

## "Second-party Opinion" on

# Yunnan Provincial Energy Investment Group Co., Ltd.'s

**Sustainable Finance Framework** 

by Hong Kong Quality Assurance Agency (HKQAA)

**Prepared by:** 

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Date:

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## 1. Introduction for Use of Proceed Financing Instruments

In September 2020, Chinese President Xi, Jinping pledged to peak China's carbon emissions before 2030 and achieve carbon neutrality before 2060 in his speech to the United Nations General Assembly. The energy sector is the source of almost 90% of China's greenhouse gas emissions, putting energy policies at the heart of the country's transition to carbon neutrality.

In the 14th Five-Year Plan (2021-2025) released in March 2021, energy and climate stand out as a central-policy priority. Solar PV and wind power generation would be the main contributor to China's incremental power capacity for the next decades to come. To this end, state-owned power generation companies are accelerating investments in renewable energy as they play a critical role in meeting China's dual carbon goals. Consequently, considerable amount of investment in renewable energy is foreseeable.

Yunnan Provincial Energy Investment Group Co., Ltd. ("Yunnan Energy", "the Group") is a provincial state-owned enterprise (SOE) based in Yunnan Province, China. Yunnan Energy is principally engaged in the investment and management of natural gas, hydropower, power grid, and coal energy businesses worldwide. The Group is also involved in the investment and management of other energy-related industries, such as environmental protection and new energy; as well as investment in oil and gas resources and pipe network projects.

Supported by the Yunnan Provincial Government, Yunnan Energy has transformed from a pure energy investment group to an integrated clean energy group, achieving rapid growth in both scale and efficiency by building on the core energy business and fully leveraging its own industry chain benefits in energy sector.

As one of the state-owned power generation utilities in the country, Yunnan Energy's direction for sustainable development is in line with the national and provincial policy.

Yunnan Energy has engaged HKQAA to review the Yunnan Provincial Energy Investment Group Co., Ltd.'s Sustainable Finance Framework, dated February 2022, and provide a second party opinion on the Framework's environmental credentials and its alignment with the Green Bond Principles 2021 (the "GBP") and Green Loan Principles 2021 (the "GLP").



## 2. Overview of Issuer/Borrower

Yunnan Provincial Energy Investment Group Co., Ltd. ("Yunnan Energy", "the Group") obtained approval for its formation from the Yunnan Provincial Government on January 11, 2012 as the key provincial SOE supervised by Yunnan SASAC, the sole strategic platform to engage in the investment and development of the energy sector, the sole platform to integrate all energy resources and the sole energy investment platform of the Yunnan Provincial Government and the main platform driving the development of the provincial government's clean energy strategy.

Yunnan Energy's diversified generation mix includes wind, solar, hydropower, fossil fuel, natural gas and other new energy projects that are of strategic importance to Yunnan Province. As of December 2021, Yunnan Energy controlled and operated 31 power generation plants with an aggregate installed generation capacity of 3995 MW.

## 3. Framework Overview and Comment

#### 3.1 Use of Proceeds

Yunnan Energy shall use the proceeds of the green and sustainability debt instruments to finance and/or refinance, Eligible Project that meets the eligible criteria listed below:

#### **Renewable Energy Production:**

- Wind Power Development, construction, installation and maintenance of Wind Facilities (such as Onshore and Offshore projects including floating wind turbines)
- Solar Power Development, construction, installation and maintenance of Solar Facilities (such as Photovoltaic or Thermodynamic plants)

## **3.2 Project Evaluation and Selection Process**

Yunnan Energy's internal process in identifying and selecting projects is conducted via a process that involves participants from various functional areas of the Group, including the project teams.

Yunnan Energy's ESG Committee ("ESGC") is responsible to oversee the Group's ESG and Sustainability reporting. The ESGC will review, select and approve the Eligible Projects.



The ESGC will evaluate associated environmental risks of all potential Eligible Projects, as well as identify related mitigation measures.

## 3.3 Management of Proceeds

Yunnan Energy will maintain a register to keep track of the use of proceeds for each GFT. The register will contain the following information of i) Type of Funding Transaction, and ii) Allocation of Use of Proceeds.

An internal accounting system will be in place for the Group to monitor the allocation to the Eligible Project and track the net proceeds. Pending allocation, the net proceeds from the GFT(s) issued may be managed according to Yunnan Energy's usual liquidity management practice, including in cash or cash equivalents.

## 3.4 Reporting

Yunnan Energy will report on the allocation of net proceeds and associated impact metrics of its Project annually through its Sustainability Report or on a separate report specific to the GFT. The report will contain details of i) Allocation Reporting and ii) Impact Reporting. The impact reporting will include relevant qualitative and (if reasonably practicable) quantitative impact indicators for the Project.

#### 3.5 Conclusion

The assessment team of Hong Kong Quality Assurance Agency has determined that the Yunnan Provincial Energy Investment Group Co., Ltd.'s Sustainable Finance Framework is well-structured and aligned with the core components of the Green Bond Principles and Green Loan Principles. For detailed information, please refer to Appendix 2: Independent External Review Form.



## 4. Introduction for Sustainability Linked Financing Instruments

Yunnan Provincial Energy Investment Group Co., Ltd. ("Yunnan Energy", "the Group") has developed a Sustainability Finance Framework ("framework") and Key Performance Targets ("KPIs") under which it intends to issue bonds/borrow loans from banking institutes, using the proceeds to facilitate and support environmentally sustainable economic activity and growth.

Yunnan Energy has engaged Hong Kong Quality Assurance Agency (HKQAA) to provide a second opinion on its framework. As part of this engagement, HKQAA requested and reviewed a broad set of documentation in order to understand the relationship to Yunnan Energy's overall sustainability strategy, target setting on how to measure the sustainability of Yunnan Energy, reporting and the review mechanism. Following this engagement, some elements of Yunnan Energy's KPIs and SPTs were clarified to ensure an alignment with the level of disclosure expected by the Sustainability-Linked Bond Principles 2020 and Sustainability-Linked Loan Principles 2022. This document contains HKQAA's opinion on Yunnan Energy's KPIs selection and SPT level and should be read in conjunction with the framework.



## 4.1 Framework Overview and Comment

## 4.1.1 Relationship to Issuer/Borrower's Overall Sustainability Strategy

Yunnan Provincial Energy Investment Group Co., Ltd. ("Yunnan Energy", "the Group") provides electricity generation services. The Group constructs and operates electric power networks, offers electric energy generation, transmission, and distribution services. Yunnan Energy is committed to seizing strategic opportunities and focusing on the development of new energy business. Driven by the national Dual Carbon Goals in "14th Five-Year Plan", Yunnan Energy has shifted focus towards green energy, and jointly developed energy-related finance and energy generating capacities, helping Yunnan province to achieve the carbon neutrality.

As a leading state-owned energy enterprise of Yunnan province, Yunnan Energy plays a key role in implementing the ambitious renewable energy initiatives of the Government of the People's Republic of China. Accordingly, renewable energy development has become a strategic direction of the Group tasked by the government. Yunnan Energy is putting effort in expanding supply of wind and solar power as reflected in the Group's advanced sustainability plan.

#### 4.2 Selection of KPIs

2 Key Performance Indicators ("KPIs") were identified by Yunnan Energy for issuing sustainability-linked debt instruments. The 2 KPIs are 1) Increase in Wind Power Generating Capacity (%) and 2) Increase in Solar Power Generating Capacity (%).

This KPI is defined by the percentage increase in total installed generation capacity from renewable energy sources (wind and solar) in MW compared to base year 2021. The KPI covers all Wind and Solar generating units owned or controlled by Yunnan Energy, its subsidiaries, and affiliates.

#### **SDG Contribution**

The Sustainable Development Goals (SDGs) were set in September 2015 and form an agenda for achieving sustainable development by the year 2030. The selected KPIs are likely to advance the following SDG goals:



KPI	SDG
Increase in Wind	7. Affordable and Clean Energy
Power Generating	Enhancing wind power and solar power generation scale
Capacity (%)	
Increase in Solar	13. Climate Action
Power Generating	Avoidance and reduction of greenhouse gas emissions
Capacity (%)	

**KPI 1 (Environment): Increase in Wind Power Generating Capacity (%)** 

**KPI 2 (Environment): Increase in Solar Power Generating Capacity (%)** 

The selected KPIs reflect some of the most material sustainability issues for Yunnan Energy's current and future operations as well as some of the most relevant sustainability challenges for its sector.

The electric and gas utilities sector has a major role to play regarding climate change and energy efficiency through the promotion of renewable energy sources, as it would help in reduction in greenhouse gas emissions from power plants. Indeed, with two-thirds of greenhouse gas (GHG) emissions coming from the energy sector, the Intergovernmental Panel on Climate Change (IPCC) highlights the need for a transformation of the world's energy system with an immediate, large-scale shift to renewable energy.

Renewable energy technologies like solar and wind are the key to reducing emissions in the electricity sector. According to a report published by International Energy Agency (IEA), the rapid adoption of renewable energy, with solar PV and wind made up for nearly 70%, is a reliable pathway to achieve over 90% of energy-related CO<sub>2</sub> emissions reductions needed to meet 2050 Net-Zero climate pledges.

At the national level, the revised Renewable Energy Law clearly states that renewable energy has priority for development in China's energy system. In 2020, President Xi committed to 1,200 GW of wind and solar installed capacity by 2030. All these give more importance to solar and wind as alternatives to fossil fuels and other renewable resources in China.

As a utility company that engages in electricity generation activities, expansion of renewables is one of the main drivers of emissions reductions. Yunnan Energy commits itself to cooperate in the further development and promotion of wind and solar technologies, particularly with regard to the increase in planned capital expenditures (CAPEX) in solar and wind energy projects. Higher CAPEX for wind and solar projects tends



to increase projected wind and solar power generation, and ultimately their projected contribution to the electricity generation mix.

In addition, the double ESG transaction issuance will limit the net proceeds to only eligible green projects as per the Framework, i.e., wind and solar projects, which could further maximize Yunnan Energy's renewable energy commitments. It is believed that this will help to deliver a considerable increase in the share of the Group's renewable energy sources.

All in all, it is particularly relevant that Yunnan Energy set targets for generating capacity for solar and wind power, fast-growing renewable energy sources both nationally and globally, as part of regional and sectoral decarbonization pathways.

Based on the above assessment, HKQAA assessment team is of the opinion that KPI 1 and KPI 2 are material and relevant topics to Yunnan Energy.

# 4.3 Target Setting – Measuring the Sustainability of the Issuer/Borrower

The baseline and the target levels for the 2 KPIs are as follows:

No.	Key Performance Indicator ("KPI")	Baseline Performance 2023 SPT [2021]		
KPI 1	Percentage increase in Wind Power Generating Capacity (%)	432.6 MW	1,183.1 MW, 173% increment compared to base year	
KPI 2	Percentage increase in Solar Power Generating Capacity (%)	1,112.7 MW	1592.4 MW, 43% increment compared to base year	



Baseline and Target determination:

#### **KPI 1: Percentage increase in Wind Power Generating Capacity (%)**

Yunnan Energy set the baseline for the SPT at 432.6 MW in 2021, meaning achieving the 173% increment target in 2023 will represent an increase in wind power generation capacity of more than 750 MW within a two-year period, nearly doubling compared to 2021. Instead of a three-year average, the adoption of 2021 as a base year for the indicator is consistent with the Group's strategic directions and sustainability strategies.

Regarding historical performance, Yunnan Energy's wind power generating capacity expanded by mere 0.7% between the launch of Yunnan Energy's renewable energy expansion strategy in 2019 and leading up to the baseline year of 2021. With no increase in 2020 and only a single-digit increase in 2021, this two-year period saw stagnant growth with no material change in wind power generation capacity. Therefore, Yunnan Energy's targets for 173% increment by the end of 2023 represent a significant improvement upon historical performance in this context. The SPT demonstrates a material improvement compared to the Group's Business as Usual scenario.

According to Global Wind Energy Council (GWEC), it is estimated that net new capacity additions of 77 GW will be added to China's wind power system in 2022-2023. By 2023, China's total wind capacity is projected to reach 405 GW from 328 GW in base year 2021, representing a growth rate of 23.5% within a two-year period. Compared to the baseline, Yunnan Energy reports an expected 173% increase in its wind power generation by the end of 2023, which is higher than the national wind power capacity predictions.

Besides, Yunnan Energy's definition and methodology for calculating SPT is consistent with the Group's historical sustainability disclosure. The use of the generation capacity as a means for defining project generation capacity is considered an industry standard. Given the nature of the measurements used for wind power generation capacity, the SPT cannot be compared with external science-based bench markets.

Based on the above assessment, HKQAA assessment team considers the SPT level for KPI 1 to be viable and appropriate.

## **KPI 2: Percentage increase in Solar Power Generating Capacity (%)**

Yunnan Energy set the baseline for the SPT at 1592.4 MW in 2021, meaning achieving the 43% increment target in 2023 will represent an increase in solar power electricity generation capacity of approximately 480 MW within a two-year period. Instead of a



three-year average, the adoption of 2021 as a base year for the indicator is consistent with the Group's strategic directions and sustainability strategies.

Regarding historical performance, Yunnan Energy's solar power generating capacity expanded by 10.4% between 2019 and the baseline year of 2021. This two-year period saw stagnant growth with no material change in solar power generation capacity. Therefore, Yunnan Energy's targets for 43% increment by the end of 2023 represent a significant improvement upon historical performance in this context. The SPT demonstrates a material improvement compared to the Group's Business as Usual scenario.

Based on Wood Mackenzie's estimate, a surge of new installations is expected to raise China's solar generating capacity to 428 GW by 2023, contributing to a growth rate of 39.9% from 306 GW (2021). Compared to the baseline, Yunnan Energy reports an expected 43% increase in its solar power generation by the end of 2023, which is higher than the national solar power capacity predictions. Of note, the evolution in Yunnan Energy's expected solar power generation capacity would represent an increase of around 35.5% from 2022 to 2023. It's also worth noting that the expansion rate of total wind and solar generating capacity (79.6%) in the period of 2021-2023 is also higher than that of national projections (31.4%) over the same period, echoing with the national's ambitious goal for wind and solar energy.

Yunnan Energy's definition and methodology for calculating SPT is consistent with the Group's historical sustainability disclosure. The use of the generation capacity as a means for defining project generation capacity is considered an industry standard. However, the nature of this measurement, percentage change in generation capacity, is not suitable for comparison with external science-based contextual benchmarks.

Based on the above assessment, HKQAA assessment team considers the SPT level for KPI 2 to be viable and appropriate.

## 4.4 Bond / Loan Characteristics

Yunnan Energy has disclosed that, for any sustainability-linked instrument issued in alignment with the Framework, if the SPT has not been achieved by the target observation date, a premium will be payable by Yunnan Energy in the form of, but not limited to, a step-up in coupon margin. The Bond/Loan characteristics adjustment for each SLT will be specified in the relevant instrument's documentation.



HKQAA assessment team considers that Yunnan Energy has taken into account the uncertainties involved in potential exceptional events that could substantially impact the calculation of the KPIs, the restatement of the SPTs.

## 4.5 Reporting

Where possible, Yunnan Energy will make and keep readily available up-to-date information relating to their SPTs, with such information to be shared at least once per annum.

As transparency is of particular value in this market, Yunnan Energy commits to publicly report information relating to their SPTs and this information will often be included in the Group's sustainability report or a separate report specific to the SLT published on corporate website, which is aligned with the Sustainability-Linked Bond Principles 2020 and Sustainability-Linked Loan Principles 2022.

## 4.6 Verification

Yunnan Energy commits to seek external review of its performance against its SPTs and make publicly available about the changes via Yunnan Energy's official website, aligned with the Sustainability-Linked Bond Principles 2020 and Sustainability-Linked Loan Principles 2022 on verification. In transactions where Yunnan Energy seeks independent verification, Yunnan Energy should have its performance against its SPTs independently verified by external reviewer, such as an auditor, environmental consultant and/ or independent ratings agency, at least once a year. Any such external reviewer should be agreed by those institutions participating in the bond/loan. Furthermore, it is also recommended that external verification be carried out in case of material changes impacting an Instrument's financial characteristics (such as a trigger event).

#### 4.7 Conclusion

The assessment team of Hong Kong Quality Assurance Agency has determined that Yunnan Provincial Energy Investment Group Co., Ltd.'s KPI selection and SPT level is appropriate, and the framework is in accordance with the requirements of the Sustainability-linked Bond Principles 2020 and Sustainability-linked Loan Principles 2022. For detailed information, please refer to Appendix 3: Independent External Review Form.



## 5. Appendix 1: Documents reviewed or referenced

No.	Author	Title
1	International Capital	Green Bond Principles, June 2021
	Market Association	https://www.icmagroup.org/assets/documents/Sustainable-
		finance/2021-updates/Green-Bond-Principles-June-2021-140621.pdf
2	Loan Market	Green Loan Principles, February 2021
	Association	https://www.lsta.org/content/green-loan-principles/
3	International Capital	Sustainability-Linked Bond Principles, June 2020
	Market Association	https://www.icmagroup.org/assets/documents/Regulatory/Green-
		Bonds/June-2020/Sustainability-Linked-Bond-Principles-June-2020-
		<u>171120.pdf</u>
4	Loan Market	Sustainability-Linked Loan Principles, March 2022
	Association	https://www.lsta.org/content/sustainability-linked-loan-principles-sllp/
5	Yunnan Provincial	Sustainable Finance Framework, March 2022
	Energy Investment	
	Group Co., Ltd.	
6	Yunnan Provincial	Official Corporate Website
	Energy Investment	http://wap.cnyeig.com/
	Group Co., Ltd.	
7	Standing Committee	Renewable Energy Law of the People's Republic of China
	of the National	
	People's Congress	
8	Global Wind Energy	Global Wind Report 2021
	Council	https://gwec.net/global-wind-report-2021/#Download
9	Wood Mackenzie	China Solar Power Energy Forecast



## 6. Appendix 2: Sustainable Finance Framework - Independent

## **External Review Form**

## Section 1. Basic Information

**Borrower name:** Yunnan Provincial Energy Investment Group Co., Ltd. ("Yunnan Energy" or the "Group")

**Borrower Green Loan Framework Name, if applicable:** Yunnan Provincial Energy Investment Group Co., Ltd. Sustainable Finance Framework (the "Framework")

Independent External Review provider's name: Hong Kong Quality Assurance Agency

Completion date of this form: 21 March 2022

**Publication date of review publication:** [where appropriate, specify if it is an update and add reference to earlier relevant review]

## Section 2. Review overview

#### **SCOPE OF REVIEW**

The following may be used or adapted, where appropriate, to summarize the scope of the review.

The review assessed the following elements and confirmed their alignment with the GBP and GLP:							
$\boxtimes$	Use of Proceeds	$\boxtimes$	Process for Project Evaluation and Selection				
$\boxtimes$	Management of Proceeds	$\boxtimes$	Reporting				
ROLE(	ROLE(S) OF INDEPENDENT EXTERNAL REVIEW PROVIDER						
	Consultant review		Certification				
$\boxtimes$	Verification		Rating				
	Other (please specify):						
Note: In case of multiple reviews / different providers, please provide separate forms for each review.							
EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW (if applicable)							
Piease	refer to the Second-Party Opinion Document for the	Grou	ip above.				



## Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

## 1. USE OF PROCEEDS

Overal	Il comment on section (if applicable):					
	HKQAA assessment team notes that the Group's eligible Green Projects for the use of proceeds are aligned with those recognized by the Green Bond Principles and Green Loan Principles.					
	nths look back period is defined in the frame aximized the project's impact.	work t	o ensure the most updated green projects			
Use o	of proceeds categories as per GBP/GLP:					
$\boxtimes$	Renewable energy		Energy efficiency			
	Pollution prevention and control		Environmentally sustainable management of living natural resources and land use			
	Terrestrial and aquatic biodiversity conservation		Clean transportation			
	Sustainable water and wastewater management		Climate change adaptation			
	Eco-efficient and/or circular economy adapted products, production technologies and processes		Green buildings			
	Unknown at issuance but currently expected to conform with GBPs / GLPs categories, or other eligible areas not yet stated in GBPs / GLPs		Other (please specify):			
If appli	If applicable please specify the environmental taxonomy, if other than GBPs / GLPs: N/A					
2. PRO	2. PROCESS FOR PROJECT EVALUATION AND SELECTION					
Overal	Il comment on section (if applicable):					



The eligible Green Projects are identified, selected by the ESG Committee, and approved by the Board of Directors. The ESG Committee involves senior staff from cross-functional departments of the Group and is responsible for evaluating the environmental risks associated with potential eligible projects.

HKQAA considers that the Group has established a standard process for the evaluation and selection of eligible green projects, the selection process is appropriate and effective.

Evalua	ation and selection		
	Credentials on the issuer/borrower's environmental sustainability objectives	×	Documented process to determine that projects fit within defined categories
	Defined and transparent criteria for projects eligible for Green and Social Bond and Loan proceeds		Documented process to identify and manage potential ESG risks associated with the project
	Summary criteria for project evaluation and selection publicly available		Other (please specify):
Inforn	nation on Responsibilities and Account	abilit	:y
	Evaluation / Selection criteria subject to external advice or verification	$\boxtimes$	In-house assessment
	Other (please specify):		
3. MA	NAGEMENT OF PROCEEDS		
Overal	I comment on section (if applicable):		
procee	•	the	eeds of allocation and keep track of the use of Group has defined rules and details for the tand documented allocation process.
Tuo akin	ag of wwo and do		
Hackii	ng of proceeds:		
X	Green and Social Bond/ Loan proceeds se appropriate manner	egrega	ated or tracked by the issuer/ borrower in an
$\boxtimes$	Disclosure of intended types of temporar proceeds	y inve	estment instruments for unallocated
	Other (please specify):		



Additi	onal disclosure:		
	Allocations to future investments only	$\boxtimes$	Allocations to both existing and future investments
	Allocation to individual disbursements	$\boxtimes$	Allocation to a portfolio of disbursements
	Disclosure of portfolio balance of unallocated proceeds		Other (please specify):
4. REF	PORTING		
Overa	Il comment on section (if applicable):		
the er report HKQA/ Princip	nvironmental impacts associated with the ing via its Sustainability Report or on a separ A considers that the Group's overall reportionles and Green Loan Principles.	Proje rate r	cess covering both the proceeds allocation and ect. Yunnan Energy is committed to impact report specific to the GFT.  ommitments are aligned with the Green Bond
Use o	f proceeds reporting:		
	Project-by-project		☑ On a project portfolio basis
	Linkage to individual bond(s)/ loan(s)		☐ Other (please specify):
	Information reported:		
	☑ Allocated amounts		☐ Green and Social Bond/Loan financed share of total investment
	☑ Other (please specify): Share of financing versus refinancing, the list of eligible project categories and amounts allocated to these categories, balance amount of unallocated bond proceeds and a selection of project examples financed by the net proceeds of the financial instrument		



	Frequency:		
	☑ Annual		Semi-annual
	☐ Other (please specify):		
Impa	act reporting:		
	Project-by-project	$\boxtimes$	On a project portfolio basis
	Linkage to individual loan(s)		Other (please specify):
	Frequency:		
	☑ Annual		Semi-annual
	☐ Other (please specify):		
	Information reported for eligible Green	Proje	cts (expected or ex-post):
	☑ GHG Emissions / Savings	$\boxtimes$	Energy Savings
	☐ Decrease in water use	$\boxtimes$	Other ESG indicators (please specify): Renewable energy produced (MWh), Renewable energy capacity (MW)
Mea	ns of Disclosure		
	Information published in financial report	$\boxtimes$	Information published in sustainability report
×	Information published in ad hoc documents		Other (please specify):
	Reporting reviewed (if yes, please specify wireview):	hich pa	rts of the reporting are subject to external
Whe	re appropriate, please specify name and date of	public	ation in the useful links section.

The Group will report on the allocation of net proceeds and associated impact metrics within one year from transaction date and annually to investors in the case of bonds, and to lenders in the case of loans. The Group will publish the information in its Sustainability Report or a separate report specific to the GFT.

**USEFUL LINKS** (e.g., to review provider methodology or credentials, to issuer/borrower's

## SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE

documentation, etc.)



Type(s	ype(s) of Review provided:						
	Second Party Opinion		Certification				
	Verification		Scoring/Rating				
	Other (please specify):						
Review provider(s):			Date of publication:				



## ABOUT ROLE(S) OF REVIEW PROVIDERS AS DEFINED BY THE GBP AND SBP

- (i) Consultant Review: An issuer can seek advice from consultants and/or institutions with recognized expertise in environmental sustainability or other aspects of the issuance of a Green Bond, such as the establishment/review of an issuer's Green and Social Bond framework. "Second opinions" may fall into this category.
- (ii) Verification: An issuer can have its Green/Social Bond, associated Green/Social Bond framework, or underlying assets independently verified by qualified parties, such as auditors. In contrast to certification, verification may focus on alignment with internal standards or claims made by the issuer. Evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria.
- (iii) Certification: An issuer can have its Green/Social Bond or associated Green/Social Bond framework or Use of Proceeds certified against an external green assessment standard. An assessment standard defines criteria, and alignment with such criteria is tested by qualified third parties / certifiers.
- (iv) Rating: An issuer can have its Green/Social Bond or associated Green/Social Bond framework rated by qualified third parties, such as specialised research providers or rating agencies. Green/Social Bond ratings are separate from an issuer's ESG rating as they typically apply to individual securities or Green/Social Bond frameworks / programmes.

## ABOUT ROLE(S) OF REVIEW PROVIDERS AS DEFINED BY THE GLP AND SLP

- (i) Consultant review: a borrower can seek advice from consultants and/or institutions with recognised expertise in environmental sustainability or other aspects of the administration of a green/social loan. "Second party opinions" may also fall into this category.
- (ii) Verification: a borrower can have its green/social loan, associated green/social loan framework, or underlying assets independently verified by qualified parties, such as auditors or independent ESG rating providers. In contrast to certification, verification may focus on alignment with internal standards or claims made by the borrower.
- (iii) Certification: a borrower may have its green loan or associated green/social loan framework certified against an external assessment standard. An assessment standard defines criteria, and alignment with such criteria is tested by qualified third parties/certifiers.
- (iv) Rating: a borrower can have its green/social loan or associated green/social loan framework rated by qualified third parties, such as specialised research providers or rating agencies.



## 7. Appendix 3: Sustainability-Linked Bonds / Loans - Independent

## **External Review Form**

Section	on 1. Basic Information
<b>Issuer/</b> the "Gi	borrower name: Yunnan Provincial Energy Investment Group Co., Ltd. ("Yunnan Energy" or oup")
	borrower's Green Loan Framework Name, if applicable: Yunnan Provincial Energy ment Group Co., Ltd. Sustainable Finance Framework (the "Framework")
Sustair	nability-Linked Bond ISIN: XS2445143329
Indepe	ndent External Review provider's name: Hong Kong Quality Assurance Agency
Compl	etion date of this form: 21 March 2022
	ation date of review publication: [where appropriate, specify if it is an update and add ace to earlier relevant review]
At the	launch of the bond, the structure is:
×	a step-up structure a variable redemption structure
Section	on 2. Pre-Issuance Review
<b>2-1</b> The fol	SCOPE OF REVIEW lowing may be used or adapted, where appropriate, to summarise the scope of the review.
The review	assessed all the following elements (complete review) $\qed$ only some of them (partial
	Selection of Key Performance Indicators (KPIs)   Bond / loan characteristics (acknowledgment of)
	Calibration of Sustainability Performance  Targets (SPTs)  Reporting
	Verification
$\boxtimes$	and confirmed their alignment with the SLBP / SLLP.
2-2	ROLE(S) OF INDEPENDENT EXTERNAL REVIEW PROVIDER



$\boxtimes$	Second Party Opinion			Certification
	Verification			Scoring/Rating
Note: I	n case of multiple reviews / different provi	ders, p	lease pro	vide separate forms for each review.
2-3	EXECUTIVE SUMMARY OF REVIEW ar	nd/or	LINK TO	FULL REVIEW (if applicable)
	refer to the Second-Party Opinion Docum			
Review comme	on 3. Detailed pre-issuance revers are encouraged to provide the information to explain the scope of their rev	rmatioi view.		
3-1	SELECTION OF KEY PERFORMANCE IN	NDICA	TORS (KI	715)
HKQAA sustair metho metho	Il comment on the section (if applicable): A assessment team overall considers the Inability issues for the Yunnan Energy's colology for calculating KPI performant dologies; but they are not benchmarkable selected KPIs:	current ce is	and futi	ure operations, their definition and daligned with credible external
			<i>(</i> )	
✓ ✓	Increase in Wind Power Generating Capa Increase in Solar Power Generating Capa		-	
<b>Defini</b> ⊠	ction, Scope, and parameters Clear definition of each selected KPIs Other (please specify):	×	Clear ca	culation methodology
Releva ⊠	ance, robustness, and reliability of the Credentials that the selected KPIs are relevant, core and material to the issuer/borrower's sustainability and business strategy.	select		e that the KPIs are externally le
$\boxtimes$	Credentials that the KPIs are measurable or quantifiable on a consistent methodological basis		Evidenc benchm	e that the KPIs can be arked



□ Ot	her <i>(pl</i>	ease s	pecify):
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## 3-2 CALIBRATION OF SUSTAINABILITY PERFORMANCE TARGETS (SPTs)

## Overall comment on the section (if applicable):

HKQAA assessment team considers the SPTs to align with Yunnan Energy's sustainability strategy and considers Yunnan Energy's SPTs to be ambitious given that they present a material improvement compared to past performance, and they align with national predications.

Ration	nale and level of ambition			
$\boxtimes$	Evidence that the SPTs represent a material improvement		Credentials on the relevance and reliability of selected benchmarks and baselines	
	Evidence that SPTs are consistent with the issuer/borrower's sustainability and business strategy		Credentials that the SPTs are determine on a predefined timeline	
			Other (please specify):	
Bench	marking approach			
$\boxtimes$	Issuer/borrower own performance		Issuer/borrower's peers	
	reference to the science	$\boxtimes$	Other (please specify): reference to national predications	
Additi	ional disclosure			
×	potential recalculations or adjustments description	$\boxtimes$	Issuer/borrower's strategy to achieve description	
	identification of key factors that may affect the achievement of the SPTs		Other (please specify):	

## 3-3 BOND / LOAN CHARACTERISTICS

## **Overall comment on the section** (if applicable):

Yunnan Energy has disclosed that, for any sustainability-linked instrument issued in alignment with the Framework, if the SPT has not been achieved by the target observation date, a premium will be payable by Yunnan Energy in the form of, but not limited to, a step-up in coupon margin.

#### **Financial impact:**



$\boxtimes$	variation of the coupon						
	Other (please specify):						
Struct	ural characteristic:						
	Other (please specify):						
3-4	REPORTING						
Yunna include sustair releva to hav	Il comment on the section (if applicable): In Energy commits to report on an annual basis the relevant figures in a sustainability-linked hability reporting or a separate report on its we int information that enables investors to monition that enables in the en	instrun bsite. \ or the l	nent report, to be published along with its funnan Energy further commits to disclose evel of ambition of the SPTs, and commits				
Inforn	nation reported:						
$\boxtimes$	performance of the selected KPIs	$\boxtimes$	verification assurance report				
	level of ambition of the SPTs		Other (please specify):				
Frequ	ency:						
$\boxtimes$	Annual		Semi-annual				
	Other (please specify):						
Mean	s of Disclosure						
	Information published in financial report	$\boxtimes$	Information published in sustainability report				
$\boxtimes$	Information published in ad hoc documents		Other (please specify):				
	Reporting reviewed (if yes, please specify wireview):	hich pa	rts of the reporting are subject to external				



Where appropriate, please specify name and date of publication in the "useful links" section. **Level of Assurance on Reporting** limited assurance reasonable assurance Other (please specify): **USEFUL LINKS** (e.g. to review provider methodology or credentials, to issuer/borrower's documentation, etc.) **Post-issuance verification** Section 4. **Overall comment on the section** (if applicable): Yunnan Energy commits to conducting a post-issuance review by external parties in case of material changes to the KPI(s) and SPT(s).

-	nation reported:		
$\boxtimes$	limited assurance	Ш	reasonable assurance
			Other (please specify):
Freque	ency:		
	Annual		Semi-annual
$\boxtimes$	Other (please specify): where necessary		
Mater	rial change:		
	Perimeter	$\boxtimes$	KPI methodology
$\boxtimes$	SPTs calibration		



## 8. Appendix 4: Hong Kong Quality Assurance Agency (HKQAA)

## **Local Excellence, Global Perspective**

Established by Hong Kong Government in 1989, Hong Kong Quality Assurance Agency (HKQAA) is a non-profit public organisation committed to introducing international management standards, promoting good management practices and sustainability in Greater China for decades. As one of the leading conformity assessment organisations in the region, HKQAA not only provides certification, assessment, registration, training and research services to help organisations enhance management performance and competitiveness, but also develops a wide range of good management practices and related criteria to cope with increasingly diversified market demands and the growing need for sustainable development, fostering a better environment and bringing benefits to the community.

#### **Ample Experience in Fostering Sustainable Economy**

In recent years, sustainability has become one of the key forces driving organisations towards a prolonged success. To support and encourage them to walk the talk, HKQAA has developed diverse services and obtained ample experience in the field of social responsibility, environmental protection, sustainability and responsible investment:

- With the initial support of The Hongkong and Shanghai Banking Corporation Limited (HSBC), HKQAA introduced the CSR Index to provide quantitative metrics to measure organisations' maturity level in practicing their social responsibilities in 2008;
- HKQAA has been the only Hong Kong organisation accredited as the Designated
   Operational Entity (DOE) by the Executive Board of the Clean Development
   Mechanism (CDM) under the United Nations Framework Convention on Climate
   Change (UNFCCC) to deliver CDM validation and verification services since 2011;
- HKQAA has been providing assessment and rating services on companies' sustainability performance for the Hang Seng Corporate Sustainability Index Series since 2014;
- Since 2017, our expert has been nominated by the Innovation and Technology Commission of the HKSAR Government and the China National Institute of Standardization respectively to directly take part in the technical committee of ISO/ TC 207/SC 4 and the working group of ISO/TC 207/SC 4/WG 7 to develop ISO 14030 Green bonds – Environmental performance of nominated projects and assets;
- Since 2018, HKQAA has been admitted as an **Observer of the Green Bond Principles** (GBP) under the International Capital Market Association (ICMA);
- Since 2018, HKQAA has become an **approved verifier under the Climate Bonds Standard**.

Contact HKQAA

Website: http://www.hkgaa.org



## 9. Appendix 5: Acknowledgement

We acknowledge the receipt of this assessment report and agree with the content of this assessment report.
Name of Company (Name of the Borrower): Yunnan Provincial Energy Investment Group Co., Ltd.
Name of the Framework: Yunnan Provincial Energy Investment Group Co., Ltd.'s Sustainable Finance Framework
For and on behalf of
(Authorized Signature)
Signature:
Name:
Title:
Date: