Agricultural Development Bank of China

2018 Euro Green Bond

Third-party Certification Report

CECEP Consulting Co., Ltd.

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中国节能
CHINA ENERGY CONSERVATION AND ENVIRONMENTAL PROTECTION GROUP

Key Certification Comments

Agricultural Development Bank of China (hereinafter the "ADBC") is scheduled to issue the Euro Green Bond of the Agricultural Development Bank of China for 2018 with an amount of about EUR 500 million (hereinafter the "Green Bond") overseas, and the Green Bond will be listed on the Hong Kong Stock Exchange, Luxembourg Stock Exchange and China Europe International Exchange. ADBC has formulated the Framework of the Agriculture Development Bank of China for Green and Sustainable Development Bond (hereinafter the "Framework") following PBoC Green Bond Endorsed Projects Catalogue (2015) (hereinafter the "Catalogue") issued by the Green Finance Committee of China Society for Finance and Banking, the Green Bond Principles (2018) (hereinafter the "GBP"), the Social Bond Principles (2018) and the Sustainability Bond Guidelines (2018) issued by the International Capital Market Association (ICMA), with reference to the nature and features of its business. Center for International Climate and Environmental Research Oslo (CICERO) and International Institute for Sustainable Development (IISD) jointly evaluated the Framework and issued a second-party opinion that the Green Bond under the Framework complies with the GBP and CICERO rates the Green Bond as “Dark Green”.

ADBC undertakes to apply proceeds in the eligible green project category supported by Green Bond under the Framework, and entrust CECEP Consulting Co., Ltd. (hereinafter the “Certifier”) to evaluate the Green Bond against the Catalogue and the GBP and, based on the evaluation, further evaluate and certify the consistence between the green projects under underlying projects category that are also social responsibility projects under the Framework and the UN Sustainable Development Goals (SDGs). The Certifier conducts the certification in accordance with the procedures set out in the Conformity Assessment - Requirements for Bodies Providing Audit and Certification of Management Systems (ISO/IEC 17021: 2011) and the Guidelines for Auditing Management Systems (ISO 19011: 2011).

As of October 24, 2018, ADBC had established a green project reserve pooling with a total of 11 eligible green projects for a total loan of CNY 4.64 billion (approximately EUR 579 million). The Certifier has conducted evaluation and certification of ADBC in terms of the use of proceeds raised by means of the Green Bond, the assessment and selection of green projects, the proceeds management, information disclosure and reporting and environmental benefit targets of proposed green projects. As of October 24, 2018, there had been no deviation from the Catalogue, the GBP and other relevant policies, regulations, and standards of China, and green projects that are also social responsibility projects within the Framework meet the requirements set out in Article 1 and 2 in the SDGs.

It is evaluated that the 11 proposed green projects to be funded by means of the Green Bond are expected to produce the following quantifiable overall environmental benefits when put into formal operation:

(1) Sustainable water and wastewater management

- Increasing the wastewater treatment capacity by 66.98 million tons/year and reducing the chemical oxygen demand by 21,000 tons/year, reducing the biochemical oxygen demand by 11,000 tons/year and reducing the ammonia nitrogen demand by 2,000 tons/year;
- Constructing 19.16km of new wastewater transfer tunnels;
- Completing the ecological improvement of 9.6km of rivers.

(2) Environmentally sustainable management of living natural resources and land use

- Increasing high standard farmland by 233 million m^2;
- Maintaining 109 million m^2 of high standard farmland;
- Reclaiming 690,500 m^2 of damaged land;
- Increasing green area by 2,302,300 m^2, increasing the carbon sequestration capacity by 69,000 tons, increasing the sulfur dioxide absorption capacity by 27.8 tons/year, reducing dust fall by 5.0 tons/year, increase the oxygen release by 3,000 tons/year and increasing the water conservation capacity by 811,000 tons/year .

(3) Renewable energy

- Increasing the power generation capacity by 21.06 million kWh/year and replacing a consumption of fossil energy of 6,634 tons of standard coal per year, reducing CO_2 emission by 18,900 tons/year, reducing sulfur dioxide emission by 142 tons/year and reducing nitrogen oxide emission by 56 tons/ year.

Two of the 11 proposed green projects to be funded by means of the Green Bond are also social responsibility projects under the Framework intended to be beneficial to society. The social benefits expected after the two projects are put formal operation are as follows:

- A flooding mitigation project which is also a poverty alleviation project is expected to reduce the impact of floods on the residents (including the registered poverty-stricken population) in the vicinity of the project;
- A flooding mitigation project that is also a cultivated land improvement and restoration project is expected to increase the grain production and the income of the poverty-stricken population and help to alleviate the poverty of the registered poverty-stricken population.

Our estimates as to the environmental benefits and social benefits are made based on the supporting materials provided by the Issuer in relation to relevant projects. Such estimates are subject to changes in technical standards and the external environment.

Section I Clarification on Certification

1. Scope of Certification

Euro Green Bond of Agricultural Development Bank of China for 2018.

2. Objectives of Certification

Compliance of the Green Bond to be issued by ADBC with the Catalogue, the GBP and other relevant laws and regulations of China and the compliance of the funded green projects funded by means of the Green Bond that are also social responsibility projects under the Framework with the SDGs.

3. Content of Certification

(1) Compliance of the proposed green projects to be funded by proceeds;

(2) The effectiveness and compliance of the evaluation and selection of green projects;

(3) The completeness and compliance of the management of proceeds;

(4) The completeness and compliance of information disclosure and reporting;

(5) The environmental benefit goals and social benefit goals (if any) of the proposed green projects.

4. Basis of Certification

(1) PBoC Green Bond Endorsed Projects Catalogue (2015) (the Green Finance Committee of China of China Society For Finance and Banking);

(2) Green Bond Principles (2018) (the International Capital Market Association)I

(3) The Framework of the Agriculture Development Bank of China for Green and Sustainable Development Bond (ADBC);

(4) Sustainable Development Goals;

(5) The Circular of the People's Bank of China on Establishing a Special Statistical System for Financial Accurate Poverty Alleviation Loans (Yinfa [2016] No. 185);

(6) The Green Credit Guidelines (Yinjianfa [2012] No. 4);

(7) The Energy Efficiency Credit Guidelines (Yinjianfa [2015] No. 2);

(8) The Conformity Assessment - Requirements for Bodies Providing Audit and Certification of Management Systems (ISO/IEC 17021: 2011);

(9) The Guidelines for Auditing Management Systems (ISO 19011: 2011);

(10) ADBC's relevant documents, mainly information relevant to the application for issuance of the Green Bond and documents related to ADBC's management system.

5. Procedures of Certification

The procedures the Certifier plans to undertake for the evaluation and certification of the Green Bond include acceptance of the commission, formation of the project team, due diligence, report preparation and three-level audit, review of the assessment certification by the internal quality management committee, external opinion solicitation, report issuance and filing.

(1) Formation of the project team. After accepting the commission, the Certifier's Green Financing Department appoints a person in charge and members of the project team with reference to the features of the project.

(2) Due diligence work. As due diligence efforts, the Certifier will review the documents related to Issuer's systems, relevant public information and reference related to the Green Bond personal interviews with the Issuer's management and relevant department heads and on-site sample surveys (on two funded green projects as needed, shown in Section VII) and calculation of environmental benefits. Commissioned by ADBC, the Certifier also evaluated social benefits of funded green projects that are also social responsibility projects under the Framework and certified that they are consistent with the UN SDGs. The due diligence efforts covered but were not limited to:

1) Evaluation of the Issuer's environmental credit risks based on ADBC's environmental risk management rules and regulations and their implementation and information collected through public channels;

2) Examination of documents related to the resolution on the proposed projects and assessment of the compliance and integrity of the procedures for resolving the proposed projects to be funded by means of the Green Bond;

3) Assessment of the green properties of the proposed projects to be funded by means of the Green Bond against the Catalogue and the GBP, with reference to the features of the relevant industries, technological advancement and the compliance of the relevant policies;

4) Collection detailed data of the proposed projects and evaluation of their environmental and social benefits by reviewing documents relevant to the proposed projects and through on-the-spot interviews with the bank management and relevant responsible persons (relevant to green projects that are also social responsibility projects under the Framework);

5) Examination of the documents relevant to systems and policies concerning the Issuer's green project screening and decisions and interviews with the Issuer's

management and relevant department heads to evaluate the effectiveness and standardization of procedures for the selection of and decisions on the green projects to be funded by means of the Green Bond;

6) Examination of the documents relevant to systems and policies concerning the Issuer's green project screening and decisions and interviews with the Issuer's management and relevant department heads to evaluate the standardization of the uses and management of the proceeds by means of the Green Bond;

7) Review of documents concerning the Issuer's information disclosure system and assessment of the transparency of disclosure related to the Green Bond.

(3) Based on the foregoing due diligence efforts, the certification team finalized and submitted the Certification Report to the Internal Quality Management Committee for review after the report was reviewed by the project team, the relevant department and the supervisor at the level of the company management, and issued a Certification Report in consultation with all relevant parties.

Section II Basic Information

1. Profile of the Green Bond

Description of the Green Bond: The Euro Green Bond of Agricultural Development Bank of China for 2018.

Term of Bond: No longer than 5 years

Size of public offer: About EUR 500 million

Listing exchanges: Hong Kong Stock Exchange, Luxembourg Stock Exchange and China Europe International Exchange

2. Profile of Issuer

Registered name of the Issuer: Agricultural Development Bank of China

Debt default or delayed payment of any principal or related interest in the last three years: None.

Historical green bond offerings: ADBC has publicly offered two green bonds in China, totaling CNY 20 billion (about EUR 2.52 billion). One of the greed bonds, Bond Connect, was publicly offered to domestic and international investors at Shanghai Clearing House and disclosed at Luxembourg Stock Exchange, amounting to CNY 10 billion (about EUR 1.26 billion).

Honors won for its contribution to the green economy and social benefits: ADBC was granted the Award for Excellent Issuers of China Bond Green Indices Constituent Bonds by China Central Depository & Clearing Co., Ltd. in 2017 and the Award for Financial Institution with the Strongest Sense in China and the Annual Award for Best Social

Responsibility Cases in China's Banking Industry by China Banking Association in 2014 and 2016, respectively.

Organization profile: ADBC, established in 1994, is the only agricultural policy bank in China under the direct leadership of the State Council of the People's Republic of China, shouldering the responsibilities to raise fund guaranteed with the national credit, undertake financial businesses based on the national agricultural policies, appropriate agriculture-supporting funds from the national treasury and provide comprehensive services for the development of agriculture and rural economy following relevant national laws and regulations. At present, ADBC provides financial services in the following five sectors: national food security, poverty alleviation, agricultural modernization, integrated urban and rural development and nationwide regional development strategy.

Business scope: National special reserved loans for grains, cotton, oilseeds, pork, sugar, silk, chemical fertilizers, as designated by the State Council, funded by the People's Bank of China and supported by the Ministry of Finance by means of interest subsidy; local reserved loans for fertilizer, sugar and meat; loans for procurement, distribution and sale of grains, cotton and meet; loans for contractual purchase of grains; loans for primary cotton processing enterprises in the cotton and linen industry; opening special accounts for grain-related risk safeguarding funds and appropriation of the funds; issuance of financial bonds; taking deposits of enterprises and institutions within its business scope; settlement of funds for enterprises and institutions with accounts opened with the bank; overseas fundraising; international settlement services for import and export trade of its clients within its business scope and foreign currency deposit taking and foreign fund remittance, FX transactions on behalf of its clients and other services related to the international settlement services; loans for acquisition of large grain processing enterprises; loans for grain, cotton and oil enterprises; loans for grain and oil seed purchase; loans for pre-purchase of cotton from cotton producing enterprises designated by the central government, deep-processing of cotton, breeding, purchase and processing of selected cotton seeds, export of cotton, import of cotton required for the national macro-regulation and reserve; loans for cotton enterprises for technical equipment transformation; collection and payment on behalf of enterprises with accounts opened with the bank; local currency transactions in the national interbank market; agreement deposits with postal savings agencies; loans for starting small-scale agricultural enterprises, rural infrastructure construction, comprehensive agricultural development and agricultural production materials; other businesses approved by the State Council and the China Banking Regulatory Commission; sideline insurance services (only for branches with licenses and only for the term specified in the licenses). (Business activities requiring special authorization shall be subject to approval of competent authorities.) (The enterprise chooses projects to operate and conducts business activities permitted by law independently; business activities requiring special authorization shall be operated according to approved contents after approved by competent authorities; the enterprise shall not be engaged in business activities prohibited and restricted by the municipal industial policies.)

3. Issuer's Environmental and Social Policies

ADBC is the only agricultural policy bank in China under the direct leadership of the State Council of the People's Republic of China. In the Reply of Approval of the Overall Plan for the Implementation of Reform of the Agricultural Development Bank of China (Guohan [2014] No. 154), the State Council clearly requires that ADBC shall focus on the policy-based banking services and proposes that ADBC be developed into an agricultural policy bank with sustainable development capabilities.

As a policy bank, ADBC practices China's green development philosophy and has formulated relevant environmental and social policies, including the Green Credit Guidelines of the Agricultural Development Bank of China, the Green Bond Fundraising and Use Management Measures (hereinafter the "Management Measures") and other systems, covering strategic directions for green credit, functional division of labor, loaning process, internal control management and information disclosure, among other basic aspects.

To identify, avoid and minimize threats to people and the environment and safeguard ADBC against environmental and social risks, ADBC will integrate the environmental and social risks threatening clients (projects) with the whole loaning process in addition to basic regulations for all steps in the loaning process (mainly including loan application acceptance, investigation, examination, review, approval, contract execution, loan grant and post management). The environmental and social risks shall mean the hazards or risks ADBC and its key related parties may cause to the environment and society in their construction, production and business activities, including environmental and social problems related to energy consumption, pollution, land, health and safety, resettlement of migrants, ecological protection, climate change and other related matters.

In the course of evaluating a project financing transaction, ADBC conducts due diligence on environmental and social risks threatening the client (project). The due diligence investigation covers the administrative approvals for the client (project) in relation to environmental and social risks (e.g., project review/approval/filing, environmental impact assessment and related approval, pre-audit or approval of land use, etc.), the compliance of the client (project) with industrial policies, market access standards, requirements on energy efficiency and energy conservation monitoring of national and provincial key energy-saving enterprises, assessment of social stability risk, respect for minority culture and customs, cultural heritage protection, labor and working conditions, land acquisition and involuntary resettlement, among other issues the client (project) is involved. When reviewing a loan application, the approving authority may exercise its right to veto if the project violates environment-related policies of China or is exposed to major environmental social risks. When signing the loan contract, ADBC requires the client to undertake not to violate any law or regulation for environmental protection, energy conservation and emission and pollution reduction, strictly abide by such laws and regulations after signing the contract and accept the supervision of ADBC. ADBC grants the loan to the client (or for the project) only when the approval from environmental

protection authority is obtained. After the loan is granted, ADBC regularly tracks and monitors the environmental and social risks threatening the project (client) in accordance with the requirements of the Measures of the Agricultural Development Bank of China for Post-loan Management (Trial) and the Green Credit Guidelines of the Agricultural Development Bank of China.

ADBC implements classified management over environmental and social risks following the Green Credit Guidelines, classifying its credit loan clients (projects) into Class A, B and C in accordance with the severity of environmental and social impacts of the industries they belong to. In order to effectively implement relevant environmental and social policies and prevent risks, ADBC has established an environmental and social risk information collection mechanism. The front-end departments at all levels collect information related to environmental and social risks its clients face keep informed of industries and its clients (projects) being encouraged or eliminated by the national government through multiple channels, including mainly energy-saving emission reduction authorities, industry associations, credit reporting agencies, regulatory authorities and public media.

In addition, ADBC developed the Framework in 2018 based on its existing environmental and social policies including the Green Credit Guidelines and the Management Measures as well as the types and characteristics of its services in accordance with the Catalogue, the GBP, the Social Bond Principles (2018) and the Sustainability Bond Guidelines (2018). The Framework outlines ADBC's specific requirements and arrangements for the Green Bond and Sustainability Bonds in terms of the use of proceeds, evaluation and selection of eligible projects, management of proceeds and information disclosure. CICERO and IISD jointly evaluated the Framework and issued a second-party opinion that the Green Bond under the Framework complies with the GBP and CICERO rates the Green Bond as "Dark Green". ADBC also includes a list of excluded items that it refuses to support with funds raised for the Green Bond. ADBC further undertakes that the green bonds it offers to the public will not be used to support clients of Class A, whose construction, production and business activities may seriously change the original state of the environment and cause adverse environmental and social consequences hard to be eliminated.

As the Green Bond is issued under the Framework, ADBC undertakes to observe the requirements and arrangements outlined in the Framework where the Green Bond is concerned.

Section III Use of Proceeds

According to the Framework, proceeds raised by ADBC by means of the Green Bond will be used to fund eligible green projects according to the Framework and the environmental objectives set out in the GBP. ADBC undertakes to be liable for the authenticity, accuracy and completeness of information it supplies in relation to such green projects.

ADBC plans to issue the Green Bond with proceeds of approximately EUR 500 million to

be invested in 11 eligible green projects, with a budget totaling CNY 4.64 billion (about EUR 579 million). The geographical distribution of above-mentioned green projects are detailed in Figure 1.

Figure 1: Geographical Distribution of Funded Green Projects*

Note: Figures refer to the fund amount of the Green Bond to be distributed for the funded projects in each region (Unit: CNY 100 million)

According to the definition and classification criteria of the Catalogue, the eligible green projects to be funded by the proceeds are classified into pollution prevention and control, ecological protection/climate change adaptation and clean energy. ADBC plans to invest mainly in the projects in the first two classes that respectively account for 90.9% in terms of the number of projects and 99.0% in terms of proceeds. The categories to which the project planed to be funded are detailed in Table 1.

Table 1: Categories of Prosed Green Projects Listed in the Catalogue to Be Funded by the Proceeds

Category of green projects			Number of projects	Amount of fund to be invested (CNY 100 million)
Level 1	Level 2	Level 3		
2. Pollution prevention and control	2.1 Pollution prevention and control	2.1.1 Facility construction and operation	4	25.82
5. Clean energy	5.2 Solar photovoltaic power generation	5.2.1 Facility construction and operation	1	0.96
6. Ecological protection and climate change adaptation	6.1 Natural ecological protection and protective development of tourism resources	6.1.1 Facility construction and operation	4	16.50
	6.4 Emergency prevention and control of disasters	6.4.1 Facility construction and operation	2	3.12
Total			11	46.40

ADBC plans to use proceeds while following the GBP. Funded projects are classified into three categories: sustainable water and wastewater management, environmentally sustainable management of living natural resources and land use, and renewable energy.

Table 2: Categories of Proposed Green Projects Listed in the Catalogue to Be Funded by the Proceeds

Classification of eligible green projects		Number of projects	Amount of the fund to be invested (CNY 100 million)
Category	Project		
Sustainable water and wastewater management	Wastewater treatment and drainage network	4	25.82
	Flooding mitigation	2	3.12

Classification of eligible green projects		Number of projects	Amount of the fund to be invested (CNY 100 million)
Category	Project		
Environmentally sustainable management of living natural resources and land use	Farmland improvement and restoration	3	15.50
	Urban greening	1	1.00
Renewable energy	Photovoltaic power generation	1	0.96
Total		11	46.40

We have not found any deviation of the classification of funded green projects by means of the Green Bond from the Catalogue and the GBP.

Section IV Criteria for Evaluation and Selection of Green Projects

1. Criteria for evaluation of green projects

When evaluating green projects, ADBC follows the provisions of the Green Credit Guidelines, Management Measures and the Framework to ensure that proceeds of the Green Bond are invested in eligible green projects.

According to the Framework, the criteria for the assessment of green projects include "Is the project in line with the requirement of the Framework in terms of classification of green projects? (See Table 3)" and "Will the project generate clear and quantifiable environmental benefits?" In addition, the project must meet the following basic requirements (among others): The project should be truthful and compliant with China's industrial policies, industry development plans and regional economic development plans. For projects requiring approval from relevant government departments, approval documents (in relation to project verification/approval/filing, environmental impact assessment, pre-assessment of or approval for land uses). And there should be lawful investments and construction conditions for the implementation of the projects.

Table 3: Categories of Green Projects in the Framework

Category	Key content
Sustainable water and wastewater management	Construction, operation, maintenance and strengthening of flooding mitigation projects Water pollution prevention & control and wastewater treatment facilities for key river basins and lakes Development of unconventional water resources[1]
Environmentally sustainable management of living natural resources and land use	Sustainable agriculture (including improvements and restoration of cultivated land, including development of high-standard farmland[2]) Sustainable forestry, such as afforestation, reforestation, forestry conservation and urban greening projects
Renewable energy	Projects for solar and wind power generation and transmission

It should be noted that ADBC includes a list of excluded items and represents that it refuses to support the following activities with funds raised for the Green Bond:

- Fossil fuel related assets (including clean coal);
- Carbon-intensive construction activities such as construction of new roads, airports, etc.;
- Nuclear energy and related assets;
- Industry and activities prohibited by the law of China, such as child labor, gaming, erotic entertainment, businesses or activities with records of illegal behaviors;
- Luxury items such as precious metals, precious art and antiques and golf clubs;
- Distilled, rectified and mixed alcoholic beverages;
- Production of tobacco and tobacco products;
- Mining and quarrying;
- Weapons and ammunition;
- Lease and operation of military vehicles;

[1] It is noted in the Framework that unconventional water refers to water other than surface water and underground water and other conventional water, including rainwater, reclaimed water (recycled wastewater), seawater, etc.

[2] The Framework adopts the definition of "high-standard farmland" in the National General Plan for the Construction of High-standard Farmland promulgated by the State Council in 2013.

- Companies or activities involving the production, distribution or storage of hazardous chemicals and radioactive materials.

2. Process for selecting green projects

ADBC implements the provisions in the Framework and establishes a green project pool by two steps: pre-screening and selection.

Front-end business departments of all branches of the bank (involving innovation services and infrastructure services for the offer of the Green Bond) will screen all candidate projects following the requirements on classification of green projects and submit lists of projects screened as eligible and supporting information to the head office, which will review the lists following the above-mentioned criteria for evaluation and finalize the list of eligible projects as a green project pool.

ADBC will engage third-party experts with professional competence in environmental protection and social risk control for the evaluation and selection of green projects under Framework. The third-party experts have the right to veto a projects with environmental and social risks.

ADBC has established a list of green projects, including 11 green projects eligible for a total loan of CNY 4.64 billion (approximately EUR 579 million). The candidate green projects fall into three major categories set out in the Catalogue, including pollution prevention and control, clean energy, ecological protection/climate change adaptation and three major categories set out in the GBP, including the sustainable water and wastewater management, continuous management of the environment of living natural resources and land use, and renewable energy. ADBC will manage the green project pool on a dynamic basis and regularly update the pool if necessary (by means of replacement, deletion or addition of projects), to ensure that proceeds can be used in green projects.

We have not found any deviation of the project evaluation and selection from the Catalogue and the GBP.

Section V Management of Proceeds

ADBC follows the requirements set out in the Management Measures and the Framework on the management and use of proceeds of the Green Bond to ensure that proceeds are invested in proposed green projects for investment.

For the public offer of the Green Bond, ADBC will establish a Green Bond proceeds management ledger, which will include but is not limited to the following information:

- Information of the Green Bond, e.g, ISIN, pricing date, expiration date, etc.;
- A list of green projects, including information of category of project (as defined in the Framework), project name and profile, borrower's profile, loan balance, date of disbursement, date of repayment, interest rate, etc.

When idle, ADBC will temporarily invest the proceeds in Green Bond or/and money market instruments with good credit rating and market liquidity, but the proceeds will eventually be fully invested in green projects, to comply with the requirements for the special account management and the application of the fund to designated purposes. In addition, ADBC is committed to investing all proceeds of the Green Bond in green projects collected within 24 months of the issuance of the Green Bond.

We have not found any deviation of management of proceeds from requirements of the GBP.

Section VI Information Disclosure and Reporting

ADBC has made the following arrangements for information disclosure and reporting before and during the issuance of Green Bond according to the Framework:

Before the issuance: ADBC will employ CICERO and IISD to evaluate the Framework and jointly issued a second-party opinion. ADBC will also employ the Certifier to conduct pre-issuance evaluation and certification of the Green Bond and publish the evaluation certification opinion.

In the term of the Green Bond: ADBC will publish annual reports on the issuance of the bond, including a report on the use of the fund and a report on the impacts of the Green Bond. The fund use report will include information as to the amount of funds invested in various green projects, the balance at the end of the year and the regional distribution of the projects. Subject to the confidentiality agreement between ADBC and the client (borrower), the report will disclose certain cases. The impact report will disclose the expected and actual environmental and social benefits (if any) of the green projects that have been funded with the proceeds as well as the methods and key assumptions used for measuring the impacts. ADBC has employed the Certifier to conduct ongoing follow-up assessments of the actual (or expected) environmental and social benefits (if any) generated by green projects funded by means of the Green Bond and issue annual assessment reports.

In addition to the above reports, ADBC will also make disclosure through other feasible channels. For example, annual reports and corporate social responsibility reports will be posted on the official website of ADBC (http://www.adbc.com.cn/) or Hong Kong Stock Exchange, Luxembourg Stock Exchange and China Europe International Exchange.

We certify that ADBC has set up a disclosure mechanism and arranged for a third-party certifier to conduct follow-up assessment and we have not found any deviation of the disclosure and reporting from the requirements of the GBP.

Section VII Assessment and Measurement of Environmental and Social Benefits

The 11 proposed green projects to be funded by ADBC with proceeds of Green Bond involve eligible green projects in all categories set out in the Framework. The green projects fall into the three categories of pollution prevention and control, clean energy and ecological protection/ climate change adaptation, listed in the Catalogue and the three categories set out in the GBP: sustainable water and wastewater management, environmentally sustainable management of living natural resources and land use, and renewable energy. The Certifier has reviewed the feasibility study reports and project approvals related to all 11 green projects, extracted key information such as project technical indexes, and adopted the official accounting method recognized by the government departments and taken into account China's regional factors and technical characteristics. The environmental benefits expected to be generated by the green projects were evaluated and measured. The Certifier also evaluated social benefits of 2 green projects that are also social responsibility projects under the Framework and certified that they are consistent with the UN SDGs.

To objectively and comprehensively evaluate the environmental benefits of proposed green projects to be funded by ADBC, the Certifier selected 2 representative projects from the 11 projects, and further conducted on-the-site investigation and on-site interviews with relevant personnel from local ADBC branches and the project companies (borrowers) before the issuance after considering the categories of green projects, investment scale, geographic locations and other factors on the basis of the paper work. The Certifier has also accessed documents of approval and information evidencing the truthfulness and compliance of the projects. Based on the foregoing work, the Certifier analyzed the expected environmental benefits that can be generated after the projects are implemented. Relevant information of the 2 projects is detailed as typical cases in this report. After the issuance, the Certifier will conduct annual follow-up assessments of the progress of these funded projects and their actual environmental benefits, and arrange further on-site investigation with reference to actual situations of funded projects. The result of assessments and on-site investigations will be disclosed in the annual assessment reports.

The Green Bond will be offered to the public following plans and schedules set out in the Framework. Expected environmental benefits of the green projects are as follows:

1. Projects for sustainable water and wastewater management

The proposed green projects to be funded with the proceeds include six sustainable water and wastewater management projects, mainly wastewater treatment plants and drainage networks, flooding mitigation facilities (for ecological management of rivers and reservoir risk elimination and reinforcement). Such projects will greatly enhance the urban

wastewater treatment capacity, improve the water quality and produce significant environmental benefits in terms of ecological restoration, flooding mitigation and drainage. One of the projects is also a social responsibility project under the Framework, which, in addition to environmental benefits, will also generate poverty alleviation benefits and contribute to the achievement of the UN Sustainable Development Goal 1, namely the alleviation of poverty.

(1) The (three) wastewater treatment plants, upon completion, will realize a wastewater treatment capacity of 66.98 million tons/year and reducing the chemical oxygen demand by 21,000 tons/year, reducing the biochemical oxygen demand by 11,000 tons/year and reducing the ammonia nitrogen demand by 2,000 tons/year;

(2) The deep tunnel wastewater pipeline network project will realize a total of 19.16 kilometers of new wastewater tunnels. After the completion, the project will significantly raise the local wastewater collection rate, enhance the urban wastewater treatment capacity, reduce wastewater discharge and improve the quality of local water, playing an indispensable roles in realizing "full treatment" of local wastewater;

(3) A river ecology improvement project is designed to cover a river section of 9.6 kilometers. The banks of the target river will be built, reconstructed or reinforcement, which will significantly increase the flooding mitigation capacity of the river section. The river channel will be dredged and improved to increase the water reserve capacity. An ecological wetland system will be developed to increase the green area of the city (by 600,000m^2 ecological wetland) while improving the ecological environment of the river. This project will generate both significant environmental benefits and social benefits. According to the criteria set out in the Circular of the People's Bank of China on Establishing a Special Statistical System for Financial Accurate Poverty Alleviation Loans (Yinfa [2016] No. 185), the county in which the project is implemented is a nationally designated poor county rated by the poverty alleviation authority of the government. The project, when completed, will consolidate and enhance the flooding mitigation and disaster mitigation capacity of the poor county, prevent the local residents from being stricken by poverty again and control the poverty-stricken population in the region, reduce flood risks threatening the safety of the residents and loss caused by future floods;

(4) A reservoir risk-elimination and reinforcement project will further consolidate the flooding mitigation capacity of the reservoir by reinforcing the dam (amounting to 91.25 million cubic meters of storage capacity), which will further enhance its flooding mitigation capacity (once-in-50-year standard).

Typical Case 1: Dadong Lake Core Area wastewater Transportation System Project

Dadong Lake Core Area wastewater Transportation System Project, being a key project to be developed in the campaign to develop Wuhan into a "sponge city", is located in Wuhan City - one of the first 16 pilots "sponge cities" designated to be jointed developed by the Ministry of Finance, the Ministry of Construction and the Ministry of Water Resources of China. The project lies within the scope of Dadong Lake Ecological Water Network. Dadong Lake Ecological Water Network is a model project proposed by the municipal government of Wuhan City for the purpose of improving the ecology of the water environment and creating a "dual community" (resource-saving and environment-friendly community). The project is designed to be a huge one, centering on Donghu Lake and including Dongsha Lake water system and Beihu Lake water system, covering the rivers, lakes, ports and channels in the city. In order to develop Dadong Lake Ecological Water Network and address the contradiction between the insufficient processing capacity of the current wastewater treatment plant and the tail water discharge standard, it is necessary to relocate four wastewater treatment plants in the core area of Dadong Lake (including the existing Shahu wastewater Treatment Plant, Erlang Temple wastewater Treatment Plant, Luobuzui wastewater Treatment Plant and proposed Beihu wastewater Treatment Plant, with a total wastewater treatment capacity of 550,000 tons/day) in Beihu for centralized treatment. This project is planned so that wastewater from existing wastewater processing plant will be transmitted using deep tunnel technology for processing.

Dadong Lake Core Area wastewater Transmission System Project totals 17.46km with a maximum burial depth of 51.5 meters. Deep tunnels are designed for fully underground wastewater treatment plant, with deep tunnels greater than tunnels of ordinary wastewater pipeline network in terms of the diameter. This project will effectively improve the wastewater transmission efficiency. In addition to the 17.46-kilometer main tunnel, this project will also include a total of 1.7km of branch tunnels, three wastewater pre-treatment stations and a lift pump station. The wastewater pretreatment stations will remove floating substances, filaments and sand grains with larger particle size in the wastewater to avoid siltation in the tunnel.

主隧工程线路：二郎庙预处理站→沙湖港及欢乐大道→三环线青化立交→武鄂高速→下穿严西湖和北湖→新建北湖污水处理厂

支线工程线路：落步嘴预处理站→三环线→4#竖井

Figure 2: Layout of the Project

The project extends to four administrative districts of Wuhan City and serves about 3 million residents. It is the deep tunnel drainage system with the largest transmission flow, the longest transmission distance, the first swirling inflow device in China and the first to be equipped with fully underground wastewater pre-treatment stations. The investment in the project is estimated to total about CNY 2.79 billion (about EUR 353 million).

Figure 3: Site Map of the Project

The project started in August 2017, with an estimated construction period of four years. When completed and put into operation, the project will be able to transmit wastewater in the main urban area to Beihu wastewater Treatment Plant located outside the Fourth Ring of the city for treatment (with a planned short-term wastewater treatment capacity of 800,000 ton/day, and a planned long-term wastewater treatment capacity of 1.5 million tons/day). This project will raise the quality of water in the city from Standard B, Level 1 to Standard A, Level 1, as defined in the *Water Pollutant Discharge Standard of*

Municipal Wastewater Treatment Plants (GB18918-2002). After put into production, this project will significantly improve the wastewater treatment capacity in the core area of Donghu Lake, conducive to the construction of Dadong Lake Ecological Water Network and improve the ecological environment of Wuhan City.

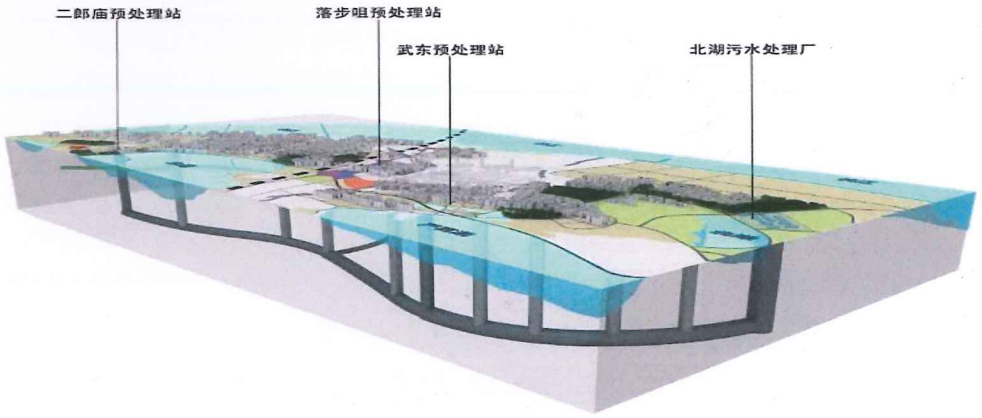


Figure 4: Plan of the Project

When completed and put into operation, this project will help achieve the goal of full collection and full treatment of wastewater of the wastewater control projects in the Dadong Lake area, rapidly reducing pollutants entering the lake and the river, purifying water entering the lake, the river and improving the ecological environment of the river. Therefore, the project can be rated as one of the sustainable water and wastewater management projects in line with the standard and requirements of the Catalogue.

2. Projects for environmentally sustainable management of living natural resources and land use

The proposed green projects to be funded by proceeds include four projects for environmentally sustainable management of living natural resources and land use, designed mainly to support the improvement and restoration of cultivated land and urban greening initiatives. Such projects will help achieve the goals of making effective use of resources (land) and sustainable development. One of the projects is also a social responsibility project under the Framework, which, in addition to environmental benefits, will also generate poverty alleviation benefits and contribute to the achievement of the UN Sustainable Development Goal 1 (to eliminate poverty in all forms) and UN Sustainable Development Goal 2 (to eliminate poverty, eliminate hunger, realize grain safety, improve nutrition and promote sustainable agriculture).

(1) (Three) farmland improvement and restoration projects, when completed, will increase the area of high-standard farmland by 233 million m^2, maintain 109 million m^2 of high-standard farmland and restore 609,500 m^2 of damaged farmland. Those projects will improve land quality, prevent soil acidification and alkalinity, alleviate soil erosion, improve the capacities of farmland production systems to cope with climate change and help efficient use of land use and sustainable

development of agriculture.

One of the three projects, identified also as a social responsibility project, will generate both significant environmental benefits and social benefits. According to the criteria set out in the Circular of the People's Bank of China on Establishing a Special Statistical System for Financial Accurate Poverty Alleviation Loans (Yinfa [2016] No. 185), the project can be rated as a poverty alleviation project. Those projects, when completed and put into operation, will help increase the grain production and the income of the poor population in the rural area of the county. Meanwhile, the Borrower (project contractor) will employ registered poverty-stricken population for the development of the projects and help to achieve the UN Sustainable Development Goal 1 (To eliminate poverty in all forms) and UN Sustainable Development Goal 2 (To eliminate poverty, eliminate hunger, realize grain safety, improve nutrition and promote sustainable agriculture).

(2) One urban greening project will increase the green area by 2,302,300m^2, the carbon sequestration capacity by 69,000 tons and the sulfur dioxide absorption capacity by 27.8 tons/year, reduce dust fall by 5.0 tons/year, increase the oxygen release by 3,000 tons/year and the water conservation capacity by 811,000 tons/year.

Typical Case 2: High-standard Farmland Development Project in XX County 2018-2020
This project, to be developed in a country in the Central and Southern China, involving 12 townships in the county. According to the 13th Five-Year Plan for High-standard Farmland in XX County, during the period between 2018-2020, it is planned to build 227 million m^2 of new high-standard farmland, accounting for 45% of the total area of new high-standard farmland in the 13th Five-Year Plan period (2016-2020) of the county. The investment in the project totals CNR 1.032 billion (about EUR 130 million). The high-standard farmland development project is proposed to, while protecting the ecological environment, level land, improve and fertilize soil, construct irrigation and drainage facilities, build field roads, protect farmland, maintain the ecological environment develop electricity supply and distribution for fields and other build other facilities and make highly efficient use of all available resources for the purpose of getting rid of restrictions or promote the quality of farmland comprehensively. Measures for the development and content of the project are determined following the principle of "making up for the lack or shortage." The project aims mainly to solve the problem of water balance in farmland, improving the drought resistance and drainage capacity of farmland ecosystems by means of water conservancy works such as farmland irrigation and drainage facilities; it also aims to level and connect farmland and construction field roads for improved use of modern farming machines and higher production efficiency. The detailed development works include the dredging of 1636.87km of channels; the lining of 2888.29km of channel; the building or repairing of 1339 pumping stations and 1010 new tunnels and dams; the construction of 2368.7km of new field roads; the building or repairing of 1396 km bridges for farming machines; and the construction of 6721 new sluice gates, 8182 culverts and 402 new aqueducts.

High-standard farmland, as ecologically friendly rural infrastructure, generates environmental benefits such as improved soil fertility and water and fertilizer efficiency. After completed and put into operation, the project will raise the fertility of the high-standard farmland by more than 0.5 grade, the quality of farmland by more than 1 grade, the effective utilization coefficient of irrigation water by more than 10%, the fertilizer utilization rate by 10%, the grain production capacity of the farmland by an average of about 100kg per mu (about 667m^2), and the annual production by 34.06 million kg. In addition, the project will significantly enhance the disaster prevention and mitigation capacity of the farmland ecosystem, help the adaption to climate change and mitigate the impacts of natural disasters on local grain production. The implementation of high-standard farmland construction project will have positive impacts on the development of the sustainable agriculture.

The project is planned to develop 227 million m^2 of new high-standard farmland, is a sustainable agriculture project. The project will contribute to several environmental goals of the GBP (protection of natural resources and adaption to climate changes) and, therefore, is also a project for environmentally sustainable management of living natural resources and land use. According to the criteria and requirements of the Catalogue, the project also meets the requirements set out in "6. Ecological protection and climate change adaptation - 6.1 Natural ecological protection and protective development of tourism resources - 6.1.1 Facility construction and operation".

3. Renewable energy project

One of the proposed green projects to be funded by proceeds is the renewable energy project, designed to develop a photovoltaic green house with a capacity of 18MWp. After put into operation, the project will realize an annual power generation capacity of 21.06 million kWh, with the benefits of replacing and reducing fossil energy consumption and, therefore, reducing the emissions of carbon dioxide and pollutants such as sulfur dioxide and nitrogen oxides.

According to the Certifier's estimates, the project, when put into operation, will replace a consumption of fossil energy of 6634 tons of standard coal per year and reduce CO_2 emission by 18,900 tons/year, sulfur dioxide emission by 142 tons/year and nitrogen oxide emission by 56 tons/ year.

Our estimates as to the environmental benefits and social benefits are made based on the supporting materials provided by the Issuer in relation to relevant projects. Such estimates are subject to changes in technical standards and the external environment.

Certifier's Statement

We hereby make the following statement as to this Third-party Certification Report on the Green Corporate Bond (hereinafter the "Report") we have issued:

I. We have fulfilled our obligation of investigation and integrity and have issued this Report following the principles of objectivity, good faith and fairness.

II. The conclusion we have presented in this Report is based on the information provided by the Issuer, who shall be responsible for the authenticity, legality and completeness of the information it has supplied to us.

III. The conclusion contained in this Report is presented following proper technical standards and certification procedures, free of any adjustment made under influence of the Issuer or any other organization or individual.

IV. This Report shall provide support and reference in relation to issues involved in the planned issuance and we disclaim any liability for any consequence of the use of the conclusion presented and information contained in this Report.

Person in charge of the certification team:

Zhao Jiajia

Members of the certification team:

Chen Kaiyue

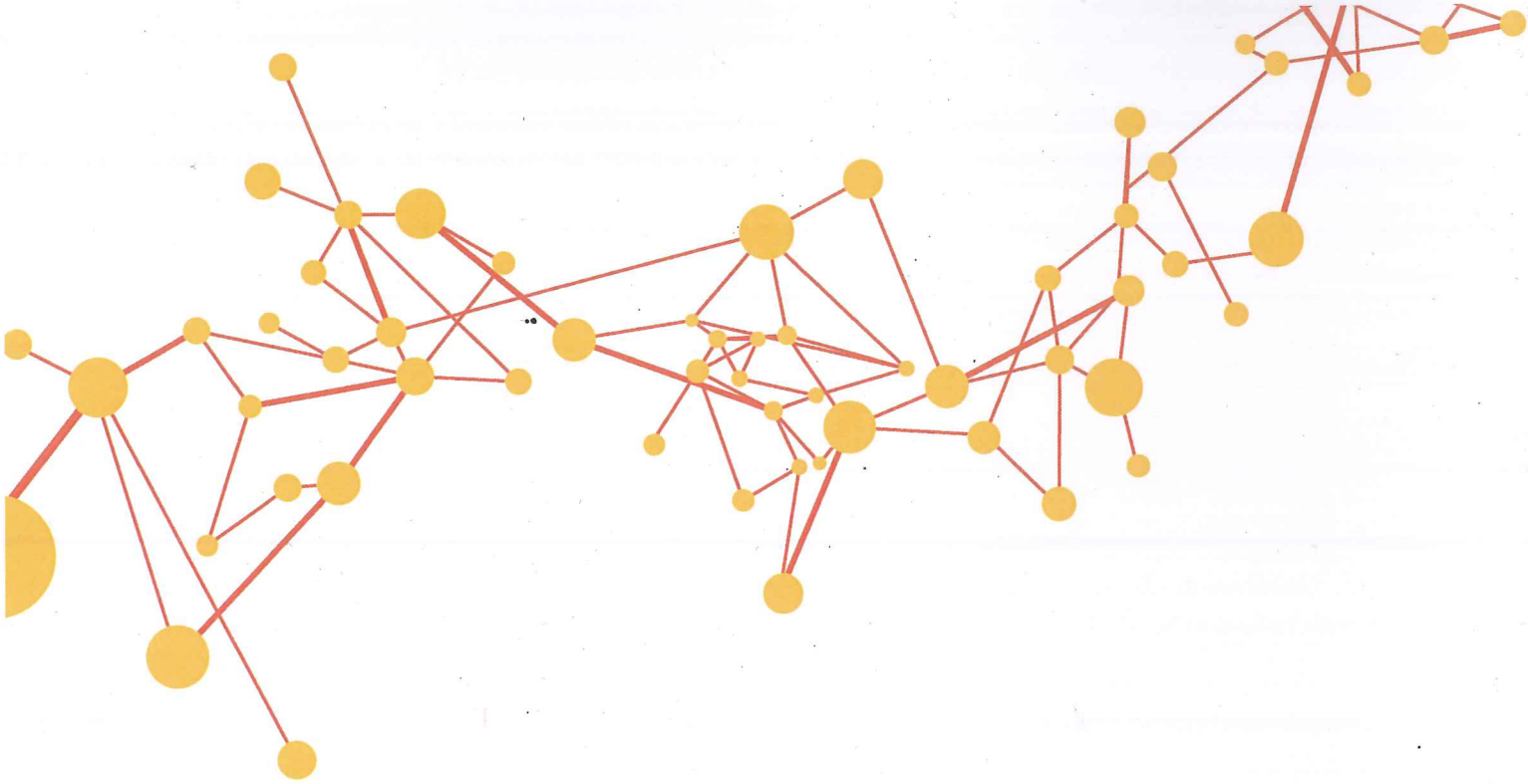
He Chang

Lu Wenqin

Certifier's seal:

CECEP Consulting Co., Ltd.

October 24, 2018



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