January, 2017

GREEN FINANCE IN CHINA中国绿色金融

HOST:International Institute of Green Finance, CUFE

SUPPORT: Green Finance Committee, China Society for Finance & Banking





GREEN FINANCE IN CHINA

中国绿色金融

HOST: International Institute of Green Finance, CUFE

SUPPORT: Green Finance Committee, China Society for Finance & Banking

CHIEF ADVISOR: Jun Ma

ADVISORS: Yi An Tao Bie

Yu Cai

Shijian Liu Xianfeng Ma Mark Halle Guangqian Wang Linjing Wang

Yihong Zhou

Qiuyue Zhou

Haizhou Huang Simon Zadek

Xiaolei Zuo

DIRECTOR OF THE EDITORIAL BOARD: Yao Wang

EDITORIAL BOARD: Yaqin Chen Ying Cui Qian Liu Yingzhe Shi

Xiaowen Yu Jin Sun Yichen Shi Yinshuo Xu

Hong Yin Ricco Zhang

Prospect of Best Green Finance Era

The preface of the Bilingual E-journal of Green Finance in China

2016 was a milestone in the history of the development of green finance in China. This year was the first year of the decisive stage for China to fully build a well-off society, and also the key year to promote the supply-side structural reform. In this important year, the global economy was still facing downward pressure and the domestic economy has arduous tasks of cutting overcapacity, destocking, deleveraging, reducing costs and making up deficiencies. Meanwhile, the contradiction between rapid economic development and resources environment bearing capacity was aggravated, we must change the traditional economic development mode, create new development momentum and seek a measure for structural adjustment and steady growth.

Now, it is the best time to promote green finance in China. Through the system arrangements of innovative finance, more social and private capital is guided and encouraged into green industry, and investment in pollution industry is effectively inhibited. Undoubtedly, for promoting green economy transformation, solving the environmental problems caused by previous high-speed economy development, green finance provides a key to the door of green, low-carbon, and sustainable future.

On August 31st, 2016, deliberated and approved by the meeting of the Central Leading Group for Comprehensively Deepening Reforms which is led by the General Secretary Xi Jinping, the People's Bank of China (PBoC), the Ministry of Finance and other five ministries jointly issued *Guidelines for Establishing the Green Financial System*. China became the first nation to build a relatively comprehensive policy system of green finance in the world. Take green bond market for example, the bond regulators have issued green bond related guidelines, continuously innovated related products. In 2016, China has issued more than 230 billion yuan of green bonds in the domestic and overseas markets, and has become the world's largest green bond market. Meanwhile, the research, innovation and transformation of green finance were being effectively promoted. The Industrial and Commercial Bank of China has published the results of environmental risk pressure test and the Ant Financial Services Group has established the largest carbon accounts platform in the world and set up the first green digital finance association globally. The first international institute of green finance was established at the Central University of Finance and Economics. Moreover, local governments have begun to build their own green finance system.

Based on "top-down" push and "bottom-up" action, China has become a leader in global green finance development.

In 2016, China put green finance into G20 agenda for the first time as one of the major topics when it took over the G20 presidency. In September, the G20 Summit was held in Hangzhou. The G20 Green Finance Study Group, co-chaired by the People's Bank of China and the Bank of England, passed the *G20 Green Finance Synthesis Report* which provided seven voluntary options to enhance the ability of the financial system to mobilize private capital for green investment. Green finance will continue to be discussed at the G20 Hamburg Summit in Germany in 2017, which the G20 Green Finance Study Group is also co-chaired by the People's Bank of China and the Bank of England.

The international cooperation of China in the field of green finance extended to the world with G20. As a starting point, China is steadily improving the ability to lead the global green finance governance, gathering global wisdom, working together to contribute to the experience-sharing and mutual benefit of green finance development, promoting the construction of the global green financial system and transition of the global economy.

Nowadays, as the researcher, practitioner and spreader of green finance, we hope that we can dedicate our efforts to the experience-sharing, capacity-building and integrative developments of the global green finance by officially launching the E-journal *Green Finance in China*, and finally contributing to offering effective financial support to the global sustainable development.

Since August 2016, under the support of Green Finance Committee (GFC) of China Society for Finance & Banking, the bilingual E-journal of Green Finance in China have been trail published for five times by the International Institute of Green Finance (IIGF), Central University of Finance and Economics, and was widely appraised by the professionals. Led by Dr. Ma Jun, Chief Economist of PBoC and the chairman of GFC, supported by a lot of authoritative experts on green finance and many related institutions and organizations, such as CIB, ICBC, Ant Financial, China Bond, CECEP, CBI, WRI, AMAC, ICMA, SSE and etc., have contributed a batch of excellent, high-quality and deep articles and offered selfless assistance and help to our compilation work.

On the occasion of publication, we hope this journal can bridge the innovative academic communication platform and promote the development of green finance. To facilitate the academic communication and academic innovation of green finance and to promote the influence of the achievements of academic communication on green finance, we hope to make the journal a platform for the related institutes to offer advices and deliver results and promote the communication, transformation and application of green finance achievements, thus further to boost the innovation of this industry. In the meantime, with the help of the government, institutions, enterprises, investors, and medias, we can form the strength to further develop green finance.

We expect that this journal can promote the communication of green finance between China and the world as a bridge. This platform enables us to absorb green finance achievements abroad, supplementing the development of green finance in China. Meanwhile, we can also share domestic high-quality green finance theories and practical results with other countries, improving the international status, influence and competitiveness of China's green finance in the whole world.

Relying on this journal, we also hope to set up models of green finance communication and overcome the barriers of traditional media, expanding the propagation positions of green finance in mainstream media. By means of working through the channels of traditional media and new media, exerting assembly effect, we can finally form the innovative mechanism of "planning", "collecting" and "compiling" by the way of "one-time collect, multiple utilize and multiple spread", promoting the three-dimensional development of academic media.

In the future, if the environmental and climate risk is endogenously included in our financial regime, we would not need to talk about green finance because the financial system has completely been green. We hope that day would come as soon as possible. At that time, even the concept of green finance would not exist anymore, it should be the best era for those who have been involved in promoting, practicing, and devoted themselves to green finance, with the purpose of a green and sustainable future for all human beings.



GREEN FINANCE IN CHINA中国绿色金融

January, 2017

EDITOR-IN-CHIEF: Wang Yao

EXECUTIVE EDITORS : Liu Suyang

WRITING EDITORS: Song Jing

ART EDITORS: Fan Yaqin Chen Chunmao

PROOFREADER: Song Jing Chi Xiaohang Liu Mengying

Chen Chuanqi

REVIEWER: Mathias Lund Larsen

CONTAXT: International Institute of Green Finance, CUFE

39 South College Road, Haidian District,

Beijing, China, 100081

CONTENTS

Top10 News

2016 Top10 Green Financial News in China

01

Policy Suggestions

Ma Jun: Green Finance takes an important part

in 2016 05

Green Finance Innovation

Stock Exchanges in Support of Sustainable

Development: The Role, Actions and Best

Practices (2)

Liu Wei, Hu Shuangli

10

14

Suggestions on enhancing the attraction of green bonds and promoting the development of the green bond market

TIANFENG SECURITIES CO.,LTD

Research Points

Impacts on The Globe and China of Trump's America
First Energy Plan

Xu Hongfeng





>> 2016 Top10 Green Financial News in China

Hosted by the International Institute of Green Finance (IIGF), Central University of Finance and Economics, and governed by the Green Finance Committee (GFC), China Society for Finance and Banking, the selecting activity for 2016 Top 10 Green Financial News in China has finished the vote.

Voted by 21111 people, the vote began on December 30th, 2016 and ended up on January 3rd, 2017. According to the vote from news network, the IIGF published the evaluation as follow as a result:



The world's first "double green properties" green covered bond issued

November 3rd, the Bank of China London Branch completed the issuing price of "green covered bond" abroad. The issuance of bond is the first covered bond issued by Chinese

banks. This innovative business opens the domestic banks to guarantee the domestic assets of foreign bonds.

This is the world's first green covered bond of "double green properties".

Votes: 10760

Three Gorges Corporation issued the largest green corporation bonds in China

September 21st, China Three Gorges Corporation's 6 billion green corporation bond was listed on the Shanghai Stock Exchange successfully, marking the issuance of the largest green corporation bond in China. The funds raised by green bonds this time will be used to support the development of real economy, and also used to the construction and development of China's largest hydropower base, the main power of China's West to East - Jinsha River cascade hydropower stations.

Votes: 3318





"Green Finance" incorporated into the G20 Meeting Communiqué for the first time

On September from 4th to 5th the G20 summit was held in Hangzhou. Under the initiative of China, the G20 discussed "green finance" for the first time, and it was written into the G20 summit communiqué.

The G20 Green Finance Study Group, co-founded by China and the UK, presented and delivered the G20 Green Finance Synthesis Report to the Conference, and proposed a series of options for G20 and national governments to consider independently.

Including: 1) To provide policy signals to support green investment; 2) To promote the principle of voluntariness in green finance; 3) To expand the capacity-building network; 4) To support the development of the local currency green bond market; 5) To promote cross-border investment in green bonds; 6) To promote environmental risk research; 7) To improve the index system of green financial.

Votes: 1687



Seven ministries issued the "Guidelines for Establishing the Green Financial System"

With the approval of the State Council, the People's Bank of China, the Ministry of Finance and five other ministries jointly issued the "Guidelines for Establishing the Green Financial System" on August 31th. With the introduction of the Guidelines, China will become the first economy in the world to establish a comparatively complete green finance

policy system.

Votes: 1618



The bonds of Green Companies opened up the "green channel"

March 16th, the Shanghai Stock Exchange officially published "carry out the pilot projects of the bonds of Green Companies," which pointed out that the Shanghai Stock Exchange will set up the green channel to accept and review the bonds of Green Companies which can improve the efficiency of the bonds of green companies to pre-listing or listing of conditions to confirm.

Votes: 1584



Green debt financing instruments introduce the "green investors" for the first time

On the last trading day of November, 10 billion "16 DunAn GN002" successfully completed a positive sale of a book-keeping document with the interest rate of 4.56%, 1.77 times the audience multiple.

There is no doubt that the brightest spot in the bookkeeping document was introducing the "green investors" for the first time in China.

This has become another bright spot of the inter-bank market's green debt financing instruments after green "debt-based" was completed.

Votes: 1477





Trucost and Golden Credit jointly launched the China Green Bond Evaluation Framework

Trucost and Golden Credit jointly launched the China Green Bond Evaluation Framework, which aims to build consensus among all sectors of society on the assessment of the environmental impact of green bonds and to provide confidence and assurance for the interests of issuers, investors and policymakers.

Votes: 1187



China's first green bond and climate bond index released

China Government Securities Depository Trust & Clearing Co. Ltd. (CDC) and CECEP Consulting Co., Ltd. (CECEP) in the preparation of the debt - China Green Bond Index and Debt - released the China Green Bond Selection Index on April 15, 2016.

This is the first release of the green bond index filling a gap in Chinese green bond market.

In addition, the China National Debt-Related Bonds Index, which was compiled by the CDC and CECEP and the Climate Bond Initiative (CBI), was released on Sept. 2nd.

The sample coupons for the index are included in the index on the basis of CBI-China Green Bond Index Sample Voucher, CBI and Energy Efficiency Assessment in accordance with the Climate Bond Classification Program and the Green Bonds Support Project Directory (2015 Edition).

Votes: 1134



The evaluation criterion of the first green bond supported project is released

In December 13th, China Bond Rating Co., Ltd. issued the Assessment Certification System of green bonds, and first built the evaluation criteria of green debt support project directory, in order to better serve the development of the green bond market.

The system of environmental certification of green investments will divide the environmental benefits of green investment projects into green (G1), green (G2), green (G3), green (G4) and non-green (NG).

Votes: 744



Industrial bank + Shanghai Pudong Development bank: 100 billion green bonds shows China's green debt market is kicking off

In January, Industrial Bank, Shanghai Pudong Development Bank has issued a notice that the China Banking Regulatory Commission and the People's Bank of China approved the issuance of green finance bonds.

According to the approval, the two banks were allowed to issue no more than 50 billion yuan of green finance bonds in the national inter-bank bond market, to raise funds specifically for the loans of green industry projects, which marked the official start of the green bond market.

Votes: 700

Some findings:

Focus on public opinion field, green bonds gained the most attention

2016 is the first year of the green finance and it is also a milestone year of green bonds issue in China. Green bonds have a massive growth in this year. Chinese institutions issue the scale of green bonds in domestic and aboard have reached 220 billion by the first 11 months of 2016. And the green bonds in China were 42 percentage points of the world during that period which had ranked the first in the world. The result of Top 10 Green Financial News is almost connected with green bonds against the background of thriving green bond market. From another side, it proves the suddenly rising of green bonds in China in 2016 and the rapid expansion of green finance in China in miniature.

The new attempt of vertical propagation, the provide for high quality information is need to cultivate

In the angle of green finance propagation to survey this appraisal result, we can receive some useful findings. The scale of issue green bonds in China was large in 2016 and the process of trading was specific which is easier be accepted by public and gained higher attention. It is a pity that some news which is not included in green bonds but have strong influence in the industry have not appeared on the list. This is because these kinds of news have high level of specialization and the scope of acceptors is narrow. It is also because the spread of green finance is lack of mature. In the future, the spreaders of green finance should increase the supply of high quality news of

green finance to make the public to understand and concern about green finance. Holding the selecting activity of Top 10 Green Financial News, we can make green finance to do the exploration and attempt by interactive broadcast in the area of vertical propagation of new media on the one hand. In addition, it is the witness of the changes and evolution of green finance in China. And we hope to find more green finance practitioners in 2017.

The attention of the top-level design is need to cultivate, form the development joint effort of green finance

On August 31st, 2016, deliberated and approved by the reform group leadership with Jinping Xi as General Secretary, authorized by the State Council, Guidelines for Establishing the Green Financial System has offered a further perfect "top-level design" for the development of green finance in China. Under the initiative of China, green finance makes its first appearance on the international stage and was written into cooperation documents on September. It goes without saying that these two pieces of news are meaningful and influencing for green finance. Under the strong top-level design, failing arrive at the top from another side to approve we need to approve the understanding of the policy, further improve the force of policy, research, school, industry, investment, financing and media. This can form the development joint effort of green finance and drive the further development of green finance in China.

Translator: He Qi

Proofreader: Liu Mengying

Editor: Lv Jingping, Chi Xiaohang



>> Ma Jun: Green Finance takes an important part in 2016

Green development has become a basic idea in "the 13th Five-Year Plan" and even longer period of China's economic and social development. Meanwhile as an important part of green development, "green finance" has attracted more and more attention. Here in 2016, the development of green finance in the world is speeding up. After a careful review of the economic and financial events in 2016, "green finance" has played a significant role. The reporter recently interviewed the Chief Economist of the People's Bank of China Research Bureau, Ma Jun, on the related issues and asked him to combine the process of green finance in 2016.

Reporter: Many experts from home and abroad said that 2016 is the beginning of rapid development of green finance, what's your opinion?

Ma Jun: Green Finance is a very important aspect of supply-side reform. At this



moment, the world as a whole faces serious environmental problems, including huge carbon emissions and climate changes. Some experts pointed out that the essence of the problem actually lies in mass polluting products, while the supply of green products and services is limited. Therefore, it is necessary to invest in green areas such as environmental protection, energy conservation, clean energy, green transportation and green building from

the supply side, in order to improve the supply of future green products and services. Green finance should be fully developed since it serves as a financial pattern to mobilize and encourage social and private capital to enter the green industry.

I agree with the view that "2016 is the beginning of rapid development of green finance ". This view not only applies to China, but also applies to the whole world. Based on past economic experiences in our country, the major breakthrough is that, the People's Bank, the Ministry of Finance and other seven ministries jointly issued the "guidelines for establishing a green financial system" (hereinafter referred to as "Guidelines") on August 31st. There are many feasible measures in the guidelines and it is considered as the first systematic policy framework which supports the development of green finance in the international



community. At the policy level, the Guidelines has proposed to reduce the financing cost of green projects by means of re-lending, interest discount, guarantee and the establishment of green development funds with government participation, thus stimulating the social and private capital. Global attention has been paid to our Guidelines, for example, after we introduced the policy, Indonesia and Latin America began to study a number of similar frameworks to support green finance policy.

Apart from the innovation at the policy level, China has also made major progress in the green financial products, tools, methods and other fields in 2016. For instance, green bonds: There was no green bond market in China in 2015, and we

didn' t establish this market until the beginning of 2016. But in the first 11 months of this year, China's domestic and overseas issuance of green bonds has reached 220 billion yuan (domestic issuance of 200 billion yuan, overseas issuance of 200 billion yuan equivalently), accounting for 42% of the global green bonds over the same period of issuance, becoming the world's largest green bond market.

Moreover, Chinese institutions also introduced green asset backed securities (ABS) and covered green bond, and green industry funds were set up in a number of places this year to support the financing of green equity, three rating companies launched Green bond rating methods (only five across the world). There are a

certain number of institutions which are capable to provide third-party certification of green bonds, namely China Government Securities Depository Trust & Clearing Co., Ltd. and China energy conservation and environmental protection group has announced three green bond index, Research Center of Climate and Energy Finance has launched an assessment of environmental benefits in the public green project, ICBC took the lead in introducing environmental stress test method in the banking industry and recently Beijing Environment Exchange and the Shanghai clearing house launched the first carbon swap products in China. This year, it is very encouraging to find the innovation and insurance of a variety of green financial products almost every week. Our green environmental stress testing methods, environmental benefit assessment tools, green bond index, climate bond index, etc. all have leading position around the globe.

We established the China Financial Society Green Finance Committee last year. Although the committee has existed only for one and a half year, the Green Finance Committee have organized dozens of promotional and research activities both domestically and internationally and have supported more than 30 research topics, including some green financial products and analytical tools development. At present, the number of members of the Green





Finance Committee has doubled comparing with last year. 160 committee members contains all the large and medium banks, many large brokers, insurance companies, fund companies and green enterprises. Assets of these members account for 67% of all financial assets in China. Participation of such a large proportion of financial institutions indicates that most of the Chinese financial institutions have begun to pay great attention to green finance and responsible investment. Financial institutions of big scale such as Agricultural Bank of China, China Development Bank and ICBC and some others have established within the Group to promote green finance development plan. In the future, we will put more efforts on promoting green finance among medium and small financial institutions, especially on nurturing green institutional investors.

From the international point of view, the biggest bright spot in the field of green finance in 2016 is the formal discussion of the green finance on G20 Summit, and the explicit proposal of expanding global green investment and financing as well as overcoming challenges of green finance development from seven different aspects. Two years ago, green finance was a marginalized issue around the world. The central bankers and finance ministers of the major countries had little discussion of the topic, not to mention state leaders.



Some countries even have doubts about the concept of green finance. This year, driven by initiatives in China and the G20 Green Finance Research Group co-sponsored by China and the UK, green finance has become a mainstream issue and has become a global consensus through the G20 summit. The "policy signal" plays an important role. In October, this year, during my attendance of the World Bank and IMF annual meeting in Washington, 4 days, there are eight financial sector-sponsored seminars on green finance; in November, this year, I attended the Cli-

mate Conference in Morocco and participated in the 4 workshop on Green Finance Seminar. It is unimaginable how high the degree of skepticism about green finance a few years ago.

Apart from promotion by China and the G20 summit, some other global institutions and countries have also made efforts on promoting the mainstreaming of green finance. For example, the FSB has set up a climate-related information disclosure working group to submit resources guidelines to the G20 to strengthen environ-

mental disclosure by the end of this year. France has recently published Energy Conversion Law, which specifically refers to Article 173, requiring French institutional investors to disclose how ESG (environmental, social and governance) factors are taken into account in the investment process. In London, the United Kingdom set up a special working group on green finance to promote green finance innovation and international exchange. IFC's sustainable banking network and the United Nations Responsible Investment Initiative (PRI) are rapidly expanding their capacity-building networks with the support of the G20 Green Finance Research Group. India, Japan and other countries are preparing to launch their own green bond market. The Hong Kong Stock Exchange launched a semi-mandatory environmental disclosure system. Judging from these examples, the world is forming a strong momentum to jointly promote the development of green finance.

Reporter: Although green finance in 2016 made considerable progress, it still has much room for development in the future, and the development process will also encounter many challenges. In this connection, what do you think?

Ma: That's right. Although the green finance developed rapidly in 2016, the scale of global green finance is still far smaller from meeting the huge demand for green investment. According to OECD experts' prediction, the global green bond issuance will be dozen times more than that of the growth space now in the future. I expect in the coming years and in even more than a decade, green finance in the world will maintain rapid growth. To maintain a good momentum of development, the key is to accurately identify and effectively overcome the challenges green finance faces.

When talking about green financial challenges, I think there are at least three aspects. The first is environmental externality. Take a clean energy project as an example to illustrate the so-called externalities. Its beneficiaries may be residents living within 300 kilometers of the clean energy project. Because of the green energy project, the emissions of carbon dioxide, sulfur dioxide, nitrogen oxide emissions will drop down and the air quality will be improved. So, it benefits a lot. But it's difficult to charge all beneficiaries, which may lead to the project proceed is not enough. The project yield rate cannot meet the required level of the private sector and social capital is unwilling to enter. This is the typical problem that the "external" can hardly be endogenous. In the green financial sector, to meet the challenge, we need a variety of approaches to improve such green projects' rate of return. For example, methods proposed in the Guidance such as re-loans, discounts, guarantees, etc. are all about to reduce the financing costs of green projects in order to improve the rate of return measures.

The second issue is the maturity mismatch. Many green projects, which can meet the energy saving and emission reduction, are mid-and-long-term projects, such as new energy, subway, light rail. Therefore, the repayment period is long. Many countries still mainly rely on bank financing. In banks, the average debt maturity is short and hardly provide a large number of mid-and-long-term green credit. In order to free from the constraints of maturity mismatching on green financing, we must find a way to provide direct mid-and-long-term financing for green projects, including the development in the green bond markets as well as other financing tools backed by future green benefits mortgage.

Asymmetric information is the third question that green finance should deal with, which has two meanings. Firstly, how to identify green business and green project. The market won't know an enterprise is green or brown without the disclosure of environmental information and the emissions of carbon dioxide and a variety of pollutants. Thus, the market cannot provide resources to green projects. Strengthen disclosure of environmental information is the only solution. Some countries or markets implement a mandatory disclosure requirement, while some are half-compulsory or voluntary



disclosure. China has made it clear in the Guidance, to establish compulsory environmental information disclosure system towards listed companies and issuers.

Another implication of information asymmetry is that some green projects have fine mid- and long-term business sustainability, while banks and other investors are so worried about risks which are faced by these projects that they are unwilling to offer loans and make investment, since they don't quite understand the technologies these projects apply and the markets they face. It is a

globally common problem and a reason for financing difficulties was in middle- and small-sized enterprises and science-and technology companies as well.

There are plenty of specific and operable content here in Advice States issued by seven ministries this time and these policies will bring many opportunities to financial institutions and green enterprises. For instance, we should set up various green development funds, not only at national level, but also encouraging local government and supporting private and

foreign capital to establish a variety of green funds in the meantime. Green projects, therefore, are going to have more fund sources, especially equity fund. Another example is applying reloaning, guaranty or interest subsidies to lower the cost of green financing and improve the return rate of green enterprises and green projects. In addition, we shall conduct compulsory insurance system to promote green insurance services.

Translator: Zhu Qiyuan, Chen Yan Proofreader: Chi Xiaohang



>>> Stock Exchanges in Support of Sustainable Development: The Role, Actions and Best Practices (2)

Liu Wei, Hu Shuangli

The first part of this article was published on the fifth trail publication of Green Finance in China.

Actions of Domestic Stock Exchanges in Support of Sustainable Development

According to a research, Shanghai Stock Exchange (SSE) ranks the 15th among its peers in terms of quality of sustainability disclosure¹. Since the total market capitalization of SSE has climbed to the fourth place among the world's exchanges and its sustainability ranking has been continuously improving since 2013, the introduction below will mainly focus on SSE's actions.

A. Encourage Sustainability Disclo-

SSE issued "Notice of Improving Listed Com-

panies' Assumption of Social Responsibilities" and "SSE Guidelines on Environmental Information Disclosure by Listed Companies" as early as in 2008 to enhance the listed companies' responsibility awareness and environmental information disclosure. The listed companies who are included in the "SSE Corporate Governance Sector", issued overseas listed foreign shares or belong to financial sector are required by SSE to make mandatory sustainability disclosure, while the other corporations are encouraged to do so voluntarily² . For those listed companies who attach great importance to assuming social responsibilities or publish sustainability reports actively, SSE also introduced incentives such as giving them priority in the selection into the

"SSE Corporate Governance Sector" or the inclusion of eligible stocks as constituents of SSE Corporate Governance Index, SSE 180 Corporate Governance Index and SSE Social Responsibility Index.

According to the White Paper on Chinese Enterprises' Sustainability Reports (2015) released by China Academy of Social Sciences (CASS), the number of sustainability reports published by Chinese enterprises has increased to 1703 by 2015. Among the reports, 423 are published by SSE listed companies, taking up 1/4 of the total amount. In addition, CASS assigns ratings to the sustainability reports based on their quality. Among the 23 corporations or groups whose reports

 $^{1~}SSE~2016~Report~on~Progress:~A~PAPER~PREPARED~FOR~THE~SUSTAINABLE~STOCK~EXCHANGES~2016~GLOBAL~DIALOGUE.~As~reference,~HKEX~ranks~the~24th~,\\ Taiwan~Stock~Exchange~the~30th,~Shenzhen~Stock~Exchange~the~43th.$

² China Institute of Finance and Capital Markets (CIFCM), 2016, Lessons of Global Listed Company Mandatory ESG Information Disclosure Scheme for China.



were rated 5-star, the majority are SSE listed companies or their subsidiaries.

B. List Green Corporate Bonds

SSE has initiated the efforts on green bond trial since June 2015. On March 16th 2016, SSE issued the "Circular on Launching Pilot Program for Green Corporate Bonds", marking the official start of the scheme.

This program operates within the existing corporate bond framework, and incorporates the core aspects of the Green Bond Principles (GBP). The proceeds of the green corporate bonds are required to be applied exclusively to the green industry, namely to finance or re-finance the construction, acquisition or operation of the eligible green projects. According to the circular, the green status of the projects are evaluated based on "Green bond Endorsed Project Catalogue (2015 Edition)" drawn up

by the Green Finance Committee of China Society of Finance and Banking (GFC). The issuers of green corporate bonds are required to track and report the funds usage properly and disclose the progress of the underlying projects and their environment benefits regularly during the tenor of the bond. It is recommended by SSE that issuers get their green bonds certified by an independent verifier to ensure market integrity.

SSE has set up a "Green Channel" to help green bonds get listed more efficiently. All the green bonds are designated with ticker symbols starting with G (short for Green) and are displayed on a dedicated page on SSE bond market website, so that they can be easily tracked by investors. Besides corporate bonds, other fixed-income products such as asset-backed securities (ABS) can also be labeled "green" if eligible.

By the end of 2016, SSE has received green bonds listing applications from 24 issuers, with total amount reaching RMB 50.6 billion. Among them, 14 green corporate bonds and 3 green ABS have been successfully issued, raising RMB 22.3 billion in total. In addition to ordinary corporate bonds, the types of SSE green fixed-income products have expanded to ABS, perpetual bonds and panda bonds, etc.

As one of the first standing members of GFC and the third GBP observer exchange (after London Stock Exchange and Luxembourg Stock Exchange), SSE draws on international and domestic market experiences and becomes the world's leading listing venue with dedicated green bond issuance scheme. The representative cases since the start of the pilot program include bond and ABS issued by Goldwind, China Energy Conservation and Environmental Protection Group, China Three Gorges Corporation and Beijing Enterprises Water Group.

Taking Goldwind as an example, it issued the world's first RMB-denominated green ABS by a non-financial issuer. The underlying assets were the cash-flows generated by Goldwind's wind farms in future 5 years. This was also China's first "dual-verified" green bond, with external certification done by two well-known international institutions - DNV GL and International Finance Corporation (IFC).

Since the launch of the pilot program, SSE green bonds have raised funds for projects in all of the six fields defined by the GFC catalogue -- energy saving, pollution prevention &



control, resource conservation & recycling, clean transportation, clean energy and ecological protection & climate change adaption. The environmental benefits from the project, if quantified, include energy savings of 47.63 million tons of standard coal equivalent, and emission reductions of 106 million tons of CO2, 56 thousand tons of SO2, 54 thousand tons of Nitrogen Oxides, and 12 thousand tons of smoke. In addition, some river treatment projects will bring ecological benefits such as the improvement of water quality, flood prevention and species conservation.

C. Launch Green Stock indices

According to statistics, at present there are 19 green stock indices in the domestic market, accounting for only 2% of the entire index market. Compared with global figure of 20%, there is still large room for development. Among the domestic green indices, five are SSE Composite Indices, whose constituents are shares listed on SSE.

In October 2015, SSE 180 Carbon Efficient Index was launched. This index focuses on listed companies' carbon emissions and constituents with low carbon emission will be given higher weight. Currently, the carbon footprint³ of the SSE 180 Carbon Efficient Index stands for only 15% of the SSE 180 Index, suggesting that investing in this index means less exposure to the social responsibility risks.

Overall, the green index market in China is still at the early stage of development, but it has already received various support and

attention.

D. Cultivate Responsible Investors

According to statistics, there were around 94 sustainability-theme funds in China by September 2016, aiming at environmentally-friendly, low carbon oriented or socially responsible investments. Their total AUM amounts to RMB 98 billion. Among the funds, about 56 are index funds with total scale of RMB 47 billion⁴. Besides, institutional investors such as Fullgoal Fund, Yaozhi Asset Management Company and He Sheng Fund are seeking to establish dedicated green bond investment funds.

In terms of investor awareness, the Socially Responsible Investment Survey on Chinese Funds (2014) shows that 89% of the fund managers interviewed take social responsibility into consideration. 61% of the interviewees indicate that they care more about social responsibility than last year. The result of the survey is in line with the gradually rising interests in ecological, green and environmentally-friendly theme funds in recent years in China.

Suggestions for Domestic Stock **Exchanges** Further Support Sustainable Development

A. Learn From Global Best Practices & **Enhance International Cooperation**

Domestic stock exchanges are suggested to enhance the communication and cooperation with overseas stock exchanges. They are advised to actively participate in the initiatives led by UN Sustainable Stock Exchanges and World Federation of Exchanges as well. On the one hand, this will help domestic exchanges to introduce the latest progress in green finance in China to the international community. On the other hand, they can also learn from the best practices of their peers and actively explore the "green securities connect" between domestic and foreign exchanges.

B. Improve Guidelines on Sustainability Disclosure

Both Shanghai Stock Exchange and Shenzhen Stock Exchange's sustainability disclosure framework require further fine-tuning. It is recommended that the exchanges capitalize on the information disclosure template issued by UN Sustainable Stock Exchange Initiative and also incorporate the special features best suitable for domestic China. Exchanges are also encouraged to provide timely update to guide the listed companies' sustainability disclosure.

Firstly, domestic exchanges should transform the existing scheme to formal guidelines by clarifying the boundaries of sustainability disclosure. Following the global trends, domestic stock exchanges are urged to gradually shift their disclosure requirements from voluntary to mandatory. Secondly, to make the guidelines more understandable and practical, good cases can be presented to demonstrate the sustainability disclosure process and how to use the key indicators to measure companies' sustainability performance. Thirdly, a more comprehensive set of indicators can be introduced to improve the quality of sustain-

³ Carbon Footprint means the total set of greenhouse gas emissions caused by an individual, event, organization or product expressed as carbon dioxide equivalent.

⁴ Xianfeng Ma, 2016, New Opportunities in Index Investment with Green Theme.



ability disclosure. When it comes to implementation, some essential indicators should be disclosed as priority, while companies take time to adapt to the disclosure requirements. Meanwhile, exchanges can consider to implement the requirements successively in different industries. Finally, listed companies shall be promoted to integrate their sustainability disclosure in periodic reports rather than provide separate documents.

C. Promote Green Financial Products

In order to promote green financial products, stock exchanges are suggested to make continuous efforts to perfect relevant rules and enrich green products varieties. Exchanges can launch green corporate bond segment and create a suite of green bond indices when ready so as to raise awareness of the product among investors, and push for more policy tools to stimulate further growth of the market. In addition, stock exchanges should work together with other parties to establish qualification system and standardized working process for independent verifiers in order to make verification more reliable and avoid "fake-green" cases. It is also important to strengthen the supervision during green bonds' tenor and improve the regulatory and information disclosure requirements so as to bring the domestic green bond market on a healthy track of development.

Due to the lack of reliable environmental information, the domestic green indices are generally designed based on model simulation data. Stock exchanges can explore more methods to collect effective environmental information to prepare better-quality green indices.

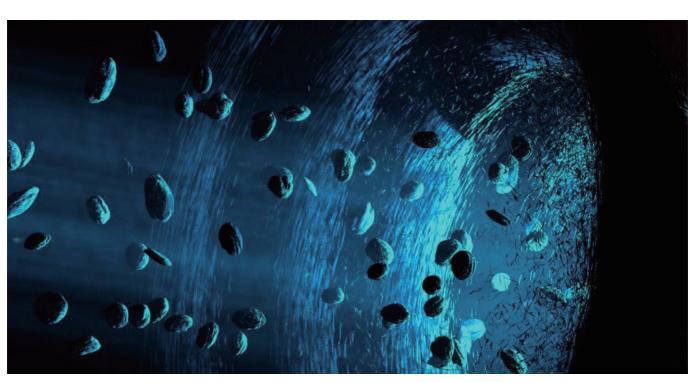
D. Develop Collaborative Initiatives on Responsible Investors' **Network**

Exchanges should strive to attract long-term investors, international investors and dedicated responsible investors and create better atmosphere of green investment through ongoing training sessions and green bond case-studies. In collaboration with PRI and other relevant parties, the domestic responsible investor network could be established to set the cornerstone of a dynamic and prosper capital market which effectively supports sustainable development.

Author's affiliation: Shanghai Stock

Exchange

Translator: Chen Weiying



>>> Suggestions on enhancing the attraction of green bonds and promoting the development of the green bond market

TIANFENG SECURITIES CO.,LTD

Since the "Integrated Reform Plan for Promoting Ecological Progress" was promulgated by the Central Committee of the Communist Party of China (CPC) and the State Council on September 21st 2015, within the field of financial enterprises, Shanghai Pudong Development Bank (SPDB) and China Industrial Bank (CIB) have successfully issued green bonds in the domestic market. Furthermore, when it comes to non-financial enterprises, under the promotion of the National Development and Reform Commission (NDRC), Shanghai Stock Exchange and Shenzhen Stock Exchange, the State Grid, BAIC MOTOR, Beijing Enterprises Water Group Limited (BEWG), China Energy Conservation and Environmental Protection group (CECEP), Beijing SPC Environment Protection Tech and some other enterprises have

successfully issued green corporate bonds or green company bonds, which implies that the domestic green bond markets has been growing steadily.

At present, the policy support for green bonds mainly focuses on the issuers' side, as a separate approval channel and higher efficiency is guaranteed for issuance. However, from the perspective of investors, treatment of green bonds and ordinary bonds is virtually indistinguishable. Without the obvious advantages, the enthusiasm due to the initial scarcity of green bonds may wear off in the long run, which will also affect the enthusiasm of enterprises who issue green bonds. As a result, it is not conducive to the sustainable development of the green bond market.

Therefore, it is recommended to increase the attractiveness of green bonds to investors from the two aspects namely: Liquidity and optimization of resource allocation, thereby reducing the interest rate of bond issuance, promoting more potential issuers to raise funds through green bonds, and accelerate the development of the market, forming a virtuous circle. Our specific recommendations are as follows:

Enhance the liquidity of green bonds

(1) Reduce the threshold of Pledged Repo in the exchange, improve the conversion rate, and enhance the convenience of green bond repurchase financing.



Firstly, it is recommended to reduce the threshold of pledged repo involved green bonds in the exchange, adjust the bottom line for company bonds from "AA for both the company ratings and bond rating" to "AA for bond rating and AA- for company ratings". For corporate bonds, lower the bond rating from AAA to AA. Secondly, it is recommended to increase conversion ratio from green bonds to standard bonds. At present, the conversion ratios of the credit repayment in the pledge repo are as follows:

It is recommended to strengthen the policy advantages by increasing conversion ratios of green bonds to 0.9, in order to attract more investors.

- (2) In medium-term lending facilities (MLF) and other monetary policy operations, green bonds will be included in the scope of qualified pledge
- (3) Establish the yield curve of green bond. With the increase in the stock market, the establishment and improvement of the green bond-specific yield curve will provide a differentiated pricing basis for the market.

$\bigcirc\bigcirc$	Enhance	the	configuration	
$U \geq$	value of green bonds			

(1) Reduce the risk weight of green bond assets.

category	Bond qualification	Ordinary company bonds	Convertible bonds, exchangeable bonds
Conversion ratios	Bond AAA/corporate AAA	0.90	0.67
	Bond AAA/corporate AA+	0.80	0.60
	Bond AAA/corporate AA	0.75	0.53
	Bond AA+/corporate AA+	0.70	0.46
	Bond AA+/corporate AA	0.60	0.39
	Bond AA/corporate AA	0.50	0.32

The quota of Credit risk	Sovereign credit 0%	Rate securities: treasury bonds, policy financial bonds
	Bank credits 20%/25%	<=3M 20%; >3M 25% Bank financial bonds, NCDS
	Corporate credits 100%	Short-term financing bills, medium-term notes, corporate bonds and company bonds private debt

At present, the risk provision standard of different bonds allocated by commercial banks are as follows:

As the purpose of green bond issuing is to support the development of green industry, which has the characteristics of special debt, it could reduce the occupation of economic capital of banks and enhance the enthusiasm of the allocation of commercial banks by reducing the proportion of risk in the commercial banks. The specific recommendation is to cut the risk ratio of green bond assets by half, which means to lower the ratio of green financial bonds to

12.5% while green corporate bonds and corporate bonds are lowered to 50%.

(2) Abatement of interest tax. It would be advantageous to issue preferential policies for green bond investment, while enhancing the attraction of green bonds to different investors though the discount policy in conditional areas.

TIANFENG Securities October 26th, 2016

Translator: Zhu Qiyuan Proofreader: Li jihao

Impacts on The Globe and China of Trump's America First Energy Plan

Xu Hongfeng

The lately-elected president Trump established An America First Energy Plan on Jan 21st, which brings about certain impacts on America and the global energy development, actions taken to cope with the climate change of the world, clean energy investment and corporation between China and the US on dealing with climate change.

Change and unchanged of America First Energy Plan

Compared with Obama's energy policy, Trump's plan has certain similarity, but also some significant differences. The main 4 similar points are listed below:

Firstly, enhancing the cultivation of US's energy, and freeing America from the dependence on energy imports: Obama established the Blueprint for a Secure Energy Future on March 2011, stated that the dependence on energy imports should be lowered by way of expanding the production of the US's local crude oil, so that they can realize securing US's energy. For the main purpose of decreasing the dependence of importing energy, Trump's plan is correspondent with Obama's blueprint.

Secondly, enhancing the cultivation of local shale gas, and using energy income to support public infrastructure projects like traffic roads, schools and bridges in the US: America's shale gas development has realized great progress under Obama's governance, of which production increased from 90 million

barrels in 2005 to 1.7 billion barrels in 2015. Trump administration hopes that further development of shale gas could provide money for America's public infrastructure projects.

Thirdly, supporting the clean coal technology and reviving America's coal industry: Clean coal plan was the major part of Obama's administration in coping with climate change and developing clean energy. They took over 10 billion dollars from the economic recovery plan's fund into the project of CO2's capture and froze, with another 4 billion dollars of private investment, totally 14 billion dollars' investment into clean coal technology. During Obama's period, America built 5 power plants which had reached commercial scale and used large carbon capture and stor-



age equipments. The amount of carbon capture and storage had reached 12 million tons. What's more, Obama administration established POWER+ in 2015, which pushed ahead the transformation and upgrading of the coal industry, and further developed the technology of carbon capture and storage. In the point of supporting clean coal technology's development, Trump's policy is basically the same with Obama's.

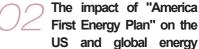
Fourthly, combining energy policy with environmental protection, and protecting clean air and water, natural habitat and resources as first priority of energy development. Environmental protection has been the significant reason and goal of developing clean energy since Obama administration. Environment protection is the inner part of coping with

climate change. Although Trump abandoned Obama's Climate Action Project, his priority on protecting the environment in energy development is in Obama's continuous line.

Compared with Obama's energy policy, America First Energy Plan has 2 different points:

Firstly, abandoning Obama's Climate Action Project. Trump believes that this project is harmful to America's energy industry and restricts the development of it.

Secondly, regarding energy relationship as a geopolitical tool for the first time, establishing positive energy relationship with gulf countries as a part of America's anti-terrorism strategy, and regarding this energy relationship as a way of enhancing US's security.

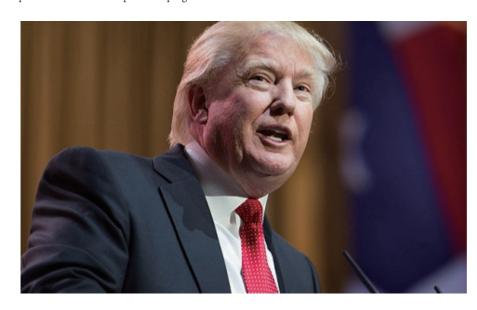


US and global energy development

The main impact of the plan on US local energy development is listed below:

Firstly, with larger production of local crude oil, the amount of imported crude oil will decrease greatly. Due to the expansion of local oil production, the imported crude oil has decreased dramatically from the peak, 137.1 million barrels per day in 2005, to 9.45 million barrels per day in 2015. Under the goal of lowering the dependence of imported energy of America First Energy Plan, we expect that the US will no longer import crude oil in the future, and even transform into crude oil exporter.

Secondly, the proportion of shale gas in US local crude oil production will be larger and become the major part of crude oil production in the future. In 2015, the production of shale gas took up 52% of US total oil production. With enhancing the cultivation of shale gas, the technology of shale gas' prospection and cultivation is likely to advance greatly and the cost will swiftly decrease (for now, the cost of shale gas is 50-80 dollars). Therefore, it will become a strong competitor of traditional oil



and gas and significantly occupies that market.

Thirdly, coal will take up larger part of US energy consumption. The proportion was 15.7% in 2015. With the America First Energy Plan which enhances the support in clean coal technology and revives coal industry, the proportion will likely to increase.

Fourthly, for the purpose of environmental protection, the proportion of clean energy in US energy structure will likely to be larger. Clean energy (nuclear and renewable energy) takes up 18% of energy consumption at present. Obama stated in 2011 that by 2035, the proportion of clean energy in electricity generation would be double and reached 84%. Although the Trump administration abandons Obama's Climate Action Project,, Trump has not rejected the former policy in clean energy development and efficiency improvement. In addition, for the purpose of environment protection, clean energy will probably take up larger proportion in energy structure.

The main impact of the plan on the global energy development is listed below:

Firstly, great changes on the supply and demand of global oil market: With the significantly increase of US shale gas, it will proba-



bly transform from the largest oil importer, to the largest oil producer in the world, and therefore reshape the supply and demand of oil market. That is to say, the global oil market will no longer be a seller's market, and become a buyer's market, which adds to the pressure of lowering oil price.

Secondly, greatly weakening the influence of OPEC and Russia to the global oil market: The transformation from oil importer to exporter leads to the difference of the relationship between the US and OPEC with Russia. It will change from buyer-seller corporation, to competitive relationship as sellers. With the US increasing the production of shale gas in the future, the competition and conflicts between America and OPEC with Russia in

occupying global oil market will be more seri-

Thirdly, significant changes on the present global oil market price coordination mechanism: Started from 1970, global oil price was greatly influenced by OPEC. By way of limiting the production to ensure the price, such policies had a lot to do with the global oil price. However, with the dramatically increase of US oil production and exporting, any global oil price coordination organism without America's participation will be of no avail. In addition, different from traditional oil exporter like OPEC and Russia, US oil corporations are run and owned by private departments, while the impact of the Federal is limited. The 2 points we mentioned will make



the future global price coordination organism be more complex.

Fourthly, with Trump administration regarding energy relationship as geopolitical tool for the first time, they consider establishing positive energy relationship as a part of US anti-terrorism strategy, and the relationships about international energy trade in energy geopolitical will change to certain extend.

The negative impact of "America First Energy Plan" on the global response to climate change

In June 2013, the Obama administration proposed the "Climate Action Plan", which has three main aspects:

Firstly, developing clean energy, improving energy efficiency and reducing carbon emissions and greenhouse gas emissions from energy production and use in the United States.

Secondly, establishing stronger and more secure communities and infrastructure, protecting economic and natural resources and ramping up their spending on research and development on climate change.

Thirdly, playing a leadership role in the international response to climate change.

relevant countries, as well as multilateral consultations and cooperation on international institutions and platforms where encouraging climate financing and leading the global public investment in clean energy are significant parts of plan. America First Energy Plan aimed at abolishing the Climate Change Action, which has a relatively big negative impact on global response to climate change: Firstly, the U.S.'s regression policies on climate change will lead to increasing resistance to international cooperation. From the perspective of the Trump administration's policy which linked the energy development with environmental protection, An America First Energy Plan does not necessarily negate the full content of the Climate Action Plan, but focuses on refusing the leadership role in international cooperation to address climate change. This is clearly a step backwards, compared to climate change attitudes and policies from the Obama administration. The reason for regressing, to a certain extent, is closely related to the increasing power of the traditional fossil energy interest groups in the Trump administration, the protection and stimulation to the United States Energy industry and the Trump administration's smaller involvement in global affairs. The United States has the world's largest carbon emissions and the third largest carbon emissions per capita. Without the US's participation and

Measures include bilateral cooperation with

cooperation, it will be difficult to achieve any global agreement to deal with climate change. And the retrograde step of the Trump administration's policy on climate change will add more variables and frictions to the future global response to climate change in international cooperation.

Secondly, the investment in U.S. clean energy technology research and development growth will slow down. Trump administration does not explicitly deny the support of clean energy development. However, considering the increasing power of traditional fossil energy interest groups in the government and protection of their own traditional fossil energy jobs and income, compared with the Obama administration, the development of clean energy might stagnate to a certain extent within the United States in the Trump term. The United States is the world's second largest clean energy R&D and clean-energy industry investment. In 2013, the US clean energy market has attracted 6.8 billion U.S. dollars and 2.2 billion U.S. dollars of open market investment, venture capital and private equity, accounting for two-thirds of the total clean energy venture capital and newly private equity investment. In the third quarter of 2015, the U.S. clean energy investment has increased by 13.4 billion dollars, accounting for 19% of the world investment in the same period. As the Trump administrationn cancel



the Climate Action Plan, the development of future U.S. clean energy investment will see a moderate adjustment.

The impact of An"America First Energy Plan"on China

Trump's "An America First Energy Plan" has both positive and negative impacts for China's energy development, as well as China-U.S. cooperation.

The four main positive impacts are as follows: Firstly, as the United States is to increase domestic shale oil production and reduce crude oil imports, it will further exacerbate the situation of oversupply in the international crude oil market, as well as increase the long-term downward pressure on international crude oil prices. China, as the world's largest oil consumer and importer country, can strengthen its voice in the negotiation with the international crude oil supply country, reduce crude oil import costs and increase national oil reserves. In addition, with the significant boom of the future US shale oil and gas production significantly, the United States may also become a new option of China's crude oil importer. As a result, it is conducive to the diversification of China's crude oil imports, and further security of the national energy.

Secondly, it will further strengthen the coop-



eration between China and the United States in environmental protection. As early as June in 2008, China and the U.S. governments signed the China-U.S. Energy and Environment Decade Framework Document in the Fourth China-U.S. Strategic Economic Dialogue. As the document suggests, the protection of clean water, clean air, forests and wetlands ecosystem are among the five priorities for environmental cooperation between the two countries. China and the US have cooperated extensively in environmental protection through the Green Partnership Program and the China-U.S. Clean Energy Research Center and other projects and platforms in the following years. As the Trump administration attached greatest importance to the protection of clean water, clean air, natural habitats and natural resources, the future China-U.S. cooperation will see much development in the field of environmental protection.

Thirdly, there will be broad cooperation space and common interests for the clean coal cooperation between China and the United States. China and the United States are both large coal consuming countries, clean coal cooperation has always played a significant role in the China-U.S. clean energy cooperation. Clean coal cooperation is not the only one of the first three priority areas of cooperation in the China- U.S. Clean Energy Joint Research Center, but also one of the five cooperation initiatives for the China-U.S. Climate Change Working Group since July 2013. In addition, in The 21st Century Coal Project, "China-U.S. Clean Energy Pragmatic Cooperation Forum" and other platforms, there are many other projects of clean



coal cooperation projects and programs between the two countries. In the Trump term, the U.S. government's strong support for clean coal technology is expected to bring favorable opportunities for further deepening the clean coal cooperation between China and the United States on the original basis.

Fourthly, it will further promote clean energy cooperation in China and the United States. In the Obama administration, the clean energy cooperation saw rapid and comprehensive progress between the two countries in all levels, such as the central government, local government, enterprises, research teams, and non-governmental organizations. China ranked the first in the current investment in clean energy R&D with the U.S. ranking the second. At the same time, China has the largest clean energy industry investment while the U.S. ranking the second.

The volume of trade in solar energy industry, nuclear energy industry and wind energy industry has reached a certain level between China and the United States. Furthermore, due to the newly-created linkage between energy policy and environmental protection and the consistent clean energy policy support of the Trump administration, there will be a bright prospect for the energy cooperation between the two countries.

However, in addition to the four positive sides, An "America First Energy Plan" will also have a predictable negative impact on China's energy development and China-U.S. cooperation in clean energy and climate



First of all, the Trump administration canceled the Obama administration's Climate Action Plan, which will bring a clear negative impact on the bilateral collaborations in climate change between China and the United States as well as multilateral cooperation in the international level. In April 2013, China and the United States set up a working group on climate change. From 2014 to 2016, the two governments have signed three joint declarations on climate change. As the world's largest emitter of greenhouse gases in developing countries and developed countries, China and the United States play a key role in the global cooperation on climate change, carbon emission reduction. Aimed at opposing playing a leadership role in the global response to climate change action, the Trump administration canceled the Climate Action Plan. Setting back the wheel of the climate change policy in the United States will undoubtedly bring a lot of resistance and difficulties in the future of bilateral cooperation as well as multilateral cooperation between China and the United States.

Secondly, there may be some impediment in the trade between China and U.S. in sustainable environmental products and clean energy. China has become the world's largest producer and consumer of renewable energy products and services as well as the world's





largest market for wind, solar, and hydropower. The U.S. department of commerce affiliated international trade administration has ranked China as the third-largest (2015 to 2016) and the second-largest (2015-2020) U.S. renewable energy export market. The U.S. government has helped the related domestic businesses in all directions to expand their market in environment and clean energy of China through the International Trade Department of the Ministry of Commerce, Trade and Development Agency, the International Development Agency, Export-Import Bank and other agencies.

On the one hand, the Trum administration

has encouraged their local enterprises to enter China's environmental products and clean energy markets, however, on the other hand, the U.S. government has adopted anti-dumping and countervailing investigations and attempted to implement carbon tariffs on China's environmental and clean energy products and services to restrict their entrance into the U.S. market. Compared to the Obama administration, the Trump administration is likely to offer more support to the local environmental protection enterprises and clean energy enterprises. More inevitable frictions will take place in the future trade of China and the United States in the sustainable environmental and

clean energy products in broader fields. Thirdly, as the United States saw the transition from the world's largest oil-importing countries to the world's largest oil-producing countries, the Trump administration regards the energy relations as a geopolitical tool for the first time and establish positive energy relations with the Gulf countries to as a part of the U.S. counter-terrorism strategy. For the world's largest consumer and importer of crude oil, China will face a more complicated geopolitical situation in the near future energy.

Translator: Chen Weiying, Zhu Qiyuan Proofreader: Chen Chuanqi



GREEN FINANCE IN CHINA 中国绿色金融

>> Host: International Institute of Green Finance, CUFE

International Institute of Green Finance (IIGF) of Central University of Finance and Economics (CUFE), is known as the first international research institute in China whose goal is to promote the development of green finance. The IIGF grew out of the Research Center for Climate and Energy Finance(RCCEF), which was founded in September, 2011. RCCEF is one of the standing member of Green Finance Committee (GFC) of China Society of Finance and Banking while it has built an academic relationship with the Ministry of Finance. The IIGF aims to cultivate the economic environment and social atmosphere with the spirit of green finance and to build the domestic first-class, the world's leading financial think tank with Chinese characteristics. The main research areas of the IIGF are Green Finance, Climate Finance, Energy Finance and Pension Finance, including the PPP Lab, Green Finance Product Innovation Lab, Carbon and Climate Finance Lab, Green Bond Lab, etc.

>> Support: Green Finance Committee

The Green Finance Committee of the China Society for Finance and Banking was established on April 22, 2015.

The Green Finance Committee, set up under at the China Society for Finance and Banking, is a non-legal-person, non-for-profit professional committee dedicated to academic research and coordination of the member institutions. Its mandate covers green finance research, promoting innovative green investment and financing products and services, increasing awareness of green investment among institutional investors, strengthening capacity building, and helping to implement green finance policies.

Until the end of 2016, the Green Finance Committee currently has 31 executive member institutions, 104 general member institutions and 14 specially invited member institutions. It is shown that the financial asset under management of the member institutions amounts to RMB 108 trillion, accounting for roughly 65% of the total asset of China's financial industry. Financial institutions such as ICBC, Agricultural Bank of China, Bank of China, China Construction Bank, China Development Bank, Export and Import Bank of China, China Investment Corporation, Silk Road Fund, PICC, and Galaxy Securities, as well as green companies such as CECEP are the executive council and the general council of the Green Finance Committee.

The current chairman of the Green Finance Committee is MA Jun, the chief economist of the Research Bureau, the People's Bank of China.



GREEN FINANCE IN CHINA

HOST: International Institute of Green Finance, CUFE

SUPPORT: Green Finance Committee, China Society for Finance & Banking

EMAIL: iigf@rccef.com.cn

TEL: 010-62288768