

Theoretical Review of The Application of Green Banking in Indonesia

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Abstract

Perkembangan konsep ekonomi hijau yang dilakukan dalam rangka mendukung pembangunan berkelanjutan mendorong peranan institusi keuangan untuk turut terlibat sebagai bagian dari roda perekonomian suatu negara. Hal tersebut memunculkan beberapa istilah baru, salah satunya adalah Green Banking yang berkaitan dengan peranan perbankan terhadap peran serta mereka dalam memelihara lingkungan melalui kegiatan operasional. Untuk itulah paper ini disusun untuk melihat potensi penerapan Green Banking di Indonesia dengan membandingkan praktek di Negara lain sebagai benchmark. Adapun metode yang digunakan dalam penyusunan skripsi ini adalah dengan menggunakan studi kepustakaan, dari berbagai sumber data sekunder baik itu buku, artikel, atau publikasi lainnya. Dengan memperhatikan kondisi Indonesia secara umum terlihat bahwa perbankan Indonesia memiliki kemungkinan untuk dapat mengembangkan green practices tidak hanya pada sektor lingkungan tetapi juga pada sektor-sektor lainnya. Misalnya, pada sektor sosial, perbankan Indonesia dapat mengembangkan social housing melalui KPR hijau (ramah lingkungan) dengan menawarkan suku bunga yang lebih rendah bagi kelompok bawah atau perbankan bisa membentuk municipal bonds sebagai salah satu instrumen pembiayaan untuk kabupaten dan kotamadya di Indonesia.

Background

Green issues have long been a global issue that is becoming an international conversation. Issue of climate change to be one of the highlights issues for the countries in the world due to his influence that feels more real in people's lives. Development of environmental issues will also eventually affect other conditions, particularly the condition of the world economy that is closely related to the establishment of relations of countries in the world through trade system.

A change in the system's natural balance, led to new terms in the field of the economy, such as the economic environment friendly (Green Economy). ECO Canada, defines a Green Economy as follows:

"The aggregate of all activity operating with the primary intention of reducing

conventional levels of resource consumption, harmful emissions, and minimizing all forms of environmental impact. The green economy includes the inputs, activities, outputs and outcomes as they relate to the production of green products and services."

Meanwhile Kevin Danaher, Global Citizens Center The leader stated:

"Green Economy differently from the use of pricing mechanisms for protecting nature, by using the terms of a "triple bottom line," an economy concerned with being: Environmentally sustainable, Socially just, based on the belief that culture and human dignity and Locally rooted, based on the belief that an authentic connection to place is the essential pre-condition to sustainability and justice. The Green Economy is a global aggregate of individual communities meeting the needs of its citizens through the

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responsible, local production and exchange of goods and services."

As simply, green economy can be interpreted as an implementation of the economic system is based on concern for the environment. Sustainable economic existence, known also by the term Green Economy itself is becoming an international issue in which the countries have started to steer its economy system on sustainable development system or better known as sustainable development. It has also drawn attention to Indonesia as part of the countries in the world, who are also concerned about environmental issues. President SBY has discussed the concept of green economy in Siring Declaration (2010) to give 10 referrals in accordance with the concept of the triple bottom line in order to encourage the development of national economy for the period 2010-2014.

The term "Sustainable Development" appeared since the holding of the Biosphere Conference in 1968. Sabtia (2010) states that the concept of Sustainable Development is terdeskripsi value of the Stockholm Declaration and the Rio Declaration as a compromise measure between the developmentalist and environmentalist. But environmentalists apparently not satisfied with the concept of sustainable development when looking at concepts such as the judging of any terms accentual always more to development.

In Sabtia (2010), commitment to achieve environmentally sustainable development was the starting point for the implementation of national development post 1972 Stockholm conference. Environmental management principles contained in the 1972 Stockholm Declaration actualized into Table 1. Triodos Bank Financing Portfolio

national legislation (UULH-82) and refined in 1997 (UUPLH-97) based on new developments in the Earth Summit in Rio de Janeiro in 1992. Rio Declaration which highlights aspects of the environment and development was a reflection of the commitment to the principles that support the concept of sustainable development (sustainable development).

The emergence of the term Green Banking in the spotlight in the banking sector related to the role of financial services to support the sustainable economy booming discussed. Green Banking concept itself is nothing new in Indonesia. Banking experts are still studying and studying more about this concept. According Sabtia (2010), The concept of Green Banking study the impact of development on the environment and environmental impacts of development based on the concept of ecology. Science of ecology is the study of the reciprocal relationship or interaction between development and the environment. Green Banking is a financial institution that gives priority to the sustainability (environmental sustainable) business practices.

Netherlands is one country that has implemented the concept of green banking. In 1986, the founders of Triodos Foundation express their thoughts about the sustainable management of money which is then realized through the establishment of Triodos Bank as an intermediary institutions that have a role to development. Triodos Bank's attention to sustainability can be seen from a more focused operations lead to the three pillars of sustainable development and are described in the following credit portfolios.

Segment	Share of Total	Information
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<i>Lending</i>		
<i>Environment</i>	49 percent	1. <i>Renewable energy projects (wind and solar power, biomass, hydro-electric and energy saving projects)</i> 2. <i>Organic agriculture</i> 3. <i>Environmental technology and nature conservation projects</i>
<i>Social</i>	28 percent	<i>Traditional business or non-profit organisations and innovative enterprises and services providers</i>
<i>Culture</i>	12 percent	<i>Educations, retreat centres, religious groups, cultural centres and organisations and artist</i>
<i>Municipality</i>	6 percent	<i>Short-term loan to municipalities</i>
<i>Private Loans</i>	5 percent	<i>Private sustainable mortgages</i>

Source: Annual Report Triodos Bank (2011)

While in Indonesia, the concept of Green Banking itself is still new and not yet widely known. Have not seen the role of banks in Indonesia towards environmental and social problems. Lack of socialization of green banking in Indonesia as a model of banking business operational activities with the concept of "green" or by directing the three pillars of sustainable development. Who run the banking business model is oriented for the benefits to be obtained without considering the impact on the environment and social.

Currently, BNI is the only bank in Indonesia, which is trying to become sustainable banking. Concern for the environment and the socio-proram look at programs run by BNI through partnerships and community development programs (CSR) which is also part of the corporate social responsibility activities. In addition, in order to improve the quality of loan funds by focusing on low-cost funding strategy (CASA), until the end of 2011, BNI has disbursed loans amounting to Rp 53,734,597,569 partnership programs for various sectors of the economy.

Based on the above background exposure, the authors formulate some

research questions that would be a problem in this study, are as follows:

1. How the implementation of the concept of green banking in the Netherlands to use Triodos Bank as a benchmark?
2. How the implementation of the concept of green banking in Indonesia that began undertaken by BNI?
3. Are there differences in the implementation process conducted by the two banks?
4. Of the difference, is there potential for Indonesia to be able to apply the concept of green banking?

Objectives

As for the objectives of this study are as follows:

1. To get an overview of the application of the concept of green banking in the Netherlands (Triodos Bank) and Indonesia (BNI).
2. To determine differences in the process of implementing the concept of Green Banking in between the two banks.
3. To determine the potential application of the concept of green banking in Indonesia.

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Theoretical Background Sustainable Development

The existence of environmentally friendly economy is closely linked to sustainable development. Sustainable development (sustainable development) is a conscious and planned effort that integrates aspects of environmental, social, and economic development strategies to ensure the environmental integrity and safety, ability, well-being, and quality of life of the present generation and future generations.

The paradigm of the sustainable development is introduced after holding a meeting in Rio de Janeiro in 1992, highlighting the three pillars of development, namely: economy, social and environment. UNEP rate is still a lack of integration in implementing the three pillars that run both in the UN system and the policies that are made globally, regionally and nationally. According Addinul Sure, economic development with an emphasis on growth is often contrary to the principles of environmental sustainability so it is often said that between economic development and environment seem contradictory.

This was reinforced by the fact that shows that there are still many countries that do development at the expense of environmental factors in the pursuit of economic benefits alone (single bottom line development). Sakariza (2010) states that only development oriented to maximizing growth, exploitative and short-term dimension. Meanwhile, the national development should be oriented with the known long-term or sustainable development (sustainable development) in order to be harmonious and balanced between the 3 (three) main pillars, namely economic development

3P (profit), the environment (planet) and social (people).

Green Economy

The existence of the green economy as a result of the development of the concept of sustainable development which aims to create an economy based on the environment. Where economic development has been carried out so far only profit-oriented with little regard for the effects of the economic activities that have been performed. To understand the concept of green economy, there are several sources that try to define the green economy.

An international organization, the United Nations Environment Programme (UNEP), defines a Green economy as an activity of production, distribution and consumption of goods and services produced *kesejahteraan* human development in the long term, however, does not explain environmental risks and ecological scarcity are significant in the next generation.

ECO Canada, one of the NGOs concerned about the environment, stating that the green economy is the entire operation with the goal of reducing the rate of conventional primary source of income for consumption (reducing conventional levels of resource consumption), harmful emissions (Harmful emissions), and minimizing environmental impact. Green economy includes inputs, activities, outputs, and outcomes related to the production of green products and services.

According to the World Resources Institute, the Green Economy is considered as an alternative vision for growth and development, something that can result in growth also in the development of human life in ways that

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are consistent with sustainable development. Green economy, promote the triple bottom line: sustaining and advancing economic, environmental and social well-being.

Green Banking

With the development of the application of the concept of green economy, can not avoid the role of financial institutions in running an environmentally friendly economy. Where the financial institution's role in the economy is considered very crucial that led to a new term, Green Banking. However, until now there is no exact definition of the concept of Green Banking. Some economists and financial try to interpret the concept of Green Banking in order to be easier to be understood and applied in the Indonesian banking system.

Ruth A. Sekaryuni, Research Executive Directorate of Banking Research and Regulation of BI, defines Green Banking as banking on with their business based on the principles of sustainable development (development sustainability), especially in the credit and financing, namely the balance of ecology (environment), human welfare, and social and cultural development of society.

According to the World Bank, Green Banking is a financial institution that gives priority to the sustainability (environmental sustainable) business practices. Clark Schultz defines Green Banking to promote environmentally friendly practices and reduce the carbon footprint of the banking operations. Of some view of the above, it can be concluded that Green Banking is a banking system that led to the principle of sustainability by implementing environmentally friendly practices in operating activities.

In general, there are two important functions that must be executed by the bank affect the economy of a country, namely:

1. Banks play a role as intermediary. Bank collects revenue from households and firms and use the revenues for investment and credit.
2. Bank to manage and diversify risks associated with operations. Its main objective is to minimize the probability of risk. (Risk Management represent an important driving force for greening process).

Methodology

This study uses descriptive study which was conducted to gain a true picture of an object. Descriptive research without intending to test the hypothesis or theory, but it is an activity to analyze and classify or systematize materials that already exist.

The analysis methodology which used in this study is a qualitative analysis approach using deductive logic approach, which is built based on the syllogism common things and lead to special things. This research material obtained by using literature study, which examines the theory with a discipline related to the discussion in this study.

Techniques of data collection in this study was through the study of literature by reviewing literature from various sources, both in print and electronic form. The type of data used are secondary data, where secondary data is data obtained through library materials and documents that can be obtained from: various books and research results related to the issues discussed and various articles, journals and magazines that explain the subject matter covered.

Result and Discussion

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Application of Green Banking in the Netherlands (Triodos Bank)

The Triodos Bank is one of the European countries that have implemented the concept of Green Banking. By offering lower interest rates on investors, banks in the Netherlands can provide a lower cost as well for green loans for environmentally friendly projects.

In addition, green practices by banks in the Netherlands also received support from the government. This is evident from the participation of the government by providing a number of funds (approximately USD 200 million - USD 300 million) to invest in environmentally friendly projects. The Dutch government also provide benefits for citizens who make an investment like buying stock environmentally friendly eco-friendly project or put a deposit on the green bank. Benefits in the form of payment of profit tax

exemption and receive a rebate on income tax.

One of the many green banks serve as resources for other banks and even other countries in developing the concept of Green Banking is Triodos Bank. Where Triodos Bank is a private bank that was founded by a group of individuals (Triodos Foundation) who had the idea of using money as a tool for social change. They are Adriaan Dekin Dura (Economist), Dieter Brull (Professor of Tax Law), Lex Bos (Organizational Consultant), and Rudolf Mees (Banker).

Triodos bank green banking understand the concept very well by using the three pillars of sustainable development as a pillar in running operations both internally and externally. Triodos also has a variety of green products such as Triodos Renewable Europe Fund, Ampere Equity Fund, Triodos Sustainable Fund, and others to support operations.

Table 2. Investment Portfolio Triodos Bank

Segment	Information
<i>Organic Food & Agriculture</i>	<ul style="list-style-type: none"> ✓ 1083 projects ✓ Total funds 218 million EUR
<i>Energy & Climate</i>	>360 projects include 204 wind farms, 131 solar plants, and various small biomass and hydro projects
<i>Sustainable Trade</i>	<ul style="list-style-type: none"> ✓ 33 agricultural exporters in developing countries for which we provided a trade finance ✓ Total global organic non-food sales USD 1.97 billion ✓ Provide trade finance in 22 countries
<i>Microfinance</i>	7.9 million loan clients reached by microfinance institution in 43 countries
<i>Arts & Culture</i>	<ul style="list-style-type: none"> ✓ 398 arts and culture projects ✓ Total funds 235,000,000 EUR

Sumber: www.triodos.com

In addition, Triodos Bank was established with the aim to support innovative projects and companies by offering funds to anyone who has the

initiative but could not get a loan through a conventional bank. In order to secure these funds and as part of risk management, a group of individuals that

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form a network guarantee or also known as the principle of personal security to microfinance (microfinance).

In 1990, Triodos Bank introduced a green fund to fund environmentally friendly projects. Triodos does not restrict financial support only on sustainable projects, but also has a number of highly successful banking

products. Triodos give loans to those who add value to the social, environmental and cultural such as renewable energy, social housing, complementary healthcare, fair trade, organic food and farming and social business. Here is a table of the loan portfolio by Triodos Bank:

Tabel 3. Financing Portfolio by Sector 2011

Sector	Amount (USD)¹	%	Number
<i>Environment</i>	1,777,183,258.50	49.2 %	2,967
<i>Organic farming</i>	147,257,352.00	4.1 %	730
<i>Organic food</i>	93,022,807.50	2.6 %	562
<i>Renewable energy</i>	1,245,807,742.50	34.5 %	803
<i>Sustainable property</i>	238,638,618.00	6.6 %	732
<i>Environmental technology</i>	52,456,738.50	1.4 %	140
<i>Social</i>	1,015,032,987.00	28.1 %	2,039
<i>Retail non-food</i>	21,501,774.00	0.6 %	134
<i>Production</i>	20,461,324.50	0.6 %	120
<i>Professional services</i>	167,570,950.50	4.6 %	270
<i>Social housing</i>	166,892,175.00	4.6 %	281
<i>Healthcare</i>	483,277,968.00	13.4 %	874
<i>Social projects</i>	105,296,800.50	2.9 %	286
<i>Fair trade</i>	8,429,296.50	0.2 %	36
<i>Development cooperation</i>	41,602,698.00	1.2 %	38
<i>Culture</i>	451,589,467.50	12.5 %	1,341
<i>Education</i>	98,412,259.50	2.7 %	258
<i>Child care</i>	27,808,146.00	0.8 %	101
<i>Arts and culture</i>	146,172,330.00	4.0 %	591
<i>Philosophy of life</i>	85,639,054.50	2.4 %	227
<i>Recreation</i>	93,557,677.50	2.6 %	164
<i>Private Loans</i>	171,150,759.00	4.7 %	15,544
<i>Municipality loans</i>	199,004,751.00	5.5 %	9
TOTAL	3,613,961,223.00	100 %	21,900

Source: Annual Report Triodos Bank 2011

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Based on the table above, it appears that the portfolio of Triodos has been dominated by the three pillars of sustainable development, namely environmental sector (49.2%), social (28.1%) and culture (12.5%). While private and municipality loan only a tenth of the overall loan portfolio. Triodos has made 3P as a foundation in designing their loan portfolios.

In addition, based on the theory of green products and services, Triodos has developed several products as part of their bank as green mortgages in the mortgage scheme, green fiscal fund with the role of the Dutch government in the form of tax exemptions, green investment and green project finance to fund environmentally friendly projects that received less attention than usual conventional banks. Other products for Triodos an opportunity to be able to include in their products.

Possibility Application of Green Banking in the Indonesia (BNI)

Green banking in Indonesia is nothing new and not many people know and apply this concept. One of the banks in Indonesia, which is trying to apply the concept of Green Banking is BNI. BNI is one of the Indonesian state-owned commercial bank that was established in 1946 with initial function as the central bank of Indonesia. In 2005, participated in the signing of BNI UNEPFI Statements in order to promote the role of the banking sector in sustainable development.

From 2010, the BNI to reform in order to achieve sustainable financial growth with customer centric approach. BNI also began to focus its operations to lead to the three pillars of sustainable development (profit, people, planet). However, green practices run by BNI

still be part of the corporate social responsibility (CSR) and not to their business model.

However, lending is done BNI for companies that are environmentally friendly has reached Rp 7 trillion, or about 5.7% of the total loan portfolio in 2010. Credit is distributed through partnerships and community development program (CSR). CSR is a part of corporate social responsibility activities BNI is implemented consistently to ensure the sustainability of its existence as a business entity.

General Meeting of Shareholders BNI on May 18, 2011, the allocation of funds for the activities of the partnership program is set at 1% or USD 41.0 billion, while 3% or Rp 123.0 billion earmarked for community development activities. Partnership program fund disbursement in 2011 was Rp 47.0 billion, while the realization of community development funds amounting to Rp 56.8 billion.

Filling The Gap

Based on the exposure in the previous subsection, we see that the difference in perception between the two banks on green banking. Triodos Bank has a better understanding of the banking and green make their concern for sustainable development outlined in the internal and external operations by investing in environmentally friendly projects such as renewable energy, organic agriculture, and others. Meanwhile, the green interpret BNI bank as a bank that cares about the environment and social through the bank's internal operations as paperless, green attitude, and the lack of banking products environmentally friendly.

Moreover, in terms of the purpose of establishing a bank, Triodos Bank was established with the aim of sustainable

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management of money by using a credit portfolio is allocated largely on environmental, social and cultural. While, BNI is a commercial bank that is trying to incorporate social and environmental elements in their loan portfolios.

Most of environmentally friendly investments made BNI is part of corporate social responsibility and do not have a special section in their loan portfolios despite BNI is now starting to do the financing for the energy sector. In addition, sectors such as environmentally damaging mining still has a sizable portion of the loan portfolio BNI. For that, BNI should do the screening of the economic sectors will receive funding and explore other economic sectors not yet covered, because it is the potential for the bank in particular and Indonesia in general banking in order to provide a greater contribution to nature, the environment and social, one through the green sector lending.

CONCLUSION

Based on the analysis and discussion that has been done in the previous chapters, some conclusions can be drawn as follows:

1. Triodos Bank has a better understanding of the concept of green banking by having green products and green portfolio that leads to the three pillars of sustainable development. In addition, most of the assets of Triodos allocated for green loans.
2. Green practices done BNI still have a small portion of the loan portfolio and the bank has not yet had a green or green products portfolio such as Triodos, although BNI has a number of assets which is much larger than Triodos.

3. Potential application of green banking in Indonesia based Triodos portfolio and taking into account the condition of Indonesia in general shown that Indonesian banks have the possibility to be able to develop green practices not only in the environmental sector but also in other sectors. For example, in the social sector, Indonesian banks to develop social housing through mortgage green (environmentally friendly) by offering lower interest rates to lower or banking group may establish municipal bonds as a financing instrument for the counties and municipalities in Indonesia.

REFERENCES

- Banjarnahor, Donald. 2012. Green Banking Incentive Request. Retrieved on June 4, 2012 from <http://www.bisnis.com/articles/green-banking-bank-minta-insentif>
- BankTrack. Collevicchio Declaration: The Role and Responsibility of Financial Institutions. Retrieved on July 4, 2012 from
- Bank Indonesia. Banking Products and Services. Accessed from the website of Bank Indonesia on July 6, 2012 from
- Bapna, Manish & Talberth, John. , 2011. Q & A: What is a "Green Economy?". Retrieved on August 8, 2012 from <http://www.wri.org/stories/2011/04/q-a-what-green-economy>
- BNI. 2012. 2011 Annual Report: Ahead with confidence. Retrieved on October 7, 2012 from <http://www.bni.co.id/Portals/0/bni-AR-2011.pdf>
- Clerck, Frans. Without Year. Ethical Banking. Retrieved on July 4, 2012 from

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- http://www.socialbanking.org/fileadmin/isb/Artikel_und_Studien/de_Clerck_Ethical_Banking.pdf
- Colby, Charles & Woodall, Gina. Without Year. Banking on Green: Responding to Consumer Concerns about the Environment. Retrieved on June 5, 2012 from <http://www.rockresearch.com/greenbankingpaper.pdf>
- Dash, R.N. , 2008. Sustainable Green Banking: The Story of Triodos Bank. Retrieved on June 5, 2012 from
- Eagle, Linda. , 2009. Sustainability in Banking: Transforming the Financial Institutions into a Green Machine. Retrieved on June 5, 2012 from <http://www.bankersacademy.com/pdf/Transforming-Financial-Institution-Green-Machine.pdf>
- Group, Aite. , 2009. Global Cash Management: Going Green. Retrieved on June 5, 2012 from <http://www.bottomline.com/collateral/banking/CashManagementGoesGreen.pdf>
- Hemawan, Qari Sakariza. 2010. Green Bank Linkage degan Sustainable Development. Retrieved on June 5, 2012 from <http://www.scribd.com/doc/45317353/Green-Banking-2010-Riza-Final>
- IFC. 2007. Environmental, Health and Safety General Guidelines. Retrieved on August 20, 2012 from
- Kaufer, Katrin. , 2011. Banking mattered as if Society: The Case of Triodos Bank. Retrieved on August 20, 2012 from http://web.mit.edu/colab/pdf/papers/Banking_as_if_Society_Mattered.pdf
- Keown, Martin, & Petty. , 2008. Foundations of Finance 6th Editions. USA: Pearson Prentice Hall

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