strategy an Analysis. Addison-Wesley Publications, Fourth edition
- 19) Markusson, N. – Olofsdotter, A. (2001): Drivers for Environmental Innovations, VINNOVA: Stockholm
- 20) OECD (2000): Promoting innovation and growth in services, Organisation for Economic Cooperation and Development: Paris.
- 21) Orosdy, B. (2005): Az ökomarketing három szintje, Pécsi Tudományegyetem, Közgazdaságtudományi Kar, Évkönyv 2004-2005, IV. kötet, pp. 325-336.
- 22) Ottman, J. (1992): Greener Marketing, NTC, Lincolnwood, Il.
- 23) Pakucs, J. (1999): Az innovációs folyamat finanszírozása, Vezetéstudomány, 1999/14
- 24) Pataki, Gy.(1999): A vállalatok „zöldülése”, mint tanulási folyamat, Kovász, 1999. I.-II., pp. 69-97.
- 25) Pattie, K. (1995): Environmental Marketing, Pitman Publishing, London
- 26) Pearce, B. – Ekins, P. (2001): International Financial Institutions; Enhancing their role in promoting sustainable development, Report for a Royal Institute of International Affaires, Forum for the Future workshop held on behalf of DEFRA,

- 27) Peeters, H. (2003): Sustainable Development and the Role of the Financial World, Environment, Development and Sustainability, 5; pp. 197-230.
- 28) Polonsky, M. J. (2000): Green marketing,
- 29) Porter, M., E. – van der Linde, C. (1995): Green and competitive, Harvard Business Review, 09-10., pp. 120-134.
- 30) Prakash, A. (2002): Green Marketing, Public Policy and Managerial Strategies, Business Strategy and the Environment, Vol.11, pp. 285-297.
- 31) Robertson, J. (1999): The New Economics of Sustainable Development, A Report for the European Commission
- 32) Saraiva, P. (2004): New Development and Opportunities on Sustainable Banking/Investments
- 33) Schumpeter, J. A. (1980): A gazdasági fejlődés elmélete, KJK, Budapest
- 34) Szakály, D. (2002): Innováció és technológiamenedzsment I. – II., Bíbor Kiadó, Miskolc
- 35) Szolnoki Győzőné (1999): A zöld marketing és gazdasági környezete, Mezőgazda Kiadó, Budapest
- 36) Thom, N. (1992): Innovationsmanagement, Schweizerische Volksbank: Bern