

# SUSTAINABLE FINANCE TOWARDS SUSTAINABLE DEVELOPMENT. THE POLISH GREEN BANKING CASE

**Magdalena Ziolo**

*magda.ziolo@wp.pl*

**Dorota Miśkiewicz**

*miskiewicz@irszczecin.pl*

**Bartłomiej Lepczyński**

*bartek123lepa@wp.pl*

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*Green banking sector is a very important part of global economics. Green bank products and care about natural environment are not only a trend but also a way of achieving stable economic situation. Development of new technologies connected with Internet and digitalisation conduce the progress of green banking sector. Modern banks not only promote eco lifestyle but also create eco-credits, loans and grants for investors who want to engage in this field. Ecology is not only the matter for crazy environment defenders but also for businessmen and politicians. It is the future for global economics. This article presents the types of green bank products and the ways in which banks can support pro-ecological actions and projects. It also presents global trends in banking sector and in the economic situation. The authors present Polish green banks and their activities and operation in the ecologic field. Poland as a developing country focuses on renewing energy sources, recycling, energy-saving activities, and protection of natural environment. Polish government cooperates with banks and private investors to achieve the most satisfactory effect.*

## **Introduction**

Sustainable finance may be viewed as creating institutional arrangements in the financial system that can contribute to achieving sustainable development of the economy<sup>1</sup>. In this context, sustainable finance would include financial instruments, institutions, and markets which would take into consideration the issues like environmental and social responsibility of entities that seek to get finance. Thus, it can be seen that sustainability and responsibility in finance and investment require an ethics. By ethics not ethical

investment is meant, but awareness of the social interconnections forged by financing activity<sup>2</sup>. The ethical (or green) financial instruments would properly involve provisions related to the purposes which financial funds provided by their issuance and may be used for advanced financial operations. The ethical (or socially responsible) financial institutions would have their investment policy aims include financing entities which pay due respect to sustainability issues like environmental protection, social responsibility, and high quality governance standards; and would

also take into account the environmental, social, and governance risks when designing their risk management processes. The ethical (or socially responsible) financial markets would create market structures which enable environmentally/socially/governance responsible firms to get lower-cost finance due to their higher standards for transparency and engagement in sustainability issues<sup>3</sup>.

From the institutional point of view the role of banking and financial sector seems to be important for implementing and fostering not only the Corporate Social Responsibility (CSR) concept, but also to support green consumerism and pro-ecological behaviour. Nowadays banks and other financial institutions offer a wide package of green banking and financial products that enable households and companies to become more green and sustainable. Being green and sustainable first of all needs financing. There are a lot of green financial products in retail banking and corporate and investment banking as well. Banks and other financial institutions enable building green houses, buying environmentally friendly cars, buying environmentally friendly products with usage of green credit cards, supporting CSR include green consumers via capital markets and steer the consumerism towards sustainability with usage of assets management, insurance, project financing, securitization and venture capital and private equity.

There is strong evidence in the literature that sustainable finance is an efficient tool that can be used to overwhelm the exclusion problem in an economy. The so-called financial inclusion process results in poverty reduction and lower income inequality. Importantly, Sarma<sup>4</sup> (2008) defined financial inclusion as a process that ensures an easy access, availability, and usage of a formal financial system for all members of an economy. In his paper, Honohan (2007)<sup>5</sup> showed that higher financial access significantly reduces income inequality, as reflected by the Gini coefficient<sup>6</sup>. Furthermore, Burgess and

Pande<sup>7</sup> (2005), based on research carried out in 2005 in India, found that the expansion of rural bank branches was one of the crucial factors determining poverty reduction. The presence of banks in an economy and in the financial system is a significant stimulus for creating a sustainable finance framework. Many banks have recently implemented policies and procedures that address the environmental and sustainability impacts of their operations. The term *green banking* reflects this kind of approach in the banking sector, which requires a strong policy framework, transparency of implementation, adapting an environmental and social management system, and exercising leadership in sustainable finance.

Research concerning sustainable finance (especially green banking) has provided details regarding the sorts of policies implemented by different banks in order to meet the expectations of sustainable finance, particularly environmental or social concerns such as human rights, labour rights, indigenous people, climate and energy, dams, biodiversity, forests, fisheries, extractive industries, sustainable agriculture, chemicals, transparency, and reporting done by clients and environmental and social management systems<sup>8</sup>. Projects covering the fields of interest mentioned above are important for financing and cooperation in the analysed banks. The allocation of money (lending policy) within selected scopes of interest in the social and environmental dimensions allows for the stimulation of sustainable development and growth. One of the best practices is to address financial regulations while taking into account their impact on environmental and social risk (ESR). In the literature, the number of studies and reports regarding the inclusion of environmental and social aspects in financial market regulation are systematically increasing for different groups of countries.

The purpose of this paper is to point out the role of banks in progress and development of green consumerism and stimulating

pro-ecological behaviour of households and companies. The research encompasses the analysis and assessment of financial products that are especially important for green consumerism and impact on pro ecological behaviour. The paper diagnoses the research gap in existing literature focused on green financial products and their impact of green consumerism and emphasises the future work and research directions in these fields.

### **Green banking and green banking products as a pillar of sustainable finance**

The 21st century is very tumultuous time. It is also the time of big changes like technological, political, economic, and philosophical ones. People start to think not only about their comfort but also about the environment. This trend may be observed in almost every area of life — it also can be seen in modern economics and banking trade. Ecology is present in everyday life — consumers may choose ecological nutritive products, eco clothes, eco furniture and eco bank products.

The global crisis which started in 2008 outlines the ways of contemporary financial solutions. It revealed the weaknesses and limitations of modern economics and financial systems. Many markets collapsed, which caused suspicion and chaos in the world of economics. It also showed that countries and organisations which realized sustainable economics in their business politics were more resisted to the results of crisis. Even politicians of low-GDP countries underlined the meaning of sustainable finances in global economics. Nowadays there is a great need of finding the most proper solutions which could stabilise the economic situation. The ethical finances go hand in hand with green finances which focuses on supporting proecological actions<sup>9</sup>.

What does *green banking* mean? To explain this issue it is worth to cite Dr. Nishikant

Jha and Shraddha Bhome<sup>10</sup> (2013): “Green Banking is like a normal bank, which considers all the social and environmental factors; it is also called as an ethical bank. Ethical banks have started with the aim of protecting the environment. These banks are like a normal bank which aims to protect the environment and it is controlled by same authorities as what a traditional bank do. Green banking is like a normal bank, which considers all the social and environmental/ecological factors with an aim to protect the environment and conserve natural resources. It is also called as an ethical bank or a sustainable bank. They are controlled by the same authorities but with an additional agenda toward taking care of the Earth's environment / habitats / resources. For banking professionals green banking involves the tenets of sustainability, ethical lending, conservation and energy efficiency.”

Green banking is a term which joins economy and ecology. Such phrases as green economy, green growth, green jobs are very popular slogans, which are the example of green banking. In encyclopaedic conceptualisation the term *green banking* refers to green investment bank and financial institution mostly public or quasi-public, which use innovation ways of financing and development of tools in cooperation with private sector. The main aim of green banking is supporting the implementation of pure sources of energy and technology by financing them.

Green banks use public measures to realise private investments focused on pure energetic technologies, which are in long-term profitable but are hard to localise on consumer market. Operation of green banks bases on promoting and boosting eco investments of private sector and moving to low-carbon economy. The country which is the leader in green banking is United States, where green banks were constituted on state level and local level. Other countries which lead in this sector are Great Britain, Australia, and Japan. In USA, the first who worked out the idea

of green banking were Reed Hundt and Ken Berlinie. In 2009, in Great Britain there were prepared two reports which became the basis to create green bank of infrastructure, which provided the measures to financing ecological projects<sup>11</sup>.

Among initiatives which are environment friendly and are undertaken by contemporary banks one may list the following:

- electronic banking;
- electronic send of documents;
- green office;
- saving energy and paper.

The phenomenon of green banking is strictly connected with the development of electronic banking. The raise of popularity of cashless operations, credit cards, internet transfers, authorisation of the operations by SMS codes, access to archive data by Internet, electronic sign and many more wrote in the idea of green office. The minimisation of usage of paper, print inks, printers and other traditional equipment is a real benefit for natural environment. It is also worth to mention that the number of electronic documents, also contracts, is increasing very fast. Green office means also the usage of modern, energy-saving solutions of lighting and powering the office devices.

The confirmation of positive attitude of banks to natural environment was the implementation international environmental norm ISO 14001<sup>12</sup>. The most popular pro-ecological initiatives used by firms are: recycling programmes, usage of energy-saving lighting, being a part of local ecological projects as for example planting trees, promoting pro-ecological behaviours. The main reason of engaging the firms and corporations in ecological projects is the economic aim — the listed activities may<sup>13</sup>:

- reduce the usage of electric energy by more than 80%;
- reduce the emission of greenhouse gases by using saving-energy devices by about 75%;

- duplex printing of documents (it is worth to mention that each 100 reams of recycled paper which is duplex printed saves two trees) — reduction of using the paper and recycling may reduce the costs and influence on environment by 75–95%.

According to M. Klimczak (2013)<sup>14</sup>, modern banks not only save the paper or energy — they also try to implement and propagate better behaviour patterns. Nowadays there are implemented new programmes co-financed by European Union which allows to propagate eco-innovations. The most important social aim of banks is enlightening the clients, which may lead not only to change of behaviours but also to new decisions and choices in the field of bank products. Banks also very often underline ecological operations in marketing communication, they gladly finance ecological actions and projects and become sponsors of ecological activities.

All of the efforts mentioned above would not have chance for success if the clients would not change their attitude — modern consumers more willingly pay by credit cards which also reduce the quantity of traditional money in rotation. Pro ecological clients are very often awarded by banks with special offers and promotions.

Green banks are also green obligations. Thanks to multilateral development banks we can talk about green obligations or climate obligations market. Multilateral development banks as World Bank, International Bank for Reconstruction and Development which is the part of Group of World Bank by 52 emissions of green obligations in 17 different currency raised 3.5 milliard USD<sup>15</sup>.

First green obligation was registered in 2011 on market in Luxembourg. It was emitted by International Bank for Reconstruction and Development (IBRD). Since then, green obligations worth 3.6 milliard USD have been emitted on Luxembourg market. It is worth quoting other data for comparisons —

in the first half of 2016, China emitted green obligations worth 11.2 milliard USD.

In the wake of European Bank went World Bank and Swedish bank Skandinaviska Enskilda Banken (SEB), which answered the needs of Swedish superannuation fund seeking opportunities of pro ecological investments. Only the engagement of World Bank contributed to increasing the interest of these instruments — not only by financial institutions but also national ones and corporations. Swedish Göteborg as a leader of green obligations and Apple concern, which emitted obligations worth 1.5 milliard USD are the best examples of the mentioned issue<sup>16</sup>. According to the World Bank<sup>17</sup>, the biggest number of green obligations were emitted by:

JP Morgan (24);  
BNP Paribas (17);  
SEB (15);  
Daiwa Securities (14);  
Credit Agricole (11).

The largest number of emissions were in following currencies:

USD (60);  
Indian rupiah (18);  
Australian dollar (8);  
Euro (6).

The measures from emission of green obligations are destined for the financial support investments which focuses on mitigation the climate changes and also for help in adjusting to climate changes, focusing mostly on flood and drought.

It is also worth mentioning that obligations emitted by the European Investment Bank (EIB) have become the tool of Climate Awareness programme. Gathered funds were intended for credit action EBI, which finances projects connected with renewable energy and energy efficiency. Since 2012, the project EBI is known as Europe 2020 Project Bond Initiative, the aim of which is funding enterprises from energetic and transport sector. In this case the role of EBI is to give loans and giving access to credit line.

Department for Business Innovation and Skills in Great Britain constituted the Green Investment Bank (GIB)<sup>18</sup>, which is responsible for financial solutions stimulating private sector for investing in green economy. The Australian Government initiated Clear Energy Finance Corporations (CEFC).<sup>19</sup> In 2008, the United States stated two important programmes connected with the energy market. Programme QECB — Qualified Energy Conservation Bonds — is conducted saving the energy. The other one — New CREB — New Clean Renewable Energy Bonds finances the investments in renewable energy. In Europe among autonomies as a precursor of obligation commission may be considered local government of region Île de France and Provence-Alpes-Côte d'Azur<sup>20</sup>.

Banks that want to be competitive and to have a lead on the financial market activate tools which are directed for natural environment protection. Banks not only support pro-ecological politic activity but also support pro-ecological investments. It leads to ecology responsibility which is a very complex issue. Modern banks realise three levels of ecological responsibility<sup>21</sup>:

- public relations, sponsoring and marketing;
- inner ecological economy and eco risk;
- offering products connected with environmental protection.

The role of green banks is more complex — they not only support ecological projects but also educate society about the importance of caring about planet Earth. It is called environmental responsibility. The educational factor is very important in implementing eco lifestyle.

Dziawgo (2010)<sup>22</sup> underlines the fact that not only governments care about environment — for example the European Union supports many ecological projects. The operation of green banks and their role in protecting the natural environment may be differentiated by three markers or hierarchy:

- Level I (the lowest stage) — sponsoring, public relations, marketing;
- Level II (the middle stage) — eco economy of the bank;
- Level III (the highest stage) — financing investments connected with environment protection and finding new solutions.

Green banking is strictly connected with promoting pro ecological behaviours which could help to protect the Mother Earth. Green banks' activities for sustainability focus on the following issues: saving energy, reducing paper use, promoting on-line banking and mobile banking, offering affinity cards, supporting humanitarian and ecological actions, and many more<sup>23</sup>.

## Green banking in Poland

Polish sector of green bank products develops very fast. Banks try to encourage society to care about planet by implementing pro-ecological solutions and supporting new innovations in industry sector. According to data presented by banks it is worth mentioning that the number of clients who are using green products increases very fast. Poles more often choose cashless ways of transactions, credit cards, and electronic bills. Notably, Polish banks engage in many pro-ecological actions and sponsor ecological projects. The green banking sector develops very fast and displaces traditional banking. Even older people are not afraid of using modern tools as credit card or Internet access to account. Polish people are aware of the need of ecological operations. The climate changes, destruction of green areas, forests and many more make people more prone to be eco. In this part it is also worth telling about the engagement in ecological actions of the government and private institutions.

In Poland, the largest number of credit products dedicated to environmental protection in its offer has BOŚ S.A. The examples of green banking financial services addressed by

BOŚ S.A. to individual clients include financial products such as mortgage credits, loan financing for devices for environmental protection or acquisition of renewable energy sources, loans in cooperation with public environmental funds, as well as ecological mortgage loans. On the other hand, among products addressed to enterprises, the following should be distinguished: climate credit, loans in the "third party" format, loans in cooperation with public environmental funds, and a loan from the NIB (Nordic Investment Bank) credit line.

When analysing the offer of other banks, it should be noted that in addition to BOŚ S.A. BGŻ BNP Paribas also has a number of loan products in the area of green investment financing. Among the products targeted to companies, the following should be mentioned: green energy loan, clean energy loan, or investment loan from the European Investment Bank. Sources of financing tasks related to environmental protection can also be divided into internal and external ones<sup>24</sup>. Additionally, all banks in Poland to express and implement sustainable banking business model offer on-line services and activities which lead to reducing the usage of paper (like on-line bill payments, electronic transaction confirmations, electronic balance sheets, etc.). Table 1 presents other initiatives of Polish banks taken for sustainable development.

Poland as a member of the European Union has to care about environment. The National Fund for Environmental Protection and Water Management (NFEPWM) cooperate with private investors and banks. In 2015, this institution implemented new line of support called Prosument<sup>26</sup>. This project is dedicated to micro installations connected with renewing energy. Banks offer green mortgages — these credits are for people who want to invest in ecological solutions like for example solar heating system or energy-saving systems. The most experienced in this field of operations is Bank Ochrony Środowiska (BOŚ) which for many years supports pro-ecological actions.

Table 1. Activities of Polish banks for sustainable development

Bank	Activities
Bank Ochrony Środowiska	<ul style="list-style-type: none"> <li>■ Establishing and maintaining lasting relations with the National Fund for Environmental Protection and Water Management (NFEPWM), regional environmental protection and water management funds, the Polish Countryside Development European Fund</li> <li>■ Supporting Natura 2000 and other ecological projects</li> <li>■ Cooperation with ecological and pro ecological institutions and organisations</li> </ul>
PeKaO SA Powszechna Kasa Oszczędności Bank Polski SA Citi Handlowy SA Fortis SA Kredyt Bank SA	<ul style="list-style-type: none"> <li>■ Sponsoring of cultural, sport and education actions</li> <li>■ Charity foundations and actions</li> <li>■ Developing relationships with employees and working politics</li> </ul>
Internazionale Nederlanden Groep Bank Śląski	<ul style="list-style-type: none"> <li>■ ING Foundation for Children (aid for chronically ill children)</li> <li>■ Initializing programme "In the company of a Lion" (help for children with cancer disease)</li> </ul>
Bank Gospodarki Żywnościowej BNP Paribas	<ul style="list-style-type: none"> <li>■ Joining the Strategic Partners of the Responsible Business Forum</li> <li>■ Establishing Foundation BGŻ BNP Paribas which cooperates with Society of Children's Friends</li> </ul>
mBank	<ul style="list-style-type: none"> <li>■ Joining the Strategic Partners of the Responsible Business Forum</li> </ul>
Powszechna Kasa Oszczędności Bank Polski SA	<ul style="list-style-type: none"> <li>■ Affinity cards supporting the Programme of Building Polish Artificial Heart</li> </ul>
Bank Inicjatyw Społeczno-Ekonomicznych Bank Przemysłowo-Handlowy Bank Zachodni WBK Polbank EFG	<ul style="list-style-type: none"> <li>■ Affinity cards supporting foundation "Spełniamy Marzenia"</li> </ul>
Bank Millenium	<ul style="list-style-type: none"> <li>■ Affinity cards supporting WWF</li> </ul>

Source: G. Paluszak, J. Wiśniewska-Paluszak<sup>25</sup>, pp. 85–86

BOŚ closely cooperates with National Fund for Environmental Protection and Water Management and offers the clients green mortgages and special credits for building eco-houses. In the period 2010–2014, NFEPWM realised a project connected with bailout of solar collectors. The Fund intended 450 million PLN for this aim. According to data cumulative amount of donations given was 443 045 thousand PLN. There was great interest in the project — more than 66 thousands of beneficiaries capitalised the bailout<sup>27</sup>.

According to Wojewoda-Leśniewicz Polish banks more willingly engage in pro-ecological activity. Michał Zwolinski — specialist from PKO BP states that PKO is very interested in pro-ecological operations. As one of the biggest banks it engages in many ecological projects. The most known investment is incineration plant in Poznan which was finished in 2016<sup>28</sup>. PKO BP also finances renewable energy production — like wind farms. PKO has 20% contribution of the market. As we can see Polish banks realise many ecological

projects, sponsor pro-ecological programmes and promote eco lifestyle.

BOŚ which was mentioned above is one of the leaders in green sector in Poland. This bank for over 25 years supports ecology and innovations. In the period of time since 1991 to 2016, BOŚ supported over 58 thousands of investments worth almost 50 milliard PLN<sup>29</sup>. Bank also gave pro-ecological credits and loans for over 17.9 milliard PLN. Bank Ochrony Środowiska cares about its image. New agency in Bielsko-Biała attracts clients with the eco interior design in very good taste. It is also friendly for consumers with pets — they can take their pets to the bank where there is a special area for animals. It is a new solution, but clients are glad that they can perform all operations connected with bank accounts and credits without worrying about their pets.

To get a better look at the issue it is worth comparing Polish green banks with other countries — for example India.

Tables 2 and 3 present data connected with the sector of green bank products in Poland and in India.

Table 2. The percentage of clients who use green bank products in India,% of all clients

Age groups	2009	2011	2013	2014
20–30	28	32	41	67
31–40	27	30	45	70
41–50	25	30	44	62
>50	15	28	36	51

Source: own research according to the data published by Indian banks

Table 3. The number of clients who use mobile banking in Poland

Bank	2014	2015
PKO BP	625 244	1 328 905
mBank	892 000	1 092 440
Bank Pekao SA	595 926	1 014 647
BZ WBK	483 472	666 278
ING Bank Śląski	420 146	500 000
Bank BGŻ BNP Paribas	77 969	118 621
Raiffeisen Polbank	27 500	52 501

Source: [http://www.bankier.pl/static/att/122000/7391886\\_polska\\_bankowosc\\_w\\_liczbach\\_raport\\_bankier\\_pl.pdf](http://www.bankier.pl/static/att/122000/7391886_polska_bankowosc_w_liczbach_raport_bankier_pl.pdf)

Indian green banking according to Jha and Bhome<sup>30</sup> (2013) is based on eight steps:

1. Go Online;
2. Use Green Checking Accounts;
3. Use Green Loans for Home Improvements;
4. Power Savings Equipments;
5. Use Green Credit Cards;
6. Save Paper;
7. Use of Solar and Wind Energy;
8. Mobile Banking.

Banks which use even some of the steps presented above are considered as green banks. More and more institutions offer green products for clients to be more competitive.

## Conclusion

Green banking products are the future of contemporary banking systems. The global crisis and other turbulences force the financial sector to development and finding of new solutions to be more stable and reliable. The green banking is a great opportunity and is connected with ecology trends. The care about the planet is a dominant trend in all sectors of economics and industry. Human activity for hundreds of years destroyed many unique natural eco systems. Green banking is a chance to save the planet and implement ecological trends to a wider group of people.

Green banking supports pro ecological activities and finances private investments which are based on the usage of pure energy and seeking innovation solutions. Nowadays banks have become the promoters of ecological behaviours which may be surprising for many people. Thanks to new technologies many banks offer the clients pro ecological solutions as for example electronic bills, green credit cards and many more. According to economists, the green banking sector is extremely popular nowadays. Green banking as a part of financial sector helps to achieve sustainable development which in the times of global crisis is very important.

Green banks not only promote pro-ecological life style and care about the planet but they also offer credits, loans and grants for eco solutions like wind farms or solar systems. Poland as a member of European Union also has to obey rules and standards of Union's economic. As a developing country in a process of economic changes Poland has to look for new solutions to achieve sustainable economy. The green sector is a very good field not only for banks but also for private institutions. Recycling, saving the energy, renewable sources of energy and many more are an opportunity to achieve stable economic situation. Polish government also supports the ecologic sector. The legislation changes and new norms and standards are created to encourage investors to pro-ecological activity.

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## About the Authors

*Dr. hab. Magdalena Ziolo* is Associate Professor, *PhD hab.*, University of Szczecin, Poland. She is the head of the Institute of Sustainable Financial Systems. Research and teaching scope of interest: finance and banking, especially sustainable finance and green banking, sustainable development, public finance.

**Dorota Miśkiewicz** is *PhD* student at University of Szczecin. Research interests: sustainable development, regional development, European Union funds, finance, self-government finance.

**Bartłomiej Lepczyński** is student at PWSZ Konin High School. Research interests: finance and banking.

## Par autoriem

*Dr. hab. Magdalena Ziolo* ir Ščecinas Universitātes (Polijā) asociētā profesore, *PhD hab.*, Ilgtspējīgu finanšu sistēmu institūta vadītāja. Pētnieciskās intereses: finanses un banku lietas, jo sevišķi ilgtspējīgas finanses un zaļās bankas, ilgtspējīga attīstība, valsts finansējums.

**Dorota Miśkiewicz** ir studente Ščecinas Universitātē. Pētnieciskās intereses: ilgtspējīga attīstība, reģionālā attīstība, Eiropas Savienības fondi, finanses, pašvaldību finanses.

**Bartłomiej Lepczyński** ir students Valsts Augstākās profesionālās izglītības skolā Koninā. Pētnieciskās intereses: finansējums, banku lietas.

## ILGTSPĒJĪGAS FINANCES ILGTSPĒJĪGAI ATTĪSTĪBAI. POLIJAS ZAĻĀ BANKA

**Magdalena Ziolo**

*magda.ziolo@wp.pl*

**Dorota Miśkiewicz**

*miskiewicz@irszczecin.pl*

**Bartłomiej Lepczyński**

*bartek123lepa@wp.pl*

## Anotācija

**Atslēgvārdi:** *zaļās finanses, ilgtspējīgums, finanšu produkti, vide*

Zaļo banku sektors ir nozīmīga globālās ekonomikas daļa. Zaļo banku produkti un rūpes par dabas vidi ir ne tikai tendence, bet arī veids, kā sasniegt stabilu ekonomisko situāciju. Jauno tehnoloģiju attīstība, kas saistīta ar internetu un digitalizāciju, sekmē progresu zaļo banku sektorā. Mūsdienās bankas ne tikai atbalsta un veicina eko dzīvesstilu, bet arī piedāvā eko kredītus, aizņēmumus un subsīdijas no investoriem, kas vēlas šajā jomā iesaistīties. Rūpes par ekoloģiju nav tikai fanātisku vides sargātāju ziņā, par to interesējas arī uzņēmēji un politiķi. Tā ir globālās ekonomikas nākotne. Šis raksts apskata dažādus zaļās bankas produktu tipus un veidus, kādos bankas var atbalstīt proekoloģiskas darbības un projektus. Tas arī parāda globālās tendences banku sektorā un ekonomiskajā situācijā. Autori apskata Polijas zaļās bankas un to darbību ekoloģijas jomā. Polija kā attīstības valsts koncentrējas uz atjaunojamās enerģijas avotiem, otreizēju pārstrādi, enerģijas taupīšanu un vides aizsardzību. Polijas valdība sadarbojas ar bankām un privātajiem ieguldītājiem, lai nodrošinātu vislabākos rezultātus.