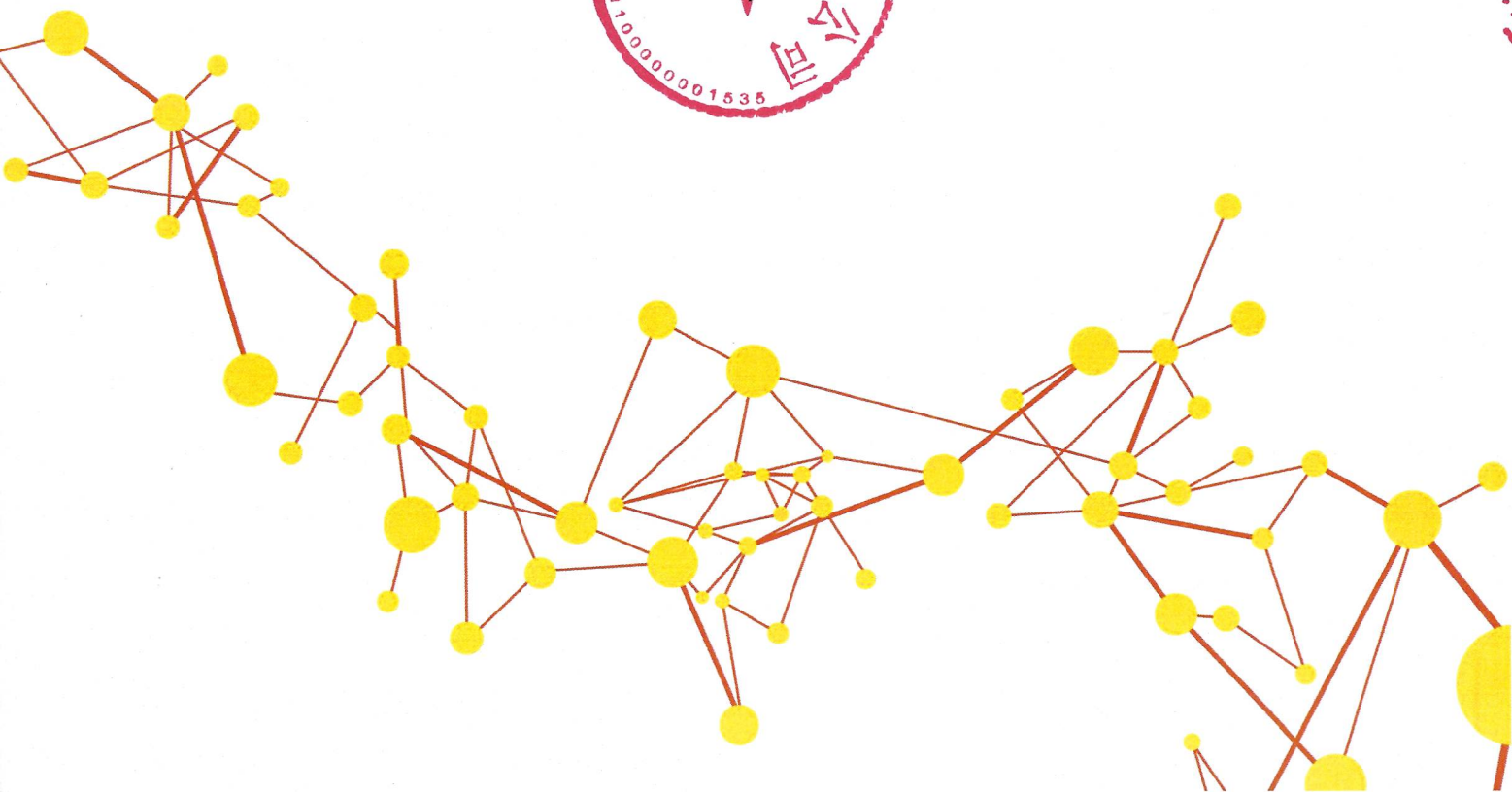


# Agricultural Development Bank of China

## 2018 Euro Green Bond

### Follow-up Certification Report (2020)

CECEP Consulting Co., Ltd.  
June 11, 2021



## Certification Conclusion

Agricultural Development Bank of China (hereinafter the "ADBC") issued the Euro Green Bond of the Agricultural Development Bank of China for 2018(hereinafter the "Green Bond")overseas with an amount of about EUR 500 million and coupon of 3 years, and the Green Bond has been listed on the Hong Kong Stock Exchange, Luxembourg Stock Exchange and China Europe International Exchange.

CECEP Consulting Co., Ltd. (hereinafter the "Certifier"), 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) and the Framework of the Agriculture Development Bank of China for Green and Sustainable Development Bond (hereinafter the "Framework"), conducts the annual follow-up certification based on 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 31, 2020, ADBC had raised proceeds of EUR 5 billion, with cumulative of 3.947 billion yuan (about 500 million euros, with a reference exchange rate of 1 euro=7.8943 yuan) allocated to 18 eligible green projects. The Certifier has conducted evaluation and certification of ADBC in terms of the use of proceeds raised by 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 31, 2020, there has 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, 2 and 6 in the SDGs.

As of October 31, 2020, it is evaluated that the proposed green projects 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
  - An annual wastewater treatment capacity of 194.82 million tons with an annual reduction in the chemical oxygen demand by 137,341 tons, reduction in the biochemical oxygen demand by 24,996 tons and reduction in the ammonia nitrogen demand by 4769 tons;
  - 19.16km of wastewater transfer tunnels newly constructed;
  - 11.6km rivers in length was treated and improved .
- (2) Environmentally sustainable management of living natural resources and land use

- Expanding high standard farmland by 6 million m<sup>2</sup>;
- Maintaining 109 million m<sup>2</sup> of high standard farmland;
- Restoring 609,500 m<sup>2</sup> of damaged land;
- Increasing green area by 149.54 million square meters, with an annual carbon sequestration capacity of 4,490,000 tons, and the sulfur dioxide absorption capacity of 1806 tons, while reducing dust fall by 324 tons/year, and increasing the oxygen release by 180,000 tons/year and increasing the water conservation capacity by 51.87 million tons /year .

(3) Renewable energy

- Annual power generation capacity reached 21.67 million kWh which replaced fossil fuel consumption of 6,653 tons of standard coal per year, while reducing CO<sub>2</sub> emission by 11,749 tons/year, reducing sulfur dioxide emission by 190 tons/year and reducing nitrogen oxide emission by 30 tons/ year.

Among the 18 green projects funded under this Green Bond, three projects are also social responsibility projects under this Framework with social benefits. Once the three projects are in operation, their social benefits expected 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 waste treatment project will improve living standards and environment of local people (including the registered poverty-stricken population)
- 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

This certification covers listed aspects of The 2018 Green Bond in Euro of Agricultural Development Bank of China (in duration) in the year of 2020 from November 1, 2019 to October 31, 2020.

### 2. Objectives of Certification

Compliance of the Green Bond issued by ADBC with the “Green Bond Endorsed Project Catalogue”(2015 edition)(Hereinafter referred to as “Catalogue”), the Green Bond Principle (2018)(Herein after referred to as GBP )and other relevant laws and regulations of China and the compliance of the funded green projects under this Green Bond that are also social responsibility projects under the Framework with the SDGs.

### 3. Content of Certification

- (1) Compliance of the green projects 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 allocated 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);
- (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 that CECEP Consulting(hereinafter the “Certifier”) plans to undertake for the evaluation and certification of the Green Bond include 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 reviews the documents related to Issuer's systems, relevant public information and reference related to the Green Bond, conducts on-site interviews with the Issuer's management and relevant department heads and survey of projects funded by proceeds and calculates the environmental benefits. Commissioned by ADBC, the Certifier also evaluates social benefits of funded green projects that are also social responsibility projects under the Framework and certified whether they are consistent with the UN SDGs.
- (3) Based on the foregoing due diligence efforts, the certification team finalizes and submits the Certification Report to the Internal Quality Management Committee for review after the report is reviewed by the project team, the relevant department and the supervisor at the level of the company management, and issues a Certification Report in consultation with all relevant parties.

## Section II Basic Information

On November 26, 2018, the Agricultural Development Bank of China (hereinafter referred to as the “ADBC” ) successfully issued the 2018 Green Finance bond of the Agricultural Development Bank of China. The basic situation of the bond is detailed in the table below.

Table 1 Basic information of bond

Description	Euro Green Bond of the Agricultural Development Bank of China for 2018
Size (EUR 100 million)	5
Tenor (year)	3



Issue date	November 26, 2018
Expiry date	November 26, 2021
Coupon	3mE+48bp
Accounting date	November 26, 2018
Amount received	EUR 500 million

## Section III Allocation and Management of Proceeds

### 1. Allocation of Proceeds

ADBC issued the Green Bond with proceeds of EUR 500 million. As of October 31, 2020, the proceeds with a total of 3.947 billion yuan (about 500 million euros, with a reference exchange rate of 1 euro = 7.8943 yuan) have been allocated to 18 eligible green projects, which are in line with the framework as defined in the Catalogue and can achieve the environmental goals in the GBP Principles.

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 account for 94.4% in terms of the total number of projects and 99.6% in terms of proceeds. The categories to which the project planned to be funded are detailed in Table 2. The geographical distribution of above-mentioned green projects are detailed in Figure 1.

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

Category of green projects			Number of projects	Amount of the fund invested	
Level 1	Level 2	Level 3		(CNY 100 million)	(EURO 100 million)
2. Pollution prevention and control	2.1 Pollution prevention and control	2.1.1 Facility construction and operation	10	22.48	2.85
5. Clean energy	5.2 Solar photovoltaic power generation	5.2.1 Facility construction and operation	1	0.15	0.02



Category of green projects			Number of projects	Amount of the fund invested	
Level 1	Level 2	Level 3		(CNY 100 million)	(EURO 100 million)
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	9.58	1.21
	6.3 Forestry development	6.3.1 Facility construction and operation	1	3.50	0.44
	6.4 Emergency prevention and control of disasters	6.4.1 Facility construction and operation	3	3.76	0.48
Total			18	39.47	5.00



Figure 1: Geographical Distribution of Allocated Green Projects

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 3: Categories of Proposed Green Projects Listed in the Catalogue Allocated by the Proceeds

Categories of eligible green projects		Number of projects	Amount allocated to projects	
Category	Project		(CNY 100 million)	(EURO 100 million)
Sustainable water and wastewater management	Wastewater treatment and drainage network	10	22.48	2.85
	Flooding mitigation	3	3.76	0.48
Environmentally sustainable management of living natural resources and land use	Farmland improvement and restoration	2	7.29	0.92
	Sustainable forestry development	1	3.50	0.44
	Urban greening	1	2.29	0.29
Renewable energy	Photovoltaic power generation	1	0.15	0.02
Total		18	39.47	5.00

**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.**

## 2. Management of Proceeds

Through document review and due diligence, the Certifier learned that ADBC followed the requirements set out in the Management Measures and the Framework on the management and allocation of proceeds of the Green Bond to ensure that proceeds are allocated in proposed green projects.

For the issuance of the Green Bond, ADBC established a Green Bond proceeds management ledger for the green financial bond proceeds to strengthen the management of the receipt, disbursement and fund recovery of the Green Bond and ensure that the proceeds are used exclusively.

When idle, ADBC temporarily allocated the proceeds to Green Bond or/and money market instruments with good credit rating and market liquidity, but the proceeds will eventually be





fully allocated to green projects, to comply with the requirements for the special account management and the application of the fund to designated purposes.

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

## Section IV Information Disclosure and Reporting

Through document review and due diligence, the Certifier learned that before the issuance, ADBC had employed CICERO and IISD to evaluate the Framework and jointly issued a second-party opinion. ADBC also employed the Certifier to conduct pre-issuance evaluation and certification of the Green Bond and publish the evaluation certification opinion.

In the duration of the Green Bond, ADBC has made the following arrangements for information disclosure and reporting: 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 V Assessment of Environmental and Social Benefits

As of October 31, 2020, the 18 green projects funded by ADBC with proceeds of Green Bond fall into the three categories: 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. According to the allocation of the green bond of ADBC, the Certifier



reviewed and verified the information and supporting materials of the project progress provided by ADBC and related project undertaking agencies, including but not limited to: the feasibility study reports and project approvals related to all green projects, project environmental impact assessment reports and approvals, project construction progress, completed project activities and project cumulative asset expenditures, etc.. The Certifier extracted key information such as project technical indexes and evaluated and calculated the environmental benefits expected to be generated by the green projects, combined with the EIB project's carbon footprint methodology and CDM methodology, taking full account of China's regional factors and technical characteristics. 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.

The Green Bond was 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 funded with the proceeds include thirteen 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. Two of the projects are also social responsibility projects 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 and Goal 6, namely the alleviation of poverty, and clean water and sanitation.

- (1) Wastewater treatment plants (2 projects), upon completion, will realize a wastewater treatment capacity of 194.82 million tons/year with an annual reduction in the chemical oxygen demand by 137,341 tons, reduction in the biochemical oxygen demand by 24,996 tons and reduction in the ammonia nitrogen demand by 4769 tons;
- (2) One 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;
- (3) Two river ecology improvement projects are designed to cover a river section of 11.6 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. An ecological wetland system will be developed to increase the green area of the city (by 600,000m<sup>2</sup> ecological wetland) while improving the ecological environment of the river.
- (4) One reservoir risk-elimination and reinforcement project will further consolidate the

flooding mitigation capacity of the reservoir by reinforcing the dam, which will further enhance its flooding mitigation capacity (once-in-50-year standard).

Typical Case 1 Sewage treatment plant in the core area of Xiaogu, a new industrial base  
 in the Bashi independent industrial and mining area, Qianwei

Sewage treatment plant in the core area of Xiaogu, a new industrial base in the Bashi independent industrial and mining area, is located in Xiaogu Town, Qianwei County, Leshan City, Sichuan Province; the project service scope covers the whole area of Xiaogu core area of Qianwei County's new industrial base. With treatment process of "hydrolysis acidification + modified AAO + high-efficiency sedimentation tank + denitrification deep bed filter", the plant has sewage treatment capacity of 80,000m<sup>3</sup> /day; The total investment of the project is 197 million yuan. The annual sewage treatment capacity is estimated to be 10.95 million tons/year with COD reduction to reach 4489.5 tons/year, BOD reduction 2628 tons/year, and ammonia nitrogen reduction 350.4 tons/year.



The project was officially started on April 16, 2019, and the construction was completed with completion acceptance on January 8, 2021. Upon this report was developed, the project is still under final construction. Once the project is put in operation, water pollution emissions will meet requirements in the centralized sewage treatment plant in the industrial park (ie quasi-category four) as specified in Table 1 of the "Water Pollutant



Discharge Standard for Minjiang and Tuojiang River Basins in Sichuan Province" (DB51/2311-2016). ). This project will significantly improve the sewage treatment capacity in the area, which is conducive to improving the ecological environment of the surrounding watershed.

According to the "Green Bond Principles" (2018), the project meets the criteria and requirements for the definition of the "sustainable water resources and wastewater management" category. According to the "Catalogue", the project is eligible as category "2. Pollution prevention/2.1 Pollution prevention/2.1.1 Facilities construction and operation".

## **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 hunger, realize food security, improve nutrition and promote sustainable agriculture).

- (1) Two farmland improvement and restoration projects, when completed, will increase the area of high-standard farmland by 6 million m<sup>2</sup>, maintain 109 million m<sup>2</sup> of high-standard farmland and restore 609,500 m<sup>2</sup> 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.
- (2) One urban greening project and one forestry cultivation project will increase the green area by 149.54 million square meters with carbon sequestration capacity of 4.49 million tons and the sulfur dioxide absorption capacity of 1806 tons/year, reducing dust fall by 324 tons/year, while increasing the oxygen release by 180,000 tons/year and the water conservation capacity of 51.87 million tons/year.



Typical case 2 National Reserve Forest Project of Hubei Kangxin New Material Technology Co., Ltd.

The National Reserve Forest Project of Hubei Kangxin New Material Technology Co., Ltd. is located in Hubei Province, covering partly the Macheng City, Guangshui City and Zhuxi County. The total construction scale of the project is 220,900 acres, of which 18,800 acres of intensive artificial forest cultivation, 42,900 acres of existing forest cultivation, and 159,200 acres of forest services, with a total investment of 652 million yuan. The project optimizes forest stand structure, promotes forestry quality and efficiency, and enhances forestry production capacity through intensive plantation cultivation, existing forest transformation and cultivation, forest tending and other management measures.

The project was officially started in September 2019 and is scheduled to be completed in September 2022. After completion, it will greatly increase the forest area in the project area, significantly improve the forest carbon sink function, significantly enhance the environmental carrying capacity, and mitigate climate change. The expected carbon sink The amount of sulfur dioxide is 4,417,200 tons, the amount of sulfur dioxide absorption is 1,778.66 tons/year, the amount of blocking dust is 318.92 tons/year, the amount of oxygen release is 176,700 tons/year, and the amount of water conserving is 51,054,000 tons/year.





According to the "Green Bond Principles" (2018), the project meets the criteria and requirements for the category of "Environmentally Sustainable Management of Biological Resources and Land Resources". According to the "Catalogue of Projects Supported by Green Bonds", the project complies with the definition standards and requirements of the category "6 Ecological protection and adaptation to climate change/6.3 Forestry development/6.3.1 Project implementation and facility construction and operation".

### **3. Renewable energy project**

One of the proposed green projects to be funded by proceeds is a renewable energy project, in which a photovoltaic green house with a capacity of 18MWp has been developed. The annual power generation in 2020 is approximately 21.67 million kWh, with co-benefits in replacing fossil energy consumption and reducing carbon dioxide emissions, sulfur dioxide, nitrogen oxides, and sulfur dioxide emissions. According to the calculations



under this certification, the project has replaced consumption of 6653 tons fossil fuel, and reduced 11,749 tons of carbon dioxide emissions, 190 tons of sulfur dioxide, and 30 tons of nitrogen oxides.

**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.**





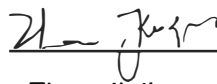
## Certifier's Statement

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.

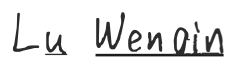
Person in charge of the certification team:

Certifier's seal:

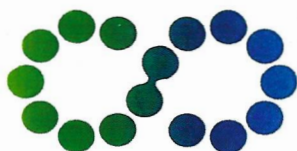
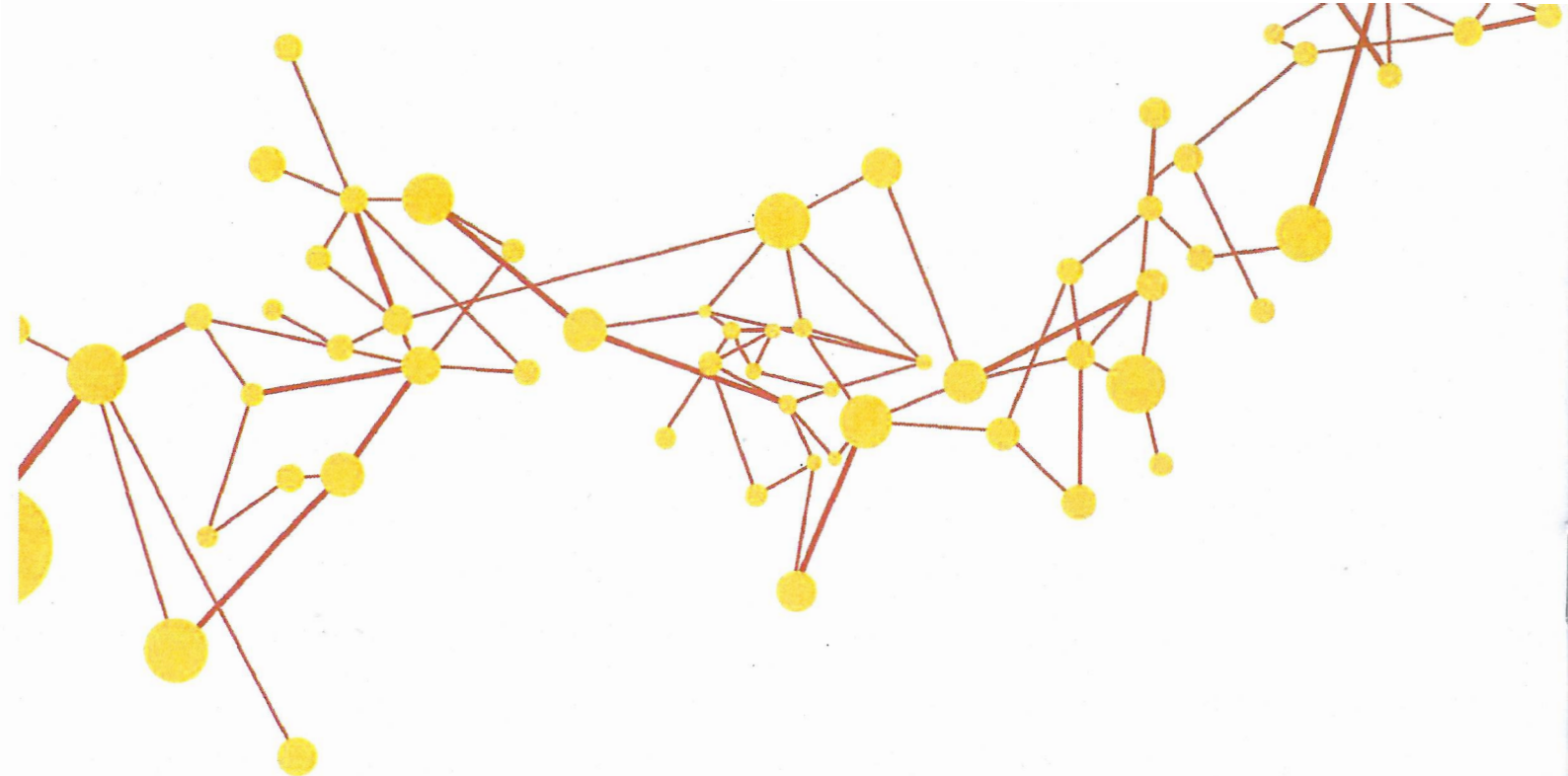
  
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**中国节能**

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