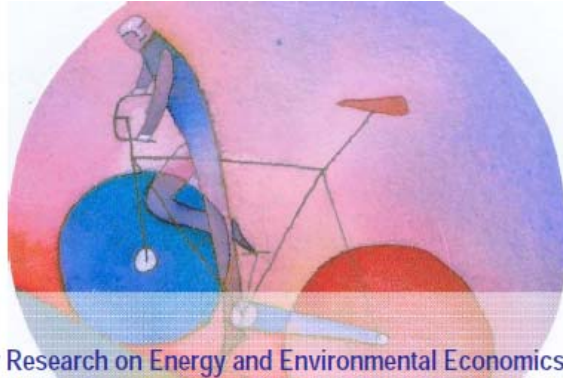


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ENVIRONMENTAL STRATEGIES BY THE BANKING SECTOR: CASE STUDIES IN THE ITALIAN CONTEXT

by

Fabio Iraldo*, Michela Melis** and Alessia Sabbatino***

Abstract

Up to today, researches and studies have been focused, from time to time, on the different financial tools through which a bank may affect the environment, with the aim of understanding the drivers and barriers that can influence their adoption and successful implementation.

The paper aims at providing a more in-depth analysis of the ways in which a bank sets up and implements these different available tools, when it comes to deciding the strategies and the objectives for the business channels on which it focuses. By means of a case-study methodological approach, the experiences of three Italian banks are analysed, with the ultimate goal of identifying a clear-cut framework of conditions that have to be ensured in order to guarantee the effectiveness of banks' environmental strategies.

Findings provide evidence that, in order to be effective, these strategies should rely on well-designed specific tools, that are able to guarantee the right balance between: *i)* the positive impact on the environment, *ii)* the attractiveness for the clients and *iii)* the financial and competitive feasibility for the bank.

JEL classification: G20, M14, Q56.

Keywords: *Environmental strategies, green financial products, environmental management, sustainable finance.*

1. Introduction

Nowadays, Corporate Social Responsibility (CSR) is a well-established concept for organizations operating in the financial sector and many institutions have openly and explicitly committed to it. Banks, particularly, given their interaction with a number of stakeholders – clients, employees, suppliers, investors, etc. – are, on the one hand, responsible to them for their actions, and on the other hand, can play a crucial role in the promotion of their stakeholders' sustainable behaviours. The rationale of our work drew on the recognized role and influence of banking institutions in promoting sustainable development (European Commission, 1997)¹:

- as investors, supplying the investment needed to achieve sustainability;
- as innovators, developing new financial products to encourage environmental improvement;
- as valuers, pricing risks and estimating returns, e.g. for companies and projects;

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¹ *The European Community Programme of Policy and Action in relation to the Environment and Sustainable development* (the Fifth Environmental Programme) recognised the importance of financial institutions by stating that : "financial institutions which assume the risk of companies and plants can exercise considerable influence [...] over investment and management decisions which could be brought into play for the benefit of the environment" (OJ 93/C 138/27).

- as stakeholders, as they can exercise considerable influence over the management of companies, both as lenders and as shareholders;
- ...

Since the 1990s, studies on this issue have been primarily focused on the environmental dimension of sustainability. Basically, banks may interact with the environment in two ways: *directly*, through their "day-to-day" operational activities and *indirectly*, through the products and services they offer (Thompson, 1998; Case, 1999; Hugenschmidt, Janssen *et al.* 2001; Jeucken, 2001; Kahlenborn and Dal Maso, 2001). This last dimension is considered to be far more substantial, in terms of both potential environmental impacts (Gray and Bebbington, 2001; Hugenschmidt, Janssen *et al.*, 2001) and business opportunities (Thompson, 1998).

As today, researches and studies have been focused, from time to time, on the different financial tools through which a bank may affect the environment, with the fundamental goal of understanding the drivers and barriers that can influence their adoption and successful implementation. Empirical studies show mixed results, depending on a wide spectrum of conditions, both *internal* (e.g. related to the proper characteristics of the bank, in terms of business strategy, mission, etc.) and *external* (e.g. the geographic context, the regulatory framework, etc.).

2. Research objectives and methodology

In such context, this work aims at providing a more in-depth analysis of the ways in which a bank chooses, sets up and implements the different available tools when it comes to deciding the strategies and the objectives for the business channels on which it focuses. We try to better understand the dynamics by which a bank operates, with the ultimate goal of identifying a clear-cut framework of conditions that have to be ensured in order to guarantee the effectiveness of the banks' environmental strategies.

To this purpose, we first carry out a literature review, in order to provide a comprehensive framework to assess how a banking institution interacts with the environment. We try to identify how this interaction takes shape within the different business channels of the bank, which are targeted at different client segments and business partners.

Secondly, by means of a "case-study" methodological approach, the experiences of three Italian banks – different in size, profile and characteristics – are analysed. This approach is a research strategy which focuses on understanding the dynamics characterising each single setting (Eisenhard, 1989). To our ends, it took the form of individual bank case studies, involving open-ended, "face-to-face" interviews with key bank personnel and review of bank documentation.

Case studies present some good practices in planning and setting up initiatives and tools aimed at positively influencing the environmental performance of different bank's 'counterparts', with the aim of identifying the key-factors for success. In particular, for each bank, a different and specific area is investigated:

- 1) the development of innovative environmentally-oriented financial products, aimed at rewarding those client firms showing a proper management of their environmental aspects (e.g. firms with a certified Environmental Management System);
- 2) the adoption of a supply chain cooperative approach, focused on the improvement of the environmental performances of the providers and suppliers of the bank;
- 3) the development, within the bank's Environmental Management System, of advanced approaches for the management of indirect environmental aspects related to client firms, with particular reference to the control of indirect CO₂ emissions.

Prior to the conducting of the interviews, background details were collected for each bank. A common set of key questions was then provided to each bank, in order to guide the case study. Follow-up fact checking was finally conducted with all banks.

The remainder of the paper is structured as follows: in section 3 we start by reviewing existing literature on the relation between banks and the environment, thus paving the way to assess how this interaction may successfully take shape within banks' different business channels. Section 4 analyses the experiences of the interviewed banks, focusing on the most important findings emerging from each case study, in terms of major challenges as well as of key factors for success.

The closing section of the paper highlights a number of implications emerging from our work, for future conceptual and empirical research on the conditions that have to be ensured in order to guarantee the effectiveness of the banks' environmental strategies and related actions.

3. Evidence from literature review

Existing studies mostly agree on the fact that banking institutions interact with the environment basically in two ways: directly, through their "day-to-day" operational activities and indirectly, through the products and services they offer. This last dimension – recognized as far more substantial – develops through various business channels, targeted at different client segments and business partners.

As today, existing literature has been focusing on lending policies and activities as one of the most important of these business channels. Over the last two decades, studies devoted great attention to banks' adoption of environmental credit risk assessment policies and procedures (Weber *et al.*, 2001; Coulson, 2009, 2002; Case, 1999; Vaughan 1994). Generally speaking, these studies aim at investigating the key objectives underlying environmental credit risk assessment practices, as well as their impact on pricing and on other loan terms. Even if many objectives may justify these practices (e.g. complying with regulation, protecting corporate image, etc.), literature agrees on identifying "default risk minimisation" as the major driver to such adoption. Still, literature provides evidence that the range of practices of environmental credit risk assessment covers a wide spectrum of lending activities and that product coverage is gradually being extended to include retail and small businesses.

From our perspective, it is rather clear from literature that the way in which a bank pursues environment-oriented strategies depends on the business channels on which it chooses to focus and, more specifically, on the characteristics of the counterparts involved. For example, if a bank decides to invest on the business channel devoted to SMEs, virtually all analysed experiences and previous case-studies emphasise that it cannot apply stringent criteria of environmental assessment in evaluating the credit risk. A small company is often not able to guarantee advanced management system or control and audit procedures to prevent environmental risks and, therefore, the decision on granting a loan cannot be subject to a restrictive and thorough risk assessment based on environmental criteria. At the same time, within SME lending in particular, credit risk assessment is ultimately the responsibility of individual lending officers, which generally miss adequate knowledge and understanding of environmental issues, even when supported by *ad hoc* implementation tools (e.g. guidelines, borrower questionnaires, checklists, etc.) (Coulson, 2002). On the opposite, the SME market is mostly made up of clients who are willing to grasp some innovation or competitive opportunities linked to environmental excellence (e.g.: launching environmental friendlier products, developing green supply chain initiatives, adopting innovative process-technologies, etc.), but they lack economic resources, and often also human resources and know-how, to carry out the necessary investments. The most effective tool for this business channel thus seems to be the promotion of *ad hoc* financial services, aimed at stimulating environmental innovation at reasonable credit conditions.

Whereas, if the bank opts for an environmental strategy aimed at the upper market segment, including, for example, large corporate or project financing, the most effective tools can be those aimed at assessing the environmental risk connected with the project or the infrastructure that has to be funded. Project financing, in particular, is recognized as

one of the primary ways in which banks impact the environment (Ganzi, Seymour *et al.* 1998; Thompson 1998; Thompson and Cowton 2004). Extensive resources are invested by project proponents in project planning and studies are undertaken including some that provide information on environmental issues. The environmental documents prepared in such project planning are generally used by decision-makers in relevant authorities to decide whether a project can proceed (e.g. environmental impact assessment statement), or to determine if a site needs to be remediated before construction can begin (e.g. environmental due diligence reports) (Banhalmi-Zakar, 2009). In this case, the environmental criteria used for the assessment can focus on the ability of the client to provide guarantees on the potential default risk due to legal non-compliances, environmental accidents and connected liabilities. As shown by the available empirical evidence, the approach and the operational modalities to face up to these client segments are substantially different: *ad hoc* assessment methodologies are developed, conditions and terms are negotiated specifically for the single contract, insurance or other forms of risk coverage can be requested to the client to prevent environmental risks and consequent defaults.

Even more different is the case in which a bank priority is to improve the environmental performance of its supply-chain or even of its own employees. This calls for organisational and managerial tools that can be defined as 'stakeholder-specific', such as green procurement procedures to select environmentally sound intermediate goods and services, or certified management systems (e.g. according to EMAS or ISO 14001), to improve the so-called environmental 'housekeeping'. Generally speaking, while banks, as financial service providers, are not viewed as polluters in the same sense as industrial companies, the scale of the financial sector operations nonetheless means that banks use a considerable amount of resources, such as energy and paper in providing their services. Substantial financial and environmental gains thus can be made by banks if resources and waste are soundly managed. In seeking to achieve such objectives, banks can have a considerable influence, both on the standard of such products and on their suppliers' environmental performance (Coulson and Monks, 1999). Quite surprisingly, the adoption of sustainable (i.e. both environmental and social) procurement practices by banks has not been so much explored by existing literature so far. We tried to bridge this gap by way of a screening of the Sustainability/CSR Reports of the banks quoted at the *Dow Jones Sustainability Index* (DJSI)². The empirical investigation focused, on one hand, on the general approach of financial institutions towards sustainable procurement. It tried, on the other hand, to identify specific policies and programs implemented by the banking sector to promote an improvement of the social and environmental performances of their providers and suppliers. The investigation was based on the following methodological choices³:

- *universe of reference*: 35 bank sector institutions constituent in the Dow Jones Sustainability Index 2009;
- *references*: the screening was carried out using, as unique source information, CSR reporting and communication materials (e.g. social reports and other reporting documents, dedicated sections of official websites, etc.);
- *contents*: the screening was structured into two parts:
 - an assessment of the bank sector institutions' general approach to sustainable procurement;
 - an in-depth analysis of banks' sustainable procurement policies and practices, aiming at identifying specific initiatives implemented by banks to promote an

² Launched in 1999, the Dow Jones Sustainability Index is the first global index tracking the financial performance of the leading sustainability-driven companies worldwide.

³ The investigation has the undoubted value of contributing to identify the key elements of bank sector institutions' sustainable procurement policies and practices. It still has some noteworthy limits, such as:

- the lack of statistical significance of the universe of reference;
- the impossibility to verify the truthfulness and completeness of the information provided by the involved banks in their reporting and communication materials;
- the lack of interaction with the involved banks representatives. It does not make possible to have detailed operative information on the practical implementation of sustainable procurement policies.

improvement of the social and environmental performances of their providers and suppliers.

Figure 1 – Bank sector institutions approach towards sustainable procurement

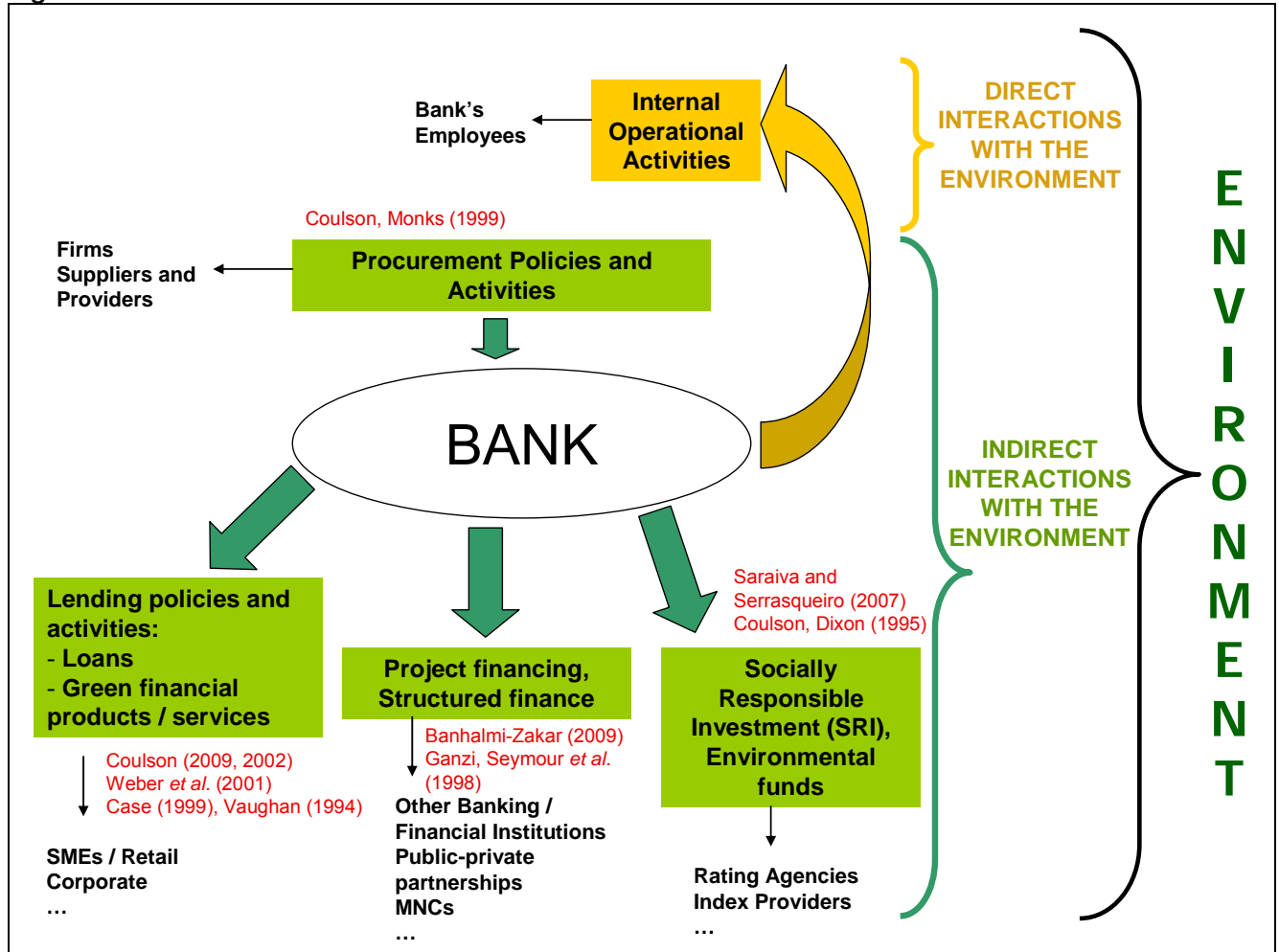
Company	Country	Info	General Commitment	Formalised Policy	Year of reference	Programs / Activities description	Outcomes
Australia & New Zealand Banking Group Ltd.	Australia	YES	YES	YES	2008	YES	NOT
BBVA	Spain	YES	YES	YES	---	YES	YES
BNP	France	YES	YES	YES	2008	YES	NOT
MPS	Italy	YES	YES	YES	2009	YES	YES
Banco Bradesco S.A.	Brasil	YES	YES	YES	---	YES	NOT
Banco Santander	Spain	YES	YES	YES	---	NOT	NOT
Bank of Montreal	Canada	YES	YES	NOT	---	NOT	NOT
Bank of Nova Scotia	Canada	YES	YES	NOT	---	NOT	NOT
Barclays Plc	UK	YES	YES	YES	2009	YES	NOT
Canadian Imperial Bank of Commerce	Canada	YES	YES	YES	---	YES	NOT
Citigroup	USA	YES	YES	YES	---	YES	NOT
Credit Agricole	France	YES	YES	YES	2006	YES	NOT
Credit Suisse Group AG	Switzerland	YES	YES	YES	---	NOT	NOT
Deutsche Bank AG	Germany	YES	YES	YES	---	NOT	NOT
Dexia	Belgium	YES	YES	YES	2005	NOT	NOT
DnB NOR ASA	Norway	YES	YES	YES	---	YES	NOT
HSBC Holdings Plc	UK	YES	YES	NOT	---	YES	NOT
Itau Unibanco Holding SA	Brasil	YES	YES	YES	---	YES	NOT
J.P. Morgan Chase & Co	USA	YES	YES	NOT	---	YES	NOT
KB Financial Group Inc	South Korea	NOT	---	---	---	---	---
Lloyds Banking Group PLC	UK	YES	YES	NOT	---	YES	NOT
National Australia Bank Ltd.	Australia	YES	YES	YES	---	YES	NOT
National Bank of Canada	Canada	YES	YES	NOT	---	NOT	NOT
Nedbank Group Ltd.	South Africa	YES	YES	YES	---	NOT	YES
Royal Bank Of Scotland Group	UK	YES	YES	YES	2005	NOT	NOT
Royal Bank of Canada	Canada	YES	YES	YES	2009	NOT	NOT
Shinhan Financial Group Co. Ltd.	South Korea	NOT	---	---	---	---	---
Shinsei Bank Ltd.	Japan	NOT	---	---	---	---	---
Sumitomo Mitsui Financial Group Inc.	Japan	NOT	---	---	---	---	---
Sumitomo Trust & Banking Co.	Japan	YES	YES	YES	2006	YES	NOT
Suncorp Metway Limited	Australia	NOT	---	---	---	---	---

The Toronto-Dominion Bank	Canada	YES	YES	YES	---	NOT	YES
UBS Group	Switzerland	YES	YES	YES	2008	YES	YES
UniCredit Group	Italy	YES	YES	YES	---	NOT	NOT
Westpac Banking Corp.	Australia	YES	YES	YES	2003	YES	NOT

As shown in Figure 1, the screening shows that most of the companies that are part of the DJSI universe of reference have a formalised sustainable procurement policy. These policies usually set the expectation for how financial institutions procure products and services across all their businesses. They generally provide the context for the development of sustainable procurement criteria or standards. To our ends, it is worth noting that these criteria and standards seem to be quite often defined without actively involving supplier and not taking into consideration local cultures, customs and circumstances. Suppliers are usually asked to share and adopt the sustainability criteria or standards set out autonomously by the banks. In some cases, social and environmental clauses are also included into purchase contracts and serious non-compliance evidences can even provoke their resolution. Actually, most of the analyzed banks foresee the possibility for non-compliant supplier to take remedial action plans, but only few institutions foresee collective action engaging both banks and supplier with the aim of promoting improving policies and practices. Banks themselves, on the base of detailed information provided by suppliers, usually monitor supplier compliance with the sustainability standards they have set up. Only few institutions audit their suppliers on sustainability performances. Even if banks' general approach towards sustainable procurement seems to be mostly driven by a risk management view, it is nevertheless possible to point out some specific initiatives aimed at promoting an effective improvement of the social and environmental performances of the banks' providers and suppliers, such as: suppliers awards, financial incentives, specific collective action programs.

To sum up, Figure 2 provides a simplified representation of the framework we drew from our literature review, synthetizing the different interactions between a bank and the environment within its different business channels. Following sections delve into three of these business channels, with the aim of investigating the drivers spurring bank' adoption of an environmental strategy within each channel as well as its proper approaches, tools and operational modalities.

Figure 2 – Bank’s interaction with the environment



4. Evidence from the case studies

4.1 The case of Banca Popolare di Milano (BPM)

The first case study concerns *Banca Popolare di Milano* (BPM), a multiregional co-operative bank with head office in Milan (Italy), whose origins go way back to 1865. Today, the bank has become an important economic force at a national level and one of Italy's leading co-operative banks. It heads up a multiregional banking group, consisting of branch networks and product companies with almost 8.800 employees and more than 800 points of sale, serving a vast clientele of private individuals and firms (BPM Group, 2008). In line with its origins, the bank's commitment is to enhance the value of household savings and to provide credit to the production system to help it grow, always with an eye on the needs of all its stakeholders and without losing site of the social and environmental aspects.

The case study focuses on a financial product that has been developed to help smaller companies face up to environmental investments during an economic downturn. In the most recent years, BPM has increasingly focused its credit strategies on environment-related sectors. Considerable investments in renewable energy production has been funded by BPM, mostly by way of structured finance operations aimed at funding infrastructural projects or large corporate production plants. The initiative described has been prompted by the awareness that the still on-going negative economic cycle can compromise the capacities of many companies that are keen to improve their environmental performance. The current recession, and the consequent pressures on the competitive edges, have

clearly affected the strategic choices made by many (especially smaller) companies to lessen their efforts on environmental investments, in order to strengthen the possibility to devote economic resources to their core-business activities. Some clear signals of this trend can be seen in a specific category of 'front runners', i.e. those 'environmentally excellent' organisations that are certified according to EMAS or ISO 14001: it is very significant that these companies are increasingly registering negative performance in the last years (as reported by many EMAS Environmental Statements, see: Daddi *et al.*, 2010) and, moreover, many of them are dropping out of the scheme, renouncing to the certification. It is widely recognised that environmental expenses are on the top of the list when a company needs to cut costs in a crisis period.

In order to support its clients in the attempt of being "environmentally conscious" even in a strong recession, at the beginning of 2009 BPM decided to develop a targeted financial product. More specifically, the initiative of the bank has been stimulated by a group of environmental managers, gathered in the so-called 'Environmental Quality Task force' created by Assolombarda, the industrial association of the Milano Province and the largest in Italy (hereafter, the Task force)⁴. The Task force proposed to BPM a co-operation based on the need to prevent further problems for certified SMEs in investing economic resources, necessary to achieve the 'continuous improvement' of their environmental performance, as requested by EMAS and ISO 14001. The original idea was generalised by BPM, so to offer a new 'environment-oriented' financial product, not only to certified companies, but to all SMEs interested in environmental issues. The concept of the new financial product was that the new product should have been able to respond to two different needs:

- on one hand, it should have been really "selective", i.e. there should be a guarantee that the financial support goes to those companies that are strongly and credibly committed to improve their environmental performance;
- on the other hand, the new product should have provided tangible and considerable advantages with respect to the other "conventional" (i.e. "non environmental") products already offered by BPM; thus making the clients perceived that they are entitled to more favourable credit conditions because they are ready to invest in environmental innovation.

On these premises, the Task force and BPM worked together to figure out what were the best conditions that would have allowed for environmentally effective investment and market viability and attractiveness of the product, especially for SMEs. The options for defining the characteristics of the new financial product were the following:

- first of all, an *interest rate lower than the average rate* (reference rate *plus* spread) offered by the market and, especially, by BPM to all the other clients for similar credit lines, differentiated according to the environmental guarantees that the client is able to provide (e.g.: the lowest possible rate for clients that are registered in EMAS, slightly higher for ISO 14001, slightly higher for non-certified companies that are investing in environmental improvement);
- a *longer coverage period*, if compared to standard credits, so that the client can rely on more time for revolving. This condition is particularly tailored to the payback period of an environmental investment, which is usually longer than that of a conventional investment (e.g.: a technology innovation aimed at improving process efficiency or productivity). The benefits of an environmental innovation are usually produced in the long run and are often linked to the ability of the investor to manage the cleaner technology also with the aim to generate resource savings, energy or water recovery, lower cost for pollution abatement, etc. This takes much time to be fully implemented and, therefore, the credit can be effectively granted for a longer period;

⁴ Assolombarda promoted the activity of this Task force back in 2007, in order to favour exchange of experiences among companies on the frontier of environmental management (many of those that are part of the Task force are also certified according to EMAS or ISO 14001) and to endorse the development of tools and initiatives that could also benefit all the other associated companies (especially the SMEs) interested in environmental issues.

- the possibility to obtain a pre-amortising (*grace period*) that enables the company to delay the moment in which it starts the restitution of the lent money to the bank;
- the deletion of all the operational expenses for the credit procedures;
- the possibility for the client to activate, at any time, a 'revolving' credit line, to guarantee continuity of resources for sustaining environmental innovation and management (e.g.: in the case a client obtains and has to maintain a certification, also by way of a continuous improvement of its performance).

On the other hand, in order to obtain these extremely favourable conditions, the potential client should demonstrate that:

- the funding is aimed at supporting an investment in a technology, machinery or plant, or to the implementation of a management solution that is able to provide a measurable and relevant improvement of the company's environmental performance;
- the investment is not exclusively or mainly aimed at achieving compliance with respect to environmental requirements set by the current legislation (whereas investments aimed at complying with future legal requirements are covered by the financial product);
- if the client wants to obtain the most favourable conditions granted to ISO 14001 and EMAS certified companies, then a valid certificate must be provided and this must include the part of the organisation or site to which the funded environmental investments refers;
- in this case, the certification must be maintained for the whole period covered by the granted credit, otherwise BPM has the right to apply standard conditions to the credit line, at any time when the certification is not renewed by the client;
- the investment covered by the financial product is included in the Environmental Programme foreseen by EMAS and ISO 14001 or, in case the client is not certified, similar evidence is provided documenting: environmental performance targets to be achieved, resources devoted to the project, responsibilities and tasks, time schedule and monitoring procedures.

As it clearly emerges from the description of the main features of the new 'environment-oriented' financial product, BPM and the Task force have agreed on the need to find a balance between *product attractiveness* for the potential clients (especially SMEs) and *credibility of the environmental guarantees* provided by the client itself, so that the effectiveness of the initiatives can be assured. The product is currently being launched on the market and in the forthcoming months a first assessment will be performed, basing on the above mentioned criteria: *How attractive was the product for BPM clients? What kinds of investments were funded? What is going to be the (estimated) improvement of the environmental performance due to these investments?*

The answers to these questions will provide a guideline for the future development of these kinds of financial products amongst the Italian financial and banking institutions.

4.2 The case of Monte dei Paschi di Siena

The second case study is that of *Banca Monte dei Paschi di Siena*, founded in 1472. The bank is today the flagship of the *Montepaschi Group*, which is a leader on the Italian market in terms of market share. The Group is present all over Italy and in the major international financial centers, with operations ranging from traditional banking activities to private banking (mutual funds, wealth management, pension funds, and life insurance policies) and corporate banking (project finance, merchant banking and financial advisory), with a special vocation for household accounts and SMEs.

The Group has always had a deep commitment in social and environmental instances⁵. Its approach towards sustainability has nevertheless evolved over the last ten years, from an ancillary subject to a more strategic approach to ensure the achievement of corporate objectives, based on a more effective involvement of the various counterparts of the organisation. Coherently with this evolution, in 2009 the Group launched a three years *Sustainable Procurement Program* as a key component of its overall CSR strategy. Given the significant volume of the bank's purchasing, procurement and logistics are considered strategic to improve the Group overall CSR impact. At the same time, the Program has been conceived in order to allow to the Group to actively operate within its sphere of influence, activating a path for the qualification and the measurement of the CSR profile of its supplying companies.

The initiative aims at embedding environmental and social principles within the whole procurement processes and culture, with the ultimate goals of both improving the Group's CSR bottom-line and capturing their potential for cost-efficiency. At the same time, the project aims at promoting an effective improvement of the sustainability performances of the bank's suppliers by way of a cooperative approach, playing in this way a pro-active role within its sphere of influence.

According to this view, on March 2009, after the creation of a dedicated internal team and a preliminary analysis phase including international best practices, the Group defined its *Sustainable Procurement Policy* (MPS, 2009). The Policy contains not only a detailed description of the objectives that the bank pursues by implementing it, but also the principles and the management criteria, which the Group is committed to following in its relation with all suppliers and in the purchase of all products and services to support its business in Italy (see Figure 3).

Figure 3 – Montepaschi Group's Sustainable Procurement Policy Objectives

MONTE DEI PASCHI DI SIENA - POLICY ON SUSTAINABILITY IN THE SUPPLY CHAIN
<p>[...] The Policy indicates the principles and management criteria which the Montepaschi Group is committed to following in its relations with all suppliers and in the purchase of all products and services to support its business in Italy. [...] The objectives that the Montepaschi Group pursues by implementing this policy are:</p> <ol style="list-style-type: none"> 1. Identifying opportunities to minimise environmental and social impacts in the supply chain; 2. Contributing to reducing operational and compliance risks and consequent impacts to our reputation; 3. Improving the management of costs associated with procurement processes and logistical aspects; 4. Promoting the growth of suppliers, stimulating innovation in sustainable products and processes. <p>To achieve these objectives, the following principles [...] will guide the actions of the Montepaschi Group:</p> <ol style="list-style-type: none"> 1. the suppliers and sub-suppliers will be encouraged to conduct their business according to standards of conduct consistent with the Montepaschi Group's Code of Ethics; 2. those suppliers who, in addition to offering an excellent quality/price ratio, demonstrate that they apply the best standards for managing the environmental impacts associated with their processes for producing and providing supplies, will be given preference; 3. we will avoid maintaining relations with suppliers who do not operate according to laws and standards on human, labour and environmental rights; 4. procurement procedures will be supplemented by evaluations and selection criteria that focus on the sustainability performance of the suppliers and their products and services, with particular attention to small companies in order to keep that from being a competitive disadvantage for them; 5. the sustainability performances of suppliers and their supplies will be measured regularly to check the effectiveness of this policy and report on it to our stakeholders; 6. transparency and accuracy will be ensured in communications to suppliers regarding the requirements and contractual conditions applied; 7. honesty and integrity are guaranteed in relations with suppliers, avoiding any risk of conflict of interests. <p>[...]</p>

⁵ The Montepaschi Group has been publishing its own Sustainability Report since 2000. It joined the UN Global Compact on June 2002, it is a constituent company in the FTSE4Good Index Series and in the Dow Jones Sustainability Index, it is certified ISO 14001 and OHSAS 18001.

Following the approval of the Policy, the Sustainable Procurement Programme was launched, with the key objective of testing the embedding of the policy principles within the standard sourcing process. The pilot phase of the initiative involved a representative sample of about 50 vendors, which, in terms of variety of corporate dimensions and types of products and services provided, was a good starting point for an accurate definition of the assessment system to be used.

Through the use of technological platforms and structured processes, the products and services included in the suppliers' offers were assessed on the basis of both their compliance with a set of environmental and social sustainability criteria and correlated cost management principles. For each supplier, the system determined the sustainable profile level achieved and identified potential development actions, to be implemented in active partnership with the supplier. This pilot phase finished on March 2010. Next steps foresee the extension of the CSR qualification process to a total number of 650 vendors by 2012.

Even if the program is in an early stage of implementation, it is possible to identify at least three distinguishing features in the Montepaschi Group's approach to sustainable procurement:

- first, a "value for money" approach, aimed at striking the right balance between buying goods and services at a competitive prices and ensuring that their lifecycle is such to minimize any environmental impact and in observance of ethical and social responsibility principles;
- an "inclusive" approach, aimed at actively involving suppliers in the Group strategy to build long lasting economic performance with a goal to obtain mutual growth by leveraging fair and open commercial relationship;
- a "360° approach", i.e. involving the whole procurement lifecycle (from policy setting to supplier operational management).

Even if the program has been only recently launched, the bank has already benefit from some preliminary results, both in terms of sustainable procurement benefits (e.g. adoption of innovative environmental technologies by some suppliers) and organizational processes benefits (e.g. implementation of a key performance indicators framework, as well as of a control process to monitor supplier social and environmental performance). The Programme has also already provided a significant contribution to the Group CSR objectives: in the last half of 2009, the overall expense for green products and services was around 51.100.000 euros, counting for 6% of all purchasing.

4.3 The case of UniCredit Group

The third experience analysed is that of *UniCredit Group*, one of the leading European banking and financial groups in terms of size and earnings, operating in 22 EU Countries, with over 165.000 employees and approximately 9.800 branches (UnCredit Group, 2009).

The case study stems from the particular scenario the bank is today operating in, in terms of both internal and external drivers, whose convergence are leading the bank to a wider commitment toward the integration of environmental management into banking business. First, from an internal perspective of analysis, the bank's environmental management system – certified according to the EMAS Regulation and ISO 14001 standard since 2002 – is, by now, a mature and well-established system: on the one hand, it allows the effective identification, assessment and management of the bank's direct and indirect environmental aspects and, on the other hand, it provides a comprehensive framework of the Group's numerous and diverse environmental initiatives developed, in Italy and abroad.

Shifting to the external context, current environmental concerns at the international level demand banks to rethink their contribution to sustainable development, by taking into account climate change issues. During the last decade, climate change has become a

subject of considerable debate and it is already altering the business environment in which banks operate. Institutional and socio-economic actors have begun to ask the businesses both to bear the costs of the carbon emissions they create and to disclose their emissions data, so that investors can make more informed decisions⁶. Despite this rapid and far-reaching change in banks' operating environment, the response from the banking sector has so far been weak. Even those banks that are taking action are doing so in a mostly 'ad hoc' way, i.e. tackling their own carbon emissions or pursuing occasional financing, investment or advisory opportunities. And even at those few banks that have drawn up some sort of strategic agenda for climate change, the impetus often comes from within the CSR function, or even the 'facilities management' function, areas far from the business's core decision makers.

In this framework, UniCredit Group has developed the need for a better approach to environmental management, in order to improve its ability to properly identify all its direct and indirect environmental aspects, properly qualify and quantify them and assess the significance of their environmental impacts. Consistently with the new EMAS Regulation (Reg. CE 1221/2009) – which confirms the relevance of the environmental aspects associated with financial institutions' core business – the focus is on the *indirect environmental aspects* and, in particular, on the distinction of the environmental aspect related to CO₂ production in two conceptually different aspects: a *direct* and an *indirect* one. This distinction has been for the first time clearly affirmed within the 2010 updating of the bank's *Environmental Review*, i.e. the comprehensive analysis of environmental aspects, impacts and performance related to an organisation's activities, products and services foreseen EMAS as a key requirement for the implementation of their EMS.

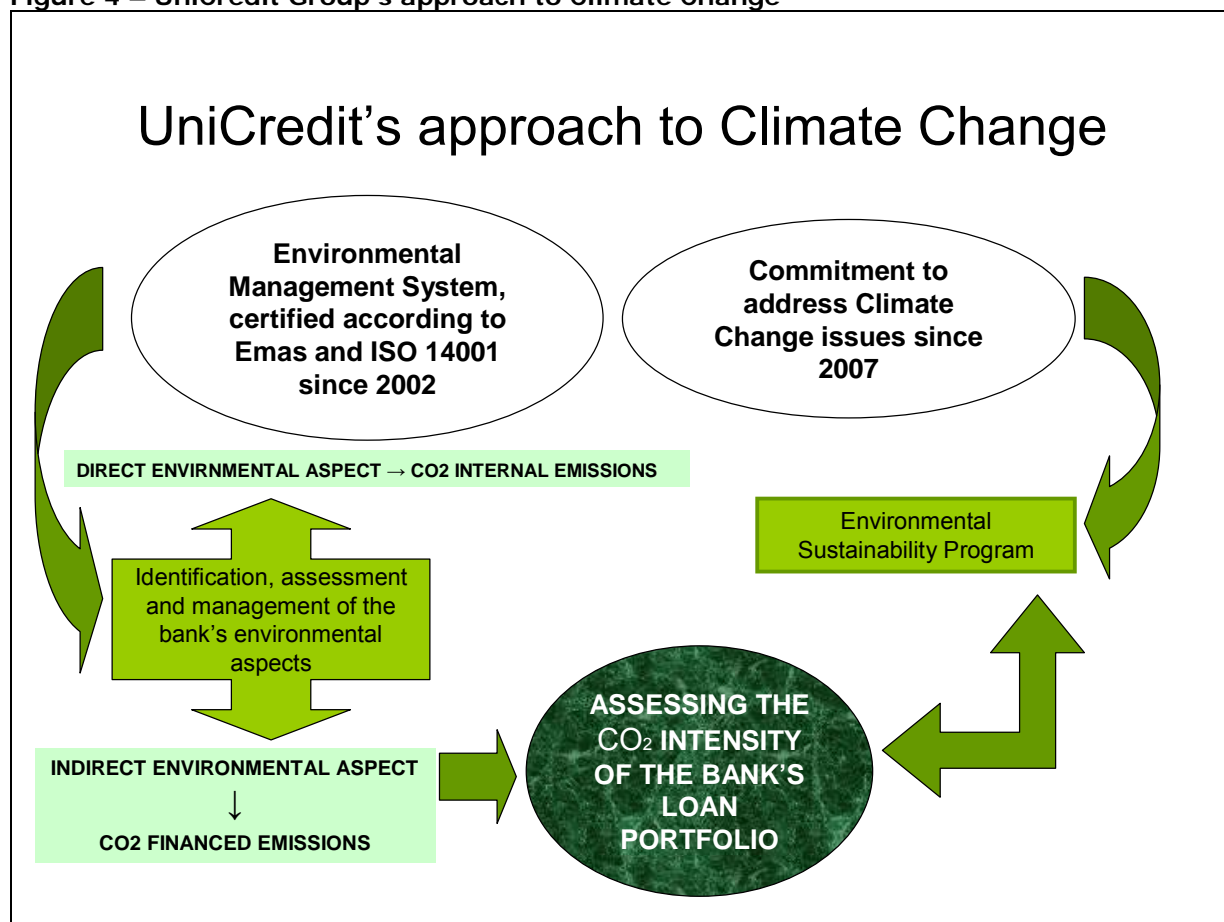
The first aspect ("direct CO₂ production") concerns the bank's activities carried out on its operative sites out and refers to GHG emissions associated with its electrical and heat-related energy consumption, on which the organization has direct managerial control. In the last years, the bank has made considerable progress in managing internal emissions resulting from the Group's banking activities⁷. This is due to a series of actions aimed at reducing CO₂ emissions related to direct energy consumption (e.g. measures for the enhancement of buildings' energy efficiency and the increasing of renewable energy sources).

The second aspect ("indirect CO₂ production"), on the contrary, concerns the CO₂ produced by the bank's financed activities, on which the organization has neither a detailed knowledge of its size and extent nor direct managerial control. Still, as signatory of the *United Nations Environment Programme Finance Initiative Declaration on Climate Change*, the bank is committed to promote knowledge and understanding of both climate change risks and opportunities. With reference to indirect emissions, this means that the bank is well aware of the role a banking institution can play through financial leverage in the transition towards a low-carbon economy, with regard in particular to its ability to steer the financed emissions generated by its clients and attributable to its lending choices (see Figure 4).

⁶ The European Union, for instance, has agreed to widen the range of industries covered by its pioneering Emissions Trading Scheme and to enforce on these industries a minimum 21% reduction of carbon emissions (from 2005 levels) by 2020. The EU also left the door open to tighten the target further. On another front, activist shareholders alliances such as the *Carbon Disclosure Project* (CDP) are increasingly demanding that companies disclose their emissions data, so that members can make more informed investment decisions. The CDP is an independent not-for-profit organization holding the largest database of primary corporate climate change information in the world. It was launched in 2000 to collect and distribute high quality information that motivates investors, corporations and governments to take action to prevent dangerous climate change.

⁷ In 2009, UniCredit Group made a public commitment to reducing its carbon footprint by cutting its generated greenhouse gas (e.g. GHG emissions created by its daily operation) emissions by 30 percent by 2020 (with the intermediate target is of reducing emissions by 15 percent by 2012). The first step toward achieving this ambitious targets in emissions reduction was to take a Groupwide carbon inventory. As a long-time participant in the *Carbon Disclosure Project*, the Group values the transparent calculation of all GHG emissions associated with its electrical and heat-related energy consumption. The bank initiated a process to incorporate all its major GHG emission sources into its inventory and thus establish an accurate carbon footprint as a baseline, in accordance with the international standard UNI ISO 14064-1:2006.

Figure 4 – UniCredit Group’s approach to Climate Change



Consistently with this view, in 2009 the bank planned to develop an innovative model within the banking industry, aimed at measuring the actual environmental impact of the Group lending portfolio in terms of GHG emissions, and therefore steer its lending decisions. To this end, a specific working group was set up, aimed at understanding how potential future climate change scenarios – as viewed according to global scientific consensus – may affect the bank’s business activities, both in terms of making more accurate credit risk assessments and in appraising related product development opportunities across all business channels.

The project has its roots on the idea that while, as a financial services provider, the bank has a relatively small greenhouse footprint (and consequently, with respect to its own operations, it is not likely to be materially impacted by future climate change regulation), both business risks and opportunities may arise through the way its clients are affected by changing regulatory frameworks (e.g. *EU Emissions Trading Scheme*) and the measures they take to mitigate these effects. For example, rising energy prices and/or carbon mitigation requirements as a consequence of regulatory frameworks could influence the bank’s client firms (e.g., impacts on operating costs, shifts in consumer demand, etc.). This could have different impacts on the bank’s lending portfolio, according to the various economic and productive sectors it consists of. Clients with high carbon exposure will mostly be affected by this kind of risks, while businesses active in the area of carbon mitigation might profit from more stringent regulatory requirements.

Within such context, the model under development aims at quantifying the impact of future climate change scenarios on the various economic and productive sectors of the bank’s lending portfolio. The aim is identifying those sectors that the institution can most

successfully support in the transition towards a low-carbon economy, by means of its financial leverage. The model will be initially used to analyze the energy sector, and subsequently extended to all industrial sectors, so as to have a comprehensive view of the emissions financed by the bank. At the same time, the analysis will take into consideration the various financial instruments the Group can use, so as to define special criteria for the use of each one, also with the aim of identifying new business opportunities and priority areas, especially in the retail and corporate business channels. This innovative approach may have significant implications on both the bank and its client firms. Such implications can be analysed by two different perspectives:

- a “traditional” risk management view, i.e. trying to measure the CO₂ emissions associated to its loan portfolio, the bank can make a further step toward its objective of default risk minimisation;
- new business opportunities, both for the Group and its client firms, by steering the bank’s loan portfolio toward less carbon intensive industries. The bank’s approach is that of supporting its clients to better understand climate change risks and manage them proactively – with mutual advantages – by making specific loans and bank services available.

Once the indirect aspect “financed emissions” conceptually defined and estimated, the following step will be the assessment of the aspect’s significance, in order to identify the appropriate future actions for its management. For this purpose, the results of the project aiming at quantifying the carbon footprint related to its credits portfolio and the various sectors concerned will be crucial. The understanding of how the carbon variable may influence client firm’s profitability will also constitute a key starting point for debate on how the banking industry should address climate change issues.

5. Conclusions

The analysis of the case studies proposed in our work allows for some preliminary considerations concerning the approach of a banking institution to environmental strategies, to be supported and enriched by future conceptual and empirical research. First of all, what clearly emerges from both the literature and the case studies is a very wide range of opportunities and ways that a bank can adopt to stimulate and support environmental improvement actions by its counterparts. The heterogeneity of the actors involved in the business relations of a bank makes it difficult to define and adopt standardised tools aimed at this purpose. On the opposite, the wide range of suppliers, clients and business partners requires a relevant flexibility to tailor the environmental commitment of the bank to the needs and specificities of each typology of counterpart. This is especially true if one considers the different business channels by which a bank promotes its financial services towards many market segments, implying several chances to set up effective tools for environmental management.

As we have mentioned, most of the literature describes banks’ environmental strategies as a very diversified spectrum of ‘combinations of objectives and instruments’, taking different shapes and implementation modalities according to the specific business area, market segment or even individual client or supplier. Prior to analysing these ‘modalities’, a first comment should be devoted to the approach that most financial institutions use in designing their environmental strategies. Despite the analysed literature does not offer particularly interesting evidence on this issue, we can draw some conclusions from one of our case studies. UniCredit’s experience on the GHG-related commitments shows a potentially effective approach, that can help in rationalising and prioritising the action of a bank. A bank, as UniCredit, should start from the awareness of its role of ‘multiplier’ and ‘engine’ for feeding the environmental improvement strategies by the external actors with whom it interacts. Therefore, a useful first step to undertake is an ‘impact analysis’, i.e. a thorough quantification and assessment of the potential environmental performance

improvement that the bank can enable in the different business channels in which it operates. By way of this "impact analysis", the bank can identify the most powerful incentives (or, more in general, stimuli) and opportunities that it can provide to its counterparts (be them clients, suppliers or business partners, including even its own employees). This analysis can produce, for example, indications on the fact that the environmental "multiplier effect" of the bank is stronger in the supply chain rather than in the credit and loans, or *vice versa*.

Once a bank has established criteria for determining its strategic priorities, on the basis of an 'impact analysis', it is then able to select the most promising 'business channels' on which it can operate to promote environmental improvement. This choice may depend both on the bank's characteristics (small bank, multinational corporations, co-operative bank, etc.), and on its market segments (SMEs, large corporations, etc.). The choice of the target 'business channel' is of paramount importance, since it enables to define better focused tools and incentives, that can be tailored to the needs of the clients or suppliers.

Both the literature we analysed and the case studies emphasise that the most critical step for an effective environmental strategy is the design of the most appropriate tools to be used to stimulate and incentivise a sounder environmental behaviour by the actors involved in the targeted business channel. Each business channel thus suggests the adoption of different approaches and tools. As we have seen, it is rather clear that a bank cannot use a sophisticated environmental credit risk assessment approach to promote awareness towards the environmental aspects of its smaller clients. Credit conditions for SMEs are, in fact, strongly bounded by sectoral regulation (e.g. the *Basel II Accord*⁸) and environmental risk assessment is often seen as an additional burden that makes it even more difficult to finance the smaller clients' activities. On the opposite, what client SMEs need is a set of favourable credit conditions that make a loan on environment-related activities more convenient and potentially viable. SMEs usually lack economic resources to invest in environmental innovation (cleaner technologies and plants) and, at the same time, are not prone to rely on external funding. The ideal tool for this business channel can be, as BPM case study show, an innovative financial product that offers favourable interest rates, revolving period, increased credit roofs, etc. for environmental improvement.

On the other hand, in order to financially sustain large companies' investments or, even more significantly, for project financing operations connected with the building of infrastructures, a bank should rely on credit assessment methods. The conditions are opposite with respect to SMEs: the resources needed are considerable, these operations can be finalised only through external funds – often just one bank is not enough, structured finance operations are required – and the bank has the chance to cover a relevant risk of default linked with environmental issues: accidental events, violations of the environmental regulations, hidden liabilities, and so on. In this case, the most appropriate approach should be that of applying rigorous environmental assessment criteria and, then, consequently, design the conditions of the funding operations consistently. This may also imply a more favourable interest rate for environmentally excellent clients, so that the final outcome is the same as for SMEs, but pursued with completely different approach.

⁸ Basel II is the second of the Basel Accords, which are recommendations on banking regulations issued by the Basel Committee on Banking Supervision. Its purpose is to create an international standard that banking regulators can use when creating regulations about how much capital banks need to put aside to guard against the types of financial and operational risks banks face. Such a standard should help protect the international financial system from the types of problems that might arise should a major bank or a series of banks collapse. Basel II attempts to accomplish this by setting up rigorous risk and capital management requirements designed to ensure that a bank holds capital reserves appropriate to the risk the bank exposes itself to through its lending and investment practices. These rules mean that the greater risk to which the bank is exposed, the greater the amount of capital the bank needs to hold to safeguard its solvency and overall economic stability.

Some final considerations should be devoted to the effectiveness of the available tools. Once again, both the literature review and the case studies lead to consider that these effectiveness does not depend merely on the 'environmental impact' generated by the multiplier role of the bank. Actually, we may summarise the results of our analysis by saying that the effectiveness essentially depends on three factors:

- the influence that the adopted tool can really and credibly exert on the environmental performance of the bank's client or supplier. This means that the bank should be able to define and adopt tools that can generate a real and certain change in the environmental performance of the counterpart. For example, there should be a guarantee that the funded investments are really and concretely aimed at improving the environmental performance of the client;
- the attractiveness of the tool for the clients (or the other business partners), i.e. the tool that stimulates environmental improvement should be, at the same time, attractive for the potential client under the economic and competitive point of view. This means that the environment-oriented financial tool adopted by the bank should be firstly able to obtain the interest of the targeted market segment. If a financial product has a very high positive potential impact on the clients' environmental performance, but it does not offer really affordable and convenient economic conditions with respect to the competitors (traditional non-green financial products), then it is going to fail (also from the environmental point of view!);
- the financial and competitive feasibility of the tool. This means, for example, that a credit risk assessment approach based on environmental performance should not prevent the bank from achieving good results in terms of business development. When a credit risk assessment method prevents the opportunity to fund many potential new clients, it conflicts with the bank competitive strategies. In this case, the bank should be able to conceive and adopt innovative assessment methods, that are not only based on legal compliance or on potential and actual environmental liabilities (as it often happens), but instead on the ability of a client to carry out the investments by fully integrating environmental and competitive assets. One of the most effective solutions could be, for example, to identify (and positively assess) those environmental initiatives adopted by the client that could be able to originate relevant competitive advantages in the future, such as the development of green products, acquisition of licences on cleaner technologies, voluntary third-party certification (e.g.: EMAS or ISO 14001), etc.

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