

Green Finance Action Plan

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Green Finance Action Plan

I. Introduction

It has become a global mainstream to take actions in response to global warming, climate change and the imbalance of ecological environment, to pursue the clean and safe green energy to maintain the sustainability of the earth's resources and environment, and to utilize financial mechanisms to guide the economy to a low carbon and resilient one (Green Economy).

In particular, the Paris Agreement under the UN Framework Convention on Climate Change (UNFCCC) entered into force on November 4, 2016, which will have a major impact on the future industrial structure and development direction of countries. Although Taiwan does not have UN representation to sign the UNFCCC and the Paris Agreement, it, as a member of the global village, should still share the responsibility for reducing greenhouse gas emissions and be in line with international trends.

The “Greenhouse Gas Reduction and Management Act” (Greenhouse Gas Act in short, under Environmental Protection Administration) clearly states that Taiwan's long-term greenhouse gas reduction target is to be less than 50% of 2005 emissions in 2050. Meanwhile, the government set three approaches to achieve greenhouse gas reduction target:

mitigation, adaptation and low-carbon economy growth. Article 8 of the Greenhouse Gas Act clearly stipulates that the relevant central authorities should promote Green Finance. The Executive Yuan has invited the National Development Council (NDC), the Financial Supervisory Commission (FSC), the Ministry of Finance (MOF) and other central ministries to cooperate in Green Finance affairs to guide Taiwan for green and low-carbon growth.

In addition to that, the Electricity Act was amended in January 2017 to incorporate the nuclear free home policy. The supporting renewable energy policy also sets the target of 20% renewable energy generation share by 2025. According to the estimation proposed by the Ministry of Economic Affairs, the funding needs of solar photovoltaic and offshore wind power are as high as NT\$1 trillion and 540 billion, respectively, which are quite amount that depends on support by the financial sector.

Considering that Green Finance has become an important international trend, and in order to pursue the major policies of Taiwan's nuclear-free home, energy transformation, and environmental emission reduction, the FSC has invited green energy experts, green energy industry players, financial institutions to discuss and negotiate with relevant ministries and then propose the "Green Financial Action Plan". The Plan to be implemented across the ministries will channel the financial sector's resources to green industries and green consumption,

and then fulfill the new economic model the President mentioned in her inaugural speech to pursue sustainable development.

II. Objectives of the Green Financial Action Plan:

1. Short-term objective:

Aligning with the policy of green energy/green power priority, the short-term objective of the Green Financial Action Plan is to assist the green energy industry, especially the solar photovoltaic and offshore wind power generation companies, to obtain the relevant funds needed for business development. Therefore, the short-term promotion focuses on cultivating financial talent to understand the green energy industry, introducing financial measures such as credit, investment, and fund-raising and enabling financial markets to spontaneously support the green energy industry.

2. Long-term objectives:

The government recognizes that developing green energy industry and promoting green finance are only parts of the overall environmental policy. It requires the public and private sector, together with the people, to collaborate to achieve the goal of long-term low carbon sustainability. The Plan's long-term objectives include: (1) building a friendly regulatory environment, (2) assisting the financial sector to understand that the core of

the green economy is “sustainability”, not “price”, (3) facilitating the financial mechanism to guide entities, investors and consumers to pay more attention to sustainability issues, and (4) transforming Taiwan into a green low carbon economy, with green consumption and living.

III. International practice for Green Finance:

The term “Green Finance” is not defined in Greenhouse Gas Act, and there are different ideas or approaches for Green Finance internationally. The main idea is to enable economic entities (including financial or industry players, and others) to incorporate environmental risks, costs and returns into financial calculations when engaging in economic decision-making. Green finance helps internalize environmental externalities and guides economic transformation toward green and low-carbon development.

There are three main types of international practice that promote green finance.

1. Promote green investment and financing with policy tools:

For example, the UK “Green Investment Bank (UKGIB)” which was established in October 2012 and 100% owned by the British government specializes in green investment. Kreditanstalt für Wiederaufbau(KfW) in German and European Bank for Reconstruction and Development (EBRD), acting as national development banks , provide preferential loans or establishes special funds for green funding. The US Department of Energy's

Loan Programs Office provides a loan guarantee for specific renewable energy power generation projects (Financial Institution Partnership Program).

2. Green Investment and Financing Guidelines on a voluntary basis (Equator Principles, Responsible Investment Principles):

(1) Equator Principles (EPs)

A. The EPs are voluntary norms of credit agencies. The principles require that the signatories should identify, evaluate and manage the risks to the environment caused by the project's fund use plan during the credit process of Project Finance, carry out socially responsible lending, and have relevant evaluation and consultation mechanisms. The bank provides financing only if the borrower can prove that the execution of the borrowing plan is in compliance with the EPs. After lending, it is necessary to continuously monitor the use of borrowing funds and related information disclosure.

B. According to the official website of the EPs Association, 91 financial institutions in 37 countries have adopted the EPs. In Asian, 11 banks signed the EPs. Among them 2 are our domestic banks, namely, Cathay United Bank Co., Ltd and E.SUN Commercial Bank, Ltd signed the principle in 2015.

(2) Principles for Responsible Investment (PRI)

A. The Principles for Responsible Investment (PRI) require long-

term funding institutional investors such as insurance funds and pension funds to take into account non-financial interests of ESG. The PRI is a set of voluntary investment principles and was initiated by the United Nations in 2006. More than 1,700 investment institutions from over 50 countries with over US\$62 trillion in assets under management have signed up to the Principles.

- B. The Dow Jones Sustainability Index (DJSI) and the FTSE4GOOD Index are two of the world's best-known indices. 18 Taiwanese companies (including 5 financial holding companies and 3 semiconductor companies) are included in the 2016 Dow Jones Sustainability Index.

3. Green financial products:

(1) Green Bonds

According to the Green Bond Principles (GBP) established by the International Capital Market Association (ICMA), green bonds refer to bond instruments where the proceeds will be exclusively applied to finance, or refinance, of eligible green projects. Eligible green projects aligned with the GBP include climate change mitigation, climate change adaptation, natural resource conservation, biodiversity conservation, and pollution prevention and control. Green bonds should cover four core components: the use of the proceeds, process for project evaluation and selection, the management of proceeds, and

relevant annual reports. Issuers should screen investment projects carefully.

(2) Green Index and ETF

At present, the international green index mainly includes the S&P Global Clean Energy Index, NASDAQ Clean Edge Green Energy Index and the FTSE Japan Green Chip 35 Index, each of which has been tracked by index funds or exchange traded funds (ETF).

(3) Green Insurance

It mainly refers to environmental liability insurance, and the insured person's liability for compensation due to pollution of water, land or air is taken as the underwriting content. The insurance policy creates benefits: one, it assists many companies to compensate and repair the environment after a pollution incident; second, making the insurance a compulsory one for specific industries may internalize external environmental costs and reduce investing in excessive environmental risks. After the EU passed the Environmental Responsibility Directive in 2004, the polluter pays principle was legalized, which led to the rapid development of the green insurance business. German passed the Environmental Responsibility Law in 1990, and requires thermal power generation, mining and petroleum industries to be insured by

the environmental liability insurance.

(4) Green consumer finance

It includes green consumer credit cards and green consumer loans. Taking green consumer credit cards as an example, South Korea encourages national green life consumption. Its Ministry of Environment and the Environmental Industry and Technology Association and private financial institutions have together launched green credit cards. Cardholders can accumulate green points in exchange for government or vendor reward or benefit.

4. Carbon finance

The concept of international carbon finance mainly covers carbon tax and carbon trading. Among the greenhouse gases that are required to be reduced by international standards, carbon dioxide is the largest. Therefore, greenhouse gas emission reduction transactions are calculated in units of carbon dioxide equivalent per ton, collectively referred to as carbon trading. Carbon trading is divided into two types of transactions, namely, spot and futures. The world's important carbon exchanges are mainly in the EU, the UK, the US, Australia and China.

5. Preparing the Environmental Impact Index (Environmental Impact Index)

Israel refers to Europe's environmental compliance assessment of enterprises. The Israeli Ministry of Environmental Protection has compiled an “Environmental Impact Index”, which includes two parts: environmental impact factors (waste and wastewater generation and treatment, and hazardous substance use risks, the environmental sensitivity of the location, etc.) and the degree of compliance with environmental regulations. The Ministry of Environmental Protection of Israel evaluates the environmental risks and management actions caused by the government departments and listed companies through the index. In addition to the basis for conducting environmental inspections and related measures, the Index publishes important information on environmental and financial risks to the investing public to compare the environmental protection of large listed companies.

IV. Measures of Taiwan's Green Financial Action Plan

Considering Taiwan's legal environment, industrial development and national conditions, and with reference to international relevant practices and development trends, the FSC proposed this Green Financial Action Plan.

The specific promotion contents include credit, investment, capital market fundraising, talent cultivation, promotion of development of green financial products or services, deepening development, information disclosure and other measures for promoting the concept of green sustainability. The seven major

aspects with a total of 25 measures , stemming from the collaboration of the FSC, the Ministry of Economic Affairs, Ministry of Finance, National Development Fund, Environmental Protection Administration, other ministries and the inter-departmental communication platform, namely, “Financial Promotion Group for Renewable Energy Power Generation Industry” led by the National Development Council(NDC).

1. Credit oriented

- (1) Actively promote the “Program to encourage domestic banks to provide loans to new key innovative industries” to assist the green energy industry in obtaining funds through rewarding individual banks that have achieved good results in renewable energy plant lending.
- (2) Encourage banks to go along with public policies and preferential mechanisms to grant credits to the green energy industry.
- (3) Urge domestic banks with experience in green energy loans (including subsidiaries of foreign banks in Taiwan) or Taiwan branches of foreign banks to act as the leading bank of syndicated loans, and encourage other banks to participate in the syndicated loans to facilitate use of bank funds and experience sharing.

- (4) Develop supporting measures to strengthen the operation of the green financing market:
- A. The Ministry of Economic Affairs will construct a third-party certification and green energy industry certification mechanisms.
 - B. Encourage offshore wind power manufacturers to use local funds: the Ministry of Economic Affairs will take into account the financing situation by domestic banks when reviewing applications of establishing offshore wind power manufacturers. That means advantages will be given to applications in which domestic banks granting loans to a pre-set ratio.
 - C. The Ministry of Economic Affairs will provide information on the financing needs of offshore wind power developers to the FSC and the later will regularly evaluate the situation of banks handling renewable energy financing.
 - D. Cooperate with the Ministry of Economic Affairs to promote the localization of wind power generation policies, offshore wind power policies, etc., and hold renewable energy financial summits, pooling high-level officers of financial institutions, renewable energy operators, and international industry players to share experiences and promote exchange.
 - E. Cooperate with the Ministry of Economic Affairs to provide information on business opportunities such as green energy related policies, solar energy and wind power generation,

industrial technology development, market scale, etc.

- F. The Ministry of Finance will urge the active participation of public banks in relevant financing.
 - G. The National Development Fund will participate in investment to increase the willingness of domestic banks to grant credits.
- (5) With reference to the contents of the Equator Principles (EPs), adopt a step-by-step approach to amend the Bankers Association Rules on Governing Members' Credit Extension and encourage banks to sign the EPs:
- A. The Bankers Association of The Republic of China (BAROC) will draft related measures to assist member banks in improving their ability to handle project financing.
 - B. The BAROC's will refer to the norms of the Equator Principles and amend the Bankers Association Rules on Governing Members' Credit Extension.
 - C. Through advocacy or seminars, encourage the bank's credit decision-making process to include assessment of the environmental impact by the borrower's business and the impact of its environmental risk factors on credit claims.
 - D. Encourage banks to sign the Equator Principles.
- (6) Establish the "Financial Promotion Group for Renewable Energy Power Generation Industry" lead by the National Development Council (NDC) to communicate and coordinate

the issues of the Green Finance with relative ministries, and to promote the actual investment and financing of renewable energy power plants such as offshore wind power.

2. Investment oriented

- (1) The Ministry of Economic Affairs may provide one-stop consultation window of green energy industry investment, and regularly publish information of business opportunities for various green energy industry participation cases.
- (2) Encourage insurers to invest in green financial products such as shares of Taiwan's green energy industry and green bonds. Also evaluate the feasibility to allow insurers to invest in funds raised by national investment companies.
- (3) Plan to prepare the CSR index and include environmental sustainability items in the evaluation indicators of the index to help institutional investors make responsible investment.
- (4) Amend the self-regulation of the “Corporate Governance Best-Practice Principles for SITEs/SICEs”, requiring investment decisions of securities investment trust funds to follow Stewardship Code. For example, evaluate whether the investee is conducting business in line with domestic environmental protection, corporate integrity and social responsibility, etc.
- (5) Allow securities investment trust enterprises to conduct the private equity fund business through their subsidiary which act as the general partner of the private equity fund to assist the

development of physical industries such as Green Energy.

3. Capital market fundraising oriented

- (1) Developing green bonds: In order to support the funding needs for sustainable development goals, the Taipei Exchange Operational Directions for Green Bonds have been enacted to set a mechanism for funds raising, proceeds managing, and information disclosing of the green bonds. Issuing and investing in green bonds are highly encouraged via non-tax incentives.
- (2) The Taiwan Stock Exchange (TWSE) and Taipei Exchange (TPEX) may assist the Ministry of Economic Affairs, in a timely way and according to the characteristics of solar photovoltaic and offshore wind power industries, to draw up simplified rules for those above-mentioned industries companies to be listed on the stock market.

4. Capacity Building oriented

Strengthen capacity building of financial talent to understand the green energy industry:

- A. The peripheral research and training institutions may evaluate and update instructors who have gained experience in green energy industry or green finance practice, and may hold relevant courses or seminars to build capacity for Taiwan's green financial talent.

- B. For the above training courses, the trainees will include the senior management level or above, and high-level class will be set up to facilitate the development of green finance related business and risk assessment.
5. Promote the development of green financial goods and services
- (1) Encourage banks to develop and promote green credit cards.
 - (2) The Taiwan Stock Exchange and Taipei Exchange may prepare the domestic green stock index and the green bond index.
 - (3) Encourage the securities investment trust enterprise to issue domestic green funds (including ETFs).
 - (4) Develop Taiwan's green insurance to meet the needs of developing green energy industry and green economy transformation in Taiwan.
 - (5) Strengthen the existing “Industrial Value Chain Information Platform” and recruiting green industry information to help investors identify green investment targets: the Taipei Exchange may regularly review or update the industry information platform every quarter, and continue to strengthen content construction, including Green industry part.
 - (6) Encourage credit rating agencies to meet the needs of the industry and provide green evaluation services:
 - A. In order to encourage listed companies to pay more attention to the green credit record (the past misconduct of

environmental pollution, environmental compliance, etc.), encourage credit rating agencies to specifically evaluate the green record of issuers (not limited to issuers of green bonds), the impact of the green level of the investment projects and the environmental cost on the issuer and the credit rating of the debt, and to disclose the information separately.

- B. Taiwan Ratings Corp. may study the feasibility of providing green evaluation for green bonds, non-green bonds and listed companies.

(7) Cooperating with the Environmental Protection Administration (EPA)'s plan for the total greenhouse gas emission control plan to handle the following matters:

- A. Assist the EPA in the establishment of a greenhouse gas emissions trading platform system.
- B. Assist the EPA to determine the sub-regulations such as the registration and trading of emission credits in accordance with Article 21, Item 6 of the Greenhouse Gas Act.
- C. Assist the EPA in clarifying the relevant accounting treatments and financial reports on the free acquisition, trading, and implementation of emission reduction projects, under the structure of the Greenhouse Gas Act.
- D. According to the actual operation of the spot trading of emissions trading, research the possibility of developing derivative financial products such as carbon futures or options

in a timely way.

6. Information disclosure oriented

- (1) Study the feasibility of requiring financial institutions to disclose “green financial results” in their CSR reports to strengthen the promotion of green finance.
- (2) Establish an inter-departmental information link for financial industry and other external enquiries: the Financial Joint Credit Center of the Consortium may connect to other ministries’ databases, and incorporate ESG (Environment, Social and Governance) information into the database for the financial industry’s use and other external use.

7. Other measures for promoting green sustainable concept

- (1) Appraise the effectiveness of green finance business for the financial industry and facilitate the financial industry to assist in the development of the green energy industry:
 - A. Add the "Good Green Finance Promoters" as a review item in the "Best Social Responsibility Award" of the Taiwan Financial Research Institute (Institute and Research Institute) Awards. The Institute may study the feasibility of adding an award for "Good Green Finance Promoters".
 - B. The Taiwan Insurance Institute (TII) may set green insurance and green finance related events as new evaluation criteria

when organizing the 2019 Eighth Taiwan Insurance Best Performance Award.

- C. Add "Green Finance" as the subject of "Corporate Social Responsibility" category in the Best Securities & Futures Paper Award, hosted by the Securities and Futures Institute (SFI), to encourage relevant research.
 - D. The SFI may study and set awards related to the effectiveness of green finance business in the Golden Goblet Awards.
- (2) Advocate the concept of green sustainability and green energy development, green finance, etc. for investors including the public.
- A. The peripheral research and training institutions may hold green finance knowledge prize-winning contests or other publicity activities to promote social consensus on the green economy, green energy development, green finance, green consumption and green life.
 - B. Urge the "Taiwan Banker" magazine to publish articles on issues related to green energy industry and green finance to promote the idea of green energy and sustainability.
 - C. Promote the public's understanding of the green economy and green finance through the financial literacy promotion activities.
 - D. The TII may promote green finance knowledge through "A+ Tour Lectures on Financial Literacy" annually.
 - E. The SFI may increase the topics related to green finance, green

economy, and green energy development in the financial knowledge online prize-winning activities.

V. Expected benefits

1. Assisting the green energy industry and energy transformation: channel funds to invest in renewable energy-related industries, and also help domestic financial institutions access the business opportunities of renewable energy market. It is expected that through the inter-departmental operation mechanism, offshore wind power investment and financing cases will be promoted by the end of 2019, with scale of NT\$50 billion.
2. Developing green finance: through the establishment of Taiwan's green bond market, the preparation of corporate social responsibility index and other green index measures, encouraging banks granting credit to the green energy industry and other measures, we believe the Green Finance Action Plan will expand the scale of Taiwan's green financial market and make Taiwan an important base for green finance in Asia.

VI. Conclusion - Creating “Win-win” situation for financial sector, physical industries and society

The establishment of a green financial system and guidelines is an important key to the transformation of the country's economic structure and environmental sustainability. The FSC will continue to promote green financial measures under the inter-ministries communication platform of the NDC, to thus

support industrial and environmental low carbon transformation and promote green consumer life, as well as increasing financial industry competitiveness and alignment with international norms. We hope that the development of green industry will motivate green finance, with a positive cycle, and create a win-win situation for financial sector, physical industries and society as a whole.