



CGN GREEN FINANCING FRAMEWORK

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1. Introduction

Greenhouse gas emissions, which are closely linked to energy production and consumption, have become one of the biggest environmental challenges for the world and China. As an international agreement to address the global climate change, the Paris Climate Agreement came into effect since 4 November 2016. As a responsible developing country, China has announced a strong commitment towards emission reduction. According to the China Climate Bulletin (2015):

- by 2030, CO₂ emissions per unit of GDP will be reduced by 60-65% from the 2015 level;
- by 2030, non-fossil energy will account for 20% of total primary energy consumption, in comparison to the actual level of 11.9% in 2015.

In 2017, the National Energy Administration of China issued the “Thirteenth Five-Year Plan on Energy” and “Thirteenth Five-Year Plan on Renewable Resources”, which proposed three main objectives: firstly, to continue to step up the development of non-fossil fuels; secondly, to expand the consumer market of natural gas; and thirdly, to achieve clean and efficient use of fossil fuels, in particular coal. It is expected that clean energy will become the main driving force of increasing energy supply during the “Thirteenth Five-Year Plan”. Later that year, the 19th National Congress of the Communist Party of China proposed a strategic plan to accelerate the reform of the ecological civilization system, promote green development, and build a “beautiful China”.

China General Nuclear Power Corporation (“**CGN Group**”/ “**CGN**”) is one of the backbone state-owned enterprises of China and one of the leading energy groups in China. It is now the largest nuclear power group and the fifth largest renewable energy group in China. In line with the commitments and objectives set by the Chinese Government, CGN Group will continue to pursue the mission to become “A World Class Energy Provider”.

Originated from nuclear power generation business, CGN Group expanded into non-nuclear clean and renewable energy (including mainly wind, hydro, solar power as well as energy conservation technologies) since 2005. In 2010, CGN acquired Meiya Power (subsequently renamed to CGN New Energy Holdings Co Ltd) which is now a HK-listed company and a majority-owned subsidiary of CGN Group to develop non-nuclear clean and renewable energy. To promote the renewable energy development, CGN has established four investment vehicles domestically and globally with different geographical focus for the development of the renewable energy projects. Specifically, CGN Wind Energy, CGN Solar Energy, and CGN New Energy Holdings Co Ltd (1811.HK) cover the domestic energy projects in China, while CGN Energy International Holdings Co Ltd (“**CGNE Intl**”) cover projects outside of China.

In addition to the investment strategy in the renewable energy sector, CGN has also established an efficient process of negative list (“**Negative List**”), which details a number of areas that are restricted from investments or with inadequate pre-assessment, such as coal-fired power generation and oil-fired power generation.

In 2017 and 2018 respectively, CGN successfully issued its Inaugural and second EUR 500mn 7-year green bonds. As of 30th November 2018, the full amount of the 2017 green bond net proceeds has been allocated to eligible projects; while c. 74% of the 2018 green bond net proceeds have been allocated.

In 2018, CGN’s total on-grid clean power generation (including nuclear power and renewable energy) reached 232 TWh, which contributes to reduction of approximately 170 million tons of avoided carbon dioxide emission.

2. CGN Green Financing Framework

The CGN Group intends to issue green bonds (“**Green Bond(s)**”) and/or borrow green loan(s) (“**Green Loan(s)**”) (“**Green Financing Instruments**” collectively) on the basis of the CGN Green Financing Framework (“**Framework**”), which has been drafted in alignment with ICMA’s Green Bond Principles (“**GBP**”)¹ and LMA’s Green Loan Principles (“**GLP**”)² respectively. As such, it will follow the four components: **Use of Proceeds, Process for Project Selection, Management of Proceeds and Reporting.**

2.1 Use of Proceeds

Proceeds raised through the Green Bond and/or via Green Loans (“**Proceeds**”) will be exclusively used to finance or refinance in whole or in part, the Eligible Green Projects (defined below) owned by subsidiaries or affiliates of the CGN Group. “**Eligible Green Projects**” refer to new or existing projects in the conception, construction and installation of renewable energy production units and associated expenses for the acquisition and the construction. It covers energy produced from renewable energy sources and only includes wind and solar as sources of energy. The Eligible Green Projects shall comply with specific Environmental, Social and Governance criteria (“**ESG Criteria**”) and are highly scrutinized through the following process:

- Review of in-depth due diligence provided by technical advisors analyzing the environmental aspects of the project and its compliance with local regulation for environmental and labor matters;
- Dedicated teams within CGN including the “Health, Safety and Environment” and the Organization and Management departments reviewing the due diligence reports and providing recommendations on the environmental and social aspects. These departments are in charge of the compliance and the monitoring of the ESG Criteria during the construction and operating phases of the project.

The main ESG Criteria are as follows:

- Monitor the environmental impact of the projects and improve energy efficiency of the facilities and resources utilization rate to achieve energy saving in response to the climate change;
- Promote the compliance with environmental protection regulations, and encourage suppliers to observe best practices in operating in an environmentally responsible manner to reduce carbon emission and waste production and enhance recycling effort to mitigate the effects on environment;
- Management of the environmental impact of the project, and carry forward the sophisticated conservation policy and protect surrounding biology diversity of the source of energy;
- Protect human and labor rights, and establish ethical, transparent and sustainable human resources practices and process;
- Promote health and safety of all employees and contractors;
- Build and improve consultation and communication mechanism for the territory’s stakeholders including suppliers, constructors, and contractors through various channels such as transparent disclosure, consulting, visit and communities activities, responding to the expectation of stakeholders effectively, all of which help form the mutual trust and reciprocal relationship;
- Committed to proactive dialogue and active contribution to local communities and their economic development.

2.2 Process for Project Evaluation and Selection

The CGN Group will adopt the following evaluation procedures to identify and select Eligible Green Project:

Strictly following the ESG Criteria, various CGN renewable energy subsidiaries (“**Respective Subsidiaries**”) will make the preliminary screening of Eligible Green Projects. Other technical parameters such as project scale, financial return, construction progress and risk assessment etc. are also considered in parallel in formulating the investment plan which is submitted to the Respective Subsidiary’s CEO Working Meeting for pre-approval, upon which the Eligible Green Projects will be reported to the Respective

¹ More information: <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>

² https://www.lma.eu.com/application/files/9115/4452/5458/741_LM_Green_Loan_Principles_Booklet_V8.pdf

Subsidiary's Board Meeting for formal approval. Eligible Green Projects are reviewed from multi perspectives including compliance to the ESG Criteria, environmental impact, strategic planning, stress testing, financial budget and financing plan, etc. Eligible Green Projects which exceed a certain budget size will need to obtain final approval from i) CGN Group's General Manager Working Meeting and ii) CGN Group's Board of Directors.

Apart from allocating or raising funds according to annual budget, projects that will be financed the Proceeds will be independently overseen by the Finance Department of Head Office to comply with the "Use of Proceeds" section of this Framework.

2.3 Management of Proceeds

The Proceeds will be deposited to a dedicated account and tracked through a formal internal process. For each Green Financing Instrument, the funds will be specially earmarked within internal accounting systems to ensure that such funds will finance only disbursements related to Eligible Green Projects as defined under "Use of Proceeds". CGN's Finance Department will implement the account supervision and fund flow tracking through the centralized electronic banking system, and Respective Subsidiaries will report to their Boards of Directors and CGN's Finance Department on a regular basis on the progress of the allocation of proceeds.

Any balance of issuance proceeds not allocated to Eligible Green Projects will be held in accordance with CGN's Treasury strategy and invested in cash, cash equivalent and/or money market instruments. CGN Group will provide an audit report by an independent third-party on an annual basis until the full allocation of proceeds into Eligible Green Projects.

CGN intends to allocate the Proceed within 24 months from the issuance or drawdown date of each Green Financing Instrument.

2.4 Reporting

The CGN Group will prepare Green Bond reporting ("**Green Bond Report**") on an annual basis until full allocation of Proceeds, and on a timely basis upon material changes of projects. The Green Bond Report will consist of reporting on the allocation of proceeds ("**Allocation Reporting**") and on impact ("**Environmental Impact Reporting**"), as defined below for each Green Bond issuance. The Green Bond Report will be publicly available on CGN's official website.

i) Allocation Reporting

The reporting will provide the following information:

- Amount of the Proceeds allocated to each Eligible Green Project
- Project description including location, type of renewable energy, installation capacity, starting date of operations, annual operating hour, etc
- Amount of Proceeds to be allocated

ii) Environmental Impact Reporting

The reporting will provide the following information:

- Installed capacity in MW
- Annual GHG emissions avoided in tons of CO₂ equivalent
- Annual renewable energy production in MWh

For each Green Loan, the CGN Group commits to provide lenders a Green Loan Report, consists of reporting on allocation and environmental impact, on an annual basis until full allocation, and on a timely basis upon material changes of projects.

3. External Review

CGN International has engaged Deloitte to provide an independent assessment on the alignment of the Framework to the GBP and the GLP. Its Independent Limited Assurance report, which concludes that the Framework is in compliance with the GBP and the GLP, is available at CGN's official website.

Post-issuance of each Green Bond, the allocation of proceeds will be audited on an annual basis by an independent third-party auditor until the full allocation of proceeds into Eligible Green Projects.