New Development Bank

COUNTRY PORTFOLIO EVALUATION

CHINA

INDEPENDENT EVALUATION OFFICE

JUNE 2026

This report is a product of the Independent Evaluation Office of NDB. The findings and conclusions expressed herein do not reflect the views of NDB Member Countries or the representatives of its Board of Directors.

TABLE OF CONTENTS

Table

Figure

Box

PREFACE

I am pleased to present this inaugural Country Portfolio Evaluation (CPE) for the People's Republic of China, prepared by the Independent Evaluation Office (IEO) of the New Development Bank (NDB). As a founding member and host to the NDB's global headquarters, China has been a key strategic partner of the Bank since it began operations in 2015. Covering NDB's full range of lending and non-lending activities in the country between July 2015 and December 2024, this report applies internationally recognised evaluation methodologies adapted to NDB's institutional framework and China's national context. It presents evidence-based findings on the partnership's achievements, good practices, existing challenges, and key lessons, with the aim of further strengthening the partnership between China and the NDB.

China hosts one of the NDB's largest and most effectively implemented project portfolios across the globe. It encompasses low-carbon transport infrastructure, clean energy, water and sanitation systems, as well as COVID-19 emergency response initiatives. All these operations are fully aligned with China's Five-Year Plans, dual-carbon goals and the Sustainable Development Goals. Local currency (RMB) financing and panda bond issuance represent the Bank's key strengths. Meanwhile, the evaluation has also found areas for further progress, such as expanding the suite of financial instruments, strengthening structured non-lending activities and enhancing institutional capacity.

As the NDB enters its second decade of operations and continues to expand its membership, the findings of this CPE are of far-reaching significance. These insights will serve as guidance for the future development of the China-NDB partnership, while also providing replicable practices for the Bank's cooperation with other member states.

I would like to express my sincere gratitude to China's Ministry of Finance, local governments, project stakeholders, NDB Management and staff, and external reviewers for their valuable support and input throughout the evaluation process. I hope that this report will serve as a useful reference for all partners as we build on our strengths, address shortcomings, and work together to drive inclusive and sustainable development.

Ashwani K. Muthoo
Director General, Independent Evaluation Office
New Development Bank

ACKNOWLEDGEMENTS

The Independent Evaluation Office (IEO) of the New Development Bank (NDB) extends its gratitude to all contributors to this Country Portfolio Evaluation (CPE) report on NDB's operations and activities in China — the first such evaluation conducted by the IEO for the host country of the NDB's headquarters. We appreciate the collaboration and insights from the Government of China, in particular the Ministry of Finance and various provincial and municipal government departments and agencies, throughout the evaluation process. Their willingness to share data, engage in discussions, and provide feedback has been crucial to shaping the findings and recommendations of this report.

In addition, we acknowledge the project implementation units and stakeholders across sectors and regions where NDB-funded projects are implemented in China. Their on-the-ground perspectives and detailed project experience have enriched the evaluation.

We also wish to express our sincere gratitude to the NDB Board of Directors for their consistent strategic guidance, support and rigorous oversight over the full course of this important evaluation.

Special thanks are due to NDB Management and staff, in particular the China Desk within the Project Portfolio Management Department, and colleagues from the Public Sector Department and the Private Sector and Non-Sovereign Guaranteed Transactions Department, for their continuous support and constructive feedback. Their cooperation in facilitating access to necessary documents, coordinating field visits, and engaging in candid discussions has been instrumental in completing this evaluation.

The report was produced under the overall supervision of Mr. Ashwani K. Muthoo, Director General of the IEO. The CPE was led by Mr. Chao Sun, Principal Professional, IEO, with support from Mr. Siyamthanda Dlova, IEO Evaluation Specialist. The report benefited substantially from the inputs of Dr. Yang Jiang, Transport and Urban Development Specialist; Dr. Kangbin Zheng, Energy Economist; Mr. Rui Liu, Financial Specialist; and Ms. Denise Siloto de Araújo, Environmental, Social and Governance Specialist, whose technical insights were instrumental in its development. It also drew on the peer review conducted by the Asia-Pacific Finance and Development Institute. The peer review opinion on the quality of the CPE report is included in this document. Moreover, we appreciate the inputs by Mr. Luciano Lavizzari, former Director of the Independent Office of Evaluation of the International Fund for Agricultural Development, and Dr. Xianbin Yao, member of the NDB High-Level Evaluation Advisory Committee and former Special Senior Advisor to the President of the Asian Development Bank, who served as senior external reviewers. Their thoughtful feedback at critical junctures greatly enhanced the quality and rigour of the final CPE report.

Finally, Ms. Jaqueline Rabelo Souza, IEO Communications and Outreach Expert, provided support in editorial quality assurance, proofreading, communications, and outreach. The IEO retains sole responsibility for the content and quality of the evaluation report.

ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
AIIB	Asian Infrastructure Investment Bank
BRICS	Brazil, Russia, India, China and South Africa
CHINCA	China International Contractors Association
CPE	Country Portfolio Evaluation
CSO	Civil Society Organisations
DMF	Design and Monitoring Framework
EIRR	Economic Internal Rate of Return
EMDCs	Emerging Market Economies and Developing Countries
E&S	Environmental and Social
ESF	Environment and Social Framework
ESG	Environmental, Social and Governance
ESMS	Environmental and Social Management System
EUR	Euro
FBA	Finance, Budget and Accounting Department
FIRR	Financial Internal Rate of Return
FYP	Five-Year Plan
IEO	Independent Evaluation Office
IFI	International Financial Institution
KM	Kilometre
kWh	Kilowatt-hour
GDP	Gross Domestic Product
LNG	Liquefied Natural Gas
MDB	Multilateral Development Bank

MCDF	Multilateral Cooperation Center for Development Finance
M&E	Monitoring and Evaluation
MoF	Ministry of Finance of the People's Republic of China
MoUs	Memoranda of Understanding
MTR	Mid-term Review
MW	Megawatt
NDB or the Bank	New Development Bank
NDRC	National Development and Reform Commission
O&M	Operations and Maintenance
PCR	Project Completion Report
PDB	Project Document to the Board
PIA	Project Implementation Agency
PIU	Project Implementation Unit
PPA	Project Performance Assessment
PPF	Project Preparation Fund
PPMD	Project Portfolio Management Department
RMB	Renminbi
SDG	Sustainable Development Goals
TA	Technical Assistance
TACS	Train Autonomous Circumambulation System
UNDP	United Nations Development Programme
USD	United States Dollar
WACC	Weighted Average Cost of Capital

EXECUTIVE SUMMARY

I. BACKGROUND

1 This is the first Country Portfolio Evaluation (CPE) of the People's Republic of China conducted by the Independent Evaluation Office (IEO) of the New Development Bank (NDB). Commissioned by the NDB Board of Directors in December 2024, the CPE provides a comprehensive, independent assessment of the overall partnership between China and the NDB from July 2015 to December 2024, with supplementary analysis of key initiatives in the first half of 2025. The core objectives of the evaluation are threefold: to assess the aggregate development results of NDB's lending and non-lending activities in China; to evaluate the performance of the NDB and Chinese borrowers across the project lifecycle; and to draw evidence-based lessons and formulate actionable recommendations to strengthen the China–NDB partnership and inform the NDB's operations in other member countries.

2 The evaluation covers NDB's entire operational footprint in China, comprising 27 active projects (24 sovereign and 3 non-sovereign operations) with a total committed financing of USD 8.86 billion, accounting for 24.4% of NDB's global lending portfolio as of 2024. The portfolio spans core sectors including transport infrastructure, clean energy and energy efficiency, water and sanitation, environmental protection, COVID-19 emergency response, and cross-sectoral sustainable development initiatives, covering 50% of China's provincial-level administrative divisions. In line with NDB's institutional mandate, the CPE assesses both lending operations and the four pillars of non-lending activities. The findings and conclusions of this CPE are grounded in rigorous quantitative and qualitative data triangulation, desk reviews of relevant project documents and past evaluations, seven field missions across the country, and focus group interviews with over 70 project stakeholders.

II. METHODOLOGY AND EVALUATION PROCESS

3 The CPE adheres to internationally recognised evaluation standards adopted by the Evaluation Cooperation Group (ECG) of multilateral development banks and is fully aligned with the NDB's Evaluation Policy, 2024–2026 Evaluation Strategy, and Evaluation Manual. The evaluation uses a six-point rating scale (1 = Highly Unsuccessful, 6 = Highly Successful) to assess performance against core criteria, with customised assessment frameworks tailored to project implementation stages to ensure methodological rigour.

4 For the lending portfolio, sovereign operations were evaluated against five core criteria: relevance, effectiveness, efficiency, impact, and sustainability. Fully commercially operational or closed projects were assessed against all five criteria, while early-stage projects were rated only for relevance, and advanced-stage projects for relevance, effectiveness, and efficiency. Non-sovereign operations launched in the country in 2024 were assessed only for strategic and design relevance, given their early stage of implementation. For non-lending activities, the CPE reviewed performance in technical assistance, capacity building, research and knowledge sharing, and partnership development, and provided a consolidated rating of overall non-lending performance. Separate assessments were conducted for NDB's institutional and portfolio-level performance in lending operations, as well as for borrower performance, including that of relevant project implementing agencies.

5 The evaluation process was structured around six sequential phases: development and finalisation of the evaluation approach paper; a national inception workshop at NDB's Shanghai headquarters; comprehensive desk review and data validation; multi-site field missions and stakeholder interviews; interim report and discussions; and final CPE report drafting, management review, consultation, and finalisation. An external peer review was conducted by the Asia-Pacific Finance and Development Institute and independent

international experts to ensure the quality, objectivity, and credibility of the evaluation findings. A national stakeholders' seminar will be convened in Beijing in 2026 to disseminate the CPE findings and facilitate dialogue on lessons learned and good practices.

III. KEY FINDINGS

A. Performance of lending activities

6 **The overall performance of NDB's lending portfolio in China is rated Successful (5),** reflecting robust delivery of sustainable infrastructure and strong alignment with national development priorities.

7 **Relevance (5 – Successful).** NDB's lending portfolio demonstrates exceptional strategic alignment with China's 13th and 14th Five-Year Plans, its national "dual carbon" goals, regional integration strategies, and the Sustainable Development Goals (SDGs) — notably SDG 7 (Affordable and Clean Energy), SDG 9 (Industry, Innovation and Infrastructure), and SDG 11 (Sustainable Cities and Communities). All 27 operations address critical financing gaps, with over 70% of loans channelled into infrastructure investments in less-developed provinces and western inland regions of China to advance inclusive growth. A defining strength is NDB's leadership in local currency financing: 68.8% of cumulative lending is denominated in Renminbi (RMB), the highest share among NDB member countries and peer multilateral development banks. This is underpinned by NDB's position as the largest issuer of panda bonds, with issuances reaching RMB 55.5 billion by the end of 2024. Project designs are generally tailored to regional contexts, integrate cutting-edge technologies, and embed robust environmental and social safeguards, including critical habitat protection for endangered species such as the Yangtze finless porpoise. Scope for refinement noted by the IEO includes overly optimistic demand forecasting for a very few early projects in the feasibility study phase, underdeveloped design and monitoring frameworks for several operations approved before 2022, and limited diversity of financial instruments beyond conventional loans.

8 **Effectiveness (5 – Successful).** The portfolio delivers strong results, with most projects meeting or even exceeding core output and outcome targets. Renewable energy projects are standout performers, having achieved above-target power generation and carbon emission reductions, with patented technologies replicated across China's renewable energy sector. Urban transit projects have increased the modal share of public transport and improved connectivity, while COVID-19 emergency loans provided rapid, targeted support for healthcare infrastructure and post-pandemic economic recovery, creating a significant number of jobs. Environmental protection, water, and sanitation projects have cut greenhouse gas emissions and mitigated pollution, while expanding access to safe water in underserved regions. Key challenges include unmet outcome targets in a handful of transport, liquefied natural gas, and water operations, as well as underutilisation of certain assets in these isolated cases.

9 **Efficiency (5 – Successful).** NDB's China portfolio is the most efficiently executed across all member countries, with a 71.6% disbursement ratio — the highest in NDB's global portfolio — representing over 30% of the Bank's total disbursements by 2024. Project approval and implementation timelines are well below NDB's global averages: 143 days from Board approval to loan signature and 217 days to effectiveness, supported by streamlined coordination with Chinese authorities and NDB's Shanghai-based China Desk. Most projects maintain strong cost control, with urban rail and water projects achieving double-digit cost savings through design optimisation and the use of domestic technologies. Other projects utilise prefabricated construction and digital technologies to accelerate delivery and lower operational costs. Several missed opportunities to maximise the operational efficiency were also noted by the IEO: market risks associated with a handful

of USD- and EUR-denominated loans, which have led to low loan utilisation due to limited currency conversion options; issues stemming from high turnover among project management staff in early phases of NDB, partly attributable to the Bank's internal reorganisation, and the lack of digital systems to streamline disbursement processes.

10 **Impact (5 – Successful).** The portfolio generates multi-dimensional long-term impacts across environmental, economic, social, and technological areas. Environmentally, renewable energy and low-carbon transport projects reduce millions of tons of CO_2 emissions annually, restore marine and terrestrial ecosystems, and improve air and water quality. Economically, projects act as growth multipliers, catalysing industrial clusters (e.g., offshore wind manufacturing hubs), generating direct and indirect employment, and boosting regional gross domestic product through improved connectivity. Socially, projects expand equitable access to essential services for rural and ethnic minority communities, contribute to poverty reduction, and strengthen social cohesion. Technologically, flagship projects set global benchmarks, including autonomous rail transit systems and typhoon-resistant offshore wind foundations, with such innovations being replicated internationally.

11 **Sustainability (5 – Successful).** The portfolio demonstrates strong long-term viability underpinned by consistent government commitment, robust institutional frameworks, and technical resilience. Renewable energy projects maintain high operational availability and stable financial viability, while urban public welfare infrastructure is supported by structured, fiscally sustainable government subsidies. Environmental and social sustainability is embedded across all operations, with climate-resilient design and biodiversity conservation measures exceeding regulatory requirements. Social sustainability is promoted through inclusive design, job creation, and community engagement.

B. Performance of non-lending activities

12 **The overall performance of NDB's non-lending activities in China is rated Moderately Successful (4).** While commendable progress has been made across all four pillars, it has been constrained primarily by institutional resource limitations, compounded by relatively fragmented implementation.

13 **Technical assistance (4 – Moderately Successful).** Technical assistance delivers targeted, task-oriented solutions for flagship projects, addressing critical bottlenecks in climate risk assessment, environmental and social compliance, and technological design. Notable achievements include biodiversity protection support for the Yangtze finless porpoise and offshore wind technical due diligence that helped shape national industry standards. However, technical assistance remains ad hoc: the Bank lacks in-house sectoral and subject-matter experts, and no Project Preparation Fund resources have been deployed in China even though China accounts for 44% of total Project Preparation Fund pledges. Coverage has been uneven across early-stage projects, and some missed opportunities for stronger project design and feasibility work have been observed.

14 **Capacity building (rated between 4 and 5).** Capacity-building initiatives have delivered meaningful results for post-2022 operations. Tailored training has strengthened the capacity of project implementing agencies in environmental and social management, sustainable procurement, and project compliance. The model has been scaled to non-sovereign borrowers, supporting the development of green finance risk management systems at Chinese financial institutions. Areas for improvement include uneven coverage for early projects and relatively limited focus on operational-phase capacity building. The IEO is of the view that a unified institutional framework for capacity building would also strengthen the Bank's China-related initiatives in a more structured, systematic, and effective manner.

15 **Research and knowledge sharing (4 – Moderately Successful).** Knowledge activities leverage high-impact external partnerships, including co-authorship of Boao Forum for Asia flagship reports and South-South knowledge transfer that replicates China's infrastructure best practices in Brazil, South Africa, and other emerging markets. Environmental, social and governance knowledge products offer actionable, context-specific guidance for ecologically sensitive projects. However, internal research capacity is severely constrained by understaffing, knowledge management is fragmented in the absence of a centralised repository, and online dissemination lags behind that of peer multilateral development banks in terms of transparency and accessibility.

16 **Partnership development (4 – Moderately Successful).** NDB has established a robust partnership ecosystem in China, with 13 memoranda of understanding signed with government agencies, financial institutions, and multilateral bodies. Strategic partnerships with the People's Bank of China and commercial banks have enabled record panda bond issuances and cross-border RMB financing, while collaboration with the Multilateral Cooperation Center for Development Finance advances knowledge sharing. Limitations include under-implementation of 20% of signed memoranda of understanding, minimal co-financing with peer multilateral development banks, and limited engagement with civil society organisations and private-sector enterprises in emerging green sectors.

C. NDB and borrower performance

17 **NDB performance (rated between 4 and 5).** NDB's performance is characterised by standout strengths in local currency financing, streamlined approval processes, and unparalleled responsiveness to China's COVID-19 emergency response needs — making it the first multilateral development bank to provide sovereign pandemic-related support to the country. The China Desk, established in 2021, ensures high-quality portfolio supervision while maintaining strict adherence to fiduciary standards and NDB policies. Areas for improvement include limited diversity of financial products and instruments; high project manager turnover amid NDB's early operational stages and internal reorganisation; and resource constraints stemming from the informal, under-resourced operational structure of the China Desk. The IEO also believes that more consistent and robust financial and economic appraisal methodologies, and stronger monitoring and evaluation frameworks would help further enhance the overall quality of NDB's lending activities in the country.

18 **Borrower performance (5 – Successful).** Chinese borrowers and project implementing agencies deliver exceptional performance across all dimensions, underpinned by robust multi-level coordination, strict financial compliance, and technological innovation. Annual national audits confirm no material fiduciary irregularities in the use of NDB financing for sovereign operations, and most projects are delivered ahead of schedule with substantial cost savings. Borrowers pioneer globally recognised infrastructure technologies, prioritise environmental and social responsibility, and advance South-South knowledge sharing by hosting international delegations. Minor challenges include initial unfamiliarity with NDB procedures among first-time borrowers and overly optimistic demand forecasting for a few urban transport and water projects.

IV. OVERALL CHINA-NDB PARTNERSHIP PERFORMANCE

19 **The overall performance of the China-NDB partnership is rated Successful (5),** reflecting a high-impact, mutually beneficial collaboration that outperforms NDB's global benchmarks. The lending portfolio stands as a model of efficient, sustainable infrastructure financing, with leadership in local currency financing and technological innovation as its defining competitive advantages. Borrower performance is a cornerstone of the partnership's success, ensuring timely delivery and long-term sustainability of investments. Non-lending activities deliver targeted value but remain constrained by the Bank's institutional resource limitations and relatively fragmented implementation. Structural gaps — including the absence of a dedicated NDB country partnership strategy for China, limited financial product diversity, and under-resourcing of the China Desk — present actionable opportunities to further enhance the partnership's long-term impact.

V. CONCLUSIONS

20 Over the first decade of the partnership (2015–2024), NDB has built a transformative, high-performing portfolio in China, its largest and most efficiently implemented portfolio among all member countries. With USD 8.86 billion in committed financing across 27 projects, the partnership demonstrates exceptional alignment with China's national development priorities and NDB's institutional mandate, driving tangible progress toward low-carbon transition, inclusive growth, and regional integration.

21 NDB's unparalleled leadership in local currency financing represents the partnership's defining strength: it mitigates foreign exchange risk for borrowers, deepens China's capital markets, and provides a replicable model for other NDB member countries. The lending portfolio achieves consistent "Successful" performance across all evaluation criteria, with renewable energy and urban transit projects setting global benchmarks for technological innovation and environmental sustainability. Chinese borrowers deliver exceptional performance, underpinned by generally strong institutional capacity, fiscal discipline, and a firm commitment to environmental and social responsibility.

22 Non-lending activities deliver targeted, project-specific value but are hindered by the Bank's systemic institutional constraints, including limited in-house sectoral and subject-matter specialist expertise, inadequate resourcing, and the absence of structured frameworks for technical assistance, capacity building, and knowledge management. Several institutional gaps constrain the partnership's full potential and optimal impact: the lack of a dedicated NDB country partnership strategy for China limits strategic prioritisation and the Bank's non-financing additionality; a narrow financial product suite reduces competitiveness relative to peer multilateral development banks; and the informal, understaffed China Desk impedes scalable portfolio management and non-lending delivery.

23 Despite these challenges, the China-NDB partnership stands as a flagship model for multilateral development banks' engagement in emerging markets, demonstrating how multilateral financing can accelerate sustainable infrastructure development when aligned with strong country ownership and institutional capacity. The partnership's successes offer actionable lessons for NDB's operations in other member countries, particularly in local currency financing, efficient project implementation, and South-South knowledge sharing.

VI. RECOMMENDATIONS

24 Building on the CPE's evidence-based findings, the evaluation presents a set of recurring and new recommendations to strengthen the China-NDB partnership, aligned with the Bank's first two general strategies and China's long-term development priorities.

i. Recurring recommendations

25 Before this CPE, multiple recommendations from other IEO evaluations on China-related operations have been raised and are under Management's consideration. Rather than reissuing them as new, this CPE reiterates their relevance as follows:

(a) Develop a tailored NDB country partnership strategy for China, aligned with China's 15th Five-Year Plans and NDB's next General Strategy (2027–2031), to integrate lending and non-lending activities, define strategic priorities, and guide resource allocation.

(b) Optimise project preparation and monitoring and evaluation systems, including early-stage technical engagement, robust demand forecasting, and standardised design and monitoring frameworks with adaptive monitoring mechanisms.

(c) Systematise technical assistance and capacity building by deploying Project Preparation Fund resources, developing a portfolio-wide support programme, and partnering with Chinese research institutions to scale technical guidance.

(d) Strengthen research and knowledge management by expanding in-house expertise, establishing a centralised knowledge repository, and enhancing public dissemination of project best practices.

(e) Digitise loan disbursement processes through a borrower client portal and streamline the reallocation of unused funds to improve fund utilisation efficiency.

ii. New strategic recommendations

1) Diversify financial products by introducing currency conversion, interest rate flexibility, guarantees, and equity investments, and offer fixed-rate loans for non-sovereign operations with shorter tenors to enhance market competitiveness.

2) Deepen multi-stakeholder partnerships to scale co-financing with peer multilateral development banks, expand engagement with civil society organisations and green private enterprises, and leverage government development funds for non-lending resources.

iii. New operational recommendations

3) Review and refine financial and economic appraisal methodologies, including consistent hurdle rates, residual value integration, robust sensitivity analysis, and Scope 2 carbon accounting, to enhance cross-project comparability and impact measurement.

iv. New institutional strengthening recommendations

4) Formalise the China Desk as a dedicated, adequately resourced organisational unit with expanded sectoral expertise and subject-matter specialists, as well as a direct reporting line to NDB Senior Management, to strengthen portfolio oversight and non-lending delivery.

执行摘要

一、背景

1 本报告为新开发银行（NDB）独立评价局（IEO）编制的首份中国国别项目组合评价（CPE）。本次评价由新开发银行董事会于 2024 年 12 月正式批准执行，对 2015 年 7 月至 2024 年 12 月新开行与中国的整体合作开展全面、独立的评价，并补充分析 2025 年上半年各项重点工作。本次评价主要设定三大目标：一是评价新开行在华借贷业务及非借贷活动取得的综合发展成效；二是在全项目周期内，评价新开发银行与中方借款方和项目执行机构的履职表现；三是基于实证分析总结经验、制定可落地的建议，进一步深化新开行与中国的长期合作，并为新开行在其他成员国开展业务提供参考和良好实践。

2 本次评价覆盖新开发银行在华全部业务布局。截至 2024 年，新开发银行在华共有 27 个在执行项目，包含 24 个主权贷款项目、3 个非主权贷款项目，累计承诺融资额 88.6 亿美元，占新开行全球借贷项目组合规模的 24.4%。业务领域涵盖交通基础设施、清洁能源与能效提升、城乡供水及环境卫生、生态环境保护、新冠肺炎疫情应急援助以及跨领域可持续发展项目，业务覆盖中国半数的省级行政区。本次评价严格遵循本行章程要求，同步开展借贷业务与四大非借贷板块的评价工作。本报告的分析结论，基于定量与定性相结合的交叉验证方法，综合项目文件和卷宗审阅、IEO 以往涉华项目评价工作的复盘、全国七轮实地调研以及对 70 余名项目相关方和执行机构代表开展专题访谈后形成。

二、评价方法与流程

3 本次评价严格遵循多边开发银行评价协作工作组（ECG）制定的国际通用评价标准，同时完全契合新开发银行《评价政策》、《2024–2026 年评价战略》及《评价手册》相关要求。评价采用 6 分评级体系（1 分为非常不成功，6 分为非常成功），围绕核心评价指标开展打分，并根据项目实施阶段定制评价框架，确保评价方法的科学性与严谨性。

4 针对借贷项目，本次评价设置相关性、有效性、效率、影响力、可持续性五大核心评价维度。对于已进入商业运营（含试运营）或已经完工的项目，开展全五项指标评价；处于实施初期的项目，仅评价相关性指标；进入实施后期的项目，评价相关性、有效性及效率三大指标。2024 年新开展的非主权贷款项目因尚处起步阶段，仅评价其战略定位与项目方案设计的相关性及合理性。针对新开行在华开展的非借贷活动，本次评价从技术援助、能力建设、研究与知识分享、伙伴关系建设四个维度开展综合评价。此外，本次评价还分别对新开发银行、中方借款方及项目执行单位（PIU）的履职表现进行专项评价。

5 本次评价共分为六个依次推进的工作阶段：编制并审定评价方案、在新开发银行上海总部举办启动研讨会、全面梳理资料并完成数据核验、多点实地调研及相关方访谈、编制并研讨中期报告、最终报告撰写、管理层审议、意见征询及定稿。本次评价邀请了亚太财经与发展学院（上海国家会计学院）及国际独立专家开展外部同行评审，保障评价结果的客观性与公信力。独立评价局计划于 2026 年在北京举办一场国际研讨会，对外发布本次评价成果，与所有项目相关方和执行单位一起分享项目经验与优秀实践。

三、主要评价结果

（一）借贷业务履职表现

6 新开发银行在华借贷项目组合综合评级：成功（5 分）。项目落地成效显著，与中国国家发展战略高度契合。

7 **相关性（5 分，成功）。**新开行在华所有项目均紧密对接中国第十三个及第十四个关于国民经济和社会发展的五年规划、“双碳” 目标及区域协同发展战略，同时对标联合国可持续发展目标（SDG），重点支撑可持续清洁能源（SDG 7）、产业创新与基础设施建设（SDG 9）、

可持续城市与社区（SDG 11）三大领域。27 个项目均有效填补了国内融资缺口，超 70% 的资金投向中西部内陆或欠发达地区基础设施领域，助力实现包容性增长。新开行在本币融资领域优势突出：人民币贷款占累计放贷总额的 68.8%，占比位居新开发银行全体成员国及同类多边开发银行首位。新开行是全球最大熊猫债发行机构，截至 2024 年末，熊猫债累计发行规模达 555 亿元人民币。贷款项目的设计方案普遍结合区域实际情况，融合前沿技术，并设置完善的环境与社会防护体系，其中包含长江江豚等珍稀濒危物种的专项栖息地保护措施。独立评价局同时指出优化方向：少数早期项目在可行性研究阶段的需求预测偏于激进；部分 2022 年之前获批项目的设计与监测框架（DMF）尚不完善；目前新开行融资工具仍以传统贷款为主，开发金融产品种类和工具较为单一。

8 **有效性（5 分，成功）。**整体项目成效突出，多数项目达成甚至超额完成预设的基础设施建设的产出目标。其中清洁能源项目表现优异，发电量及碳减排量均超出预期，相关专利技术已在国内清洁能源行业推广应用。城市轨道交通项目有效提升公共交通出行比例、完善区域互联互通水平；新冠肺炎疫情应急贷款为医疗基础设施建设及疫后经济复苏提供及时、精准的资金支持，创造大量就业岗位。生态环保、供水及环卫项目有效削减温室气体排放、治理环境污染，同时提升欠发达地区安全饮水保障能力。现存问题：少量交通、液化天然气及水务项目未能达成预期成效目标，部分设施出现资产使用率偏低情况。

9 **效率（5 分，成功）。**中国项目组合是新开发银行全球范围内执行效率最高的业务板块。截至 2024 年，项目放款率达 71.6%，为全行最高，放款总额占新开行全球放款总量的 30% 以上。项目审批及落地周期远低于全行平均水平：董事会审批至贷款签署平均用时 143 天，贷款生效平均用时 217 天。这一成果得益于中方各级主管部门与位于上海的新开发银行中国业务部的高效协同。多数项目通过设计和执行方案优化、国产化设备应用及采购实现成本节约；装配式建造、数字化技术的应用进一步压缩工期、降低运营成本。同时仍存在待改进领域：因缺少新开行提供的币种转换工具，导致少量美元、欧元计价的贷款的资金利用率偏低；新开行前期内部组织架构调整，造成项目管理人员和项目经理频繁轮岗，一定程度上影响了工作衔接和效率；目前新开行尚未上线面向借款人和项目执行单位的数字化放款系统，流程仍有优化空间。

10 **影响力（5 分，成功）。**项目在环境、经济、社会、技术四大领域形成全方位、长期性综合效益。环境层面，清洁能源与低碳交通项目每年减排数百万吨二氧化碳，修复水陆生态系统，显著改善空气与水质；经济层面，项目发挥经济倍增效应，培育海上风电等产业集群，创造直接及间接就业岗位，依托互联互通建设拉动区域经济增长；社会层面，保障农村及少数民族地区均等获取基础公共服务，助力减贫事业、增进社会凝聚力；技术层面，全自动轨道交通、抗台风海上风电等标杆项目树立全球典范，相关创新技术已实现国际推广。

11 **可持续性（5 分，成功）。**依托各级政府的持续支持、完善的制度体系及项目自身技术韧性，项目具备强劲的长期运营能力。清洁能源项目保持高运转率与稳定的财务收益；城市公益性基础设施依靠长效财政补贴实现可持续运营。所有项目均将环境与社会可持续要求融入设计环节，气候适应、生物多样性保护等相关措施均高于法定标准，并通过普惠化设计、就业安置、社群互动等举措夯实社会可持续基础。

（二）非借贷业务履职表现

12 **新开发银行在华非借贷活动综合评级：比较成功（4 分）。**四大业务板块均取得一定进展，但受机构资源不足、工作统筹性较弱等因素影响，整体成效未能充分发挥。

13 **技术援助（4 分，比较成功）。**技术援助聚焦重点标杆项目，针对气候风险评估、环境社会合规、工程设计等核心瓶颈提供专项解决方案。代表性成果包括长江江豚生物多样性保护技术支撑、海上风电行业标准编制咨询等。但现阶段技术援助多为临时性个案，未形成体系化运作：银行内部缺乏专职行业及技术专家；中国为新开行项目准备基金（PPF）的捐款占比基金总份额达 44%，但 PPF 尚未在华投入使用；早期项目的技术援助覆盖不均衡，部分项目在可行性研究及方案设计阶段错失了优化机会。

14 **能力建设（评级：介于 4 分至 5 分之间）。**2022 年以后开展的能力建设工作成效显著。定制化培训有效提升各项目执行单位在环境社会管理、绿色采购、项目合规等方面的履职能力，相关经验已延伸应用至非主权借款机构，助力中资金融机构搭建绿色金融风控体系。待改进方向：早期项目的能力建设覆盖不足，工作重心多集中在项目施工阶段，

针对运营阶段的培训内容偏少。独立评价局建议搭建统一的能力建设制度框架，推动相关工作规范化、系统化落地。

15 **研究与知识分享（4 分，比较成功）。**新开行依托优质外部合作平台开展多项工作，包括连续三年参与了博鳌亚洲论坛旗舰报告的联合编制工作、依托南南合作将中国基础设施优秀实践推广至巴西、南非等新兴市场；各类环境、社会及治理（ESG）成果也为生态敏感区域项目提供实操指引。但银行内部研究力量仍然相对薄弱、人员配置不足；未建立统一的知识档案库，各类成果分散管理；线上传播渠道的信息透明度与可及性，落后于同类多边开发银行。

16 **伙伴关系建设（4 分，比较成功）。**新开行已与中国政府部门、中资金融机构、总部在华的多边及国际组织签署了 13 份谅解备忘录（MoU），构建完善的合作生态。银行与中国人民银行、商业银行开展战略合作，创下熊猫债发行纪录，并推动人民币跨境融资落地；与多边开发融资合作中心（MCDF）合作开展知识分享工作。现存不足：约 20% 的谅解备忘录未落地实质合作；与其他多边开发银行开展联合融资的项目数量偏少；与社会组织（CSO）、绿色环保领域的头部公司及中国新质生产力的代表机构特别是民营企业的合作深度有待拓展。

（三）新开发银行与中方借款方履职表现

17 **新开发银行履职表现（评级：介于 4 分至 5 分之间）。**新开行在本币融资、审批流程优化方面优势突出，同时也是全球首个为中国提供主权层面抗击新冠疫情专项融资的多边开发银行，应急响应能力高效。2021 年设立的中国业务部，严格遵循相关政策合规要求及受托责任准则，保障了项目组合的整体监管和实施质量。待改进领域：新开行的融资产品和开发金融工具品类相对有限；新开行前期组织架构调整引发项目负责人和项目经理的频繁变动；中国业务部在 2026 年之前仍属于非正式建制，人员配置不足、资源受限。此外，新开行应考虑进一步统一和完善财务与经济的评估和自评价标准，完善项目监测与评估框架，全面提升借贷业务质量。

18 **中方借款方及项目执行单位履职表现（5 分，成功）。**中方各级机构综合表现优异，依托多层级协同机制、严格的财务管控与技术创新推进各项工作。历年国家审计结果显示，新开行的主权贷款未出现重大资金违规使用情况；多数项目提前竣工，并实现大额成本节约。中方项目执行机构研发或首用多项国际领先的基础设施技术，严格履行环境与社会责任，并通过接待境外代表团等方式推进南南经验交流。细微问题：首次合作机构对新开行的业务流程尚不熟悉；部分城市交通、水务项目前期需求预测偏于激进。

四、中国—新开行合作整体履职表现

19 **中国—新开行双方整体合作综合评级：成功（5 分）。**双方在合作的第一个十年期间成效突出、互利共赢，整体表现优于新开发银行全球平均水平。借贷业务已成为高效、可持续基础设施融资的典范，本币融资与技术创新是核心竞争优势。中方借款方高效履职，保障项目按期交付与长期稳定运营。非借贷业务创造专项价值，但受银行自身资源相对不足、早期工作碎片化等因素制约。现阶段存在结构性短板：新开行尚未和中国政府一起制定专属中国的国别合作战略、开发金融工具和产品单一、中国业务部人员配置不足。以上问题均为后续提升合作成效的重要发力点。

五、结论

20 在 2015 至 2024 年的首个合作周期内，新开发银行在华打造出规模庞大、成效优异的贷款项目组合。该组合是新开行体量最大、执行效率最高的国别业务项目组合之一。27 个项目合计承诺融资 88.6 亿美元，项目布局高度契合中国发展规划与本行宗旨，有效推动中国低碳转型、包容性增长与区域协同发展。

21 本币融资是双方合作最核心的亮点，既帮助中国借款人和项目机构规避了汇率风险，也帮助完善了中国的资本市场尤其是银行间债券市场的体系，同时为新开发银行其他成员国提供可复制的实践经验。新开行在华借贷业务五大评价维度均获评“成功”，清洁能源、城市轨道交通项目的技术与环保标准达到国际领先水平。中方借款人、项目机构和执行单位依托完善的治理体系、严格的财政纪律及高度的环境社会责任感，保障合作高质量推进。

22 非借贷活动可针对单个项目提供支撑，但受新开行系统性短板制约：内部行业专家和专业技术人才短缺、资源配置不足，技术援助、能力建

设、知识分享均缺乏统一制度框架。多项体制性问题制约合作潜力释放：尚未和政府一起设立专属中国的国别合作战略，难以明确中长期合作重点及非借贷活动的增值服务方向；开发金融产品和融资工具单一，相较同类多边开发银行竞争力不足；中国业务部为非正式建制、人员短缺，制约项目统筹及非借贷业务规模化推进。

23 尽管存在上述挑战，中国和新开行的合作仍是多边开发银行服务新兴市场的标杆范例。实践证明，依托东道国的发展能力、完善的国别体系与制度保障，多边融资能够有效助力可持续基础设施建设。双方积累的经验，尤其是本币融资、高效项目管理、南南知识共享等做法，可为新开发银行其他成员国提供重要参考。

六、建议

24 结合本次评价实证结论，本报告梳理延续性建议与新增建议，兼顾本行前两轮总体战略（2017–2021；2022–2026）及中国中长期发展规划，进一步深化中国和新开行的合作。

一、延续性建议

25 独立评价局此前针对中国业务相关评价工作提出的多项建议，目前仍在新开发银行管理层审议和考虑的范围内。本次评价重申其现实指导意义，具体如下：

(a) 基于和中国相关政府部门的讨论和磋商，考虑制定专属中国的国别合作战略，衔接中国第十五个关于国民经济和社会发展的五年规划与新开发银行 2027–2031 年新一轮总体战略，统筹借贷业务与非借贷活动，明确合作重点，优化资源配置。

(b) 优化项目筹备、监测与评价体系，强化项目前期技术介入，推行科学的需求预测机制，落地标准化、可动态调整的设计与监测框架（DMF）。

(c) 系统化推进技术援助与能力建设工作，动用项目准备基金（PPF）来有针对性和更有效的支持相关活动，搭建全项目组合支持机制，联合中国科研机构推广先进技术方案。

(d) 完善研究与知识管理体系，扩充内部专业团队，搭建统一知识档案库，加大项目优秀实践的公开传播力度。

(e) 推进放款流程数字化建设，上线面向借款方的线上服务端口和放贷系统，优化闲置贷款资金的再调配流程，进一步提升贷款资金的使用效率。

二、新增战略类建议

26 丰富开发金融工具和融资产品的体系，增设贷款币种转换、利率调整、担保、股权投资等工具；针对期限较短的非主权贷款项目推出固定利率贷款，提升市场竞争力。

27 深化多方合作，扩大与同类多边开发银行的联合融资规模，加强与社会组织、绿色领域和新质生产力的民营企业对接，加强和各类政府主导的发展基金和开发机构的合作，补充非借贷业务资源。

三、新增运营类建议

28 修订并完善财务与经济评价方法，统一门槛收益率、资产残值核算、敏感性分析、范围二碳排放核算等标准，进一步提升跨项目对比能力与成效测算精度。

四、新增机构建设类建议

29 将中国业务部正式设立为独立部门，配齐行业、技术专家及专项领域的专业人员，建立直接向新开发银行高层汇报的工作机制，强化项目监管与非借贷业务的落地能力。

NDB MANAGEMENT RESPONSE*

The New Development Bank (NDB) Management welcomes the Independent Evaluation Office's Country Portfolio Evaluation (CPE) related to NDB's partnership with the People's Republic of China over the period 2015–2024 and appreciates the thoroughness of its analysis.

Management notes the report's main conclusions that the overall performance of NDB's lending portfolio in China was rated Successful (5), with highly positive ratings across all core evaluation criteria — relevance, effectiveness, efficiency, impact, and sustainability — and that the overall China-NDB partnership performance is also rated Successful (5).

Management notes the IEO's recognition of the portfolio's strong strategic alignment with China's national development priorities; its efficient and streamlined project appraisal processes far shorter than global averages; the tangible results and transformative impacts delivered through innovative sustainable infrastructure projects in transport, clean energy, and environmental protection; NDB's leadership in raising local currency financing (68.8% of cumulative lending in RMB, the highest share among member countries and peer multilateral development banks (MDBs), and its position as the largest issuer of panda bonds), which together position the NDB-China partnership as a flagship model for development banks' engagement in other member countries. These results are especially noteworthy given NDB's limited operations workforce as compared to its peers operating in China.

In terms of the suggestions made by IEO, Management notes that most of them relate to projects prepared during the first years of NDB operations, in the first General Strategy cycle. Since that time, the Bank has significantly strengthened its capacities and processes of project preparation, appraisal, and implementation. As observed by IEO, "finance plus" elements, such as capacity-building and knowledge-sharing activities, have currently received a strong boost compared to the initial period of NDB operations, and are now systemically integrated into all NDB operations, in China and across other member countries.

Please refer below to the detailed Management response to IEO's recommendations.

IEO'S RECOMMENDATIONS

1 **Develop a tailored country strategy aligned with China's national priorities and NDB's mandate for the next general strategy cycle (2027–2031),** informed by comprehensive government consultations and lessons learned from the first decade of China-NDB cooperation. Against the backdrop of China's 15th Five-Year Plan (2026–2030), this document shall explicitly articulate the imperative to link NDB's lending to non-lending activities in China, further complement the existing model by outlining priority areas for capacity building, expertise enhancement, customised tools/solutions, and technical assistance (TA) to support China more effectively. Serving as a guide for resource allocation and stakeholder engagement, it shall be subject to periodic reviews to align with China's evolving development priorities.

* The Management response to the evaluation recommendations for the China CPE was received on 28 May 2026.

Management response

The NDB Management acknowledges IEO's recommendation for Country Partnership Plans (CPP) but believes that CPPs should be introduced on a demand-driven basis, if the respective country wishes to put one in place. For those countries that elect to have a CPP with NDB, work in this direction would be undertaken as a continuation of the currently ongoing preparation of the Bank's General Strategy for the cycle 2027–2031.

2 **Optimise project preparation, implementation, and monitoring and evaluation processes for China projects.** NDB should formalise a more structured early engagement process:

(i) Participate in high-priority project concept development with subject-matter experts, providing technical inputs on design and financial viability throughout the project lifecycle;

(ii) Enhance feasibility study quality by requiring robust baseline data collection, scenario-based demand forecasting (leveraging regional economic and demographic data), and comprehensive risk assessments. Additionally, conduct regular sectoral and policy assessments to adapt to China's evolving regulatory frameworks; deliver regular China-specific Design and Monitoring Framework (DMF) training, emphasizing critical sections (e.g., theory of change, assumption, and risk monitoring). Mandate projects to include phased targets (e.g., 3-year ridership ramp-up for urban transit) and adaptive monitoring frameworks tied to implementation progress. Post-approval, DMFs shall be proactively reviewed and updated during mid-term reviews to reflect evolving project contexts. Further, enhance Project Administration Manuals to clarify NDB's procurement, financial management, and environmental, social and governance (ESG) compliance requirements — by leveraging China's country systems to achieve NDB's objectives through accurate and detailed interpretations, targeted guidance, and standardised templates.

Management response

The work on the outlined directions is constantly ongoing, as NDB Management sees it as a priority to improve the quality, volume, and processing time of the Bank's lending and non-lending operations in all member countries, including China, by building on lessons learned and adapting to each country's priorities. In this regard, NDB will further strengthen its project origination and preparation capacity, enhance its operational efficiency and quality, expand its financing instruments and lending modalities to better serve its member countries in a demand-driven manner. The upcoming General Strategy 2027–2031 will guide NDB on ways to strengthen early engagement with project stakeholders to ensure greater alignment with countries' development priorities, regulatory and policy frameworks.

3 **Systematise TA and capacity building for full lifecycle support.** Allocate dedicated Project Preparation Fund (PPF) resources and budgets to China-focused TA, and develop a portfolio-wide TA programme through Chinese government consultations — focusing on thematic areas including advanced technology adaptation and industrial low-carbon transition. Improve transparency and visibility of TA application procedures and disseminate PPF eligibility criteria to project entities — ensuring broad access to support. Develop a structured capacity-building framework drawing on first-decade partnership lessons, covering capacity assessment, ESG management, sustainable procurement, and project monitoring; deliver regular China-specific training and establish long-term capacity sustainability monitoring. Partner with top Chinese think tanks and research institutions to develop context-specific technical guidelines (e.g., typhoon-resistant offshore wind design, ecological infrastructure protection) and share them as global public goods.

Management response

The NDB Management agrees with the need for a more proactive approach to the use of TA. The NDB Regional Offices, including the China Desk, have already been tasked with working closely with provincial authorities to identify high-priority projects, and make full use of the NDB PPF. The Bank will continue to explore ways to improve the visibility of TA funds and the application procedures, and will disseminate PPF eligibility criteria to relevant project entities to ensure broader access. However, the Management does not see the need to develop a dedicated, standalone capacity-building framework or policy document at this stage, as this will only add layers to the Bank's existing operational processes. Instead, capacity-building support should be integrated into project preparation, implementation, and supervision activities on a client demand-driven basis.

On developing context-specific technical guidelines (like typhoon-resistant offshore wind design, and ecological infrastructure protection), the Management feels that this is not part of NDB's core mandate. Nevertheless, the Bank, through its Strategy, Policies and Partnerships Department, continues to look at ways of partnering with top Chinese research institutions to generate and share knowledge products that can benefit both China and other member countries.

4 **Strengthen Research and Knowledge Sharing to position the Bank's China portfolio as a knowledge repository.** NDB should:

(i) Bolster internal research capacity by recruiting additional sectoral experts in key areas and filling the chief economist role to lead China-focused research on sustainable development challenges and actionable solutions;

(ii) Establish a centralised repository for knowledge products from NDB's China portfolio (e.g., technical reports, case studies, project-related patents) and ensure access for NDB staff, project stakeholders, and other member countries — fostering South-South knowledge sharing;

(iii) Develop flagship knowledge products: biennial reports on China-NDB cooperation impact, case studies of high-impact replicable practices, and policy briefs on green finance and infrastructure innovation. Expand online dissemination channels — including NDB's Chinese WeChat official account and its website (in member countries' official languages) — featuring video case studies, expert interviews, and interactive tools to boost transparency and stakeholder engagement.

Management response

Further, the Management agrees that greater efforts should be made to disseminate the project's results, innovative features, collaborative efforts for project implementation, etc., particularly for flagship projects. For instance, in addition to project-related information available through its official website and annual report, NDB is in the process of developing a BRICS–NDB Knowledge Portal in collaboration with the Ministry of Finance, India, under India's BRICS Presidency 2026. The proposed Portal will be a comprehensive knowledge platform linked to the NDB website and managed by the Bank on a continuous basis. Furthermore, in March 2026, the NDB Board of Directors approved the strengthening of the Bank's Research Department by establishing two new divisions – the Knowledge and Analytics Division and the Data and Statistics Division. Approved changes to the organisational structure will greatly enhance the utilisation of institutional and external data and statistics, and improve the efficiency and productivity of the Bank's knowledge function. The Management also acknowledges the need to expedite the recruitment of key personnel in the Research Department for those functions, subject to available budgetary resources.

NDB will further strengthen its communication platforms, including the official website and presence in social media (such as accounts on WeChat, LinkedIn, and other social media). The Bank will continue to highlight the development impact of NDB-financed projects as well as promote knowledge sharing. Various other forms of engaging content, including video clips, will be used to make information more accessible and visible.

5 **Optimise loan disbursement processes and improve fund utilisation efficiency.** Launch a borrower-centric digital client portal for drawdown requests, document submissions, and progress reporting — reducing disbursement processing time and enhancing transparency, aligned with peer MDB digitalisation trends. Explore enabling unused loan funds to be reallocated to eligible complementary components (e.g., supporting infrastructure, ancillary facilities, capacity building) within the same project via more streamlined approval workflows. Provide enhanced technical support on financial management and disbursement procedures to project entities, especially first-time borrowers and those with limited experience/capacities — mitigating delays from unfamiliarity with international financial institutions' requirements.

Management response

The NDB Management acknowledges the need to optimise the loan disbursement process. To this end, the Bank has already developed a client portal, which is in the final stage of testing and will be launched in the near future. Further, the Management informs that reallocation of unused loan funds to eligible complementary project components is already possible and can be made upon the borrower's request. Additionally, technical support on financial management and disbursement procedures is regularly provided by NDB Finance, Budgeting and Accounting Department to all project entities, with particular attention to first-time borrowers and those with limited prior experience with international financial institutions. This support includes targeted guidance, training sessions, and hands-on assistance during project implementation.

6 **Diversify financial products and instruments to enhance competitiveness and address market gaps.** The Bank needs to expand its product portfolio to include flexible financing tools tailored to China's market characteristics and development needs:

(i) Introduce currency conversion options (e.g., USD or EUR to RMB) and interest rate swap mechanisms (fixed/floating rates, interest rate caps/collars) over the loan tenor to swiftly mitigate market risks;

(ii) Develop innovative financial instruments such as guarantees, direct/fund-based equity investments, and mezzanine finance to mobilise private capital, with a focus on emerging sectors such as new-quality productive forces, energy storage facilities, and green manufacturing — to address the diversified financing needs of China's dynamic private sector and digital infrastructure projects;

(iii) Refine the results-based lending process by synthesising lessons learned from existing operations and explore asset securitisation for economically viable projects (e.g., renewable energy with stable cash flows) by leveraging China's mature capital market. Additionally, offer fixed-rate loans on competitive terms for non-sovereign operations (typically shorter tenor with demand for stable repayment structures) to align with NDB's strategic target of allocating 30% of total financing to non-sovereign lending.

Management response

The NDB Management agrees with the need to expand the Bank's product offerings, including innovative instruments such as guarantees, equity investments, and mezzanine finance, to mobilise additional private capital and support emerging sectors. The Guideline on Currency Conversion Option is at the final stage of development by NDB Treasury and Portfolio Management Department and is expected to be rolled out shortly. Fixed-rate loans are already offered for non-sovereign operations, and the Bank will continue to refine its lending terms to provide competitive and flexible solutions aligned with client demand and the strategic target of increasing non-sovereign lending.

7 **Deepen partnerships with key stakeholders to mobilise resources and replicate good practices.** The Bank should strengthen targeted collaboration to fill gaps in resource mobilisation and knowledge sharing:

(i) Formalise partnerships with civil society organisations and leading Chinese private enterprises in new-quality productive forces and advanced manufacturing (e.g., energy storage, smart logistics) to share technical expertise, knowledge and replicate successful models;

(ii) Scale up co-financing with national financial intermediaries (NFIs) and peer MDBs for large-scale infrastructure and climate action projects — prioritising initiatives aligned with China's national development priorities (e.g., inter-provincial transport corridors, regional energy grids) and NDB's mandate to deliver global public goods;

(iii) Strengthen engagement with the Multilateral Cooperation Center for Development Finance (MCDF) and BRICS PartNIR Innovation Center (BPIC), establish robust partnerships with the China International Development Cooperation Agency (CIDCA) and other development partners (such as the government-based development funds) to access grants, joint TA, and policy coordination opportunities — addressing gaps in non-lending resource integration;

(iv) Leverage existing partnerships with Chinese financial institutions to expand green syndicated loans and cross-border RMB financing, further advancing Shanghai's role as an international financial centre and promoting the usage of member countries' national currencies in NDB operations outside China.

(v) Strengthening partnerships with United Nations and international organisations in China more widely for joint knowledge sharing, capacity building, research, and mobilising resources to maximise the Bank's development impact.

Management response

The Management agrees that partnerships with key stakeholders need to be deepened to mobilise resources and replicate good practices. To this end, partnerships with leading Chinese entities, both public and private, have been intensified over time, with the view to establishing a network of expertise and helping replicate successful development models among the Bank's member countries, and more broadly, across countries in the Global South. Recognising the indispensability of multi-stakeholder collaboration in closing the immense infrastructure and climate financing gap, NDB has identified development finance institutions, particularly NFIs and peer MDBs, as strategic partners. The Bank even set a strategic target to co-finance 20% of projects (by number of projects) with peer MDBs for the 2022–2026 cycle and is on track towards reaching this target. Similarly, NDB's engagements with MCDF, BPIC, CIDCA, United Nations agencies, as well as other national and international organisations have been strengthened, aiming to mobilise additional resources, both financial and non-financial, for the benefit of the Bank's member countries and clients. Leveraging its partnerships with entities within and outside China, NDB has successfully provided RMB-denominated loans to finance projects in Brazil and is proactively exploring similar opportunities in other member countries, as an innovative way to provide tailored solutions to meet clients' needs.

8 **Strengthen financial and economic appraisal methodologies through benchmarking common practices among peer MDBs, as well as tracking carbon reduction impacts for NDB-financed projects.** For instance, the weighted average cost of capital (WACC) calculations and financial analyses shall be consistently applied to operations generating notable revenue as part of the appraisal, where projects are not fully reliant on subsidies or other external support, such as annual government legislative appropriations or discretionary grants. Infrastructure residual value, if applicable, is suggested to be incorporated into economic internal rate of return (EIRR) models as a negative investment cost at the end of the project period, calculated as the proportion of an asset's remaining replacement life multiplied by

its constant-price value. In addition, focusing on the specific parameters underpinning aggregate benefit or cost estimates in sensitivity analysis would improve assessment of the true impact of individual parameter changes, compared with a mechanical or isolated analytical approach. It is also recommended to identify switch values for each key variable and assess the project's risk exposure to those variables. The same hurdle rates should be applied consistently across all Bank-approved operations when calculating economic net present value (ENPV) and maintained consistently throughout the full lifecycle of individual projects for ENPV analysis. This ensures consistent benchmarking against approval-stage criteria to objectively verify whether a project has fully delivered on the expected economic viability committed at entry. Lastly, the Bank shall mandate consistent adoption of Scope 2 emissions accounting, requiring all applicable projects to integrate carbon reduction benefits into quantitative economic analysis and EIRR models. The IEO is of the view that these proposed refinements will further enhance the accuracy, comparability, and robustness of project appraisals and self-evaluations, and ensure that projects' financial sustainability, economic value, and environmental contributions are fully reflected.

Management response

The NDB Management does not agree with these recommendations. First, discounted cash flow analysis based on comparison of the project's financial internal rate of return with WACC is just one of the methods of financial analysis used by NDB. It is applicable to projects that envisage financial recovery of investments, and is not suitable for all projects with revenues. Second, applying the proposed approach to the calculation of the economic residual value to all projects, without considering the utility of residual assets to society, may give unjustifiably inflated and distorted results of the economic analysis. Third, the hurdle rate is dependent on country- and sector-specific environment and can change over time, hence applying one hurdle rate to all countries/projects would not be appropriate. Finally, the mandatory inclusion of Scope 2 emissions in the analysis of all projects may not be practically implementable, as not all projects have the necessary primary data for this.

9 **Formalise and resource the China Desk to enhance portfolio management and processing capabilities.** Given the size of the current China portfolio and the country's future needs, NDB might need to consider:

(i) Formalise the China Desk as a dedicated organisational unit with a clear mandate, a separate and dedicated budget and resources, and a direct reporting line to NDB Management (e.g., Vice President and Chief Operating Officer) — aligning with the structure of dedicated offices for other member countries; and

(ii) Expand staffing to include sectoral experts, specialists for subject-matter, TA and knowledge management to ensure robust support for both lending and non-lending activities.

Management response

The NDB Management has already taken steps for the implementation of this recommendation and has obtained approval of the NDB Board of Directors for the establishment of the dedicated East-Asia Pacific Department. The NDB Management also acknowledges the need to increase the respective headcount of the Bank, subject to available budget resources.

AFDI PEER REVIEW REPORT

新开发银行中国国别项目组合评价报告同行评审意见

一、 总体评价：

报告对 NDB 自 2015 年 7 月到 2024 年的 27 个在华项目进行了全面而有深度的评价，同时还对同期 NDB 在华的非贷款活动进行了非常中肯的评估，体现了评价组的良好专业素质和巨大的时间精力投入。评价组采用的评价方法是适当的，指标体系设置完整、严谨，各项指标打分佐证材料详实，评价结论逻辑严谨、表述明晰，提出的建议具有很好的实践意义且可操作性强。

二、 评价方法与指标体系评审意见：

评价组通过六个阶段的工作不仅发挥了评价组成员的专业能力，还汇聚了外部专家的知识和经验，使得五个维度的评价指标体系不仅具体，而且可量化测评，也体现了 NDB 在华项目的特点，为做好评价工作提供了良好的基础。这一评价体系不仅为 NDB 未来在华项目的绩效评价提供良好基础，也对 NDB 在其它国家的项目评价和国别评价具有很好的借鉴意义。此外，案例分析法有助于帮助读者深度了解那些具有代表性的项目实施情况，是对五个维度指标体系评价的良好补充。

三、 评价结论：

评价组给予 NDB 在华贷款项目较高绩效评分，与此同时非贷款活动的得分略有不足，这是基于大量的实地调查、数据分析和案例分析的基础上做出的。一个有趣的关联是，在非贷款活动不尽如人意的情况下如何能够让贷款项目的业绩最佳？如果能够针对这一问题做更进一步的思考和分析，或许还能得出一些可供未来和其它国家借鉴的经验做法。

报告给出的建议虽然是基于中国项目的分析和思考，对提升 NDB 未来的在华活动管理效率和效益有着很好的助力，但这些建议中很多也具有相当的普适性，对 NDB 的其它国别项目活动管理也有很好的借鉴意义。

亚太财经与发展学院
2026.06.02

AFDI PEER REVIEW REPORT FOR THE NDB COUNTRY PORTFOLIO EVALUATION REPORT FOR CHINA (ENGLISH TRANSLATION)

I. OVERALL ASSESSMENT

The CPE report delivers a comprehensive and in-depth evaluation of 27 NDB-financed projects implemented in China between July 2015 and 2024, alongside a pertinent assessment of the Bank's non-lending activities in China over the same period, reflecting strong professionalism and substantial time and resource commitment from the IEO evaluation team. The evaluation methodology adopted is appropriate, with a complete and rigorously structured evaluation indicator framework backed by ample evidence and supporting documentation for all scoring items. The evaluation conclusions feature sound logical reasoning and clear articulation, and the proposed recommendations carry strong practical value and robust actionability.

II. REVIEW OF EVALUATION METHODOLOGY AND FRAMEWORK

Conducted across six phases, the evaluation process draws on the in-house expertise of the IEO team and consolidates knowledge and experience from external sector specialists. The resulting five-dimensional indicator framework is specific, quantifiable, and customised to the unique features of NDB's China projects, laying a solid foundation for the evaluation exercise. This framework will not only underpin NDB's future performance reviews of its China portfolio but also serve as a valuable reference for the Bank's project and country-level evaluations in other member countries. Furthermore, cross-case study analysis complements the five-dimensional indicator assessment effectively, allowing readers to develop in-depth insights into the delivery of NDB's flagship projects.

III. EVALUATION CONCLUSIONS

The evaluation team awards a high-performance score to NDB's lending operations and project portfolio in China, but a comparatively lower score to its non-lending activities, a conclusion grounded in extensive field missions, data analysis, and case examinations. One noteworthy analytical puzzle remains: how the Bank's lending portfolio achieved robust results despite relatively weak non-lending performance. Further targeted research into this discrepancy could generate replicable lessons for future operations and programmes in other NDB member states.

While the CPE report's recommendations stem from analysis of China-based projects and will help improve the efficiency and operational effectiveness of NDB's future China activities, most suggestions enjoy broad applicability and offer actionable references for NDB's programme and operations management across the Bank's other country portfolios.

Asia-Pacific Finance and Development Institute (AFDI)
June 2, 2026

01 INTRODUCTION

01 Introduction

1. The New Development Bank (NDB) is a multilateral development bank (MDB) established by Brazil, Russia, India, China and South Africa (BRICS) to mobilise resources for infrastructure and sustainable development projects in BRICS and other emerging markets and developing countries (EMDCs). It complements the existing efforts of international financial institutions (IFIs) for global growth and development. The Bank's membership expansion commenced in 2021, and as of April 2026, its Board of Governors has approved the admission of eight new members, namely, Algeria, Bangladesh, Colombia, Egypt, Ethiopia, the United Arab Emirates, Uruguay, and Uzbekistan.

2. As a founding member of NDB and host country of its global headquarters, China has actively participated as both a shareholder and borrower since the Bank commenced operations in Shanghai in July 2015. In December 2024, the NDB Board of Directors tasked the Independent Evaluation Office (IEO) with conducting the Bank's first Country Portfolio Evaluation (CPE) of China in 2025, with a view to comprehensively assessing the overall partnership between China and NDB. The CPE covers the partnership period from July 2015 to the end of 2024. IEO assessed all NDB-related activities in China during this timeframe, as well as certain associated subsequent initiatives in the first half of 2025.

02 CHINA'S DEVELOPMENT CONTEXT AND PRIORITIES

02 China's development context and priorities

3. Over the past 45 years, China has undergone a remarkable transformation, evolving from a predominantly agrarian society into a global economic powerhouse. Since 2010, it has been the world's second-largest economy by nominal gross domestic product (GDP) — an unprecedented shift underpinned by significant progress in macroeconomic reform, infrastructure development, and international trade. China's currency, the Renminbi (RMB), was officially included in the International Monetary Fund's Special Drawing Rights currency basket in October 2016, with an initial weight of 10.92%, making it the fifth currency in the basket after the US dollar, Euro, Japanese yen, and British pound.

4. China's development progress has been mainly driven by industrialisation, urbanisation, and substantial investments. Its market-oriented reforms began in the late 1970s, paving the way for modernisation, industrial expansion, and the country's opening-up to global trade. Since 1978, China has maintained a steady GDP growth rate of around 9% annually,[1] and it is gradually shifting from an investment-driven model toward a more balanced, consumption-oriented economy.

5. In recent years, China's real GDP growth has gradually moderated, reflecting multiple factors including shifts in the country's development paradigm. At the 19th National Congress of the Communist Party of China in 2017, the New Era development agenda was launched, aiming to accelerate the country's transition to high-quality development while enhancing people's wellbeing. Accordingly, the government has shifted its focus from prioritising growth quantity to emphasising quality. The National Bureau of Statistics (NBS) reported China's 2023 GDP at RMB 129.43 trillion (approximately USD 17.85 trillion). For 2024, the NBS stated that China's GDP reached RMB 134.91 trillion (USD 18.6 trillion), a 5% year-on-year increase at constant prices — reflecting "the national economy was generally stable with steady progress; high-quality development advanced steadily; and new solid strides were made in building Chinese Modernization."[2]

Figure 1: China's economic overview

Data	Year							
	2017	2018	2019	2020	2021	2022	2023	2024
GDP (billion RMB)	82,712.2	90,030.9	100,587.2	103,486.8	117,382.3	123,402.9	129,427.2	134,908.4
Population (million)	1,390.08	1,395.38	1,410.08	1,412.12	1,412.60	1,411.75	1,409.67	1,408.28
Per-capita GDP RMB	59,660	64,644	71,453	73,338	83,111	87,385	91,746	95,749

Source: National Bureau of Statistics, China.

6. During the past decade, China has experienced significant demographic shifts toward an aging population, which poses challenges to growth prospects. By the end of 2023, the government reported that nearly 297 million of its citizens (21.1% of the total population) were aged 60 or above, while the number of those aged 65 and above had reached 216.76 million. China's healthcare system, economy, and society are grappling with the implications of population aging.[3] Developing long-term elderly care requires a robust financial and quality assurance framework, supported by an adequate skilled workforce and elderly care services to meet both health and social needs.

1 See China Overview: Development news, research, data | World Bank. https://www.worldbank.org/ext/en/country/china
2 National Bureau of Statistics of China: "National Economy Witnessed Steady Progress amidst Stability with Major Development Targets Achieved Successfully in 2024" (January 2025). https://www.stats.gov.cn/english/PressRelease/202501/t20250117_1958330.html
3 Ministry of Civil Affairs of the PRC: 2023 National Communiqué on the Development of Aging Undertakings.

7. China's government development plans and priorities are guided by its Five-Year Plans (FYPs) — strategic blueprints first launched in 1953 that outline national economic and social development goals, establish government work priorities over a five-year period, and guide market activities. The 13th FYP (2016–2020) aimed to address China's "unbalanced, uncoordinated, and unsustainable growth" and build a "moderately prosperous society in all respects" [4] through innovation, coordination, green development, further opening-up, and sharing. It outlined a "comprehensive deepening of reforms," emphasised improving the quality and efficiency of growth, and pursued balanced, inclusive, and sustainable development.

8. Moving beyond the historical emphasis on economic growth and restructuring, the 14th FYP (2021–2025) focuses on achieving sustainable, high-quality economic growth. It highlights innovation as the core of modern development, anchors the "Dual Circulation" development paradigm,[5] and advances reforms to improve living standards. The plan seeks to narrow the urban-rural gap, lay the groundwork for peaking carbon dioxide emissions before 2030, and achieve carbon neutrality before 2060 (the "dual carbon" goal). These objectives are reinforced by the longer-term perspective of China's Vision 2035, which charts the path for the country to become a moderately developed nation and a global leader in innovation by 2035.[6]

9. Complementing the FYPs are other sectoral and development strategies. For example, in 2015, the government unveiled the "Made in China 2025" policy — China's first ten-year action plan focused on advancing the manufacturing sector. It aims to elevate China's manufacturing industry to the forefront of global competitiveness through strengthening macro guidance, enhancing innovation capacity and industry quality, and aligning with emerging industries such as new-generation information technology and high-end equipment. It promotes the widespread adoption of green manufacturing practices, accelerating the sector's eco-friendly transformation and upgrading by advancing cutting-edge energy-saving and environmental technologies, processes, and equipment.[7]

10. In addition, since 2013, China has proposed initiatives to jointly build the Silk Road Economic Belt and the 21st Century Maritime Silk Road — collectively known as the Belt and Road Initiative — anchored in the vision of a "global community with a shared future for mankind". [8] By advocating and promoting investments in infrastructure projects, China seeks to facilitate trade, strengthen economic ties with participating countries, and foster an environment for the freer flow of goods, services, and investments.

11. Partnerships with IFIs have played a pivotal role in China's development since it officially resumed its legitimate seat at the World Bank in 1980 — marking China's proactive embrace of international cooperation in the early stages of reform and opening-up and providing crucial impetus for its economic take-off. Since receiving its first loan from the World Bank in 1981, a total of eight IFIs have approved 1,181 sovereign projects for China as of the end of 2024, with cumulative committed financing of USD 121.7 billion. Of this amount, USD 105 billion had been disbursed, and China had repaid USD 63.7 billion. These operations span key sectors including air pollution control, energy conservation and environmental protection, climate change mitigation and adaptation, green development, rural revitalisation, transportation, urban development, education, healthcare, agriculture, and post-disaster reconstruction. Among these projects, 93% of the total committed financing comes from the World Bank (462 projects, USD 62.7 billion) and the Asian Development Bank (ADB, 305 projects, USD 42.2 billion).

---

4 The 13th Five-Year Plan for Economic and Social Development of the People's Republic of China. https://en.ndrc.gov.cn/policies/202105/P020210527785800103339.pdf
5 The strategy refers to "internal (or domestic) circulation" and "external (or international) circulation".
6 National Development and Reform Commission (NDRC): The Outline of the 14th Five-Year Plan for Economic and Social Development (2021–2025) and Long-Range Objectives through the Year 2035 of the People's Republic of China. https://en.ndrc.gov.cn/policies/202203/P020220315511326748336.pdf
7 The State Council of PRC: Made in China 2025 (19 May, 2015). https://www.gov.cn/zhengce/content/2015-05/19/content_9784.htm
8 The State Council Information Office of China: "The Belt and Road Initiative: A Key Pillar of the Global Community of Shared Future." https://english.www.gov.cn/archive/whitepaper/202310/10/content_WS6524b55fc6d0868f4e8e014c.html

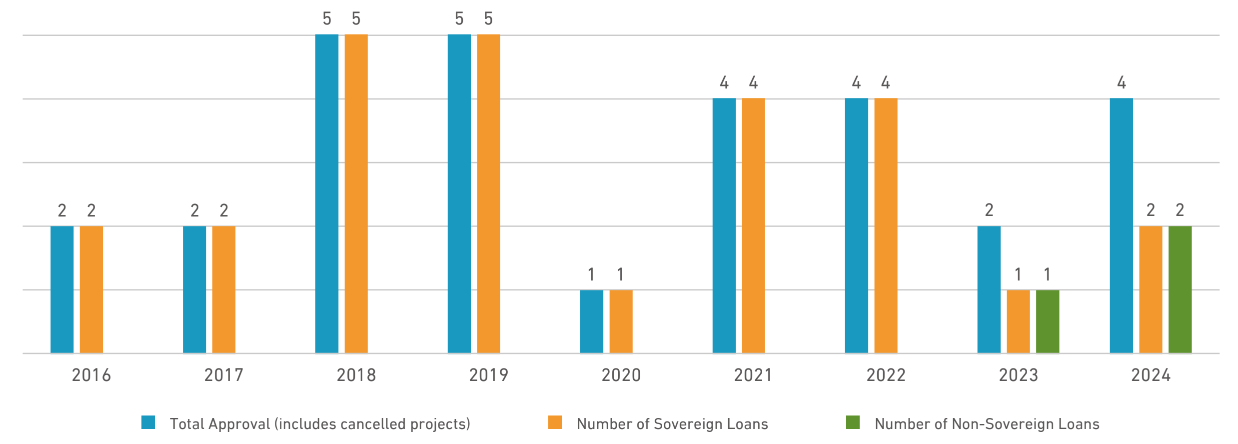
03 NDB'S PARTNERSHIP WITH CHINA

03 NDB's partnership with China

12. NDB — China's third-largest IFI creditor after the World Bank and the ADB — has financed infrastructure projects across a range of sectors, including transportation, clean energy and energy efficiency, water and sanitation, and environmental protection since April 2016. It has also extended emergency financial support during the COVID-19 pandemic.

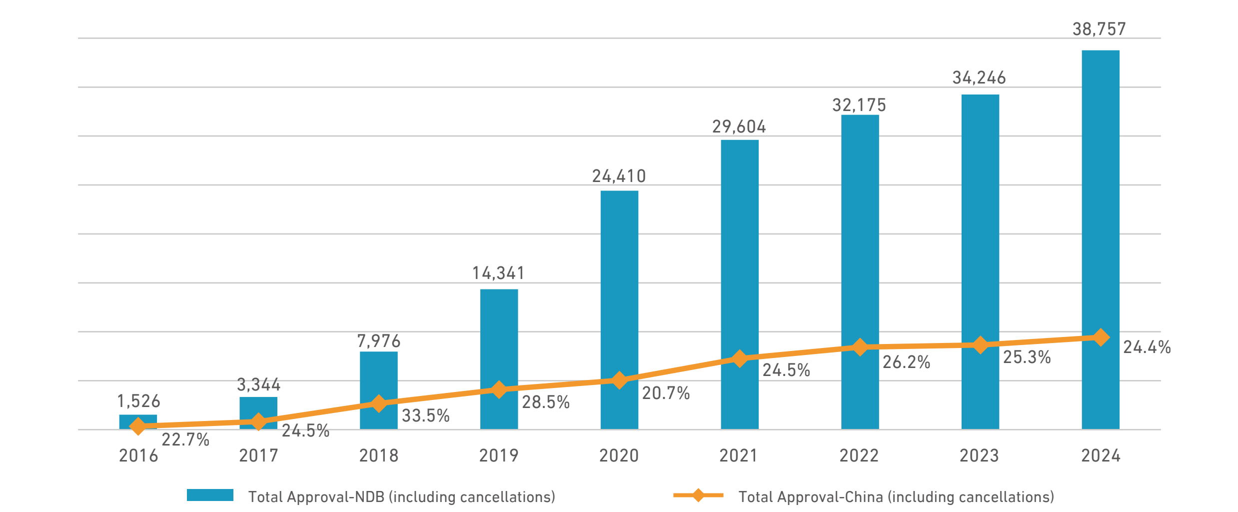
13. **Lending activities.** As of December 2024, the NDB had approved 29 projects for China, comprising 26 sovereign operations and three non-sovereign loans. These account for approximately 24.4% of its total lending portfolio. Two of the sovereign loans approved in 2017 and 2018, respectively, were cancelled in 2020,[9] consequently bringing the number of active loans to 27 with a total lending commitment of USD 8.86 billion.

Figure 2: Number of project approvals by year and type in China



Source: NDB Loan Dashboard by the Finance, Budget and Accounting Department (FBA) (December 2024) and IEO's analysis.

Figure 3: Proportion of China projects approved vs. NDB total (in million USD)



Source: NDB Loan Dashboard by the FBA (December 2024) and IEO's analysis.

9 Two sovereign loans cancelled in 2020: (1) Ecological Development Project in the Green Heart Center of Hunan Chang-Zhu-Tan City Cluster; (2) Chongqing Small Cities Sustainable Development Project.

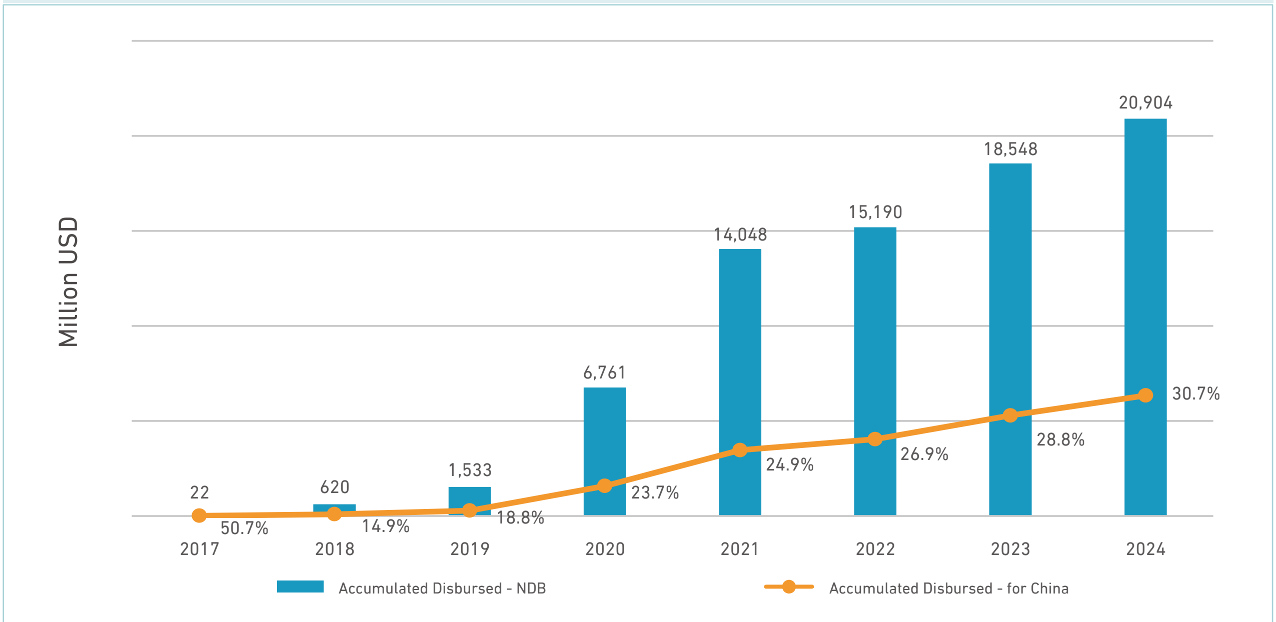
14. As of December 2024, almost 72% of NDB's committed lending for the 27 projects has been disbursed, making the disbursement ratio of the China portfolio the highest among all NDB member countries, and accounting for over 30% of the Bank's entire disbursements.

Table 1: Snapshot of the NDB portfolio in China

Number of active operations	27*
NDB approved amount (USD billion)	8.86
Disbursed amount (USD billion)	6.34
Overall disbursement ratio (%)	71.6

Source: NDB Loan Dashboard by the FBA (December 2024) and IEO's analysis.
* Excluding the two cancelled sovereign projects.

Figure 4: Amount of NDB's total disbursement and percentage share of China operations



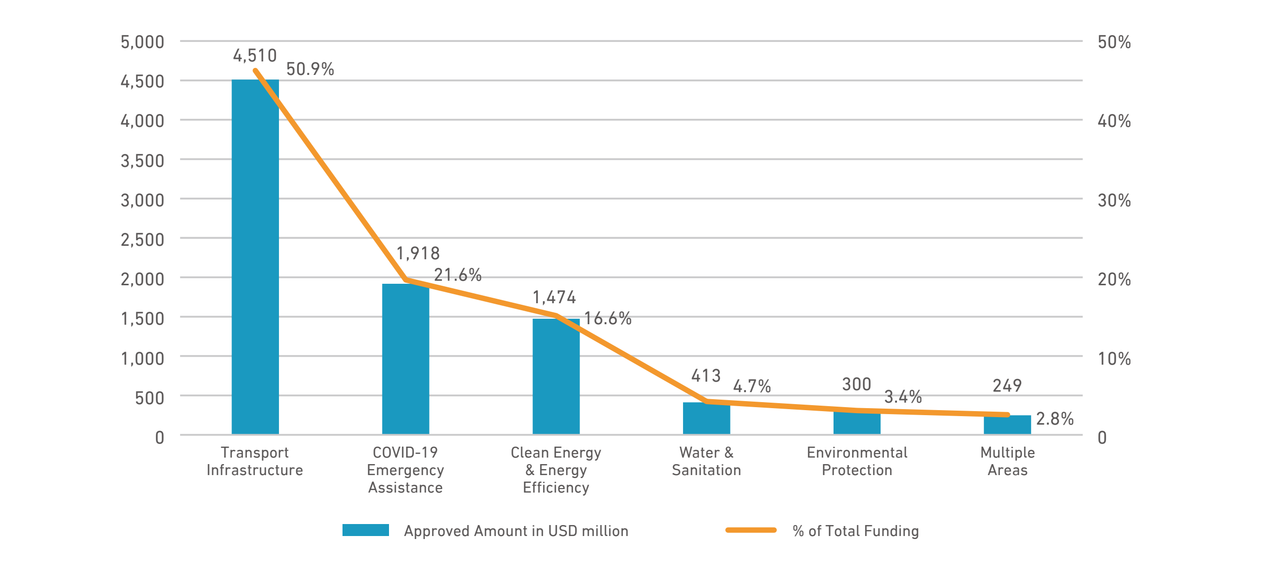
Source: NDB Loan Dashboard by the FBA (December 2024) and IEO's analysis.

15. **Sector composition of the NDB portfolio.** Of the 27 NDB-funded projects in China, 14 loans back transport infrastructure, encompassing: new airport construction and terminal expansions in three provincial capitals; road construction or upgrades across four provinces; urban connectivity improvements in four cities via two metro systems, one bus rapid transit system, and one tram system; multimodal logistics infrastructure in one region to boost regional connectivity; liquefied natural gas (LNG) transportation capacity expansion through large-scale LNG carrier investments; and logistics efficiency improvements in one provincial capital via water and railway transport link upgrades. Another five projects underpin China's low-carbon transition to clean and renewable energy, financing offshore wind farm development, a natural gas transmission system, distributed solar power plants, and LNG receiving, storage, and regasification facilities.

16. The remaining eight NDB-approved projects are evenly split across four themes: COVID-19 emergency response (2), water and sanitation (2), environmental protection (2), and cross-sectoral initiatives (2). They aim to boost China's capacity to mitigate COVID-19 impacts and advance cross-sectoral sustainable development — including river restoration, ecological protection, urban/rural water supply and sewage treatment, and traditional industry modernisation to enhance energy efficiency and waste management.

17. The majority of the NDB's committed financing in China is directed to the development of transport infrastructure: as of December 2024, a total of USD 4.5 billion (over 50% of the total financing for China's portfolio) had been approved to expand the country's transport infrastructure.[10] The second-largest investment, totalling USD 1.92 billion, was allocated to emergency response to the COVID-19 pandemic. This accounted for almost 22% of the total approved loan amount. The clean energy and energy efficiency sector received committed financing of USD 1.47 billion (16.6% of total approvals).

Figure 5: Monetary value of approvals across sectors (excluding the cancelled operations)



Source: NDB Loan Dashboard by the FBA (December 2024) and IEO's analysis.

18. **Geographical distribution.** Since approving its first China project in April 2016, NDB has gradually expanded its operational geographical reach over the subsequent eight years. As at December 2024, the NDB's China portfolio covers 50% of the country's province-level administrative divisions. Apart from four nationwide projects, the remaining 23 span 17 of China's 34 province-level divisions, directly benefiting 12 provinces, three autonomous regions, and two municipalities, as summarised in annex III.

19. **Implementation status.** By December 2024, the Bank had disbursed approximately 71.6% of the total committed amount for 27 projects. Out of these projects, six have received 100% disbursements. Additionally, the last available date for drawdown requests for seven projects had passed, resulting in the automatic cancellation of unused credits, thus increasing the number of "fully disbursed/loan account closed" operations to thirteen. In total, approximately 74.1% of the active projects in China have disbursed over 50% of their loan amounts approved by NDB, and 55.6% of them have disbursed over 80%.

10 Not including the loan amount for two cancelled operations.

Table 2: Disbursement status of 27 NDB loans in China as at end-2024

Disbursement range (%)	Number of projects	Breakdown
Fully disbursed (including loan closed operations)	13	Transport (4), clean energy and energy efficiency (4), COVID-19 loans (2), multiple areas (1), environmental protection (1), water and sanitation (1)
Between 80 and 99	2	Transport (1 airport project), clean energy (1)
Between 50 and 80	5	Transport (4), water (1)
Between 20 and 50	2	Transport (2 road projects)
Between 0 and 20	1	Transport (1 road project)
No disbursements (thus far)	4	Transport (2), environmental protection (1), multiple areas (1)

Source: NDB Loan Dashboard by the FBA (December 2024) and IEO's analysis.

20. Six of the 27 projects have been completed, and their project completion reports (PCRs) have been approved by the NDB's Credit and Investment Committee. Additionally, five sovereign loans were closed by the end of 2024, with four of their Borrower Completion Reports finalised during the second and third quarters of 2025. Furthermore, 16 operations are at various stages of implementation, including four approved in 2024.

21. **Co-financing.** Beyond domestic co-financing with the Chinese government, domestic financial intermediaries, or state-owned commercial banks, one project has benefited from international co-financing with a peer MDB — the Beijing Gas Tianjin Nangang LNG Emergency Reserve Project — which was a parallel co-financing operation with the Asian Infrastructure Investment Bank (AIIB).

22. **Local currency financing.** NDB has continually expanded its local currency operations in China. As of December 2024, RMB-denominated loans accounted for approximately 68.8% of the cumulative approvals for the country – the highest level of local currency financing not only among NDB member countries but also among all peer MDBs. Loans in EUR and USD represent 17.7% and 13.5% respectively, as summarised in annex XII.

23. **Local currency fundraising.** The Bank launched RMB fundraising from the start of its operations in China. In July 2016, the NDB issued its inaugural RMB 3 billion bond, marking the first time an IFI has issued a green finance bond in the China Interbank Bond Market. In January 2019, the NDB became the first international issuer to establish an onshore RMB bond programme and conduct offerings under the new legislation promulgated by the Ministry of Finance of the People's Republic of China (MoF) and the People's Bank of China in September 2018. As of December 2024, the total amount of "panda bonds"[11] issued by the NDB had reached RMB 55.5 billion, making it the largest issuer in the panda bond market and accounting for over 31% of the Bank's total global borrowings. The NDB's onshore RMB bonds are eligible as collateral for central bank operations in China and have been used to finance 19 local currency operations in the country and two RMB-denominated loans in Brazil by the end of 2024.

24. **Project Preparation Fund.** The NDB Project Preparation Fund (PPF) was established in 2017 to enhance the NDB and its member countries' project preparation capacity, facilitate feasibility studies, and support project implementation. The first PPF contribution agreement was signed by the NDB and China in Xiamen on the sidelines of the 9th BRICS Summit in 2017. The PPF has received a total of USD 9 million in contributions, with 44% coming from China. As of December 2024, China has not submitted to the Bank an application or a proposal to request the use of the PPF.

25. **Partnerships.** As of December 2024, the NDB has signed 13 memoranda of understanding (MoUs) to establish partnerships with various types of organisations based in China, including one peer MDB, two multilateral institutions, five commercial banks, three national development banks, and two academic institutions — representing the highest number among all NDB member countries.

11 A panda bond is an RMB-denominated bond from a non-Chinese issuer, which is sold in mainland China.

04 EVALUATION OBJECTIVES, METHODOLOGY AND PROCESS

04 Evaluation objectives, methodology and process

A. RATIONALE

26. This Country Portfolio Evaluation aims to provide an overarching, broad understanding of the results of NDB's engagements in promoting sustainable economic and social development in China, particularly in mobilising resources for infrastructure and sustainable development projects. The results of the evaluation, including the Management Response, will be presented to the Board of Directors in June 2026.

27. The independent evaluation evidence already collected by IEO on six sovereign operations by October 2025 has been leveraged in this CPE, and the ratings and lessons captured in the relevant reports (as summarised in annex IV) have informed the CPE's analysis. It is important to clarify that, given time and resource limitations, the CPE did not include conducting in-depth project performance evaluations for the remaining 21 projects. While all projects funded by NDB in China had been reviewed as part of the CPE, IEO analysed in more detail a selected number of projects and, based on their assessment, evaluated the aggregate outcomes of NDB activities in supporting China's sustainable economic and social development.

B. EVALUATION OBJECTIVE

28. The main objectives of the evaluation were to:

(i) Assess the aggregate results of the China-NDB partnership, especially the outcome of lending activities from July 2015 to 2024; and

(ii) Generate lessons and recommendations for strengthening the partnership moving forward. In addition, share the experiences of the China-NDB partnership with other NDB member countries for disseminating and replicating any applicable good practices.

29. To achieve these objectives, the evaluation covers all projects and activities from the time the Bank started its operations in China until the end of 2024, by analysing the aggregate performance of two mutually reinforcing pillars of the China-NDB partnership:

(i) NDB-funded projects;

(ii) Non-lending activities.

Efforts were made to capture synergies across these pillars, to formulate an overall China-NDB partnership performance assessment.

C. METHODOLOGY AND RATING

30. The evaluation was conducted within the overall framework of the NDB Evaluation Policy, NDB Evaluation Strategy 2024–2026, and the NDB Evaluation Manual. In particular, the evaluation followed internationally recognised evaluation criteria and processes adopted by the Evaluation Cooperation Group (ECG) of the MDBs. However, the evaluation criteria and processes were customised, as appropriate, to the NDB's institutional context, the Chinese context, and the specific project contexts. Definitions of all evaluation criteria are provided in annex VIII. The evaluation methodology entailed a mix of quantitative and qualitative data collection, ensuring an evidence-based and robust assessment of the NDB-financed projects in China and bilateral partnerships.

31. **Assessment of lending operations.** To assess the sovereign operations, IEO applied the following evaluation criteria: relevance, effectiveness, efficiency, impact, and sustainability. In practice, these criteria were applied in a differentiated manner, depending on the implementation stage of each project, as detailed in Annex VII.

32. In particular, five sovereign operations are assessed against all five above-outlined criteria as they are fully commercially operational, with their loans fully disbursed (or projects closed) by end-2024: Hubei Huangshi Modern Tram Project, Shengzhou Urban and Rural Integrated Water Supply and Sanitation Project, Ningxia Yinchuan Integrated Green Transport Development Project, Jiangxi Natural Gas Transmission

System Development Project, and Qingdao Metro Line Six (Phase I) Project. Additionally, the IEO assessed both NDB and borrower performance for these operations. This assessment sought to gauge stakeholders' contributions to project design, approval, supervision, implementation support, and self-evaluation across the full project life cycle, via analysing data on outputs, outcomes, and financial performance.

33. On the other hand, 13 projects that remain under construction and have disbursement ratios below 80% were only evaluated for relevance (i.e., an assessment of the relevance of their objectives and design). This is either because it would not be methodologically robust to assess the other criteria (effectiveness, efficiency, impact, and sustainability) for operations in the early stages of implementation, or because there is no operational data available to examine their outputs, outcomes, and performance — given that the respective project entities were still in the process of building the committed infrastructure as of the end of December 2024.

34. Three projects in advanced implementation stages (including the Jiangxi Industrial Low Carbon Restructuring and Green Development Pilot Project, Beijing Gas Tianjin Nangang LNG Emergency Reserve Project, and Lanzhou Zhongchuan International Airport Phase III Expansion Project) — with most key components having entered commercial operation by the end of Q1 2025 and preliminary operational data available — were evaluated for relevance, effectiveness, and efficiency. As the projects are still ongoing, assessing their medium-to-long-term impact and sustainability is methodologically premature, as these two dimensions require more comprehensive outcome and financial data. While effectiveness and efficiency were assessed, the CPE notes that performance on these metrics may evolve following project completion. Notably, the CPE's evaluation of these metrics is as of the assessment date, based primarily on monitoring and evaluation (M&E) data from project entities and NDB Management, in addition to focus group interviews conducted during missions.

35. The Bank's non-sovereign lending in China was launched in May 2024, with the first non-sovereign loan agreement signed in the same month. Assessing the financial, environmental, and social performance of such operations at an early stage of implementation thus poses a methodological challenge. Consequently, the IEO assessed only their relevance by evaluating how project design contributes to the NDB's mandate and delivers additionality. Based on the assessment of relevant individual projects and taking into account the NDB's institutional and portfolio-level performance, the CPE formed a qualitative and holistic performance judgement for each criterion and assigned an overall rating to the Bank's entire lending portfolio in China.

Table 3: Summary of evaluation criteria for lending project portfolio

Item		Number
Total number of projects approved in China as of 31 December 2024		27*
Projects with loan accounts closed by the end of 2024		11*
Number of lending operations reviewed and rated for:		
(1)	Relevance	27
(2)	Effectiveness	14
(3)	Efficiency	14
(4)	Impact	11
(5)	Substantiality	9
(6)	NDB Performance	11
(7)	Borrower Performance	11

* Per the Loan Dashboard of the FBA.

36. **Assessment of non-lending activities.** Beyond operations, the CPE evaluated the China-NDB partnership on non-lending activities, rating **technical assistance (TA), capacity building, research and knowledge sharing, and partnership development.** For instance, the IEO reviewed NDB's support in project design and implementation — including integrating advanced technologies, ensuring alignment with China's country systems and NDB's environmental/social standards, enhancing project impact and sustainability, and addressing capacity gaps. Additionally, the IEO assessed NDB's integration of global best practices into its China operations, support for research on sustainable development solutions, and documentation and dissemination of results, lessons, and good practices. Based on this analysis, an overall rating for non-lending activities was assigned.

37. **China-NDB partnership performance.** Informed by the analysis of NDB's project portfolio and non-lending activities, a final rating was assigned to the overall performance of the China-NDB partnership. This rating reflects the outcomes of the overall partnership (both implicit and explicit), including synergies and interlinkages identified between different elements of the country portfolio, the extent to which lending and non-lending activities contributed to achieving the overall partnership objectives, and the roles played by the Chinese borrowers and the NDB. The overall performance rating of the China-NDB partnership was based on a qualitative and holistic assessment, drawing on the ratings of the 11 composite criteria mentioned above for both lending and non-lending activities.

38. An evaluation framework was developed and is provided in annex I. This evaluation is summative and employed both quantitative and qualitative data collection and analysis methods. The IEO rated each of the criteria mentioned above using a six-point scale (see annex II), based on evidence collected through triangulation techniques.

D. EVALUATION PROCESS AND TIMELINES

39. **The evaluation was conducted in five main phases.** The first phase involved the preparation and finalisation of the approach paper. Thereafter, a nationwide CPE Inception Workshop was held at NDB headquarters on 25 March 2025 to brief over 120 key partners and project staff across China on the evaluation methodology, process, and required contributions from their side. This was followed by a comprehensive desk review (Phase Two) and field visits, including focus group interviews (Phase Three).

40. **Field visits.** The IEO conducted seven evaluation missions in China between April and July 2025. During these missions, the team interviewed key informants, project stakeholders, and beneficiaries; collected operational data; and visited selected project sites across five provinces. Back-to-office reports for all missions had been shared with NDB Operations, and briefing meetings were organised with all relevant NDB project managers to communicate key mission findings and gather their feedback.

41. A progress report and an interim report were developed post-field visits to share emerging insights and gather feedback from key stakeholders. Using the inputs received, the fourth phase focused on drafting the CPE report — shared with relevant stakeholders for comments and finalised with feedback. The fifth phase includes discussing the final report at the June 2026 NDB Board meeting and a 2026 national stakeholders' seminar in Beijing. Audit trail templates were created to show how the IEO integrated comments on the draft approach paper and CPE report into final documents, shared with relevant parties to ensure full transparency throughout the evaluation process.

42. **Deliverables.** The main deliverables of the CPE process include:

    (i) An Approach Paper detailing the evaluation's methodology and process, and a communiqué summarising Inception Workshop insights;

(ii) Several technical working papers on specific topics and targeted operational groups (e.g., transport, self-evaluation, knowledge sharing), including briefs on individual CPE-assessed projects. These served as background documents and informed the final CPE report's preparation;

(iii) Progress and interim reports;

(iv) A final CPE report featuring the IEO's China-NDB partnership assessment, incorporating the NDB Management Response;

(v) Evaluation Lens: a two-page reader-friendly brochure summarising the CPE's key findings and recommendations, drafted in English and translated into Chinese and other NDB member country languages;

(vi) NDB Management Response: per the NDB Evaluation Policy, a written response to the evaluation outlining approaches and timelines for implementing CPE recommendations.

43. An **evaluation reference group (ERG)** was established for the China CPE to facilitate dialogue/exchanges at key evaluation stages, foster learning, and build evaluation ownership. The ERG includes internal and external representatives:

(i) NDB Operations Departments (Public Sector, Private Sector and Non-Sovereign Guaranteed Transactions, Project Portfolio Management, and China Desk);

(ii) Other NDB functions relevant to operations and engagements in China (Environmental, Social and Governance [ESG]; Strategy, Policies and Partnerships; Research; Treasury and Portfolio Management; Finance, Budget and Accounting; Office of the President, etc.);

(iii) The Chinese Government (Ministry of Finance [MoF]); and

(iv) Provincial authorities and relevant project entity representatives. The ERG was specifically invited to provide comments on key deliverables, share inputs, and access to data and documents on specific topics, and attend the Inception Workshop.

44. **External peer review.** The Asia-Pacific Finance and Development Institute (AFDI) serves as the external peer reviewer for this CPE. AFDI has reviewed and provided written feedback on the draft Approach Paper, interim report, and draft CPE report, and will participate in the 2026 final CPE seminar. Based on the final report, it also prepared a short assessment of the evaluation's overall quality in process and content, which has been included in the CPE report upon finalisation and dissemination. Beyond AFDI, the interim report and draft CPE report underwent peer review by IEO staff and two additional external experts: Mr. Luciano Lavizzari and Dr. Xianbin Yao. Incorporating the feedback received, the report was revised and shared with MoF China and NDB Management for review and comments.

45. **Dissemination and communication.** Subject to the agreement of the MoF China and in line with the NDB Evaluation Policy, Evaluation Strategy, and Evaluation Manual, as well as to enhance transparency, accountability, and learning, the key deliverables produced by the IEO under the CPE will be publicly disseminated through various communication channels, including IEO webpages on the NDB website, official social media platforms, and other outreach channels. To share the CPE's findings and lessons learned and to engage a broad range of stakeholders in dialogue and knowledge exchange on the evaluation results, the IEO will organise a national CPE seminar in Beijing in 2026 following consultations with the MoF.

46. **Timeline.** The evaluation was conducted from January 2025 to April 2026 (see annex XI for the detailed timeline).

25 March 2025 – China CPE Inception Workshop at NDB HQ, with 93 representatives from 17 provinces, MoF officials, and NDB staff.

05 PROJECT PORTFOLIO PERFORMANCE

A. Strategic focus of NDB's lending operations
B. Relevance
C. Effectiveness
D. Efficiency
E. Impact
F. Sustainability
G. Overall lending portfolio achievement

05 Project portfolio performance

A. STRATEGIC FOCUS OF NDB'S LENDING OPERATIONS

47. NDB's lending operations, strategically aligned with sustainable development across two strategy cycles, follow two phases: first, during 2017–2021, it focused on sustainable infrastructure (clean energy, transport, water management, sustainable urban development, intra-member cooperation) under flexibility, efficiency, and minimal bureaucracy principles. It adopted risk-based approval, leveraged members' existing legal, environmental, social, and procurement frameworks where possible, deployed diverse financial instruments (long-term loans, equity), prioritised local currency financing to mitigate foreign exchange risks, and built trust through a sovereign operations-focused portfolio. Building on this, the 2022–2026 strategy prioritises climate-smart, disaster-resilient, tech-integrated, and inclusive projects — promoting the review and use of country systems to align with NDB requirements, scaling up local currency financing, and expanding non-sovereign operations and co-financing partnerships with peer MDBs. Core lending sectors expand to six priority areas (including social and digital infrastructure), with quantitative targets: 30% for local currencies, 30% for non-sovereign operations, 20% for peer MDB co-financing, and 40% for climate initiatives aligned with members' Nationally Determined Contributions and the Paris Agreement.

B. RELEVANCE

48. The relevance of the NDB's lending portfolio in China is rated "Successful (5)", reflecting strong alignment with China's national development priorities, NDB's institutional strategies, and the Sustainable Development Goals (SDGs). In addition to four nationwide projects, the portfolio directly benefits 50% of China's provincial-level administrative divisions, spanning five key sectors and COVID-19 response efforts. While certain critical gaps — including those in design optimisation, monitoring frameworks, and demand forecasting — as well as limited product offerings and financial tools have undermined its overall performance, they do not significantly compromise core relevance.

Strategic alignment with China's National Development Agenda

49. Like the practices of peer MDBs, NDB's sovereign project pipeline in China has also relied on a structured approach over its first decade of partnership with the country. Every three years on average, the central government, through its designated agencies for partnerships with MDBs (MoF and the National Development and Reform Commission [NDRC]), solicits project proposals from provinces/municipalities following comprehensive consultations with NDB, vets them against national development plans, NDB's strategic priorities and policies, then formulates a two–three-year lending programme jointly with NDB for approval by the State Council, and oversees subsequent project preparation, appraisal, approval, and implementation with minimal changes. This bottom-up model — adopted by all MDBs in China — delivers a robust pipeline with strong provincial/local ownership while posing few minor challenges for cross-provincial or national-level initiatives. Notably, the demand-driven framework aligns closely with NDB's strategic direction: for example, the 2022 project proposal solicitation expanded beyond traditional sectors to include digital infrastructure (broadband, 5G, AI, Internet of Things), and social infrastructure (public health and education) to advance inclusive development — reflecting key priorities outlined in NDB's second strategy. Three such projects were included in the 2023–2024 project pipeline (with two concept papers approved in 2024), while the latest 2025 project proposal solicitation incorporates new elderly care facilities and age-friendly refurbishment of existing infrastructure as a key priority under social infrastructure. This not only addresses the needs of China's aging population but also aligns with the Bank's sectoral focus.

50. Benefiting from this structured process, NDB's portfolio is deeply embedded in China's national development agenda and local priorities, with all projects directly aligned to the 13th and 14th FYPs. Renewable energy projects serve as cornerstones of China's "dual carbon" target: the Putian Offshore Wind Project, for instance, avoids 1.02 million tons of CO_2 annually and was upgraded from 5 MW to 6 MW turbines to align with Fujian's "marine economy" FYP; the

Lingang Solar Project, despite a 2018 national subsidy cut, adjusted its scope to 65 MW and reduced unit costs from 7.5 RMB/W to 5.0 RMB/W, supporting Shanghai's target of increasing non-fossil energy's share to 20% by 2025.

51. The Bank's transport projects in China span northern (Inner Mongolia), eastern (Anhui, Shandong), central (Henan, Hubei), western (Gansu, Ningxia), and southwestern (Guizhou, Guangxi) regions, addressing critical infrastructure gaps to reinforce regional connectivity and align with national strategies like the Yangtze River Delta Integration Plan, New International Land-Sea Trade Corridor, Silk Road Economic Belt and Yangtze River Economic Belt. Key cross-regional projects include the Anhui Tongling G3 Road-Rail Bridge (shortening cross-Yangtze travel time from 17.4 to 7.1 minutes), Lanzhou New Area Multimodal Logistics Hub (2023 cargo throughput 3.41 million tons, serving 627 industrial and 350 foreign trade firms), and Xi'an Xianyang International Airport Phase III (alleviating overcapacity and launching Central Asian freight routes). Urban transit initiatives prioritise "green, efficient mobility" with flagship projects like Luoyang Metro and Qingdao Metro Line 6 (Phase I), while road projects deliver targeted results: the Guangxi Trunk Road Network upgrades 1,636 km of highways/216 bridges (aiming to cut travel time by 40% via results-based disbursement), the Guizhou Qianxinan Rural Roads benefits 350,000 residents (supporting local infrastructure upgrading goals), and the Anhui Roads Project constructs/upgrades 196 km of roads, piloting sustainable technologies and capacity building. These efforts enhance urban public transit in lower-tier cities, strengthen rural and intercity connectivity, boost LNG maritime transport capacity, and address growing mobility demands through infrastructure sustainability.

52. Utilities projects in China address structural bottlenecks, expand clean energy access, and align with national/provincial development goals, balancing coastal clean energy growth with inland industrial transition. The Jiangxi Natural Gas Transmission Project serves as a model, achieving 100-county coverage (replacing coal in 45 previously underserved areas) via a unified pipeline fee (RMB 0.18 per km) and centralised LNG reserves — cutting costs by 40%, reversing declining demand with tiered industrial pricing, reducing annual CO_2 emissions by 650,000 tons, and supporting Jiangxi's 14th FYP 18% coal dependence reduction target. Complementing this, the Beijing Gas LNG Emergency Reserve Project meets Beijing-Tianjin-Hebei's "coal-to-gas" needs with 1.2 billion cubic meters of storage and 500 million cubic meters of annual supply, critical for northern China's winter heating.

53. The Bank's industrial low-carbon and environmental projects further advance national strategies like the Industrial Green Development Plan and Northeast Old Industrial Base Revitalisation. Jiangxi's Industrial Low-Carbon Restructuring Project aims to enhance energy efficiency in energy-intensive industries and improve wastewater discharge quality to Class 1-A via a Project Finance Facility (20 sub-projects), aligning with an 18% industrial energy consumption reduction goal. Liaoning's Industry Upgrading Project complements this by upgrading 466 km of roads, remediating industrial wastewater, retrofitting 12 boilers to ultra-low emission standards, raising solid waste utilisation from 57% to 65%, and cutting annual CO_2 emissions by 263,476 tons, reducing pollution by 30% for the project areas.

54. The portfolio's largest intervention — two COVID-19-related loans totalling RMB 14 billion — delivered rapid, targeted support for China's pandemic response: the 2020 Emergency Assistance loan focused on three severely affected regions (Hubei, Guangdong, and Henan), supporting the expansion of over 70 hospitals and the procurement of RMB 2.3 billion in anti-epidemic supplies. The 2021 Economic Recovery Loan directly addresses China's "dual circulation" strategy to stabilise supply chains.

55. Geographically diversified, the portfolio prioritises balanced and inclusive development by tilting financing toward less-developed provinces and western inland regions of the country (74% of total portfolio, far above the 26% allocated to China's more developed coastal provinces in the southeast). Most transport projects are in underdeveloped central and northwest regions to narrow local development gaps. For example, the Guizhou Qianxinan Rural Roads Project improves "last-mile" agricultural product connectivity, supporting rural revitalisation: 45 Qianxinan villages will benefit from a 25% cut in farm goods travel time post-upgrades. Urban initiatives like Luoyang Metro Line 1 ease congestion and advance transit-oriented development, accounting for 11.65% of the city's motorised travel and aligning with

its FYP to build a "rail-backed integrated public transport system." While this layout boosted NDB's visibility across 50% of China's provinces in its first decade and mitigated concentration risk via alignment with government debt management, it may inadvertently constrain potential project synergies. In NDB's next strategy cycle, tactically concentrating operations in priority regions could unlock economies of scale, and further enhance transaction cost efficiencies.

Alignment with NDB's institutional strategies and SDGs

56. The portfolio aligns with NDB's two general strategies, prioritising large-scale sustainable infrastructure financing while advancing and refining the usage of China's country systems. A standout achievement is local currency financing: as of December 2024, RMB-denominated loans accounted for 68.8% of cumulative lending to China, far exceeding NDB's 30% target for the 2022–2026 cycle. This not only mitigates borrowers' exchange rate risks but also advances the Bank's goal of deepening local capital markets — by end-October 2025, NDB had cumulatively issued 13 panda bonds, mobilising RMB 75.5 billion in total to support operations in China and other member countries. It has retained its status as the largest panda bond issuer and a benchmark institution in this sector.

57. Climate action, a core NDB mandate, is integrated across operations in China, supporting the Bank in meeting its institutional target: allocating 40% of total approved financing to climate mitigation and adaptation projects during the 2022–2026 period. The Beijing Gas Tianjin Nangang LNG Emergency Reserve Project, for instance, reduces annual CO_2 emissions by 750,000 tons through "coal-to-gas" substitution in the Beijing-Tianjin-Hebei region; the Lanzhou Zhongchuan Airport Phase III Expansion Project cuts carbon intensity by 32% via 11.43 MW photovoltaic systems and deep geothermal heating systems.

Box 1: Renewable energy projects: Catalysing China's dual carbon goals

NDB's renewable energy operations in China demonstrate how targeted lending aligns with China's low-carbon transition and NDB's strategic priorities — notably as the world's first MDB to finance offshore wind projects, the only such initiatives in its global portfolio:

- **Lingang Distributed Solar Power Project (Shanghai):** After 2018 national solar subsidy cuts, it shifted from utility-scale to distributed rooftop installations across Shanghai's industrial parks and commercial complexes, retaining 65 MW capacity. Now generating 73 million kWh annually, it serves as an innovative model for solar deployment in international metropolises.

- **Putian Pinghai Bay Offshore Wind Power Project (Fujian):** NDB's first global commercial-scale offshore wind initiative, holds 11 patents (e.g., large-diameter monopile-barrel composite foundations) later replicated in non-NDB projects, cutting foundation costs by 18% and avoiding 1.02 million tons of CO_2 yearly to support Fujian's "marine economy."

- **Guangdong Yudean Yangjiang Shapa Offshore Wind Power Project (Guangdong):** Maintained unit costs at RMB 21.98 million/MW (below the global average of USD 3.5–4.5 million/MW), aided Guangdong's 2020 0.3 GW coal-fired capacity cut, and underpinned the development of a national offshore wind manufacturing/logistics centre and Asia's largest single-unit main engine plant in the project area.

58. NDB's non-sovereign operations — a key priority under its 2022–2026 Strategy — have expanded rapidly since launching in China in November 2023: three financial intermediary loans were approved within 12 months, all signed by June 2025 (one fully disbursed), meeting the Bank's 30% non-sovereign operations target. The initiative showcases green finance innovation, such as the Bank's inaugural "parallel RMB loan" and the first leasing/shipping sector transactions, while aligning with China's green finance reform via well-designed financial covenants — comprehensively monitoring borrowers' capital adequacy and liquidity ratios to mitigate operational risks as highlighted below:

- **Bank of Huzhou Sustainable Infrastructure Project:** NDB's first non-sovereign loan to a city commercial bank, leveraging a green credit cloud platform to support USD 2 billion in on-lending. It aims to raise the bank's green loan ratio from 29% (2022) to 35% (2025), aligning with Zhejiang's "Green Finance Reform Pilot Zone" policy and NDB's goal of mobilising private capital for green development.

- **BoCom Financial Leasing LNG Transportation Project:** NDB's first leasing-sector loan, funding three 174,000 m^3 LNG vessels with ME-GA low-pressure dual-fuel engines (reducing NO_X by 20%, using boil-off gas as fuel) meeting International Maritime Organization 2025 standards. It addresses BoCom's maturity mismatch (43% of debt <1 year vs. 15-year LNG leases) and supports China's LNG import growth (88 million tons in 2024, +12% year-on-year).

- **Haitong Leasing Environmental Protection Project:** Adopts a "parallel loan" structure (NDB: USD 100 million; Bank of China: USD 300 million, both RMB-denominated) to finance wastewater/solid waste treatment equipment. Excluding first-tier cities, the project directs funds to underdeveloped regions and assists the Chinese leasing firm in establishing an effective Environmental and Social Management System (ESMS), encompassing the allocation of dedicated ESG resources, and the implementation of robust monitoring and reporting mechanisms for sub-projects.

59. NDB's operations have served as a key complement to other IFIs in supporting China's development agenda. Notably, some MDBs have gradually shifted their focus from large-scale infrastructure financing to other areas in China in recent years, such as natural resource management, biodiversity conservation, market and fiscal reform advancement, and national health security strengthening. However, China retains structural demand for infrastructure — encompassing not only the maintenance and upgrading of traditional infrastructure, but also the development of new infrastructure, progress in green transition, strengthened regional coordination, and enhanced cross-border connectivity. NDB's portfolio thus aligns with China's development objectives, delivering unique value in infrastructure financing, as mandated by its strategies. From 2016 to 2024, the average size of its sovereign lending to China is USD 329 million, which is smaller than AIIB's (USD 395 million) but larger than the World Bank's (USD 154 million) and ADB's (USD 167 million).

60. Lastly, NDB's sectoral portfolio aligns strongly with the SDGs, such as: SDG 7 (Affordable and Clean Energy) includes the Jiangxi Natural Gas Project (extending clean energy to 45 previously underserved counties) and Yangjiang Offshore Wind (300 MW, supporting Guangdong's 2030 12 GW target); SDG 9 (Industry, Innovation and Infrastructure) features Qingdao Metro Line 6's Train Autonomous Circumambulation System (TACS) (60% efficiency boost) and Liaoning Industry Upgrading (46,000 tons/day wastewater treatment, solid waste technologies aligned with China's circular economy); SDG 11 (Sustainable Cities) covers Luoyang Metro's Transit-Oriented Development model (driving urban renewal) and Chongzuo Urban Water Project (restoring 16 lakes/31.9 km canals to address waterlogging and enhance liveability).

Relevance of project design: tailored solutions to local challenges

61. Led mainly by borrowers with modest NDB interventions, the projects feature designs well-tailored to specific regional and sectoral needs, which in most cases contribute to their objectives. In wind-rich coastal areas, the offshore wind projects in Fujian and Guangdong deploy 6–6.45 MW large-capacity turbines to enhance generation efficiency — Putian's upgrade alone lifted annual output by 19% compared with initial projections. In arid northwest China, the Lanzhou Zhongchuan Airport project integrates photovoltaic systems and geothermal heating to reduce reliance on fossil fuels, aligning with the region's scarce water resources and high solar irradiance. In the karst terrain of Chongzuo, Guangxi, the urban water project adopts ecological revetments (reeds and calami) and native drought-tolerant plants to curb erosion, constructing two 30,000 m^3 rainwater reservoirs by utilising karst caves. This addresses urban waterlogging (economic losses from the 2014 floods: RMB 252 million) and supports Guangxi's "karst ecological restoration" goals.

62. All China projects underscore innovation and support pilots of new technologies and sectoral best practices — an emphasis aligned with NDB's explicit strategic priorities, further enhancing the relevance of their designs. The Anhui Tongling G3 Bridge's "highway-railway integrated" structure (upper 6-lane highway, lower 4-track railway) optimises cross-Yangtze space use, avoiding redundant construction and reducing land acquisition costs by 20%. The Shengzhou Water Project merged 421 scattered village water stations into a unified network and utilised gravity-flow technology (leveraging a 120-meter terrain elevation difference) to cut annual electricity costs by RMB 1.2 million, demonstrating a cost-effective design in addressing urban-rural disparities. Stakeholder engagement further strengthened relevance: the project adjusted pipeline routes based on rural feedback to avoid ancestral halls, boosting residents' satisfaction to 93% in 2024 (from 50% in 2018).

63. Notably, the Guangxi Trunk Road Network Improvement Programme — structured as NDB's first sustainable development loan in China with a results-based disbursement mechanism — deployed patented technologies for geologically complex areas: irregular high and steep slopes were stabilised using anchor rods, high-performance ecological substrates, and active/passive protective nets; a slope wire rope anchor pullout detection device ensured construction quality. These innovations not only enhanced safety but were also scaled up to other road maintenance projects in Guangxi, generating substantial social and economic benefits. Beyond meeting immediate needs, such designs also serve as replicable models for analogous regions.

Box 2: Airport projects: Supporting technology-integrated and green regional aviation hubs

Among all member countries, NDB has only provided financing for airport projects in China — aligning closely with China's "Civil Aviation Power" strategy and NDB's goals for technology-integrated infrastructure, while addressing capacity shortages and enhancing climate resilience in less developed northwestern regions.

- **Lanzhou Zhongchuan International Airport Phase III:** Completed in 4.5 years (shorter than industry average) via 3D modelling and prefabricated construction. It integrates 11.43 MW photovoltaic systems and deep geothermal heating (41,900 m^2 coverage), cutting annual carbon emissions by 6,800 tons and supporting Gansu's Belt and Road Initiative role as a northwest aviation hub.

- **Xi'an Xianyang International Airport Phase III:** Alleviated the old airport's capacity crunch (2019 passenger throughput 47.22 million vs. designed 31 million), integrated Silk Road cultural elements (arch structures), and launched freight routes to five Central Asian countries — strengthening Shaanxi's "Silk Road Economic Belt core area" status. Waste concrete recycling achieves 55% material reuse.

- **Hohhot New Airport:** NDB's largest transport project in China addresses severe capacity shortages (2017 passenger throughput exceeded the old airport's design by 245%) and boosts the China-Mongolia-Russia Economic Corridor via cross-border air logistics. It features a dedicated cold-chain cargo zone for Inner Mongolia's dairy/meat exports, aligning with the region's high-value agricultural trade development goals.

64. ESG considerations are not merely compliance measures but integral to driving the portfolio's relevance to China's green and inclusive development objectives. Guided by NDB's technical support, ecological protection measures have been embedded in project designs across sectors. For example, the Anhui Tongling G3 Bridge Project — traversing a critical habitat of the endangered Yangtze finless porpoise in the Yangtze River — developed and implemented an Aquatic Life Conservation Plan with the Bank's support. This plan included the appointment of a dedicated biodiversity expert to provide guidance on and oversee plan execution; capacity-building initiatives for all construction personnel; compensation and habitat offset measures; installation of a real-time monitoring and early warning system for underwater noise and target aquatic species, with data generated by the system informing construction scheduling and navigation control decisions; enhancement of aquatic life rescue systems; and the rollout of public awareness campaigns. This suite of measures aligns with China's Yangtze River Protection Law and NDB's Environment and Social Framework (ESF) requirements to "protect key habitats."

65. Furthermore, the Beijing Gas LNG Project implemented a "fishery resource enhancement" programme, stocking 500,000 juvenile fish each year to mitigate construction impacts on marine ecosystems — aligning with China's Marine Environmental Protection Law. Similarly, the Liaoning Industry Upgrading Project — focused on heavy industrial zones — remediated 171 hectares of contaminated land and restored 24 kilometres of riverbanks, directly aligning with the region's "ecological priority" policies.

66. Social inclusivity enhances the projects' design relevance, particularly for ethnic minority and rural communities. The Qianxinan Rural Roads Project — covering four counties with 64% ethnic minority population — included bilingual (Chinese + Bouyei) safety campaigns, horse-drawn vehicle lanes for traditional travel, and prioritised local labour (58% Bouyei/Miao workers) in its designs, directly supporting ethnic minority rural revitalisation. The Shengzhou Water Project adjusted rural water prices from RMB 2.8 to 2.2 per cubic meter per village committee/WeChat group feedback, boosting satisfaction from 60% to 85% and ensuring low-income households' clean water

access. The Hohhot New Airport Project's resettlement plan offered "cash + housing + skills training" for 3,223 affected residents (50% relocated within six months), aligning with NDB's ESF involuntary resettlement requirements.

67. Lastly, NDB's portfolio has expanded its financing scope from infrastructure construction to capacity-building initiatives — executed by project entities based on institutional capacity assessments and proposals by NDB in most cases reviewed by this CPE — reducing implementation risks and achieving project sustainability, capability accumulation, and replicable development. For instance, in the Yangtze River Smart Logistics Hub Project, RMB 60 million of the NDB loan (1% of the project's total cost) is designed to fund a scenario-based chemical safety training centre, train the project implementation unit (PIU) on compliance and procurement management, and develop a medium- to long-term operational plan — enhancing safety, regulatory adherence, and institutional sustainability. Similarly, a small portion of NDB's loan for the Anhui Province Roads Development Project funds training on project management, supports pilot smart technologies, and raises public awareness of green travel and environmental protection.

Room for improvements

68. Notwithstanding its strong overall strategic relevance, the CPE finds that portfolio performance could be further strengthened in several areas. First, overly optimistic demand forecasting for a small number of early projects approved by 2022 underestimated market volatility and could be better aligned with sectoral benchmarks, local context, and regional trends, undermining the validity of corresponding frameworks for assessing outcomes of such individual cases. In a very few operations, the NDB became formally engaged after feasibility studies were finalised, or even at the post-construction stage, leaving limited room for design adjustments. Consequently, the Bank was restricted to providing financial support rather than delivering additional value or tailored development solutions in these isolated early cases, missing opportunities to maximise the effectiveness and impact of approved operations from sector-wide and technical standpoints. Such opportunities include supporting project entities in developing supplementary inputs, activities, and outputs; setting ambitious yet realistic performance targets; establishing effective mitigation measures and monitoring systems; and ensuring the timely and complete delivery of planned outcomes and results. That said, there are also several operations that highlight the Bank's value addition — such as bridging financing gaps and facilitating early project preparation — which represent meaningful contributions at the portfolio level, particularly in recent years.

69. One of the drivers of these gaps is that the imperative of linking NDB's lending with non-lending activities in China lacks explicit articulation in a dedicated country-specific strategy. NDB's General Strategy serves as a core guiding document for its operations; however, it is an overarching institutional framework that does not address China's specific development challenges or NDB's priority areas in the country for capacity building, expertise enhancement, tailored solutions, and TA to support China more effectively and impactfully. Consequently, it remains unclear what specific role the China-NDB partnership is positioned to play in advancing the Bank's institutional goals — particularly in pursuing its medium- and long-term objectives. For instance, critical questions lack clarity: how much of the planned USD 30 billion funding envelope (2022–2026) has been allocated to China to inform its annual lending ceiling; how many co-financed operations with peer MDBs should be programmed during NDB's second strategy period (only one had been processed in China pre-2022) and which areas might host such opportunities; how to develop projects facilitating economic cooperation between China and other NDB members; and what key areas of China's country systems NDB could further strengthen. Addressing these questions will, in turn, foster closer, more effective China-NDB collaboration, laying the groundwork for a more scientific and efficient programming process by complementing the existing model.

70. Furthermore, despite having piloted modalities such as the Project Finance Facility and Sustainable Development Loan, as well as the NDB's first global syndicated "parallel loan" transaction, NDB has not progressed beyond primarily offering plain vanilla loans to China. To date, beyond successful panda bond issuances, the Bank has not fully leveraged China's capital market — one of the most

sophisticated among its member economies — to develop mechanisms and financial instruments that mobilise private capital more directly through project de-risking and improved viability. For instance, NDB has neither provided guarantees nor expanded its product portfolio for China-focused operations (e.g., investing in hybrid capital instruments such as subordinated debt or preferred shares, or undertaking equity investments — either direct or indirectly through funds). Furthermore, significant potential exists for NDB to explore investment vehicles focused on securitisation and carbon trading, leveraging China's dynamic and innovative capital market. This is particularly pertinent for its renewable energy projects, which have delivered stable financial performance and consistent economic returns.

71. Lastly, all NDB lending to China is priced off a floating benchmark rate, while the local market mostly operates with fixed-rate financing. The Bank has entered into interest rate swap contracts for all issued panda bonds, converting fixed coupon rates to floating benchmark rates (e.g., Shibor) — thereby marginally raising the Bank's overall RMB loan pricing due to hedging expenses, which weakens the competitiveness of RMB loan pricing and limits the scale up of NDB's lending operations in China, particularly in the RMB market. As of May 2025, NDB has not introduced flexible loan products that support currency conversion (e.g., USD to RMB) or interest rate flexibility (e.g., fixed-to-floating rate switches, interest rate caps, or collars) over the tenor of the loan. This places the Bank behind both established MDBs and its peer institution of similar vintage, the AIIB. Moreover, NDB has not offered fixed-rate loans equivalent to fixed-rate alternatives to its floating-rate products, making its product suite relatively less relevant and competitive for China's expanding non-sovereign operations — typically characterised by shorter tenors.

Conclusion

72. NDB's China portfolio achieves a "Successful (5)" rating for relevance by anchoring its lending in China's national priorities, NDB's institutional strategies, and the SDGs — a performance further strengthened by borrower-led, targeted project design and technological innovation, integrated ESG considerations, and leadership in local currency financing. While the issues highlighted above persist, they are limiting the Bank's long-term potential and overall impact in addressing China's development needs and should be addressed as priorities.

Criterion	Rating
Relevance	**5**

C. EFFECTIVENESS

73. Effectiveness includes the assessment of the extent to which the project achieved, or is expected to achieve, its objectives and results at the time of the evaluation, including any differential results across groups. The analysis of effectiveness involves taking account of the relative importance of the different objectives or results. The effectiveness of the NDB's portfolio in China is rated "Successful", reflecting strong performance in most operations. It demonstrates robust delivery capacity for core and large-scale infrastructure, with borrowers' strong commitment and ownership, while advanced technologies and institutional capacity building act as key enablers.

74. Notably, the portfolio's financing structure has been gradually enhanced: as of December 2024, RMB-denominated loans accounted for 68.8% of cumulative approved lending to China, effectively helping borrowers and project implementing entities mitigate foreign exchange risk. For post-2021 lending, 64.25% was denominated in RMB, making China the primary contributor to NDB's 2022–2026 institutional objective of increasing financing in member countries' currencies — thereby enhancing the portfolio's effectiveness. While a few projects face performance gaps due to overly ambitious targets, external disruptions, or delays in supporting facilities, the majority have met or exceeded core objectives, validating the Bank's targeted lending approach and implementation support.

75. Renewable energy projects stand out as benchmarks of effectiveness, with full output delivery, exceeded expected outcomes, and sector-wide demonstration value. The Lingang Distributed Solar Power Project completed the commissioning of 65 MW capacity in line with the revised 2020 project scope, generating 73 million kWh of electricity in 2021 — 3% above the adjusted target. Post-completion, the

implementing agency expanded solar capacity to 83 MW in Shanghai, contributing to national renewable energy targets. The Guangdong Yangjiang Offshore Wind Power Project has commissioned 302.2 MW of capacity, exceeding the planned 300 MW. Power generation in 2024 reached 95.6% of the design and monitoring framework (DMF) target, while annual CO_2 reductions exceeded the target by 109% (620,983 tons) — despite initial shortfalls in generation due to lower-than-expected wind speeds and typhoon impacts.

76. Among all operations, the Putian Offshore Wind Project delivered the most exceptional results: with annual power generation of 1.043 billion kWh (19% above design) and annual CO_2 reductions of 1.02 million tons — exceeding outcome targets. Its 11 key patents, including the large-diameter monopile-barrel composite foundation, have been adopted for replication in other non-NDB projects in China, as detailed in the box below.

Box 3: Putian Pinghai Bay Offshore Wind Power Project: Exemplary effectiveness in result delivery

This pioneering offshore wind project delivers exceptional effectiveness, setting benchmarks for innovation and sector transformation:

- **Output and outcome surpassing:** Commissioned 246 MW capacity (vs. planned 250 MW) with 6 MW turbines (upgraded from 5 MW mid-project), achieving 1.043 billion kWh annual power generation (19% above target) and 1.02 million tons annual CO_2 reduction (17.2% over project document to the Board's estimates), offsetting the minor capacity shortfall.

- **Technological innovation and replication:** 11 patented solutions, including the world's first large-diameter monopile-suction bucket composite foundation for rocky seabeds. Replicated in projects in Jiangsu Taizhou and Liaoning Zhuanghe, earning national geotechnical innovation awards.

- **Institutional and safety legacy:** Created standardised operation/safety manuals (e.g., offshore traffic rules, maintenance guidelines), ensuring 2,300+ consecutive safe operation days and serving as national offshore wind references.

- **Strategic sector catalysis:** Attracted Shanghai Electric's integrated research and development/manufacturing/operation and maintenance base to Putian, driving local industrial clustering, contributing RMB 300–400 million annual tax revenue, and creating 1,101 jobs (60% local hires).

77. Urban rail transit and green transport projects demonstrate mixed yet overall positive effectiveness: infrastructure delivery and output performance generally outperform expectations, while ridership and efficiency indicators face contextual gaps. The Luoyang Metro Project completed 25.34 km of track (vs. planned 22.34 km) and 19 stations, achieving an 11.65% share of motorised travel (double the 2022 target) and a 98.17% passenger satisfaction rate. However, passenger flow intensity (3,700 persons/km-day as of August 2023) only reached 41.1% of the overly ambitious target, as the typical three-year passenger cultivation period for new metro lines was not considered.

78. In parallel, the Huangshi Modern Tram Project reduced travel time by 45% by connecting old and new urban districts and achieved a 99.97% on-time rate. Nevertheless, 2024 ridership only reached 25% of the 2026 target, attributed to slowing population growth, unfinished network expansion, delayed new town development, and overly optimistic projections (20.7 million annual passenger trips) for a medium-sized city (population <2.5 million). The Yinchuan Integrated Green Transport Project has fully electrified the municipal bus fleet, established an intelligent public transport management platform integrating operational data of buses, taxis, ride-hailing vehicles and shared bicycles, lifted the public transport modal share from 33% to 37% (with the green travel share reaching 64% as of 2022), achieved an annual natural gas saving of 29.7 million cubic metres, and cut bus operating costs by RMB 58.98 million via the fuel switch from natural gas to electricity.

79. Other critical infrastructure operations (LNG reserve, airport expansion) demonstrate robust effectiveness by delivering core outputs, achieving strategic objectives, and driving long-term outcomes. The Beijing Gas Emergency Reserve Project completed 10 storage tanks and a 5 million ton/year receiving capacity, forming 1.2 billion m^3 of emergency reserve (exceeding NDRC's 5% requirement) and alleviating Beijing-Tianjin-Hebei winter peak demand. Its digital twin technology and inspection robots enhanced operational stability, achieving nearly 4,000 cumulative safe working hours with no major incidents. The Lanzhou Zhongchuan Airport Phase III Project achieved a 78.7% gate occupancy rate (surpassing regional averages), 40% shorter security checks, and 5.89% year-on-year passenger growth in the first six months. Its Integrated Control Platform with fully automatic boarding bridges sets industry operational performance benchmarks, though cargo targets face challenges from post-COVID-19 sluggish regional logistics demand.

80. Emergency response programmes demonstrate strong effectiveness, delivering targeted, rapid support aligned with crisis response needs. The NDB's RMB 14 billion COVID-19 emergency assistance programme supported the expansion of over 70 hospitals in Hubei, Guangdong, and Henan, procured RMB 2.3 billion worth of anti-epidemic supplies, and provided free nucleic acid tests for over 1 million people — reducing the diagnosis time for suspected cases by 50%. The economic recovery tranche created 40,700 rural jobs via the Agricultural Development Bank of China, while the component supported by the Export-Import Bank of China exceeded employment targets by 154%.

81. Industrial green transition initiatives have achieved moderate effectiveness, with sub-project delivery progressing well, but with challenges related to low-carbon indicators and data management. The Jiangxi Industrial Low Carbon Restructuring Pilot Project completed most of its 20 sub-projects by the end of 2024, adding 46,000 tons per day of industrial sewage treatment capacity. However, energy consumption reduction targets have not been met due to asset sales, policy-driven adjustments to sub-project scope, and implementation delays.

82. Across sectors, key drivers of effectiveness include high-quality delivery of core project components, strong commitment from implementers and governments, and NDB's support — such as refining the application of China's country systems in procurement. Technological innovation is another consistent driver (e.g., Putian's offshore wind foundations, Qingdao Metro's TACS system, Beijing Gas's membrane tank technology), with replicable solutions advancing sector-wide progress. Notably, borrower-executed institutional capacity building (proposed, supported, and in some cases even led by the NDB, based on the institutional capacity assessment of project entities) is a key highlight: Huangshi Tram and Jiangxi Natural Gas built standardised management systems, while Yinchuan and Shengzhou enhanced stakeholder engagement

and environmental and social (E&S) compliance, laying the groundwork for operational effectiveness. Most projects demonstrated some adaptability to unforeseen challenges (e.g., post-pandemic demand shifts, typhoon damage) via proactive adjustments like route optimisation. Nevertheless, greater efforts are needed to monitor and reassess key assumptions/risks affecting outcomes, and refine design, target setting, and M&E processes throughout the project lifecycle.

83. Despite solid overall performance, certain projects — particularly those approved by 2022 — faced several challenges that hinder optimal effectiveness. In a handful of operations, outcome targets set beyond practical realities contributed to avoidable underperformance. External disruptions, such as global energy price hikes and policy adjustments, have inevitably undermined operational stability and represent common systemic shocks affecting infrastructure projects worldwide. Delays in the development of supporting and ancillary facilities (e.g., rural sewage pipelines) also moderately restrict full value capture.

84. In conclusion, the NDB's China portfolio has attained a "Successful" effectiveness rating by leveraging strategic lending to drive infrastructure modernisation, decarbonisation, and inclusive growth. Renewable energy operations consistently meet core objectives, while urban transit and industrial transition projects balance infrastructure achievements with operational challenges. The portfolio's focus on technological innovation has created lasting sectoral value beyond immediate project outputs. Continuous refinement of project designs, better coordination of ancillary and supporting facilities, and upgraded monitoring systems will further strengthen overall effectiveness.

Criterion	Rating
Effectiveness	5

D. EFFICIENCY

85. Efficiency is assessed against four core dimensions: timeliness of delivery, cost control, financial efficiency of loan deployment, and operational productivity, with reference to NDB's institutional benchmarks. The efficiency of operations in China is rated "Successful", reflecting the portfolio's strong performance in optimising resource utilisation and financial management, delivering outputs in a timely and cost-effective manner for most operations, and adapting to dynamic implementation environments in general.

86. Benefiting from the Bank's Shanghai headquarters, China's robust institutional systems, and a dedicated desk established in December 2021 to oversee operations in China, NDB's lending portfolio in the country has achieved the most efficient implementation among all NDB member countries to date. As of December 2024, 71.6% of NDB's committed lending to 27 active projects in China had been disbursed, accounting for over 30% of the Bank's global disbursements. Out of these projects, six have received 100% disbursements. Additionally, the last available date for drawdown requests for seven projects had passed, thus bringing the total number of "closed/fully disbursed loans" to thirteen. In total, approximately 74.1% of the projects in China have disbursed over 50% of their NDB-approved loan amounts, and 55.6% of them have disbursed over 80% — exceeding the average among NDB member countries.

87. The average time from Board approval to loan signing (143 days) and from approval to loan effectiveness (217 days) is significantly shorter than the Bank's global averages (289 days and 395 days, respectively). This demonstrates streamlined coordination between the NDB and project stakeholders and underscores the operational agility of the portfolio. The average time from Board approval to first disbursement (468 days) is also below the Bank's corresponding global average of 488 days. While there are sector-specific challenges — including schedule delays in industrial transition projects and asset underutilisation in green transport initiatives — the evaluated projects have generally been rated "Successful". This reinforces the portfolio's strong overall efficiency in converting financial, human, and material inputs into tangible development outcomes.

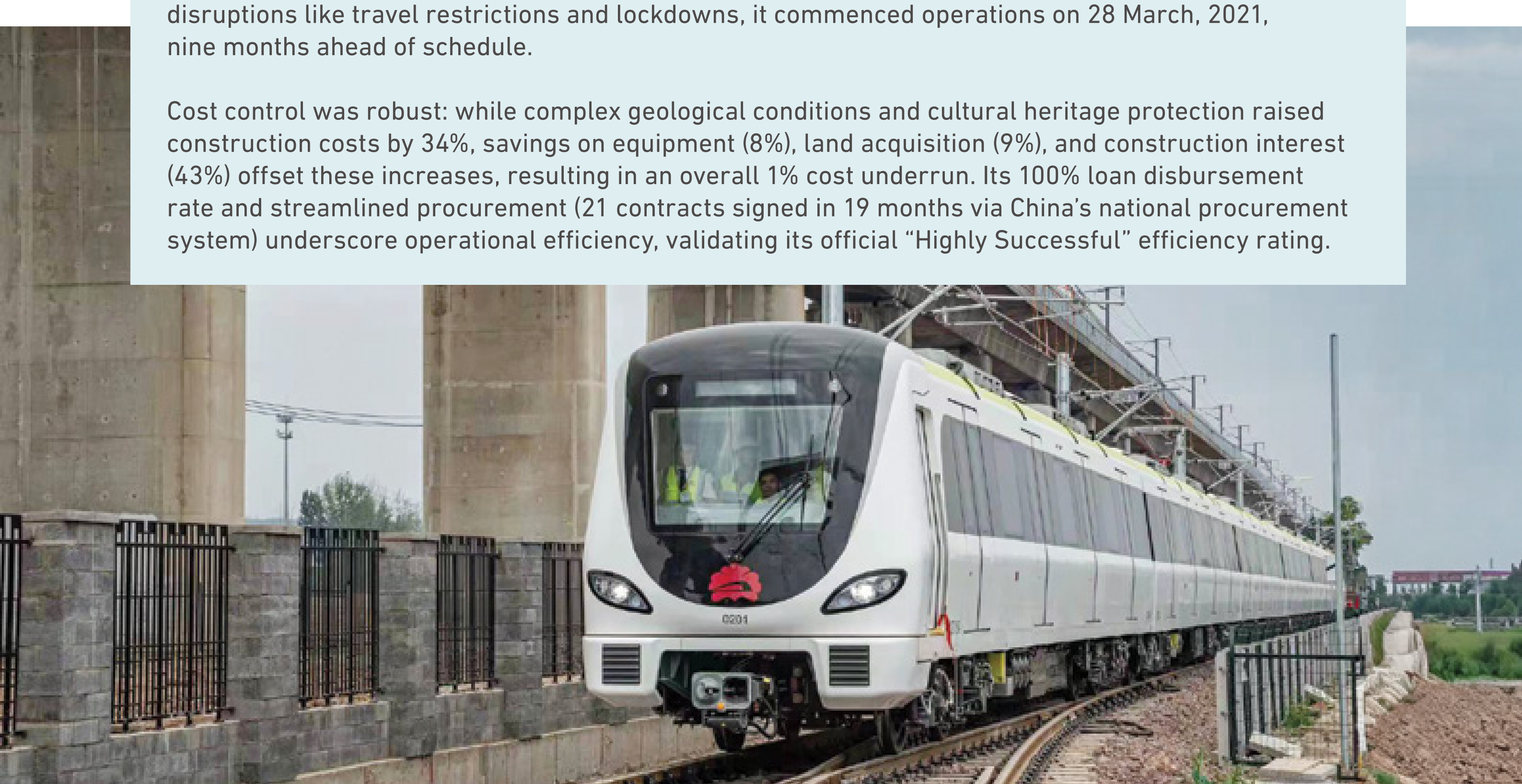
88. Across the portfolio, renewable energy projects have demonstrated sound economic efficiency overall, despite facing a range of unforeseen challenges. The Lingang Distributed Solar Project cut unit costs by 33.3% (7.5–5.0 RMB/W) via competitive bidding and advances in domestic photovoltaic tech, with its economic internal rate of return (EIRR) rising to 14.0%–16.7% (vs. 12.8% at appraisal). It was planned to be completed by December 2019 with all outputs and outcomes delivered; however, a one-year delay was incurred, primarily due to national solar tariff adjustments, which eventually caused the revision of project scope and a partial cancellation, compounded by the outbreak of COVID-19 in early 2020. Similarly, the Putian Offshore Wind Project, which was also originally scheduled to be completed by the end of 2019, saw its completion delayed by two years due to various challenges such as complex geological conditions, changes to turbine design, adjustments to procurement plans, and the COVID-19 pandemic. It still eventually achieved an EIRR of 16.23%–20.01% (exceeding the 13.37% appraisal estimate) — driven by lower capital/operational costs and higher energy output from upgraded 6 MW turbines. In parallel, the Guangdong Yangjiang Shapa Offshore Wind Project, with a 9.1% cost overrun due to supply chain pressures during the installation rush and incomplete seabed surveys (with the foundation rock socketing rate exceeding 90%), has kept its unit costs below global benchmarks (RMB 21.98 million/MW vs. USD 3.5–4.5 million/MW) and achieved an EIRR of 11.7%, surpassing NDB's assessment threshold.

89. Urban rail transit projects stand out for their exceptional schedule adherence and cost optimisation, even amid the COVID-19 pandemic. The Luoyang Metro Line 1 was completed nine months ahead of schedule in 2021, with actual costs 1% below budget (RMB 17.925 billion vs. RMB 18.119 billion), supported by streamlined procurement (21 contracts signed in 19 months) and 100% loan utilisation. The Qingdao Metro Line 6 (Phase I) achieved an 18.3% schedule compression, opening 11 months ahead of plan, and realised RMB 550 million in cost savings through over 50 design optimisations — including prefabricated station construction and repurposing existing power infrastructure. These results reflect proactive project management and the adoption of cloud-based business management platforms — enhancing project efficiency.

Box 4: Luoyang Metro Line 1: Exemplary timely delivery amid pandemic challenges

A standout benchmark for efficient urban rail implementation, the project was approved by NDB's Board in July 2018, signed loan agreements within a month, and achieved loan effectiveness by October 2018 — an 88-day turnaround far below the Bank's global average. Despite COVID-19 disruptions like travel restrictions and lockdowns, it commenced operations on 28 March, 2021, nine months ahead of schedule.

Cost control was robust: while complex geological conditions and cultural heritage protection raised construction costs by 34%, savings on equipment (8%), land acquisition (9%), and construction interest (43%) offset these increases, resulting in an overall 1% cost underrun. Its 100% loan disbursement rate and streamlined procurement (21 contracts signed in 19 months via China's national procurement system) underscore operational efficiency, validating its official "Highly Successful" efficiency rating.



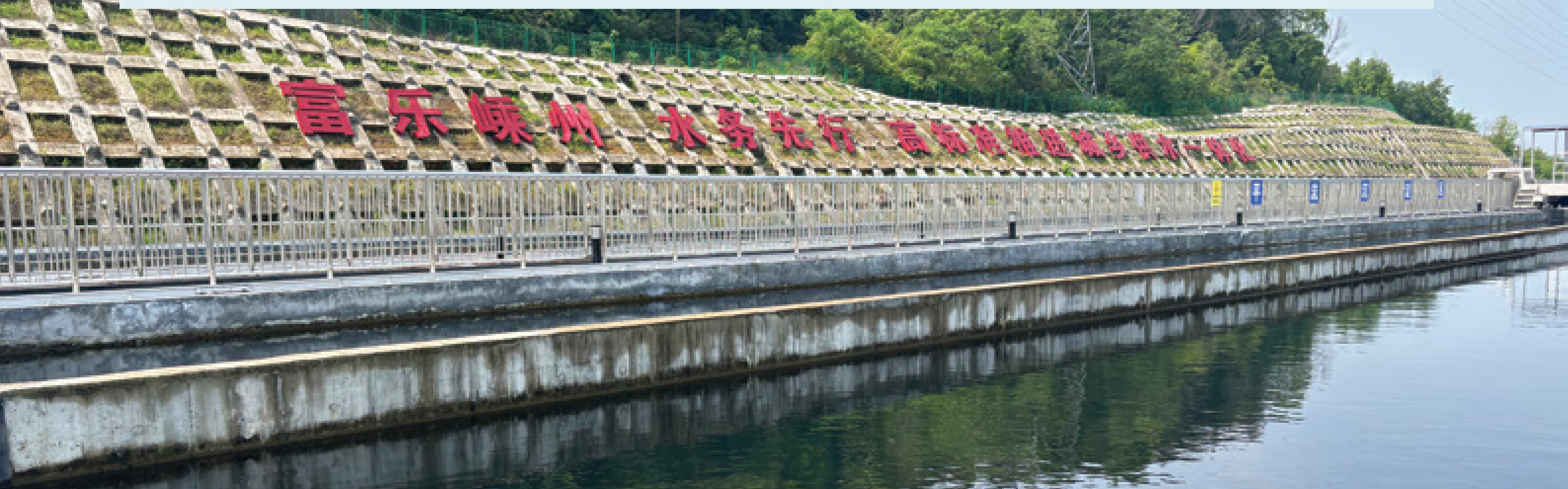
90. Energy reserve and aviation infrastructure projects demonstrate industry-leading efficiency, driven by rigorous planning and technical innovation. The Beijing Gas LNG Emergency Reserve Project reduced total investment by 7% (RMB 959.3 million) through open tendering and membrane tank technology, which cut steel usage by 30% and shortened construction time by two months per tank. The Lanzhou Zhongchuan Airport Phase III Expansion Project shortened the average construction period by 10%–20% (4.5 years vs. 5–6 years for peers) through 3D modelling and prefabricated construction. Its 98% equipment localisation rate (vs. 70%–80% for peers) reduced debugging cycles by 50%. These operations illustrate how integrating advanced technologies and localised solutions can effectively enhance construction efficiency.

91. Utility projects excel in cost control and technical innovation but face financial misalignment and infrastructure underutilisation in some cases. The Jiangxi Natural Gas Transmission System Project cut total costs by 17.5% via domestic equipment substitution and modular construction. Smart technologies like fibre optic monitoring boosted operational efficiency, lowering the pipeline leakage rate to 1.2% (below the 1.5% industry standard). However, its USD-denominated NDB loan interest rate surged from 1.3% to 7.6%, resulting in 36% unutilised funds (USD 129.56 million) and high financial costs from exchange rate and interest rate risks. To date, NDB has not launched flexible loan products (e.g., USD-RMB conversion, interest rate caps/collars) for mid-tenor market risk mitigation, lagging behind peer MDBs. Meanwhile, the Shengzhou Urban and Rural Integrated Water Supply and Sanitation Project delivered 39.4% cost savings via refined design and competitive procurement, with EIRR exceeding NDB's benchmark — though auxiliary facility delays and raw water price disputes limited full operational efficiency.

Box 5: Shengzhou Urban and Rural Integrated Water Supply Project: Cost efficiency via refined design

The project achieved exceptional cost efficiency, cutting total investment by 39.4% (RMB 1.868 billion to RMB 1.132 billion) through targeted measures:

- Refined design (merging three booster stations, simplifying pipeline routes) saved RMB 104 million; equipment competitive bidding reduced costs by 40%.
- Technological innovations: the fourth water plant adopted gravity flow supply (utilising a 120-meter terrain elevation) to eliminate pumping stations, cutting annual electricity costs by RMB 1.2 million.
- Drone-based leak detection and pollution source monitoring improved fault response time from 30 minutes to 5 minutes, boosting operational productivity by 83%.
- Despite initial procurement delays due to preparation of bidding documents, the project maintained an average bidding cycle of 63 days (below the 90-day industry average) and achieved timely loan closure in July 2024, earning a "Successful" efficiency rating.



92. Similarly, green transport projects have delivered strong cost efficiency. The Yinchuan Integrated Green Transport Project achieved a 23% reduction in total costs through competitive bidding, with its completion EIRR exceeding the appraisal estimate of 14.8%. Notwithstanding, the Bank's preliminary self-evaluation also noted that large electric buses (12- and 18-meter) operated below capacity during the first year of operation, mainly due to ongoing route optimisation, AI-enabled dispatch, and lower-than-expected ridership. It further observed that project cost savings could be maximised through timely and proactive fleet optimisation. These insightful lessons highlight the importance of aligning project design with comprehensive feasibility studies and robust sectoral and regional analysis, which could further enhance economic and operational efficiency.

93. Common strengths across the portfolio include robust cost control via leveraging China's country systems in public procurement (notably in recent years), technical innovation, local currency financing, and adaptability. Eighty percent of evaluated projects achieved over 10% cost savings through competitive open tenders, design optimisations, and domestic equipment substitution. Advanced technologies — digital twin (Beijing Gas LNG), AI-driven scheduling (Yinchuan Green Transport), and Internet of Things sensors (Shengzhou Water) — effectively boosted operational efficiency. Diversified disbursement methods (direct payment for Putian Offshore Wind, reimbursement for Yangjiang Offshore Wind) supported over 85% loan utilisation across most operations. Widespread local currency financing reduces swap market reliance, enhancing financial efficiency with lower costs than hard currency — especially post-2022. Projects also showed strong adaptability to unforeseen challenges: the Shengzhou project's dual-supplier reserve ensured 60% construction progress during 2022 COVID-19 pandemic outbreaks.

Box 6: Hubei Huangshi Modern Tram Project: Early completion and low-cost delivery

The project exemplifies efficient urban transport delivery: completed six months ahead of schedule amid COVID-19; actual investment of RMB 3.62 billion (26% below the RMB 4.89 billion approved budget) with a unit cost of RMB 12.7 million/km — China's lowest for comparable trams (Suzhou: RMB 17.2 million/km; Zhuhai: RMB 20.2 million/km). This was achieved via streamlined procurement (overcoming initial three- to six-month tendering delays from design approval lags) and refined designs, including realigning municipal power substations to shorten power supply distance.
It maintains solid economic viability with an EIRR of 11.08% and integrates a unified smart dispatch platform for buses and trams, enhancing operational coordination. Its "Successful" efficiency rating reflects strong resource conversion and adaptive management amid external disruptions.

94. Despite these achievements, several challenges persist. In addition to the issues outlined in earlier sections, the CPE also observed that USD- or EUR-denominated loans have exposed certain operations to market risks, resulting in higher financial costs, given that the NDB does not yet offer flexible loan instruments. Asset underutilisation has tied up committed resources in some instances, owing to weak demand or delays in the provision of matching funds.

95. Institutional gaps in certain non-lending support areas have further constrained the achievement of maximum operational efficiency. Prior to 2022, relatively insufficient training provided by the NDB left some implementing agencies unfamiliar with the Bank's procurement and financial management policies and procedures. Furthermore, high turnover among NDB project team leaders — resulting from several organisational restructurings at the Bank — negatively impacted implementation consistency, leading to repeated document revisions and processing delays in a few projects. The situation has improved gradually in recent years as the Bank has placed greater focus on addressing these critical issues.

96. Accordingly, targeted optimisation measures can further enhance efficiency. For offshore wind projects, comprehensive pre-project geological and policy surveys can mitigate delays. Transport projects should prioritise integrated network planning and "last-mile" connectivity (e.g., synchronising bike lane and feeder bus development with station openings) to expand catchment areas and improve asset utilisation. Overarching institutional improvements are critical to sustaining efficiency: NDB should further standardise processes via documentation templates and knowledge management platforms, strengthen risk assessments — including scenario planning for policy shifts — to better prepare for unforeseen disruptions. Introducing currency conversion tools, more flexible disbursement adjustments (enabling swift reallocation of unused funds to eligible complementary components), and summarising lessons learned from the two result-based lending to see how to boost fund utilisation. A borrower-facing digital portal for drawdown requests — where NDB lags peer MDBs — should be implemented promptly to accelerate processing and enhance real-time engagement. Finally, deeper coordination with local authorities to align NDB requirements with domestic regulations (e.g., pre-negotiating tender templates) can reduce procurement delays.

97. In conclusion, NDB's China portfolio delivers "Successful" efficiency by leveraging technical innovation and localised solutions, robust cost control, local currency financing, and adaptive implementation. Energy and airport projects consistently meet high efficiency standards, while urban transit and industrial transition projects balance strong infrastructure delivery with operational challenges. While some challenges persist, targeted improvements in planning and preparation, flexible loan products, and more integrated institutional coordination can further elevate efficiency. By addressing these gaps, NDB can further improve economic, environmental, and social value, serving as a model for efficient infrastructure financing in emerging markets.

Criterion	Rating
Efficiency	**5**

E. IMPACT

98. Impact is defined here as the long-term, transformative effects of NDB's lending activities beyond immediate project outputs, measured against alignment with China's national development priorities and NDB's mandate. The impact of the NDB's lending portfolio in China is rated "Successful", reflecting substantial and multi-dimensional positive outcomes across environmental sustainability, economic growth, social inclusion, and technological innovation. Operations evaluated by this CPE have demonstrated strong performance in decarbonisation, industrial catalysis, and livelihood improvement.

99. Environmental impact is a cornerstone of the portfolio's success, driven by aggressive decarbonisation and ecological stewardship. Energy projects lead emission reductions: the Lingang Distributed Solar Project avoids approximately 46,133 tons of CO_2 annually, the Putian Offshore Wind Project cuts 800,000 tons/year, and urban transport initiatives like Yinchuan's fully electrified bus fleet reduce NO_X emissions from 37 to 26 mg/m^3. Beyond

carbon mitigation, the projects place a strong emphasis on ecological conservation. The PIU of the Guangdong Yangjiang Offshore Wind Power Project carried out marine ecological compensation through stock enhancement and release activities: between 2020 and 2023, a total of 400,000 black sea bream fry, 21 million Pacific white shrimp fry, and 15.5 million juveniles of other commercial aquatic species were released.

100. Critically, these environmental gains directly translate to public health improvements — reduced air pollutants in densely populated regions like the Pearl River Delta lower respiratory disease risks, and cleaner water sources in Zhejiang Province eliminate incidents of waterborne illnesses in served communities, demonstrating how infrastructure investments converge environmental sustainability with human well-being. Urban transit projects further contribute to environmental sustainability by reducing greenhouse gas emissions and traffic congestion: Qingdao Metro Line 6's adoption of fully enclosed shield tunnelling cuts PM 2.5 concentrations by 40% during construction, while Yinchuan's electric bus fleet eliminates tailpipe emissions of CO_2, SO_2, and NO_X, thereby improving air quality and public health for urban residents.

101. Beyond environmental impact, NDB-financed operations act as economic multipliers, driving inclusive, high-quality growth in project areas. Economic impacts derive from industrial clustering and job creation that unlock regional growth, with infrastructure investments delivering long-term socio-economic benefits. Urban infrastructure drives substantial employment: Luoyang Metro generated over 10,000 direct and indirect jobs (360 female regular roles, 1,832 non-regular positions in security and maintenance), while Qingdao Metro Line 6 supports 1,000 long-term operational roles — with per billion RMB invested boosting GDP by RMB 2.63 billion. Offshore wind projects are powerful economic multipliers: the Putian Pinghai Bay Project attracted Shanghai Electric to build a local base integrating research and development, production, and operations and maintenance, contributing RMB 300–400 million in annual local tax revenue and spurring auxiliary industries — for instance, the number of local restaurants grew from 1 to 10 during implementation. Meanwhile, the Yangjiang Shapa Project has supported the establishment of a national offshore wind manufacturing and logistics hub in Guangdong: the Yangjiang base of Mingyang Smart Energy Group, which is now Asia's largest dedicated offshore wind turbine main assembly facility by physical scale, lifting capacity, workshop span, and annual production capacity.

Box 7: Guangdong Yudean Yangjiang Shapa Offshore Wind Power Project: Sector and socio-economic impact

This pioneering project exemplifies transformative sectoral and inclusive socio-economic impact:

- **Sector catalysis:** It has catalysed the development of an RMB 46 billion offshore wind industrial cluster with 42 supporting enterprises, establishing Yangjiang as a national hub (accounting for 43.8% of Guangdong's offshore wind equipment output). Turbine supplier Mingyang Smart Energy invested over RMB 8 billion in a fully integrated value chain (production, assembly, marine logistics, and maintenance), creating around 3,200 direct and 8,500 indirect jobs. Some 89% of operational roles are filled by local residents, with salaries 20%–30% above the regional average.

- **Environmental stewardship:** It delivers annual savings of approximately 259,500 tonnes of standard coal equivalent and 524,300 tonnes of CO_2 emissions, equivalent to the carbon sequestration of more than 1,400 hectares of forest each year. This supports Guangdong's coal-fired power capacity phase-out (4.6 GW decommissioned by 2021).

- **Innovation and replication:** Has facilitated the development of 37 patented construction technologies (e.g., typhoon-resistant turbines, AI-driven smart control systems), supported the formulation of five national and industry standards, and secured copyright protection for nine software programs. The project also delivered the world's first domestically completed rock-socketed three-pile jacket foundation for wind turbines.

102. **Enhancing connectivity emerges as a key driver of high-quality urban development** — projects like the Huangshi Tram connect old and new urban districts, cutting cross-district commute time and driving a 15% growth in commercial land values along routes, while Yinchuan's green transport network extends the city's public transport coverage to 100%, enabling rural residents to access urban jobs and education. Utility investments further boost local economies: the Jiangxi Natural Gas Project attracts over 30 enterprises, propelling Yichun's lithium battery industry to an output of over RMB 50 billion and creating 30,000 indirect jobs in downstream sectors, while the Shengzhou Water Project's follow-up "water supply/sewage network integration" initiatives mobilise RMB 800 million in investment and 1,500 temporary jobs, attracting 50 enterprises to Changle Yazhang Industrial Park (up from seven–eight) by resolving industrial wastewater constraints.

103. Notably, urban transit projects reduced last-mile transfers, a critical barrier to public transport adoption. The Qingdao Metro Line 6 and Huangshi Tram integrated with bus networks and deployed shared e-bikes at selected stations, reducing the need for multiple transfers in served areas. This seamless connectivity not only boosts public transport ridership — Yinchuan's public transport share in all motorised travel rose from 54% to 60%[12] — but also enhances economic productivity by cutting commuter stress via innovative operational models such as the Yinchuan Smart Bus app-based Public Transport System, which covers a service area of approximately 20 km^2 in two key districts of the city — enabling workers and students to utilise responsive ride-hailing bus services — although more efforts should be made to further refine the design of these operations and continually improve transport system integration.

104. For businesses, improved connectivity expands customer bases and enhances supply chain efficiency: the Huangshi Tram's connection of industrial zones, scenic areas, and commercial hubs has accelerated the city's transition from a resource-dependent economy to a diversified one, with its GDP exceeding RMB 200 billion since the project's launch, though the CPE believes that the NDB indeed missed some opportunities to collaborate more closely with the PIU to further refine the tram system's route, length, and strategic positioning, which could have maximised its impact more effectively and efficiently. Among all NDB's lending to China, the largest share comes from the COVID-19 Emergency Assistance Programme, 50% of which was allocated to directly support the country's post-pandemic economic recovery, as shown in the box below.

Box 8: COVID-19 Emergency Assistance Programme: Rapid impact for economic recovery

The RMB 14 billion emergency loan (two RMB 7 billion tranches) delivered a timely, targeted impact during the pandemic:

- **Healthcare resilience:** First tranche supported expanding over 70 hospitals, procured RMB 2.3 billion in anti-epidemic supplies, and provided free nucleic acid tests for 1 million+ people, cutting suspected case diagnosis time by 50%.
- **Economic recovery:** Second tranche created 44.7 thousand jobs (40.7 thousand rural, 4,036 enterprise-related); the Agricultural Development Bank of China on-lending backed agricultural processing/cold chain projects, stabilising incomes for over 9.5 thousand rural households.
- **Enterprise relief:** The Export-Import Bank of China on-lent the NDB funds to 14 foreign trade firms in resuming orders, generating RMB 8.09 billion in upstream/downstream procurement and safeguarding over 2 thousand manufacturing jobs.
- **Inclusive support:** 52% of new jobs went to women, 35% to rural residents (easing inequality); flexible terms (five-year grace period + 15–25-year repayment) minimised local borrowers' fiscal strain.

12 Data from the latest draft NDB PCR indicate that the share of public transport in all motorised trips includes buses, taxis, and other forms of urban public transport, such as the 6.9 km monorail in Yinchuan.

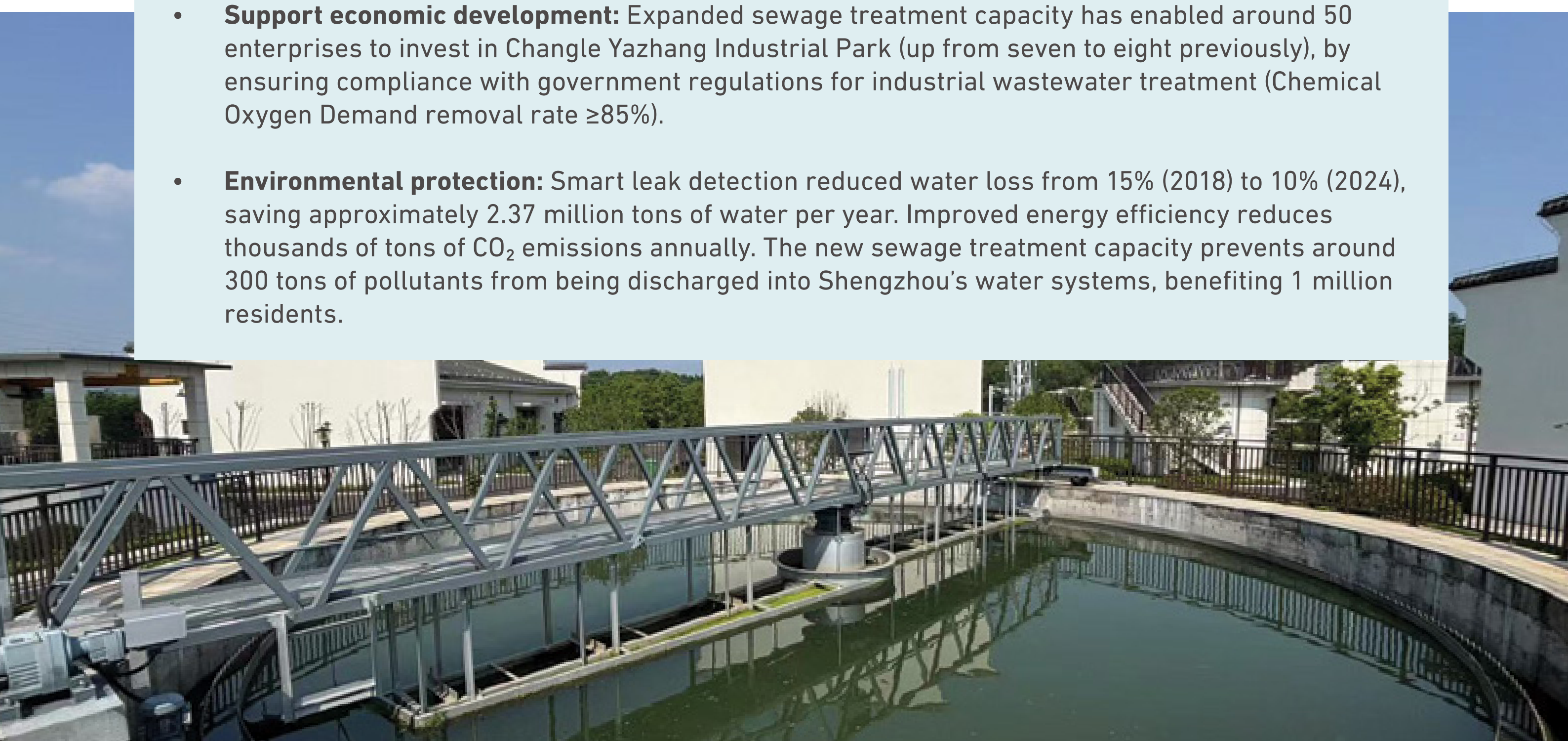
105. The social impact of NDB's lending portfolio further embodies balanced, inclusive service expansion, livelihood improvement, and community empowerment — ensuring no group is left behind. Projects prioritise equitable access to essential services: the Jiangxi Natural Gas Transmission Project cuts gas prices in the provincial network's final 45 counties from RMB 5/cubic meter (LNG retail) to RMB 2.8 (pipeline), saving rural households RMB 800–1,200 annually and reducing gas accidents by 60%. The Shengzhou Integrated Water Project has delivered strong social benefits by achieving full rural water supply coverage for villages and resolving water quality and supply shortages during rainy and dry seasons. It has supported local economic development by expanding sewage treatment capacity, which enabled about 50 enterprises to invest in the local industrial park while meeting wastewater treatment regulatory requirements. It also reduced water loss, CO_2 emissions, and pollutant discharge, saving millions of tons of water annually and benefiting around 1 million local residents (detailed in box 9). Cultural integration boosts social cohesion: Qingdao Metro Line 6's "one station, one scene" art design integrates local heritage (e.g., Huangdao paper-cutting, coastal scenery), engaging the public in ticket design and poetry contests. Its industry-themed play "Metro Line 6" has toured 30+ times nationwide, reaching over 10,000+ frontline workers and boosting public recognition of the NDB-funded initiative.

106. For vulnerable groups, barrier-free facilities — such as platform gap fillers in Luoyang Metro and AI-assisted accessibility systems in Qingdao Metro — ensure accessibility for wheelchair users, the visually impaired, and elderly passengers, benefiting over 20,000 disadvantaged individuals each year. Community engagement initiatives further enhance social value: the Putian Wind Project supports sustainable alternative livelihoods for fishermen (e.g., shipping company ownership) and ensures equal treatment for female employees (with 38 permanent and 47 temporary positions) by offering flexible working hours, while Yinchuan's green transport project conducts 38 Hui ethnic cultural training sessions to promote ethnic harmony in the Ningxia region.

Box 9: Shengzhou Integrated Water Project: Inclusive growth and livelihood impact

This project delivers tangible social, economic, and environmental benefits for urban-rural communities:

- **Social inclusion:** Achieved full integration of rural water supply (100% coverage for villages below 200 meters in elevation), ending the problems of "muddy water during the rainy season and water shortages in the dry season."
- **Support economic development:** Expanded sewage treatment capacity has enabled around 50 enterprises to invest in Changle Yazhang Industrial Park (up from seven to eight previously), by ensuring compliance with government regulations for industrial wastewater treatment (Chemical Oxygen Demand removal rate ≥85%).
- **Environmental protection:** Smart leak detection reduced water loss from 15% (2018) to 10% (2024), saving approximately 2.37 million tons of water per year. Improved energy efficiency reduces thousands of tons of CO_2 emissions annually. The new sewage treatment capacity prevents around 300 tons of pollutants from being discharged into Shengzhou's water systems, benefiting 1 million residents.



107. The technological and sectoral impact of the Bank's projects in China is driven by innovation and replicable good practices that elevate industry standards. Qingdao Metro Line 6's TACS — a world-leading traction control technology — enables direct train-to-train communication, setting a benchmark for smart urban rail transit domestically and internationally. This system is now promoted nationwide and internationally, with technical consulting provided to Shenzhen, Chengdu, and Saudi Arabia's Mecca-Medina High-Speed Railway, showcasing the portfolio's role in advancing global infrastructure innovation. Luoyang Metro's energy-saving Heating, Ventilation, and Air-Conditioning system, which cuts station energy use by 35%–40% through split cooling systems and piston wind utilisation, has been certified by the China Association of Metros as a good practice and adopted in all new metro stations nationwide.

108. Most notably, offshore wind projects pioneer engineering breakthroughs: the Putian Project's large-diameter monopile-suction bucket foundation, developed for complex rocky seabeds, has been replicated in other coastal provinces of China, while the Guangdong Yangjiang Project's typhoon-resistant turbines (protected by 37 patents) demonstrate resilience in extreme weather, with a 97% availability during typhoon seasons. These innovations not only improve project efficiency but also strengthen China's global competitiveness in renewable energy and smart infrastructure sectors, with 60% of global wind power generation equipment now sourced from China.

109. The overall development impact of NDB's China portfolio is profound. Aligned with China's "dual carbon" goals, rural revitalisation, and transport modernisation, the portfolio has accelerated green transition, reduced urban-rural inequalities, and strengthened regional economic resilience. Energy projects solidified China's global leadership in clean energy deployment, while urban infrastructure transformed mobility, expanded access to public services, and enhanced the quality of life for millions of residents. With a focus on inclusive growth, the portfolio has fostered social cohesion and narrowed development disparities, while delivering tangible social benefits across its projects — notably livelihood improvements for local communities across Shengzhou and Jiangxi. Additionally, it catalysed institutional capacity building: implementing agencies gained valuable NDB project management and cross-sectoral policy alignment experience, with lessons replicated in later initiatives. These impacts have delivered tangible short-term benefits and laid the groundwork for long-term sustainable development, demonstrating how multilateral financing can catalyse inclusive, green growth in emerging economies — though it could drive more systemic cross-regional and cross-sectoral changes by moving beyond individual project boundaries.

110. Despite the portfolio's strong overall performance, the IEO noted that baselines and data collection mechanisms for performance indicators in the project documents to the Board (PDBs) of several early projects could be further strengthened, a key prerequisite for rigorous impact assessment. Such refinement would reduce the difficulty of robustly evaluating projects' broader outcomes and impacts, while enabling the Bank and project entities to better and comprehensively capture their full, precise, and attributable development contributions.

111. Additionally, environmental performance could be further improved by addressing the cumulative ecological impacts of certain operations. While individual projects implement mitigation measures, the cumulative impact of multiple offshore wind projects in the Yangjiang coastal zone has shown signs of a potential decline in fish egg density, underscoring the need for ecosystem-level environmental assessments rather than project-specific mitigations. Urban transit projects, while reducing greenhouse gas emissions, are still in the process of systemic integration with non-motorised transport in some cases, for example, developing dedicated bicycle lanes in parts of Qingdao Metro Line 6 could contribute to further emission reductions through mode shifts. For utility projects, completing rural sewage pipe network construction would also help gradually eliminate sewage discharge into water bodies in a number of villages and improve the utilisation of wastewater treatment facilities, which would further strengthen the projects' positive environmental outcomes.

112. In conclusion, the Bank's projects in China have delivered a "Successful" impact by using lending to drive decarbonisation, inclusive growth, and technological progress. The portfolio evaluated in this CPE has demonstrated how multilateral financing can address urgent challenges, bridge urban-rural gaps, and catalyse industrial transformation. Its key strengths lie in the delivery of E&S benefits and the creation of replicable models for other emerging economies. Further strengthening the reporting and data collection systems, theory of changes, and impact assessment methodologies will continue to enhance the portfolio's long-term results. The overall impact of the portfolio has underscored NDB's value as a reliable development partner for China, accelerating China's transition to a low-carbon, inclusive economy while providing actionable lessons for other emerging economies.

Criterion	Rating
Impact	**5**

F. SUSTAINABILITY

113. The sustainability of the NDB-financed project portfolio in China is assessed as "Successful", reflecting the portfolio's strong performance across core dimensions — operations and maintenance, financial viability, E&S impact, and institutional/technical capacity. Renewable energy projects consistently excel in operational resilience, while urban public welfare infrastructures (metro, tram) rely on structured and stable government subsidies to sustain public service and welfare delivery. Utility projects (water supply and sanitation, natural gas transmission system) address unique challenges such as unmet demand and rigid cost structures, yet maintain overall viability through robust policy/institutional support and technical optimisation. Notably, the portfolio aligns closely with China's "dual carbon" goals, leveraging innovative technologies and policy synergies to enhance long-term sustainability.

114. Government commitment and institutional support form the foundation of the portfolio's sustainability, critical for mitigating long-term risks and aligning projects with national/local development priorities. Policy-wise, projects like Qingdao Metro Line 6 are anchored by local regulations such as the Qingdao Municipal Rail Transit Construction Management Measures, which establish a "government-led, diversified investment" principle and integrate the project into the city's key industrial cluster plans. Financially, governments provide structured subsidies: the Huangshi Tram secured a 30-year (2023–2053) cumulative subsidy commitment of RMB 4.6 billion, with 2024 subsidies accounting for just 1.1% of municipal fiscal revenue to avoid budget strain. Cross-divisional coordination further strengthens operations — Qingdao Metro leverages a "project express" team led by the Municipal Administrative Examination and Approval Bureau, linking over 10 district-level agencies to cut approval time by 40%. Projects like Jiangxi Natural Gas Transmission System are integrated into provincial "14th Five-Year Energy Plans", ensuring alignment with broader energy infrastructure strategies and long-term operational synergy.

115. Beyond policy alignment and financial subsidies, the central government has established a three-dimensional management mechanism ("policy-led, full-cycle supervision, multi-dimensional guarantee") for sovereign operations financed by all IFIs operating in China (including NDB) — a cornerstone for sustainability. Project selection aligns strictly with national/local development plans and is incorporated into the national *Foreign Loan Candidate Project Plan* for the State Council's approval. Project screening process adopts a multi-dimensional approach: verifying economic metrics (financial internal rate of return [FIRR], payback period), ensuring locally suitable technical schemes and localisation requirements, and implementing risk-classified management (environmental/social) per international standards. Fund management forms a critical closed loop via refined control and risk prevention. Debt risk management is enhanced by provincial statutory debt service reserve funds and a three-level (provincial/municipal/county) early warning mechanism, with targeted measures for high-risk regions.

116. Operations and maintenance (O&M) sustainability is a key strength for NDB's operations in China, with tailored systems across project types — particularly in renewable energy. The Lingang Solar Power Project established a dedicated O&M unit, supported by a contractor with over 1.5 GW of solar photovoltaic operation experience, delivering routine inspections and repairs since the commissioning of its first two sub-projects. Offshore wind projects set higher benchmarks: the Putian Pinghai Bay Offshore Wind Power Project operates at full capacity with a 90% overall turbine availability rate, supported by real-time monitoring and scheduled quarterly/annual inspections. It also plans for post-warranty O&M (2022–2027 warranty period) with flexible options (Original Equipment Manufacturer collaboration, third-party outsourcing, in-house capabilities) and an annual budget of RMB 25.7 million.

Box 10: Guangdong Yudean Yangjiang Shapa Offshore Wind Power Project: A model of holistic sustainability

The Project exemplifies replicable good practices in operational, environmental, and social sustainability:

- **Operational resilience:** Developed in-house maintenance teams for marine vessels, turbine components, and electrical systems, achieving a turbine availability rate of 97.8% in 2024 (above the international benchmark range of 94%–96%). The project has partnered with Mingyang Smart Energy to secure guaranteed component supply through 2040, ensuring long-term technical support.

- **Climate resilience:** It withstood multiple typhoons in 2025 (e.g., Typhoon Ragasa, with sustained winds of 185 km/h) without sustaining any structural damage, supported by jacket-type foundations, high-strength steel towers, and real-time Supervisory Control and Data Acquisition monitoring.

- **Environmental stewardship:** Established 180 hectares of aquaculture zones beneath and around turbine arrays. 2022–2023 monitoring showed seawater quality met Class I standards, with 50 phytoplankton species, 68 zooplankton species, and 49 benthic species recorded (Shannon-Wiener diversity indices: 2.16–3.93), indicating a healthy marine ecosystem.

- **Social value:** The Project has carried out rural revitalisation and livelihood support activities, and provided targeted donations in Shangyang Town, Yangxi County, with annual contributions totalling nearly RMB 500,000. It also delivered science lectures and donated books to local schools, promoting school-enterprise collaboration and educating students on renewable energy.

117. Urban rail transit projects combine technical innovation with standardised O&M to balance efficiency and public service. Luoyang Metro's Maintenance Engineering Department oversees operations with ongoing recruitment and training of technical staff. It piloted energy-saving Heating, Ventilation and Air-Conditioning technologies (split systems for public/equipment areas, magnetic levitation compressors) that cut energy consumption by approximately 40% per station, later scaled to 14 Line 2 stations. The Huangshi Tram maintains a 99.9% timetable fulfilment rate (exceeding the 99% industry benchmark) with a certified O&M team comprising supplier specialists and staff transferred from bus companies. Qingdao Metro Line 6 integrates smart construction platforms and prefabricated technologies into Qingdao's metro standards, reducing long-term O&M costs and replicating innovations (e.g., TACS system, flywheel energy storage) in subsequent lines.

118. Utility projects emphasise scalable O&M and risk mitigation to serve broad user bases. The Shengzhou Water Project adopts a phased approach for sewage facilities: initially engaging third-party firms with proven expertise while training in-house teams for future handover. By 2025, its parent shareholder expanded to 278 employees in total (24.8% holding intermediate technical or engineering titles), ensuring technical competence. Drone inspections and gravity-fed water supply also reduce energy use and operational risks. The Jiangxi Natural Gas Transmission Project relies on a standardised O&M system with 54 provincial-level construction methods, a dedicated material department for spare parts, and fibre optic sensors along pipelines to detect leaks or climate-induced disturbances — even in remote counties with low pipeline utilisation (<30%).

119. Financial sustainability varies by project type: renewable energy projects maintain stable viability, while public welfare and utility projects face subsidy dependence or demand and revenue gaps. Renewable energy projects demonstrate robust performance: the Lingang Solar Project's post-tax FIRR (6.15%) exceeds the weighted average cost of capital (WACC) (2.40%) despite subsidy cuts; the Putian Offshore Wind Project's FIRR rose from 6.42% (appraisal) to 9.10% (completion), driven by higher electricity generation and lower costs; the Yudean Yangjiang Offshore Wind Project cut operational expenditure to RMB 0.18/kWh (2024) and diversified revenues via long-term project performance assessments (PPAs), provincial subsidies and marine logistics income. It also established an RMB 131 million decommissioning fund (for 2046) to ensure lifecycle cost coverage.

120. Urban rail transit, as public welfare infrastructure, relies heavily on structured government subsidies to offset low farebox revenue. Luoyang Metro received combined subsidies of RMB 524 million (2021) and RMB 743 million (2022) from provincial and municipal governments, with plans to generate approximately RMB 299 million per year from commercial space and advertising. The Huangshi Tram's FIRR improved from -1.98% (appraisal) to -0.9% (completion), but fares cover only 6.7% of O&M costs, requiring long-term subsidies and support. Qingdao Metro Line 6 faces similar challenges, with an EIRR below 10% as estimated by IEO, necessitating annual subsidies of RMB 306 million. Notably, all project entities have made ongoing efforts to generate non-farebox revenue through advertising, in-station retail, and even external consulting.

121. In general, utility projects have demonstrated relatively robust economic viability, although a small number of isolated cases experience challenges in meeting sales targets, which limits their optimal sustainability from a financial perspective. For instance, the Jiangxi Natural Gas Transmission Project faces notable financial pressures, with an FIRR of 0.81% (well below the 1.67% WACC). This is driven by transmission tariffs that are 25% lower than planned, 51.1% unmet gas demand, and surging USD-denominated borrowing costs. Provincial support to the PIU is critical to covering long-term O&M costs.

122. Environmental sustainability is a portfolio highlight, with measurable benefits aligning with NDB's green mandate. Renewable energy projects lead decarbonisation by cutting a significant amount of CO_2, NO_X, and SO_2 emissions. Urban projects minimise resource use: Qingdao Metro Line 6 achieves 100% resource utilisation of construction muck and reduces carbon emissions by 18%–20% of the baseline; the Huangshi Tram Project uses permeable pavements to replenish groundwater and achieves 100% survival of transplanted plants. Utility projects prioritise efficiency: the Shengzhou Water Project saved 2.37 million tons of water in 2024 via leak reduction; Jiangxi Natural Gas restored 95% of vegetation along pipeline routes, complying with NDB's ESF.

123. Projects have generally gone beyond formal compliance to enhance ecological protection and climate resilience. The Putian Pinghai Bay Offshore Wind Power Project conducts one- to three-year assessments of foundations and undersea cables to mitigate storm risks. Qingdao Metro Line 6 uses P12-grade self-compacting concrete and multi-layer waterproofing, reducing leakage rates by 80% in its coastal climate. Jiangxi Natural Gas uses 316L stainless steel for key components to enhance corrosion resistance, ensuring infrastructure durability in humid regions.

Box 11: Anhui Tongling G3 Road-Rail Bridge Project: Balancing infrastructure with ecological protection

Project overview: The 11.96 km G3 Tongling road-rail bridge (NDB-approved Dec 2022), crossing the Yangtze River, lies within the Yangtze River Dolphin National Natural Reserve experimental zone — critical habitat for the International Union for Conservation of Nature-listed, national Class I protected Yangtze finless porpoise and 14 other endangered species. Its potential biodiversity impacts triggered NDB's critical habitat policy.

Core environmental challenges: Construction/operation risked habitat loss, noise disturbance, water pollution, and threats to the porpoise's feeding/breeding/migration, plus cumulative impacts with existing infrastructure and non-compliance reputational risks.

Mitigation and governance: Engaged third-party biodiversity experts, integrated an Aquatic Life Conservation Plan into the Environmental and Social Impact Management Plan; adopted single-span pillar-free river crossing, noise-reducing piling, and dry-season underwater construction (avoiding porpoise breeding); restored 2–3 km upstream/downstream beaches, installed real-time monitoring/dolphin detection devices, and established rescue systems.

Sustainability outcomes: Increased porpoise sightings near the site, restored riverbanks, and no adverse impacts on endangered species; boosted conservation awareness via training/engagement; fully aligned with NDB's critical habitat policy and national requirements, setting a model for balancing infrastructure and critical habitat protection.

124. Social sustainability is delivered through job creation, community investment, and inclusive benefits. The Shengzhou Water Project, one of the smallest sovereign operations financed by NDB in China, had generated almost 100 permanent jobs by 2024. Qingdao Metro Line 6 reduces construction noise by 20 decibels via vibration-damping track beds, minimising community disruptions. Projects prioritise vulnerable groups: the Huangshi Tram provides affordable fares for low-income residents and students; the Shengzhou Water Project guarantees rural water access; metro projects include barrier-free facilities for the elderly and disabled; the Jiangxi Natural Gas Transmission System Project ensures stable supply for hospitals and low-income neighbourhoods, treating the network as a "quasi-public good" in practice.

125. Despite its strong overall performance, the portfolio faces a few challenges: demand shortfalls constrain the full financial sustainability of a few utility projects; some projects lack detailed exit strategies (e.g., wind turbine decommissioning plans); and infrastructure governance remains fragmented (e.g., rural and urban water pipelines managed by separate local authorities). Key improvement measures include revenue diversification (e.g., commercial space at Luoyang and Qingdao Metro stations) and integrated infrastructure governance (e.g., unified management of water pipelines).

126. In conclusion, the portfolio demonstrates success in sustainability, driven by strong government commitment, a robust national and institutional framework for overseeing MDB lending (led by the MoF with strong support from provincial governments), technical innovation, and consistent delivery of E&S co-benefits, in compliance with the Bank's E&S safeguards. Renewable energy projects serve as models of holistic sustainability, while urban and utility projects leverage institutional support to address the inherent challenges of public service delivery. Improving financial sustainability and revenue diversification, exit planning, and infrastructure coordination will further enhance the portfolio's long-term impact, ensuring NDB's investments continue to align with China's sustainable development goals and NDB's mandate to foster inclusive, green growth.

Criterion	Rating
Sustainability	**5**

G. OVERALL LENDING PORTFOLIO ACHIEVEMENT

127. The overall performance of NDB's lending portfolio in China has been positive, with substantial contributions to China's national development priorities — including the "dual carbon" goals, rural revitalisation, regional integration, and industrial green transition — and strong alignment with the SDGs. The portfolio is formally rated "Successful (5)" across all core criteria, reflecting consistent delivery of project objectives, transformative socio-economic and environmental outcomes, and long-term viability. Standout performance in local currency financing (68.8% of cumulative lending), renewable energy innovation, rapid response to the global health crisis, and inclusive infrastructure deployment have solidified NDB's role as a trusted development partner for China.

128. The "Successful" overall rating is driven by multiple key factors. These include strategic alignment with China's 13th and 14th FYPs, NDB's institutional strategies, and SDGs; technological innovation that enhances project efficiency and replicability; integrated ESG practices that prioritise ecological protection and social inclusion; strong stakeholder ownership and commitment from Chinese borrowers and government agencies; and effective leverage of country systems to streamline implementation. While some institutional challenges remain — including scope to strengthen monitoring and self-evaluation frameworks, the need for more robust sectoral and regional trend analysis to support sophisticated early-stage project design and feasibility studies, limited diversity in financial instruments, and occasional asset underutilisation — none of these undermine the portfolio's core mission, and many have been partially addressed through adaptive measures. Collectively, the portfolio demonstrates that targeted multilateral financing, combined with localised solutions and policy synergy, can effectively accelerate sustainable development in emerging economies.

Table 4: Summary of lending portfolio performance ratings

Criterion	Rating
Relevance	5
Effectiveness	5
Efficiency	5
Impact	5
Sustainability	5
Overall lending portfolio achievement	**5**

06 NDB AND BORROWER PERFORMANCE

A. NDB performance in lending activities

B. Borrower performance

06 NDB and borrower performance

A. NDB PERFORMANCE IN LENDING ACTIVITIES

129. Overall, NDB's performance in its lending activities in China is rated by the IEO as between "Moderately Successful (4)" and "Successful (5)", reflecting notable strengths in targeted local currency financing and adaptive support. As one of NDB's largest and most efficient portfolios globally, the Bank's work in China benefits from close coordination with central authorities (such as the MoF and NDRC), robust partnerships with provincial-level project entities, a dedicated Shanghai-based China Desk, and a consistent strategic focus on sustainable infrastructure — although some missed opportunities preclude a higher rating.

130. A core strength lies in local currency financing, where NDB's China portfolio outperforms peer MDBs and is widely recognised by project authorities as a key component of NDB's value proposition in the country. As of December 2024, RMB denominated loans accounted for approximately 68.8% of cumulatively approved lending to China, effectively helping clients mitigate foreign exchange risk and reduce reliance on swap markets via leveraging its position as the largest issuer in the panda bond market. Since its inaugural RMB bond issuance in 2016, NDB has solidified its market standing through successive large-scale issuances. For example, the RMB 6 billion five-year panda bonds issued in January 2025 and the RMB 7 billion three-year panda bonds issued in April 2025 were both oversubscribed, with April offering achieving an oversubscription rate of 1.3x. Its issuance volume far outpaces that of other MDBs, attracting a diverse investor base including central banks and sovereign wealth funds.

131. Meanwhile, NDB has reduced its fundraising costs by refining issuance strategies, thereby benefiting all RMB borrowers: the interest rate on its five-year bonds issued in January 2025 hit an all-time low, trading approximately 30 basis points above the yield on Chinese government bonds of the same tenor. Furthermore, NDB's RMB bonds are eligible as collateral for central bank operations in China. Notably, the flexible use of NDB's panda bond funds has not only financed 19 onshore operations but also supported overseas projects — including but not limited to RMB-denominated loans to Brazil — thereby boosting cross-border usage of members' national currencies, lowering the borrowing costs of other NDB members via the swap of RMB into hard currencies, and effectively alleviating NDB's liquidity strain during the geopolitical crisis in 2022.

132. NDB has also demonstrated strengths in streamlined approval processes and adaptive implementation across most operations. Key projects saw impressively short cycles: the Huangshi Tram Project moved from its on-site fact-finding mission (June 2019) to Board approval (December 2019) in six months, while it took one and a half months from the appraisal mission of the Yinchuan Integrated Green Transport Project to the Board approval, meeting the target of NDB's first strategy. During the COVID-19 pandemic, the Bank shifted to virtual supervision (e.g., online reviews for the Jiangxi Natural Gas Transmission System Development Project) and flexibly approved amendments — such as the Huangshi Tram Project's 2024 financing ratio adjustment (approved within a month) — to keep projects on track. Most notably, the Bank's fast-track support for the COVID-19 Emergency stood out: within just 40 days of initiating dialogue with the Government, NDB approved its first loan to China on 19 March, 2020 — making it the first MDB to respond and act swiftly worldwide, while also providing China with the largest sovereign loan to finance direct pandemic response expenses. This was particularly significant because support for emergency assistance programmes was not explicitly provided for in either NDB's Mandate or its General Strategy 2017–2021.

Box 12: Exceptional responsiveness: NDB's Emergency Assistance Programme

NDB demonstrated exemplary agility in supporting China's pandemic response, delivering time-sensitive, high-impact assistance:

- Approved two sovereign loans totalling RMB 140 billion: the first RMB 70 billion in March 2020 via an innovative 40-day "fast-track" process (from government dialogue to Board approval), supporting Hubei, Guangdong, Henan with emergency medical infrastructure (e.g., disease control centres).
- Pioneered an "RMB thematic bond + lending" model via an RMB 50 billion anti-epidemic panda bond (April 2020), ensuring 29-day full disbursement to avoid foreign exchange delays. The second RMB 70 billion (February 2021) supported post-pandemic recovery via policy bank on-lending.
- Served as a blueprint for NDB's subsequent $100 billion Global Emergency Assistance Facility, with China's experience shaping support for other members a key South-South knowledge transfer example.

133. Regarding E&S and procurement compliance, NDB provided targeted guidance that enhanced project compliance and integrity for selected operations. It advised the Jiangxi Natural Gas Transmission Project to reroute pipelines around ecological redlines and establish a full-life-cycle ecological protection framework. For the Guangdong Yangjiang Shapa Offshore Wind Power Project, NDB recommended raising early contract termination default penalties from 5% to 15%, thereby ensuring timely grid connection before the expiration of the national feed-in tariff. In certain cases, the Bank also facilitated alignment between local procurement systems and NDB standards — evidenced by the Huangshi Tram Project's smooth procurement process and the training provided to the PIU of Lingang Distributed Solar Power Project during implementation.

134. Despite these strengths, the IEO believes that certain practices in appraisal, monitoring, and self-evaluation still warrant portfolio-level or even institutional-level review. For instance, in the IEO's view, the financial and economic assessments for certain early operations approved before 2022 could be further refined to consistently assess the overall cost of capital, financial performance, and operational efficiency of NDB operations, although such technical matters inevitably involve professional judgement. In particular, WACC calculations and financial analyses are suggested to be consistently applied to projects that generate notable revenue and are not fully dependent on subsidies or other external support, such as annual government legislative appropriations or discretionary grants, at the project design stage. It might be good practice to include the infrastructure's residual value in EIRR models as a negative investment cost at the end of the project period, calculated as the proportion of the remaining replacement life of the asset multiplied by the constant-price value of the infrastructure concerned. Focusing on the specific parameters underlying aggregate benefit or cost estimates in sensitivity analysis would strengthen the assessment of the true impact of individual changes, compared with a mechanical or isolated approach — for example, only assuming a 10%–20% reduction in benefits or a 10%–20% increase in costs. In addition, identifying switch values for each key variable — i.e., the values at which a project becomes marginal at appraisal — might also help highlight the project's risk exposure to key variables. This would, in turn, support an assessment of the likelihood that such switch values will materialise, as well as possible measures to mitigate or reduce the probability of deviations from the base case during project implementation.

135. Moreover, IEO believes the same hurdle rates should be applied consistently across all Bank-approved operations in the country when calculating economic net present value, clearly disclosed in PDBs, and maintained consistently

over the full lifecycle of individual projects for Economic Net Present Value analysis. While the Bank's 2022 adjustment of the hurdle rate for new project appraisals in China is consistent with prevailing market conditions and regulatory guidelines (originally issued by national authorities in 2006), the CPE is of the view that the revised rate should not replace the original approval-stage benchmark for the post-completion self-evaluation of projects approved under the earlier framework. Lastly, the CPE notes that certain isolated projects lacked comparability between appraisal and self-evaluation due to inconsistent time horizons (20-year evaluation period in PDBs vs. 13 years in PCRs). Specific economic benefits — such as productivity gains from reduced commuting time via rail transit — were captured in the economic analysis of two metro operations but excluded from the analysis of a comparable tram project.

136. Additionally, the Bank applied an inconsistent methodology to track the carbon reduction impact of its projects. A tram project, for example, adopted a Scope 2 emissions accounting framework to quantify indirect emissions from tram electricity consumption, countering the fallacy of "zero emissions". However, the PDB for an integrated green transport project only accounted for Scope 1 emissions, omitting indirect emissions from bus electrification; meanwhile, the design papers of two metro operations fully excluded carbon emission reduction benefits from their economic analysis.

137. While the average quality of China projects' PDBs has improved since the Bank's 2022 reorganisation, the IEO considers that design documents for some early operations still have room for further quality enhancement. For example, several projects approved during NDB's first General Strategy cycle lacked explicit, well-prepared Project Administration Manuals and missed opportunities to provide clearer guidance on organising project implementation. The DMF — NDB's key M&E tool — could also be strengthened in certain instances: the PDB for an integrated green transport project included neither a DMF nor an explicit "theory of change" to link objectives, inputs, activities, and outcomes; non-aeronautical revenue growth could be incorporated as a performance indicator in the DMF of an airport expansion project to comprehensively monitor and assess progress toward one of its goals as stated in the corresponding PDB; and key PDB objectives (e.g., increasing public transport mode share) could be better reflected in a metro project's DMF through dedicated inputs and activities, which would ultimately enhance the robustness of impact assessment. Furthermore, sound project design requires identifying clear, valid assumptions and risks, which should bridge cause-and-effect gaps across results levels and ensure alignment between activities and outputs, and between outputs and outcomes. IEO observed that several early projects did not capture critical assumptions or key risks at output and outcome levels in their DMFs, nor have these elements been comprehensively monitored and updated in the PPAs throughout implementation for these isolated cases.

138. Additionally, under NDB's institutional guidelines, a mid-term review (MTR) is only mandatory when a project faces significant challenges threatening the achievement of its outputs, or when the borrower/project implementation agency (PIA) requests a scope change. In all other cases, the Director General for Operations may approve a waiver based on sound justifications. By comparison, peer MDBs generally treat MTRs as routine self-evaluation exercises for most operations. Their purpose is to assess whether projects remain on track to deliver outputs, outcomes, and budget targets through a comprehensive review of institutional, administrative, and technical arrangements, safeguards, social dimensions, gender equality, economic and financial performance, operational priorities, risks, and other project design parameters. These reviews also entail updating the DMF where warranted. For some of the China projects covered in this CPE, MTRs — particularly those conducted after 2022 — have been carried out, with an aide-mémoire or memorandum of understanding prepared accordingly. MTR mission back-to-office reports included findings, recommendations, and time-bound action plans; yet very few of these exercises proactively revised the DMF to reflect potential shifts in expected outcomes arising from identified implementation issues or external shocks. This is partly because procedures for changes to sovereign transactions following Board of Directors' approval — covering major/minor classifications and approval hierarchies — were only formalised in NDB's policy framework in August 2024.

139. Furthermore, high staff turnover stemming from several reorganisations within the Bank has emerged as a critical challenge for certain early operations, amid frequent leadership changes: seven project managers for the Yinchuan Project (2019–2025), four for the Shengzhou Water Project (average tenure of one-and-a-half years), and over five for the Lingang Solar Project. These disruptions undermined knowledge continuity, delayed issue resolution, and required repeated stakeholder reorientation — impacting projects like Jiangxi Natural Gas, where inconsistent guidance has somewhat complicated procurement practice during early implementation.

140. Process inefficiencies and limitations in existing products further hindered effectiveness. To date, NDB has yet to introduce flexible loan products enabling currency conversions (e.g., from USD to RMB) or interest rate conversions for its non-RMB borrowers in China during the loan tenor. Additionally, drawdown requests are still processed via registered mail rather than a borrower-facing online platform — lagging behind peer MDBs — though a client portal system has been developed and is currently undergoing rigorous internal testing by the Bank's business stakeholders and Information Technology Division.

141. NDB also faced gaps in knowledge management and capacity building. While exceptions existed — such as the Ningxia Yinchuan Project's 14-page English knowledge product for Brazilian delegates and the Putian Wind Project's case study in the Multilateral Cooperation Center for Development Finance (MCDF) workshops — most projects lacked systematic knowledge transfer support due to capacity constraints, which is further examined in the "Non-lending activities" section of this report.

142. Nevertheless, NDB's self-evaluation system for its China operations has gradually evolved in recent years — with improvements following the December 2021 establishment of the China Desk. Supervision missions are consistently conducted at least annually post-COVID-19 by project managers with in-house ESG and procurement specialists, while post-mission memos are carefully prepared and issued on time. Project entities submit Project Progress Reports at least twice yearly, reviewed by project teams. Drawing on these, PPAs are prepared semi-annually with inputs from relevant finance, ESG, and procurement teams, reflecting the latest supervision mission findings, and with ratings updated in four areas: implementation progress and impact/outcomes achievement; contracting and funding; procurement policy, financial management, and reporting, covenants; and E&S impact management. Centrally reviewed by the Project Portfolio Management Department (PPMD), they are approved by the Director General for Operations for internal circulation. Nevertheless, the IEO considers that engaging more sectoral and subject specialists in missions, preferably in-house, would deliver greater added value to the projects by prioritising technical guidance for the continuous refinement of project design and early implementation over mere compliance with loan covenants and NDB policies.

143. The Bank's M&E quality has also benefited from China's rigorous and structured management system for MDB projects — covering the full project lifecycle with multi-dimensional collaboration. For example, all NDB sovereign operations in China undergo annual state audits by the National Audit Office or local audit authorities. Preparatory phase audits verify compliance with approval procedures and funding rationality; implementation phase checks fund disbursement, progress, and contract performance; post-completion audits confirm final account authenticity, objective achievement, and performance outcomes. State auditing's core is in-depth fund verification and standardised implementation, with results rigorously applied: non-compliant entities must rectify issues in a timely manner, and NDB project teams have consistently followed up on these rectifications in their supervision missions, PPAs, and monitoring reports since 2021.

144. Additionally, since Q4 2023, the PPMD has been issuing a brief memo every one to two months for all country portfolios, serving as a regular reminder, tracking, and monitoring tool that summarises outstanding issues based on finalised PPAs and associated reports, complementing the Quarterly Project Implementation and Disbursement Report to the Board. As a monitoring instrument, it allows the PPMD to track the Bank's project implementation and supervision progress — ensuring all key issues identified in PPAs are timely addressed by the respective project teams. It also reminds the China Desk Head and relevant project team leaders of projects

not timely field-visited or reviewed per NDB's guidelines. This CPE noted the PPMD's monthly brief memo for the China Desk is consistently with far fewer M&E delays and pending issues than those for other teams. This reflects that the implementation and supervision quality of NDB's China portfolio is generally higher than the Bank's overall average. Further evidence comes from Ernst & Young's Q4 2024 internal audit — covering project implementation, monitoring, and reporting procedures — which found no issues with sampled China projects (December 2021–March 2024). This outperforms PricewaterhouseCoopers' 2022 and KPMG's 2019 audit results, indicating steady improvements in the effectiveness of relevant processes and internal controls for NDB's China portfolio.

145. Before PCR preparation, project completion review missions are consistently conducted, followed by a detailed aide-mémoire. All China Desk-prepared PCRs undergo a two-tier review: first, internal peer review by the ESG, Procurement, Strategy, Policy and Partnerships Department, Legal, and Regulatory Compliance teams, followed by approval by the Director General for Operations, and the Vice President and Chief Operating Officer; second, phased clearance by the Bank's Credit and Investment Committee, comprising all five NDB senior management members. This process has improved PCR quality: all reports now feature a dedicated "lessons learned" section containing detailed implementation reflections. That said, the IEO observes that lessons and recommendations are intertwined in most PCRs, leading to generic statements lacking clear ownership and thus weakening the feedback loop to future project design. The IEO is of the view that segregating recommendations from lessons in future PCRs would bring greater conceptual clarity by distinguishing learning (what worked, what did not, and why) from actionable next steps. Overall, PCR quality is satisfactory: among four IEO-conducted project performance evaluations in China, over 65% of criteria aligned with PCR ratings, and three projects earned the same overall rating as their PCRs.

146. Furthermore, to address some of the operational gaps, the China Desk has proactively launched multiple initiatives since 2023, aimed at strengthening lending pipeline preparation and improving project quality. Among these, a series of national workshops co-organised by the China Desk, MoF, and NDRC at NDB's Shanghai Headquarters have been well-recognised by relevant external stakeholders. These workshops demonstrate strong additionality and high replicability for other NDB member countries — helping bridge policy and implementation gaps and enhancing project quality.

Box 13: Collaborative pipeline development: Workshops and supervision meetings

NDB's partnership with MoF China and NDRC co-organised targeted national events (October 2024–September 2025), exemplifying good practice in stakeholder engagement:

- **Pipeline supervision seminars** (October 2024, May 2025): Covered over seven provinces, focusing on pipeline projects (healthcare, logistics, water environment, and vocational education) in preparation and processing. For each proposed operation, structured 20-minute sessions (five-minute progress updates + 15-minute Q&A among central government agencies, NDB project teams, project entities, and provincial authorities) resolved preparation bottlenecks and clarified policy ambiguities. It also established a platform for project stakeholders to submit progress updates via a dedicated online portal, and facilitated experience sharing and lesson exchange among peer provinces.

- **Lending Pipeline Workshop** (September 2025): Featured senior officials from MoF, NDRC, and NDB's Vice President and Chief Operating Officer. It disseminated operational policies, shared good practices from flagship projects (e.g., Taiyuan Zero-carbon Airport Project and Yangjiang Shapa Offshore Wind Power Project), and provided expert guidance on low-carbon design and smart urban regeneration. Online participation options, post-meeting, and a WeChat group for knowledge sharing and training materials ensured accessibility.

147. It is important to highlight that the China Desk, under PPMD, is headed by a principal professional specialist and had only six staff members at the end of 2025. With less than 10% of the workforce of either the World Bank or ADB resident missions in Beijing, the volume of operations processed by the China Desk amounted to over 30% and 36% of the approvals by the two peers, respectively, over the period 2016–2024. However, it remains an informal operational unit under NDB's human resources and budgeting frameworks, whereas other NDB regional offices are led by a Director General who reports directly to the Vice President and Chief Operating Officer. While its proximity to headquarters enables rapid communication, limited resources and its informal administrative status constrain its ability to address complex portfolio challenges and maximise NDB's value addition for project stakeholders.

148. In conclusion, the evaluation assesses NDB's performance as being "Between Moderately Successful (4) and Successful (5)".[13] This reflects its capacity to provide targeted financing and adaptive support consistent with China's national priorities, as demonstrated by its swift COVID-19 response and joint efforts in building the project pipeline. At the same time, the IEO considers that the scope remains to further strengthen performance, as highlighted in the above assessment. By making steady progress in these areas, the NDB can better leverage China's robust institutional strengths to deliver higher-impact sustainable infrastructure and scale up this cooperation model across other member countries.

Criterion	Rating
NDB Performance	**Between 4 and 5**

B. BORROWER PERFORMANCE

149. Overall, the performance of borrowers and project entities is rated "Successful", reflecting proactive coordination and sustained commitment across the project lifecycle. NDB-funded sovereign projects in China involve multi-level stakeholders — national authorities (e.g., the MoF as the sovereign borrower), provincial governments (as project entities), local municipalities, and state-owned enterprises (as PIAs/PIUs). The three non-sovereign projects focus on on-lending arrangements through financial institutions such as commercial banks and leading financial leasing companies, and these institutions generally have relatively strong institutional capacity and robust internal controls. Collectively, they have ensured alignment with national development priorities while meeting NDB's core requirements for completion, compliance, and accountability.

150. Foundational strengths lie in robust multi-level coordination and strict financial compliance. Project stakeholders have established dedicated cross-departmental leading groups, often chaired by municipal mayors or senior provincial officials, to resolve bottlenecks such as land acquisition, municipal pipeline relocation, and inter-agency approval bottlenecks. For example, the Huangshi Tram Project formed a mayor-led team to streamline the power cable relocation, shortening implementation timelines; the Shengzhou Water Project set up a "four-level safety grid" and Party Member Task Forces, enabling it to close the loan account on schedule, with no extension, despite disruptions caused by the COVID-19 pandemic. Financially, government agencies like the provincial department of finance have supported PIAs/PIUs in submitting timely loan drawdown requests, conducting transparent designated account management, and adhering to on-lending rules.

13 In addition to the project-level individual ratings, the IEO also took into account the Bank's institutional and portfolio-level performance in its lending operations when determining the overall performance rating for this criterion.

151. Annual state audits confirm no significant fiduciary, implementation, or procurement irregularities in NDB fund usage across nearly all China projects. Most project progress reports and borrower project completion reports (BPCR) meet NDB's quality and timeliness requirements — e.g., the 2024 BPCR from the Guangdong Wind Power Project, commended by the IEO for its detailed technical and financial analysis.

152. Efficient project management and technological innovation stand out as key strengths across the portfolio. PIAs and PIUs have deployed digital tools and design refinements to control costs and accelerate schedules: Qingdao Metro Line 6 used Building Information Modelling and a smart construction platform to finish 11 months early and save RMB 550 million; the Huangshi Tram reduced costs by 26% through centralised procurement and design adjustments. Technological innovation has been widespread, with most projects having secured over 20 patents: Jiangxi's Natural Gas Transmission System Project developed corrosion-resistant duplex stainless steel pipelines (improving durability by 50%) and Tunnel Boring Machine synchronous grouting technology; Shengzhou's water supply project developed AI-driven smart dispatch systems and pipeline leak warning tools. Stakeholders also demonstrated strong adaptive resilience — during the COVID-19 pandemic, Guangdong Energy Group maintained supply chains via dual-supplier reserves, while the Yangjiang PIU implemented closed-loop construction to mitigate risks of delays.

Box 14: Exceptional borrower performance: Qingdao Metro Line Six (Phase I) Project

Rated "Highly Successful" (6/6), Qingdao Metro Line Six (Phase I) exemplifies outstanding borrower performance across four core dimensions:

- **Project management excellence:** The PIU delivered the ~RMB 19.7 billion project 11 months ahead of schedule, saving RMB 550 million via 50+ design optimisations (e.g., adjusted station layouts). Rigorous safety measures (fingerprint-enabled welding machines, four-level grid management) and quality controls (20 anti-seepage techniques) maintained "three zeros" (no building damage, collapses, or major complaints).

- **Technological innovation:** The PIU pioneered the first global Train Autonomous Circumambulation System, boosting turn-back efficiency by 21% with 32 invention patents. It deployed flywheel energy storage (saving 6.5 GWh/year, cutting 6,500 tons of CO_2) and won the Asia-Pacific Economic Cooperation (APEC) Public Transport Innovation Award, and China's Rock Mechanics Society Science and Technology Progress First Prize. Its six prefabricated stations (80% workforce reduction) were recognised as a national urban rail transit innovation.

- **Social and cultural impact:** Created 15,000 construction jobs (1,000 operational), recycled 1.75 million m^3 of TBM muck into aggregates, and built three pocket parks plus four park-and-ride facilities. The "Warm Community" model safeguarded migrant workers' rights; its industrial worker-themed drama (staged 30+ times nationwide) and summer camps for workers' children enhanced public recognition.

- **Knowledge and technical dissemination:** The PIU showcased TACS and green technologies at the International Trade Fair for Transport Technology (InnoTrans, Berlin, Germany) and the International Tunnelling and Underground Space Association (ITA) World Tunnel Congress (Genoa, Italy). It published 20+ core journal papers, provided technical consulting to Shenzhen/Chengdu, and partnered with Saudi Arabia's Mecca-Medina High-Speed Rail, advancing Chinese metro standards globally.

153. Borrowers have consistently prioritised social and environmental responsibility in line with NDB's safeguard standards. Socially, initiatives include workforce development — such as the Yangjiang PIU's collaboration with Guangdong Ocean University to provide local training — and community engagement: Shengzhou's water conservation campaigns reached 150,000 residents, and organised water and sewage plant tours for students. Environmentally, projects minimised ecological impact: Guangdong Energy Group conducted continuous marine ecological surveys in project's areas of influence throughout the construction and operation phases; the natural gas project in Jiangxi rerouted pipelines to avoid ecological redlines and implemented post-construction restoration measures; the Huangshi Tram Project adjusted construction design and engineering method when traversing local wetland areas; and Shengzhou's water project achieved full compliance with water plant standardisation requirements.

154. Despite overall success, several recurring challenges are identified. First, first-time NDB borrowers' initial unfamiliarity with MDB operational frameworks caused delays: an urban and rural water project had six-month tender delays from unfamiliarity with NDB procurement rules, and a natural gas project had four-month equipment procurement delays from inadequate communication/interpretation with NDB on "country systems". Second, relatively weak feasibility studies (inadequate demand forecasting) hindered operational efficiency: tram and metro projects had post-operational ridership below projections, while an integrated green transport project scrapped planned components mid-term due to insufficient early traffic congestion research and weak design. Third, isolated resource and coordination gaps emerged: 35.6% of the 826 direct current charging piles remained idle two years after installation in an integrated green transport project, due to shortfalls in matching funds — despite this gap representing only around 1% of total project cost, and Qingdao's metro could enhance "last-mile" connectivity at select stations with stronger cross-agency coordination.

155. Notably, Chinese borrowers have proactively driven knowledge creation, distillation, and international knowledge exchange, going beyond NDB's mandatory requirements. Projects have developed technical manuals, patents, and best practice reports — such as five national and industry standards from the Yangjiang project and publications in core journals from the Qingdao project. Internationally, they have hosted delegations from developing countries: the Shengzhou water project welcomed a delegation from the Africa Water and Sanitation Association and delegates from South Africa; the Ningxia transport project hosted a delegation from the Municipality of Maceió, Brazil. These efforts have positioned China's infrastructure solutions as global public goods, enhancing NDB's impact on sustainable development.

156. In conclusion, the successful performance of NDB's Chinese borrowers is driven by strong institutional coordination, efficient project management, technological innovation, and a commitment to E&S responsibility. While challenges such as initial unfamiliarity with IFI frameworks and gaps in demand forecasting persist, they are offset by the projects' achievements in timely delivery, compliance, and knowledge dissemination. The "Successful" rating reflects the borrowers' commitment and capacity to deliver tangible results aligned with national priorities and NDB's strategic goals, with standout cases setting benchmarks for global infrastructure cooperation.

Criterion	Rating
Borrower performance	**5**

07 PERFORMANCE OF NDB'S NON-LENDING ACTIVITIES IN CHINA

07 Performance of NDB's non-lending activities in China

A. STRATEGIC FOCUS ON NON-LENDING ACTIVITIES

157. NDB's non-lending activities — supporting its strategic objectives and complementing lending operations — are anchored in four core pillars: initially outlined in the 2017–2021 strategy and reinforced as mission-critical in the 2022–2026 update. First, TA provides project preparation support, addresses sustainable development needs through special funds, and includes advisory services/training to enhance private sector project viability. Second, capacity building strengthens members' local implementation capabilities via merit-based staff development, while advancing NDB's internal capacities. Third, research and knowledge sharing undertakes applied research aligned with the Bank's mandate, fosters South-South cooperation, and the 2022–2026 strategy further positions NDB as a hub for EMDC development challenge insights — with a focused emphasis on SDGs and climate goals. Finally, partnership development collaborates with multilateral/national banks, the private sector, civil society, and academia to leverage expertise and co-finance initiatives; building on these, the second strategy expands this pillar to drive increased resource mobilisation and information exchange, ultimately amplifying the Bank's developmental impact.

B. TECHNICAL ASSISTANCE

158. NDB's TA in China — a core component of its non-lending activities — generally aligns with the Bank's General Strategies by targeting project-specific technical, compliance-related bottlenecks to support project implementation. Provided as short-term, task-oriented assistance — without dedicated or separate funding — and embedded in the project processing procedures for NDB's China operations in recent years, TA has gradually achieved some objectives in facilitating project compliance and addressing immediate challenges for several selected operations, while facing notable institutional gaps in scalability, resource allocation, and systematic delivery.

159. In general, the Bank's TA for selected operations in China has largely aligned with NDB's overall policy framework, although implemented on an ad-hoc basis without a country programme or portfolio-wide support plan, with a primary focus on four priority areas across the project lifecycle: technological adaptation, compliance assurance (procurement and ESG), dynamic risk mitigation, and practical implementation support (loan disbursement guidance). Furthermore, the Bank's non-lending support in China avoids policy conditionality and tailors solutions to local contexts — from optimising renewable energy project designs to aligning procurement with ESG standards.

Box 15: Climate risk TA for Beijing Gas Tianjin Nangang LNG Emergency Reserve Project

In August 2023, NDB engaged ERM — a leading global sustainability consultant — to provide a specialised climate risk assessment for the Beijing Gas LNG Emergency Reserve Project (an E&S Category A project co-financed with AIIB). Going beyond standard practices, the TA focused on two critical priorities: (1) ensuring LNG tank safety amid extreme temperatures, floods, strong winds, storms, and other hazards; and (2) assessing risk materiality, project asset vulnerability, and formulating targeted risk prevention/mitigation measures.

Executed in line with Task Force on Climate-related Financial Disclosures (TCFD) and Equator Principles 4 (EP4) requirements, the assignment covered seven core facilities (a receiving terminal and five distribution stations). It leveraged historical hydrometeorological data and Intergovernmental Panel on Climate Change climate scenarios (Representative Concentration Pathway [RCP] 4.5, RCP 8.5) to identify risks, including LNG tank leakage from extreme high temperatures and electrical equipment damage due to flooding. Key outputs included wind-resistant tank reinforcement plans, supplier climate risk screening checklists, and a dynamic risk management mechanism — all integrated into the project's construction and implementation. This TA embodies NDB's task-oriented approach: It addressed specific technical barriers, ensured compliance with international standards (EP4, TCFD disclosure requirements), and delivered actionable solutions — reducing climate-related operational and financial losses to safeguard the effective use of NDB loan funds.

160. Operationally, the Bank's assistance has delivered tangible value to selected projects across sectors. In E&S risk management, as highlighted in the box above, NDB supported operations in meeting global standards; in procurement optimisation, NDB guided the Guangdong Yangjiang Offshore Wind Power Project to mitigate risks of contractor non-performance during China's offshore wind installation rush period — advising the PIU to raise the penalty for early contract termination from 5% to 15% and establish a "progress-performance-payment-linked" assessment mechanism. This assistance mitigated the risk of contractor default during the critical installation phase and was instrumental in ensuring the project achieved grid connection within the required timeline to maintain eligibility for the feed-in tariff. Additionally, training sessions were organised to strengthen project entities' understanding of NDB's procurement policies and practices, thereby ensuring full procurement compliance.

161. NDB's non-lending assistance has driven technical innovation and addressed early-stage technical uncertainties — exemplified by the Bank's support to the Anhui Tongling G3 Project, for which NDB engaged world-leading dolphin experts to assist the project in completing a supplementary biodiversity study and implementing an aquatic life conservation plan. Another impactful case is the "monopile-suction bucket hybrid foundation" engineering solution and *The Handbook for Developing Offshore Wind Power Projects in China* (developed for the Putian Pinghai Bay Offshore Wind Power Project, as shown in the box). The Handbook filled gaps in domestic technical standards and subsequently supported other similar projects in China. For instance, in December 2017, the Yangjiang Shapa Offshore Wind Power Project's implementation entity visited the Putian Project for experience learning, just one month post feasibility study. This enabled NDB's smooth appraisal and due diligence for the Guangdong project in mid-2018, with approval by year-end. These outcomes demonstrate NDB's value-added technical support and its role in laying a solid foundation for China's renewable energy infrastructure development.

Box 16: Technical due diligence support for the Putian Pinghai Bay Offshore Wind Power Project

(1) Project background: As one of China's early large-scale commercial offshore wind projects (initial planned capacity: 250 MW), it faced prominent challenges during appraisal: underdeveloped domestic technical standards, complex seabed geology, and limited offshore project experience of implementing entities. To ensure feasibility and compliance, NDB provided targeted technical due diligence support.

(2) Assistance content: NDB mobilised a five-expert team from domestic and international institutions (China Renewable Energy Engineering Institute, DNV GL [Norway], ITP Energised Group [UK]). Covering turbine design, power system integration, O&M planning, and feed-in tariff policy adaptation, the team conducted comprehensive technical due diligence to identify construction and operational risks — such as complex seabed geology, wind turbine reliability gaps, and grid connection instability — laying a critical risk-mitigation basis.

Leveraging expertise, NDB supported compiling *the Handbook for Developing Offshore Wind Power Projects in China*, co-released with China Renewable Energy Engineering Institute in 2017. The Handbook systematised technical standards, construction processes, and risk control methods, directly addressing the gap in domestic offshore wind standards. It offered clear technical frameworks for site selection, geological surveys, and feasibility studies — critical for Fujian's first commercial offshore wind project. Additionally, targeting Pinghai Bay's unique "sea canyon effect" on wind resources, NDB integrated international experience (e.g., European offshore wind design standards) to assist stakeholders in technical assessments, ensuring the project's design matched local wind conditions.

(3) Technical assistance outcomes: First, upfront risk identification enabled targeted mitigation measures, reducing potential construction delays and cost overruns. Second, the Handbook — a core output — served as a direct technical basis for appraisal and implementation, ensuring compliance with NDB's ESF and China's *Measures for the Administration of Offshore Wind Power Development and Construction*. Third, expert exchanges and technical documentation deepened implementing entities' understanding of international standards and best practices, supporting smooth subsequent project phases.

(4) Key lessons: NDB should prioritise early-stage TA integration by embedding technical due diligence and design support into pre-feasibility and appraisal phases, ensuring expert advice informs core design decisions. Second, strengthen localised adaptation in appraisal by aligning international standards with China's policy, geological, and industrial context to improve recommendation practicality. Third, leverage knowledge products for scalability — promoting the dissemination of guidance documents across similar Chinese offshore wind projects to maximise the spillover effects of TA during the appraisal phase.

162. Despite these achievements, TA delivery faces structural challenges stemming from resource constraints. NDB lacks in-house sectoral and subject-matter specialists and relies predominantly on short-term external consultants to resolve technical matters and design solutions. Related costs are funded through the general operational budget, rather than from dedicated resources earmarked for TA. Notably, while China has contributed 44% of the total pledged amount of USD 9 million for NDB's PPF, no PPF-funded TA projects have been approved for China. This gap has resulted in uneven TA coverage, with some early-stage operations (approved under the Bank's first strategy) receiving fragmented support. Peer MDB experiences also demonstrate that national- or provincial-level TA is valuable given its significant influence on specific sectors or regions, which could help NDB better engage different stakeholders in policy-making and project pipeline development.

163. Additionally, TA for China operations remained largely ad-hoc before 2024, addressing project challenges on a case-by-case basis. Multiple project stakeholders informed this CPE that they only learned of NDB's TA policy and PPF support in recent years and emphasised the absence of systematic training on TA application processes or requirements. Other key issues include limited early NDB involvement in project design refinement and weaknesses in demand modelling — pointing to scope for enhancing feasibility study quality through more effective use of PPF-funded TA.

164. Knowledge and outcomes reuse are key additional challenges for some operations. Details and outputs of NDB's non-lending support (e.g., technical reports, assessments, sector handbooks) are neither disclosed on NDB's official channels nor centralised in a shared knowledge repository. The climate risk assessment report for the Beijing Gas LNG Reserve Project is only accessible to internal staff directly involved and selected project stakeholders, limiting its spillover effects. Furthermore, mechanisms to verify TA outcomes and effectiveness are not yet fully established or integrated into project DMFs. Moreover, some project entities noted insufficient full-lifecycle coverage and technical depth in NDB's support — for example, water and transport projects have received limited guidance on operational-phase process optimisation, as the Bank's support prioritises construction-phase compliance reviews (procurement and E&S) over technical support and continuous optimisation of operational management plans.

165. To address these issues — particularly the Bank's uneven contributions to project design — several initiatives have been launched since 2023 to enhance project quality through early-stage technical support in China and strengthened efforts to assist projects in resolving technical bottlenecks. For instance, the June 2024 workshop for the proposed Taiyuan Zero-Carbon Airport Project convened three peer MDBs, over 20 academics, research and design institute representatives, and leading aviation practitioners to define a "photovoltaics + geothermal energy + energy storage + smart management" technical framework. It directly addressed pre-design pain points, laid the foundation for national regional hub zero-carbon airport standards, provided construction and operational support (e.g., solutions for heat loss in long-distance geothermal pipelines, smart energy-carbon management platforms), and offered replicable experience for other Chinese airports — efforts that facilitated the project's approval in July 2025. This successful model was recently replicated in the fact-finding mission for the proposed Xinjiang Alashankou Port Infrastructure Development Project, where six targeted knowledge sessions refined the design by introducing international best practices in logistics automation, digital transformation, port decarbonisation, corridor efficiency, and sustainable procurement.

166. The "Moderately Successful" rating reflects TA's achievement of some core objectives in China during NDB's first decade, amid limited initial capacities. It has provided notable task-oriented solutions to urgent project challenges for key flagship operations and complemented lending activities to ensure fund utilisation. Yet TA has not covered all complex, large-scale operations via a structured approach, lacks systematic design and knowledge management, and has insufficient resources to respond promptly and adequately to project requirements. Moreover, NDB's TA-governing policies are not fully implemented — for example, the PPF has yet to fund targeted TA for high-priority projects. Bridging these gaps will enable the Bank's TA to better fulfil its strategic role in advancing NDB's mission of sustainable infrastructure development in China.

Criterion	Rating
Technical assistance	**4**

C. CAPACITY BUILDING

167. Capacity building has played an important role in NDB's non-lending operations in China, aligning with the Bank's strategies — which identify it as critical to enhancing member countries' long-term institutional capabilities. It enables the independent design and implementation of infrastructure and development projects, as well as their long-term sustainability. Complementing the designated component for borrower-led capacity-building activities financed as part of loans, NDB's non-lending efforts in China target four interrelated core domains: E&S risk management, sustainable procurement, project preparation, and cross-domain compliance. Together, these domains address China's unique needs — from reconciling international standards with domestic regulations to fostering self-reliance across project contexts — ultimately advancing NDB's mission of "financing for impact."

168. NDB's approach to these domains prioritises "sustainable ownership": rather than addressing one-off issues, it seeks to embed sustainable skills, codified processes, and organisational frameworks that endure beyond direct Bank support. This approach is evident in both sovereign and non-sovereign project contexts, where tailored interventions — particularly for operations approved since 2022 — have been gradually delivered and addressed critical gaps based on institutional analyses of project entities. However, insufficient attention was devoted to it in a few early-approved operations during the Bank's first strategy cycle, due to its limited institutional capacity and resources.

169. For sovereign operations, NDB has increasingly provided targeted capacity building for complex infrastructure requiring multi-stakeholder collaboration in recent years. The Guizhou Qianxinan Rural Roads Improvement Programme serves as a prime example: NDB's ESG team organised a workshop for the PIU to address its capacity-building needs, bringing together 39 participants from local transport bureaus, environmental protection authorities, contractors, and supervisors. The intervention addressed critical gaps in data integration (e.g., fragmented land acquisition records), ambiguous E&S reporting, and inadequate dissemination of the E&S Management Plan. Through practical training on reporting templates and collaborative case exercises, the programme increased the completeness of land acquisition data from 65% to 98% and boosted the share of quantitative E&S indicators in project progress reports from 30% to 85% within one month in 2025.

170. Beyond E&S, NDB's procurement support has also gradually shifted from ad-hoc process guidance to institutionalised system-building for select operations since 2021. In procurement optimisation, the Bank advised five projects to embed ESG social clauses in bidding documents, directly creating more jobs. The Yinchuan Integrated Green Transport Project benefited from targeted support: NDB helped the PIU resolve contract signing delays (three contracts took over 200 days) via process optimisation and training for 150 Project Management Office staff; later contracts saw 40% efficiency gains (70–115 days). The PIU also developed a reusable "International Tendering Compliance Protocol" supporting other Yinchuan urban bus projects. For the Huangshi Tram Project, NDB aided the PIA in developing 30+ regulatory/operational documents (financial management, E&S safeguards) and an integrated command centre for tram-bus synergy. These capabilities were reused in Huangshi's NDB-financed New Port Logistics Hub Project (currently under appraisal), showcasing capacity-building's scalable, cross-project value.

171. A key strength of NDB's capacity building in China is its alignment with local contexts. These initiatives — leveraging China's public procurement, environmental protection regulations, and green credit guidelines to advance the Bank's institutional objectives — prioritise organisational capability development, avoiding one-size-fits-all international templates. For example, on-site sustainable procurement consultations for recent projects (Qingdao Metro Line 6, Taiyuan Wusu Zero-Carbon Airport) have yielded industry-specific Sustainable Public Procurement operational manuals and internal policies, adaptable for reuse in non-NDB projects. Nevertheless, some PIAs and PIUs — especially those managing projects approved in NDB's initial years — note insufficient clear interpretations and in-depth training on China's country procurement system in early project phases. This gap has slowed implementation, as uncertainties persist over specific procurement practices: whether to use the lowest evaluated price or a comprehensive scoring method, and which tender platforms/

templates are NDB-acceptable. To address this, a clear, context-specific procurement guide — integrated into a practical project administrative manual and supplemented by comprehensive training — would be highly valuable.

172. NDB also demonstrates strength in cross-domain compliance capacity-building. In October 2020, NDB participated in a joint training programme with the MoF and other peer MDBs in Kunming, assigning four senior experts in E&S and procurement to train 105 participants from over 50 provincial finance departments. NDB's sessions focused on aligning the Bank's procurement policies with China's public procurement regulations, specifying detailed E&S safeguard requirements, and identifying gaps between country systems and NDB standards while also sharing reusable tools. By the end of 2024, procurement irregularities in NDB-supported operations across participating provinces had gradually declined — underscoring the effectiveness of such cross-domain alignment.

173. Notably, NDB has expanded capacity building to non-sovereign operations, addressing a key gap in China's green finance ecosystem. In March 2024, its ESG Division hosted a workshop for Bank of Huzhou (BoH) — NDB's first non-sovereign borrower in China, tasked with screening private-sector sub-projects — engaging 50 staff from 17 branches and core departments via a "theory + hands-on practice" approach. Post-workshop, NDB supported BoH in developing a full-cycle E&S risk management system (Sub-project E&S Screening Manual, quarterly monitoring ledgers, risk remediation tracking mechanism). By September 2024, the RMB 357 million loan to BoH was fully disbursed (nine months post-approval, three months after loan signing), with BoH independently identifying and screening all six sub-projects — proving built capacity sustainability and enabling smooth implementation. Building on this, NDB replicated the model for Haitong Unitrust International Financial Leasing in January 2025, addressing its E&S gaps through a half-day workshop and follow-up advisory support. This "bank + leasing" dual-scenario model has created scalable, reusable frameworks for non-sovereign financial institutions, aligning with NDB's second strategy to deepen private-sector engagement.

Box 17: E&S capacity-building for non-sovereign borrowers (Bank of Huzhou [BoH] and Haitong Unitrust International Financial Leasing [HUIFL])

- **BoH:** NDB's first non-sovereign borrower in China (approved in November 2023), tasked with on-lending to sustainable infrastructure sub-projects (clean energy, water sanitation, transportation) in Zhejiang Province. Pre-workshop gaps identified during the project design and planning process included limited E&S expertise among frontline staff and inadequate subproject due diligence frameworks.

- **HUIFL:** A key FI client for NDB's environmental protection project (approved in November 2024), categorised as FI-A due to substantial E&S risks in its sub-project portfolio. Its existing ESMS lacked coverage of due diligence, social impact assessment, and long-term monitoring.

NDB delivered tailored, "theory + practice" workshops for both clients, complemented by post-event institutionalisation support.

Bank of Huzhou (March 2024)	Haitong Unitrust (January 2025)
Duration and participants: One-day workshop; 50 staff from 17 branches + headquarters (risk, credit, compliance, green finance).	**Duration and participants:** Half-day workshop; 29 core staff (credit managers, risk officers, investor relations, E&S consultants).
Core modules: 1. NDB ESF interpretation (exclusion lists, A/B/C/financial intermediaries' classification); 2. E&S risk identification (rooftop photovoltaic, water restoration, and electric vehicle charging stations); 3. Alignment with China's Green Credit Guidelines; 4. Sub-project compliance assessment.	**Core modules:** 1. NDB ESF requirements for financial intermediaries; 2. ESMS procedure optimisation; 3. Sector-specific E&S risks (Chinese regulatory context); 4. Case study: Waste Heat Recovery Project Risk Mitigation.
Delivery methods: Group discussions (risk matrix application), ERM expert lectures, and on-site Q&A.	**Delivery methods:** Collaborative problem-solving, hypothetical case analysis, and post-workshop feedback surveys.
Post-event support: Assisted in establishing full-cycle ESMS (Sub-project E&S Screening Manual, quarterly monitoring ledgers, risk rectification tracking).	**Post-event support:** Assisted in establishing and implementing a comprehensive ESMS (policy, procedures, screen and categorisation template, due diligence checklist, monitoring and reporting mechanisms, hands-on training on implementing the ESMS, etc.)

Key outcomes:

(1) BoH established a full-cycle E&S risk management system (screening manuals, monitoring ledgers) enabling independent sub-project screening by 2025.

(2) HUIFL strengthened its ESMS to address due diligence and compliance gaps.

(3) Both frameworks are reusable for non-NDB initiatives, boosting China's green finance ecosystem.

Critical lessons:

(1) Client-specific tailoring drives adoption;

(2) Integrating China's Green Credit Guidelines and domestic regulations ensures actionable practices;

(3) Workshops + ESMS tools + follow-up turn knowledge transfer into enduring capacity; (4) The model scaled to leasing firms, expanding NDB's non-sovereign green finance footprint.

174. Despite these successes, NDB's capacity-building efforts in China still face notable limitations. First, at the institutional level, there is no unified policy framework. Activities before 2022 were primarily driven by ad-hoc responses to emerging issues (e.g., procurement delays and irregularities, state audit findings, implementation challenges) — rather than a systematic, well-designed, and fully funded portfolio-wide programme. This fragmentation leads to inconsistent quality across projects: recent large-scale initiatives receive comprehensive support, while a few earlier operations lack systematic capacity building due to institutional constraints. Several operations approved during NDB's first strategy cycle relied on "post-hoc remediation" instead of upfront, context-tailored training — based on a comprehensive assessment of PIA/PIU capacities — resulting in unnecessary delays and trial-and-error.

175. Second, resource constraints undermine both the scope and sustainability of capacity-building efforts. The NDB China Desk — with only seven full-time staff by 2025 — lacks a dedicated team to coordinate, implement, and conduct long-term monitoring of capacity-building initiatives. The IEO holds the view that mechanisms for tracking capacity-building results and outcomes could also be strengthened through qualitative and quantitative performance indicators and institutionalised as a long-term effort extending beyond individual operations, underpinned by a solid diagnosis of specific institutional performance gaps. This gap is particularly acute in M&E: as highlighted in other IEO evaluations, operations such as the Luoyang Metro lack integrated M&E systems, while NDB missed opportunities to provide training on indicator design, data analysis, and standardised M&E tools during implementation. In addition, most capacity-building support is concentrated on the construction phase, with relatively limited attention to operational and post-completion phases.

176. To address these issues and fill the capacity gap in proposal preparation and project design, the China Desk co-organised a national workshop with the MoF and NDRC in September 2025, training over 120 participants from provincial/municipal governments and state-owned enterprises. The workshop focused on three pillars:

(1) aligning proposal preparation with NDB's strategic priorities and policy framework;

(2) sharing best practices from benchmark projects;

(3) delivering targeted training on Theory of Change, demand modelling, DMF, and key sector project design (urban development, energy, transportation). Additionally, post-workshop resources (reusable training materials, WeChat knowledge-sharing groups) have strengthened long-term impact. Participants highly recognise it and highlight the need for more frequent initiatives of this kind — particularly during the call-for-proposals stage — to maximise value.

177. In conclusion, NDB's capacity-building efforts in China are assessed as "Between Moderately Successful (4) and Successful (5)". The Bank has consistently rolled out more context-specific initiatives in recent years, informed by analyses of institutional capacity gaps, fostering sustainable capabilities in key areas for selected projects and expanding into non-sovereign operations. The IEO is of the view that further addressing issues outlined in this assessment will enable the NDB to position capacity building as a more structured, scalable driver of long-term sustainable development in China.

Criterion	Rating
Capacity building	**Between 4 and 5**

D. RESEARCH AND KNOWLEDGE SHARING

178. NDB's research and knowledge sharing (R&KS) in China is guided by its evolving institutional strategy over the last decade. The first Strategy framed R&KS as "key ancillary activities" with a focus on practicality, aiming to build in-house research capacity through the lean Economic Analysis Unit and align research with infrastructure and financing innovations. The second Strategy elevated R&KS to a core strategic goal, aiming to position NDB as a "knowledge hub" for EMDCs. For China, this translated into tailored R&KS efforts — including collaborating with local think tanks and harvesting lessons from the lending portfolio in China to refine global operations.

179. NDB's research activities in China are characterised by two contrasting features: limited in-house capacity and a few impactful external collaborations. Internally, the Research Department — established in 2016 to lead China-focused research — faces chronic resource constraints: as of June 2025, it comprises only three full-time employees, and the Chief Economist position has remained vacant since May 2020. This leadership and staffing gap hinders systematic independent research (e.g., long-term studies on China's green tech adoption or infrastructure financing gaps) and limits the development of a cohesive research agenda. The few existing internal outputs — such as a 2023 study on the potential of China's AI industry in smart infrastructure — are only accessible to NDB Senior Management; these outputs have rarely been developed into public knowledge products and have not been systematically integrated into project design or institutional strategic adjustments. By contrast, external collaborative research has emerged as a strength, with flagship participation in the Boao Forum for Asia's annual reports — efforts that fill internal capacity gaps and integrate China's experience into regional knowledge discourse, as highlighted in the box below.

Box 18: Flagship collaborative research: NDB's contribution to Boao Forum for Asia (BFA)

Founded in 2001, BFA is a non-profit international organisation based in Hainan — a key high-level dialogue platform for global leaders, elites, and scholars to address regional challenges and promote cooperation. NDB has co-authored BFA's flagship reports for three consecutive years, integrating China's project practices and EMDC perspectives to enrich regional sustainable development solutions:

- **2022:** Co-authored Chapter 3 ("Financing Asia's Green Transition") of the annual report, embedding NDB China project cases: Its 2016 RMB 3 billion green bonds funded Shanghai Lingang and Putian offshore wind projects, collectively reducing annual carbon emissions by over 940,000 tons.
- **2023:** Led sections on "global macro context" and "MDB roles in Asia" in Sustainable Development of Asia and the World 2023, sharing local currency financing data and innovative aggregated models (e.g., India's Rajasthan project, cutting costs by 8%–10% through pooling — adaptable to China's distributed renewables).
- **2024:** Co-developed a four-stage "green investment roadmap" (environment creation → project preparation → risk mitigation → blended finance) in the annual report to tackle Asia's annual USD 313.1 billion renewable energy investment gap, leveraging NDB's 2023 USD 1.25 billion green bonds and China's offshore wind experience to guide policymakers and developers.

Launched annually at BFA Annual Meetings, these reports have become key knowledge products bridging NDB's China operations with regional solutions — reaching over 5,000 annual attendees, including Chinese local governments and private-sector partners.

180. Beyond the BFA, NDB contributed to Global Development and Cooperation with China (2025), a book published by Springer Nature in collaboration with the Center for China and Globalization — a leading Chinese think tank with United Nations special consultative status. NDB's Senior Management authored a chapter in Part 1 ("New Ideas for Global Governance"), focusing on NDB's role in reforming global development finance and its partnerships with China. This chapter filled a critical gap in traditional global governance narratives — centring EMDC-led multilateral institutions like NDB rather than developed-country-led bodies — and showcased China-specific practices (e.g., panda bond issuance, Public-Private Partnership models for wind power) as replicable for other EMDCs.

181. Operationally, knowledge sharing is project-driven, with clear boundaries between "experience transfer" and "research" activities, yet with relatively weak institutional backing. In some cases, knowledge capture has benefited from proactive efforts by PIUs/PIAs under NDB's guidance, yielding valuable sectoral outputs: the Guangdong Yangjiang Offshore Wind PIU developed three national, one industrial and one local standards for offshore wind in typhoon-prone regions, as well as 37 technical innovations, including three anti-typhoon foundation patents; the PIU for Qingdao Metro Line 6 documented its TACS system after receiving the 2024 International Tunnelling and Underground Space Association (ITA) "Beyond Engineering Award". Nevertheless, NDB's support has been, in general, comparatively ad hoc: it assisted the Putian Offshore Wind Project in synthesising construction innovations for MCDF workshops at the 27th Conference of the Parties of the United Nations Framework Convention on Climate Change (COP27) and featured them in MCDF's 2023 Climate-Smart Connectivity Infrastructure report. Critically, the Bank lacks a standardised knowledge inventory and a central archiving mechanism for these PIU-led outputs, risking underutilisation of valuable insights.

182. Knowledge dissemination combines targeted offline activities and underdeveloped online channels, with notable transparency gaps. Offline, NDB has organised events tailored to stakeholder needs: during its 8th Annual Meeting in Shanghai, the "China Project Showcase" highlighted three flagship initiatives — the Fujian and Guangdong offshore wind projects (showcasing technical breakthroughs in typhoon resilience) and the Anhui Tongling G3 Road-Rail Bridge Project (spotlighting its biodiversity conservation measures for Yangtze finless porpoises). By sharing good practices with governments, international organisations, and other stakeholders, these efforts delivered tangible cross-border and multilateral impact.

183. Furthermore, NDB's China-funded projects show strong potential as a core South-South knowledge-sharing platform, enabling cross-border replication of practical experiences to support other Global South countries' sustainable development. For example, at NDB's April 2025 "Intelligent Transport Systems (ITS) Workshop," a Brazilian delegation (Maceió post-disaster Bus Rapid Transit reconstruction) connected with Ningxia's green transport project, producing a 14-page actionable report on applying Ningxia's ITS (2,000+ electric buses, 16,200 shared e-scooters) to Maceió's design. Similarly, NDB arranged a tour for South Africa's Magalies Water and the African Water Association to the Shengzhou Water Project; they adapted its AI leak detection and smart management systems to tackle Africa's urban-rural water imbalance. These initiatives gradually turn China's project successes into scalable solutions for other members, supporting NDB's role as an EMDC "knowledge hub". NDB senior officials have also shared China cases (e.g., Taiyuan Wusu Airport's 100 MW rooftop photovoltaic, Guangxi's 8-river ecological restoration) at domestic ESG conferences and seminars, deepening engagement with local policymakers.

Box 19: Knowledge application: South-South transfer of China's project experiences

China's NDB-funded projects are a powerful platform for South-South knowledge sharing, facilitating cross-border reuse of practical experiences to tackle sustainable development challenges in the Global South:

- **Ningxia Yinchuan Integrated Green Transport Development Project:** Brazil's Maceió delegation adopted its 40% upfront cost-cutting "battery leasing model" for electric Bus Rapid Transits and 25% efficiency-boosting "central lane design," directly supporting post-disaster transport reconstruction.
- **Shengzhou Urban and Rural Integrated Water Supply and Sanitation Project:** South Africa's Magalies Water and the African Water Association adapted its AI leak detection system, cutting water loss from 28% to 19% in pilots and addressing Africa's urban-rural water imbalance.
- **MCDF knowledge sharing:** NDB's China Desk shared Putian and Guangdong Yangjiang offshore wind projects' "three-tier risk-sharing model" and "four-stage climate adaptation process" at MCDF workshops. It also co-hosted MCDF's August–September 2024 online workshop (with ADB/AIIB) on involuntary resettlement valuation, integrating full-cycle practices from China projects like Anhui Tongling Bridge.

184. Online, however, NDB lags behind peer MDBs: its official WeChat account (launched in May 2022) has published 13 promotional videos, with only two focusing on China projects, which primarily feature basic project overviews rather than in-depth knowledge sharing. By comparison, the World Bank and AIIB have released 38 and 14 China-related videos over the same timeframe, many of which include expert analyses and case-study deep dives. Key project documents also remain restricted: for example, the Beijing Gas LNG Reserve Project has only a 700-word summary available on NDB's official website, whereas AIIB, the co-financer, published a 42-page design document and nine monitoring reports for the same project, including granular emissions-reduction data and various E&S management plans.

185. NDB's ESG Division has developed targeted China-specific ESG knowledge products, directly addressing on-the-ground operational pain points instead of generic theoretical frameworks. Key outputs include the ESG Knowledge Series and E&S Best Practices, which integrate China project cases to offer actionable guidance. A standout example is the Anhui Tongling G3 Bridge Project: it details how NDB and the team balanced infrastructure development with Yangtze finless porpoise conservation via a patented "real-time underwater noise and dolphin monitoring system" (alerting at >180 dB), a world-first "double-deck cable-stayed-suspension hybrid structure" (no mid-river piers to avoid habitat disruption), and dry-season-only construction to safeguard porpoise breeding. These practices ensured NDB ESF compliance and provided a replicable template for ecologically sensitive areas. Yet NDB lacks formal mechanisms to systematically promote cross-regional reuse of these insights, confining their impact to individual projects instead of scaling across its entire portfolio.

186. In conclusion, NDB's research and knowledge sharing (R&KS) in China meets some strategic objectives but faces systemic constraints limiting its full potential. Strengths include high-impact external collaboration amplifying China's experiences, project-driven South-South knowledge transfer delivering tangible value to other EMDCs, and ESG products addressing China's unique ecological challenges. Yet gaps persist: insufficient in-house research capacity restricts independent analysis, the absence of a systematic knowledge management framework causes fragmented knowledge capture, and limited transparency/online presence hinders external access to knowledge products.
To realise its "knowledge hub" goal, NDB must prioritise targeted investments — expanding

research staffing, developing a knowledge management framework with standardised processes, and boosting transparency via enriched online content. The rating reflects progress in aligning R&KS with China's priorities while acknowledging institutionalisation and scalability as unmet objectives.

Criterion	Rating
Research and knowledge sharing	4

E. PARTNERSHIP DEVELOPMENT

187. Partnership development is a core pillar of NDB's mandate to advance infrastructure and sustainable development in BRICS and other EMDCs, and it plays a pivotal role in NDB's non-lending operations in China. Aligned with NDB's strategies, which emphasise collaboration with governments, MDBs, financial institutions, private entities, and international organisations, NDB's partnerships in China aim to mobilise resources, innovate cooperation models, and cover diverse development areas.

188. NDB has built robust collaborations with Chinese government agencies, leveraging policy synergies and the locational advantages of its Shanghai headquarters — evidenced by its structured pipeline development process, which is built on a strong partnership with the NDRC, MoF and provincial authorities. Furthermore, in June 2020, NDB joined the MCDF as a subsequent associate member in collaboration with the MoF, and became a formal participant in the MCDF Coordination Committee — which aims to facilitate joint TA, project preparation, and knowledge sharing for sustainable infrastructures. The Bank also co-hosted the "NDB New General Strategy Workshop" with the MoF during China's BRICS chairmanship in 2022. Notably, since October 2024, NDB has co-hosted two national workshops on "Loan Programme Supervision and Guidance" and one national "Lending Pipeline Workshop" with the NDRC and the MoF, advancing the preparation and processing of multiple proposed sovereign operations through joint reviews while strengthening the project proposal preparation process.

189. Cooperation with China's central bank, the People's Bank of China, has deepened in green finance: in 2016, with its support, NDB issued its first RMB 3 billion green bond — the first of its kind by an IFI in China — earmarked for clean energy projects in BRICS countries. Subsequently, the People's Bank of China clarified the use and certification standards for green bond funds through the Green Bond Support Project Catalog and permitted the flexible use of NDB's panda bond funds for overseas projects — significantly alleviating NDB's liquidity pressure during the geopolitical crisis that began in February 2022. Importantly, the RMB bonds issued by NDB are eligible as collateral for central bank operations in China. The National Association of Financial Market Institutional Investors granted NDB registration quotas of RMB 30 billion by 2020. Additionally, partnerships with the Shanghai municipality enabled innovations such as cross-border fund allocation via Free Trade Non-resident accounts, with cumulative panda bond issuance having surpassed RMB 70 billion by 2025 — accounting for over 80% of the global panda bond volume issued by IFIs.

190. NDB's partnerships with the MCDF extend to joint events, knowledge-sharing, and capacity-building programmes based on a memorandum of understanding signed in 2020. For example, NDB co-hosted the "Land and Asset Valuation in Involuntary Resettlement" virtual workshop (Q3 2024) with the MCDF, ADB, and AIIB, where its E&S experts shared practical experience in land acquisition and compensation. The Bank also sent representatives to the Asia-Pacific Integrity and Compliance Forum (August 2024, Xiamen National Accounting Institute) and its supporting training sessions (September 2025) — co-hosted by the MCDF, ADB, and the China International Contractors Association (CHINCA) — offering constructive insights on integrity frameworks and procurement compliance.

191. NDB's partnerships with financial institutions form an effective "national financial intermediaries + commercial banks" cooperation framework in China, supported by eight signed MoUs. National financial intermediaries like the Agricultural Development Bank of China and Export-Import Bank of China efficiently implemented the RMB 7 billion on-lending project via funds from NDB's Emergency Assistance Programme for China's post-

COVID-19 economic recovery, garnering the "Global Poverty Alleviation Best Practice Award" from the World Bank, the International Fund for Agricultural Development, and other co-organisers. Strong commercial bank partnerships have been pivotal in capital markets and cross-border settlement: Bank of China (BoC) served as lead underwriter for nearly all NDB's panda bonds; with Industrial and Commercial Bank of China (ICBC), it enabled NDB's indirect access to the Cross-Border Interbank Payment System — covering all NDB members — boosting cross-border RMB payment efficiency and cutting costs for NDB's global infrastructure projects. ICBC also underwrote NDB's 2020 RMB 5 billion anti-pandemic bond, which was 2.99x oversubscribed. Additionally, Bank of Communications partnered with NDB on an RMB 1.069 billion loan to fund LNG carrier acquisitions for financial leasing — NDB's first operations in the leasing sector.

Box 20: NDB-BoC partnership: Driving green finance and cross-border collaboration

NDB and BoC signed a strategic cooperation memorandum of understanding in January 2016, serving as the core framework for long-term, multi-dimensional collaboration. This partnership has become a benchmark for MDBs cooperating with Chinese commercial banks, underpinning in-depth engagement in capital market collaboration, cross-border fund allocation, and green syndicated loans.

1. **Panda bond underwriting leadership:** BoC has led underwriting for nearly all NDB panda bonds, supporting landmark issuances: 2016's RMB 3 billion green bonds (first by an international organisation in China) for BRICS clean energy; 2023's RMB 8.5 billion SDG-aligned bonds (largest single issuance by a multilateral institution then); 2024–2025's two RMB 60 billion five-year bonds (2025's 1.70% coupon rate a record low). Cumulative issuance reached RMB 685 billion by April 2025, solidifying NDB's position as the largest supranational panda bond issuer.

2. **Green syndicated loans:** In June 2025, the pair jointly signed an RMB 1.2 billion green leasing syndicated loan with Haitong Hengan International Leasing (BoC contributing RMB 500 million as co-lead arranger). It supports wastewater treatment, waste-to-energy projects, and small- and medium-sized enterprises' green transition, expected to cut annual CO_2 emissions by over 40,000 tons and pioneer the "MDB financing + leasing" model.

3. **Cross-border innovation:** BoC Shanghai Branch opened NDB's first Free Trade Non-resident account in 2016 via Shanghai Free Trade Zone policies and completed a five-year USD-RMB cross-currency swap, enabling efficient cross-border fund allocation and hedging interest rate/exchange rate risks.

4. **Market ecosystem building:** In 2025, BoC assisted NDB in hosting a "Panda Bond Market Development" seminar with over 50 institutional investors, expanding its investor base to include overseas central banks and insurance funds, and integrating panda bonds into global RMB asset portfolios.

5. **Strategic significance:** It supports NDB's local currency financing strategy, reducing funding costs via China's interbank bond market; strengthens BoC's leadership in green finance and cross-border services; boosts Shanghai's international financial center status and advances RMB internationalisation.

192. NDB's private-sector partnerships focus on non-bank financial institutions and city commercial banks. It approved USD 100 million-equivalent RMB green syndicated loans to Haitong Unitrust International Financial Leasing (for wastewater treatment and waste-to-energy sub-projects) and USD 50 million-equivalent RMB loans to Bank of Houzhou (for clean energy and smart parking sub-projects). Notably, it has also developed a unique cooperation model with local governments like Huangshi (Hubei): amid the COVID-19 pandemic, NDB allocated RMB 900 million in emergency loans to support the city's public health system, while 116 of its staff voluntarily raised funds to donate medical alcohol and sanitisers to local hospitals — enhancing rapport beyond formal lending. However, long-term strategic alliances with leading private enterprises in emerging new-quality productive forces and green manufacturing are still lacking, constraining the scale of its non-sovereign lending operations.

193. Partnerships with international organisations, particularly the United Nations Development Programme (UNDP), have forged a "standard-financing-outreach" cycle. In December 2020, NDB and UNDP established the SDG Financing Communication Mechanism; in March 2021, NDB issued RMB 5 billion SDG-aligned panda bonds — the world's first SDG-aligned panda bond issued by an IFI — leveraging UNDP's SDG Impact Bond Standards and China's SDG Financing Taxonomy. The funds have supported China's post-pandemic recovery (e.g., support for small- and medium-sized enterprises) and have successfully established a global benchmark for SDG-aligned finance.

194. Moreover, collaboration with the CHINCA has mitigated "information asymmetry" between NDB and Chinese enterprises. From 2023 to 2025, four business matching workshops were held, engaging over 80 enterprises (e.g., China National Chemical Engineering). These events enhanced project matching efficiency for non-sovereign initiatives and advanced private-sector projects to the bidding, procurement, and appraisal stage, though no joint implementation cases have been finalised.

Box 21: NDB-CHINCA: Bridging multilateral finance and private sector collaboration

NDB has established a strategic partnership with CHINCA (China's sole national-level international contracting industry organisation) to tackle information gaps between MDBs and enterprises, optimise non-sovereign project matching, and advance the Bank's priority of expanding private-sector engagement.

1. **High-level dialogue mechanism (2020–Present):** Launched a formal dialogue framework in November 2020, agreeing to collaborate on financing innovation, project matching, and research. In 2023, NDB's Vice President and Chief Operating Officer met with CHINCA's President, confirming mutual goals to promote member enterprises' participation in BRICS infrastructure projects and inviting CHINCA to NDB's South Africa Annual Meeting.

2. **Business matching workshops (2023–2025):** Co-hosted four targeted workshops, engaging over 80 leading enterprises (e.g., China National Chemical Engineering, China Railway No. 1 Engineering Bureau) to discuss non-sovereign loan terms, ESG standards, exchange rate risk management, and approval procedures. CHINCA's "Going Global Public Service Platform" disseminates NDB's tender information, supporting enterprises in bidding for projects like the Wuhan Multimodal Logistics Hub.

3. **Integrity and compliance capacity building:** Participated in CHINCA co-hosted training at the 3rd Asia-Pacific Integrity and Compliance Forum (2025, Xiamen), sharing expert perspectives on compliance leadership, bid conflict-of-interest identification, and procurement due diligence to enhance enterprises' governance capabilities.

4. **Industry forum collaboration:** Joined CHINCA's 3rd International Infrastructure Financing Matchmaking Conference (September 2023), presenting NDB's loan policies and project criteria (e.g., SDG alignment, technical viability) to over 80 engineering firms and 70 financial institutions. Shared non-sovereign financing cases at CHINCA's "Green Development of Overseas Urban Infrastructure" seminar (February 2025) to guide sustainable investment practices.

195. Partnerships with universities and research institutions remain largely exchange-oriented, focusing on short-term training, internships, and conference participation. For example, NDB partnered with the Shanghai Summer School (BRICS Programme), hosting visits by delegations from the Fudan Development Institute to its headquarters — welcoming nearly 40 BRICS students in 2019, students from all BRICS member states following the bloc's expansion in 2024, and continuing this collaborative practice in 2025 by hosting students from Global South countries. These visits, as part of the programme's cultural activities, help participants understand NDB's unique role within BRICS cooperation mechanisms, Shanghai's international profile, and the Bank's strategic priorities. However, no joint research initiatives or knowledge products have been developed, indicating still relatively limited substantive cooperation at this stage.

196. NDB's partnerships in China have delivered solid results: over RMB 70 billion in panda bond issuances by October 2025; innovative models such as the "CHINCA + multilateral institution" platform; and strategic contributions to Shanghai's international financial centre development and BRICS cooperation. These outcomes outperform NDB's partnership practices in its other member countries, as highlighted in other IEO reports, which note a more fragmented partnership approach elsewhere.

197. Nonetheless, gaps persist: around 20% of the 13 signed MoUs have yet to deliver any tangible outcomes; though many partnerships exist without signed MoUs, publicly disclosed joint forums or capacity-building events remain limited as of end-2024; co-financing with peer MDBs and other international organisations is restricted to one pre-2022 project with AIIB, and no substantive operational collaboration has been established with ADB or the World Bank in China; NDB is not an implementing partner of the MCDF Fund, lacking direct joint financing with MCDF or access to its grants for China operations; it has not established strategic cooperation with ministerial think tanks, the China International Development Cooperation Agency, or government-backed development funds (e.g., China-Africa Development Fund, China-Latin American Cooperation Fund, Silk Road Fund, Global Development and South-South Cooperation Fund, etc.), nor has it accessed their grants or joint TA or co-financing — lagging behind other IFIs in this regard; additionally, cooperation with the BRICS Partnership on New Industrial Revolution Innovation Center (Xiamen) remains limited, with effective collaboration on policy coordination, talent development, or project development still unrealised. Apart from the UNDP, partnerships with other United Nations agencies remain largely underdeveloped in China, as is the case with partnerships with civil society organisations (CSOs).

198. In conclusion, the "Moderately Successful" rating reflects NDB's achievement of core partnership objectives in China. However, no roadmap has been developed to explicitly mainstream partnerships with Chinese stakeholders and maximise their impact across its activities via a more systematic approach — one featuring measurable goals, clear deliverables, defined interaction modes, and structured work plans. Thus, additional efforts are needed to nurture and strengthen partnerships, enhancing cooperation with private enterprises, government-backed development finance institutions and funds, think tanks, CSOs, United Nations agencies, and other international organisations in China, for joint capacity building, knowledge sharing, and leveraging insights from their expertise and perspectives. While incremental improvements are required (e.g., accelerating MoUs implementation, expanding MDB co-financing, among others), the overall partnership framework has supported resource mobilisation and innovations — solidifying NDB's role as a reliable, key contributor to China's sustainable development.

Criterion	Rating
Partnership development	**4**

F. OVERALL PERFORMANCE OF NDB'S NON-LENDING ACTIVITIES IN CHINA

199. NDB's non-lending activities in China are rated "Moderately Successful", reflecting strategy-aligned progress while noting systemic gaps that constrain full scalability. Its core strength lies in promising partnership development — mobilising substantial resources, fostering innovative collaboration models, and aligning with China's strategic priorities like green transition and RMB internationalisation. Complementing this, moderately successful TA, capacity building, and research/knowledge sharing have delivered targeted value: resolving project-specific bottlenecks, building sustainable institutional capabilities, and enabling South-South knowledge transfer of China's infrastructure practices to other EMDCs. These synergise with lending operations to enhance project compliance, fund utilisation, and long-term sustainability.

200. Despite these achievements, key challenges persist across all non-lending pillars: resource constraints result in uneven support for earlier projects; structural gaps hinder the scaling of impact beyond flagship initiatives; and substantive joint research with academic institutions remains underdeveloped. Nevertheless, NDB's non-lending activities have laid some foundation through context-tailored solutions that reconcile international standards with domestic regulations. To enhance performance, the Bank needs to prioritise addressing resource gaps, institutionalising robust knowledge management and capacity-building frameworks, and deepening underdeveloped collaborative partnerships — thus leveraging its Shanghai headquarters advantage and China's sustainable development experience to fulfil its mandate as a knowledge hub.

Table 5: Summary of ratings for non-lending activities

Non-lending activities	Rating
Technical assistance	Moderately Successful (4)
Capacity building	Between Moderately Successful (4) and Successful (5)
Research and knowledge sharing	Moderately Successful (4)
Partnership development	Moderately Successful (4)
Overall rating for non-lending activities	**Moderately Successful (4)**

08 OVERALL PERFORMANCE OF THE CHINA-NDB PARTNERSHIP

08 Overall performance of the China-NDB partnership

201. **The overall performance of the China-NDB partnership is rated "Successful",** an assessment that encompasses both lending and non-lending activities. NDB's lending portfolio has delivered tangible results across key sectors, with standout strengths in local currency financing and technological innovation, which have enhanced project efficiency and sustainability. Complementing lending, non-lending activities have added targeted value: partnership development mobilised resources and fostered innovative models, while TA and capacity building resolved some project bottlenecks and built institutional capabilities. However, gaps persist — including resource constraints leading to uneven technical and implementation support for early projects, underdeveloped knowledge management frameworks, and limited deep collaboration with private enterprises in green manufacturing and other partners — highlighting areas for strategic improvement.

202. Despite these challenges, the partnership has established replicable good practices. To maximise impact, a more integrated approach is needed — including institutionalising knowledge management, increasing non-lending resource allocation, and deepening collaborations with peer MDBs, government-backed development agencies and funds, and think tanks. Overall, the China-NDB partnership serves as a model for sustainable infrastructure financing, advancing inclusive growth in China and supporting South-South knowledge transfer to other EMDCs.

Table 6: Rating of the China-NDB partnership

Evaluation criterion	Rating
Overall lending portfolio achievement	**Successful (5)**
Relevance	Successful (5)
Effectiveness	Successful (5)
Efficiency	Successful (5)
Impact	Successful (5)
Sustainability	Successful (5)
NDB performance	Between Moderately Successful (4) and Successful (5)
Borrower performance	Successful (5)
Overall non-lending activities performance	**Moderately Successful (4)**
Technical assistance	Moderately Successful (4)
Capacity building	Between Moderately Successful (4) and Successful (5)
Research and knowledge sharing	Moderately Successful (4)
Partnership development	Moderately Successful (4)
Overall China-NDB partnership	**Successful (5)**

09 CONCLUSIONS

09 Conclusions

203. **Storyline.** Over the past decade, since approving its first China project in April 2016, NDB has forged a robust partnership with its headquarters' host and founding member country. With USD 8.86 billion in approved lending across 27 active projects (24 sovereign, 3 non-sovereign), its China portfolio ranks among the Bank's largest and most efficient globally, delivering strong outcomes aligned with NDB's institutional mandate and China's national development priorities. This collaboration is defined by alignment with China's Five-Year Plans, pioneering local currency financing, sustainable infrastructure innovation, strong country ownership, robust borrower performance, and swift crisis responsiveness (e.g., COVID-19) — solidifying NDB's role as a trusted development partner.

204. A cornerstone strength is NDB's local currency financing: as of December 2024, 68.8% of cumulative lending to China is RMB-denominated, underpinned by its status as the largest panda bond issuer (RMB 55.5 billion by end-2024). This has effectively mitigated foreign exchange risks for borrowers, deepened China's capital market, and enhanced NDB's global liquidity. Geographically, the portfolio covers 50% of China's provinces, balancing support for coastal economic hubs and inland regions to advance inclusive development and national strategies like regional integration and rural revitalisation.

205. NDB's performance reflects notable strengths and areas for improvement. Core achievements include streamlined approval processes (with loan signing and effectiveness timelines far shorter than its global averages), targeted ESG and procurement guidance, and rapid emergency assistance — making it the first MDB to provide sovereign support to China during the pandemic. Nevertheless, the IEO believes some refinements warrant consideration to further enhance NDB's interventions: more sophisticated economic appraisals, ongoing development of M&E systems, stronger DMFs, and more detailed Project Administration Manuals for early projects, and greater financial product diversity relative to peer MDBs.

206. Complementing lending operations, non-lending efforts deliver modest but targeted value amid structural constraints. Partnership development stands out: 13 MoUs with China-based institutions have laid a solid foundation for mobilising resources via capital market collaborations and green syndicated loans, as well as sharing good practices among EMDCs. In contrast, TA and capacity building lack dedicated resources and systematic frameworks, while research and knowledge sharing are hampered by limited in-house capacity. These challenges, not significantly undermining core achievements, present actionable opportunities the Bank should not overlook. As the partnership enters its next phase, building on existing strengths and addressing critical gaps through strategic adjustments will enable NDB to further advance inclusive, green growth in China and replicate its successes across other member states.

(A) NDB'S LENDING PORTFOLIO IS RELEVANT, EFFECTIVE, AND EFFICIENT, ALIGNING CLOSELY WITH CHINA'S DEVELOPMENT PRIORITIES AND NDB'S MANDATE

207. The cornerstone of China-NDB cooperation is a lending portfolio consistently delivering core objectives — defined by strong relevance, effectiveness, and efficiency — closely aligning with China's development priorities and NDB's institutional mandate. Its relevance is anchored in tight alignment with national agendas (regional integration, low-carbon transition, urban-rural inclusion) and NDB's strategies: all 27 projects directly support these priorities and contribute remarkably to SDG 7 (Affordable and Clean Energy), SDG 9 (Industry, Innovation and Infrastructure), and SDG 11 (Sustainable Cities and Communities). Geographically diverse, the portfolio prioritises balanced inclusion by tilting toward less developed inland regions, boosting NDB's visibility across 50% of China's provinces while mitigating concentration risk through alignment with government debt management (see paras. 51–55 and 60). Most project designs

are tailored to regional and sectoral needs, with ESG considerations integral to advancing China's green and inclusive development goals (see paras. 61–66).

208. Effectiveness remains robust, as most projects meet or exceed core targets: renewable energy initiatives achieve higher annual power generation than projected, while urban transit projects increased public transport modal share and connectivity — despite some ridership shortfalls from overly ambitious projections. Emergency responses totalling RMB 14 billion provided swift support, expanding hospital capacity and creating rural jobs, underscoring NDB's agility in addressing crisis-related needs (see paras. 74–82).

209. Efficiency is a standout strength: the portfolio boasts a 71.6% disbursement ratio (NDB's highest among member countries) with streamlined approval processes — 143 days from Board approval to loan signing and 217 days to effectiveness, both significantly shorter than its global averages (paras. 86, 87). Cost control is strong: urban transport projects are completed, on average, over six months ahead of schedule with cost underruns, while water projects achieve substantial savings via borrower-led design optimisations. Cutting-edge technologies, including prefabricated construction and AI-driven smart scheduling, are widely adopted to further enhance efficiency (paras. 90–93).

210. The portfolio's environmental, economic, and social impact is increasingly evident: **environmentally**, renewable energy and transport projects reduce millions of tons of annual CO_2 emissions, with co-benefits like marine habitat restoration and water conservation; **economically**, projects act as growth multipliers, creating direct and indirect jobs, catalysing industrial clusters (e.g., wind power manufacturing hubs in Fujian and Guangdong), and boosting regional productivity through improved connectivity; **socially**, inclusive development is advanced, benefiting ethnic minorities, low-income households, and rural residents by expanding essential services and strengthening community engagement (see paras. 100–106). Technological innovations — such as Qingdao Metro's Train Autonomous Circumambulation System and Putian's offshore wind foundations — set not only national but also global benchmarks (see paras. 107–109).

211. Sustainability is underpinned by strong government commitment, robust institutional frameworks, and technical resilience: renewable energy projects demonstrate long-term viability with high turbine availability rates, while urban public transport operations are supported by structured government subsidies and policies. Environmental sustainability is integrated into designs — e.g., the Anhui Tongling G3 Bridge's "no mid-span pier" layout to protect Yangtze finless porpoise habitats — while social sustainability is fostered through job creation, community investment, and inclusive access, ensuring equitable and enduring distribution of project benefits (see paras. 114–119).

(B) LOCAL CURRENCY FINANCING LEADERSHIP DEFINES THE PARTNERSHIP'S COMPETITIVE ADVANTAGE

212. A defining competitive advantage of the China-NDB partnership lies in NDB's pioneering local currency financing, a core value proposition for Chinese borrowers and project entities. As of December 2024, RMB-denominated loans accounted for 68.8% of cumulative approved lending to China — far exceeding NDB's 2022–2026 strategic target of 30% and representing the highest share among all member countries. This milestone is underpinned by NDB's leadership in the panda bond market: since its 2016 inaugural RMB 3 billion green bond issuances, it has issued a total of RMB 55.5 billion in such bonds by the end of 2024, establishing itself as the market's largest issuer (see para. 56).

213. It effectively mitigates foreign exchange risks for borrowers, which is critical for long-term infrastructure projects vulnerable to currency fluctuations, while lowering funding costs — NDB's 2025 five-year panda bonds were issued at an all-time low rate, approximately 30 basis points above Chinese government bond yields. Additionally, these onshore bonds are eligible as collateral for operations of China's central bank, enhancing financial flexibility and supporting cross-border usage of member currencies (e.g., RMB-denominated loans to Brazil). Amid geopolitical and market volatility, they effectively alleviated the NDB's liquidity strain and helped to reduce relative borrowing costs for other member states by swapping RMB into hard currencies, highlighting the strategic value

of deepened local capital market engagement (paras. 131, 189).

214. This leadership offers a replicable model for other NDB members seeking to reduce hard currency reliance and hedge foreign exchange risks. Its success is enabled by strong partnerships with Chinese financial institutions (e.g., Bank of China as lead underwriter for most panda bonds), market regulators and clearing house, plus policy support from the People's Bank of China and MoF — collaborations that have mobilised resources and strengthened Shanghai's status as an international financial centre (see para. 189).

(C) STRONG BORROWER PERFORMANCE DRIVES PARTNERSHIP SUCCESS

215. Borrowers' strong performance is pivotal to the China-NDB partnership's success, underpinned by robust coordination, financial compliance, innovation, and social-environmental responsibility. Borrowers, provincial authorities, and project entities have generally demonstrated effective multi-level collaboration through dedicated cross-departmental teams, efficiently resolving implementation bottlenecks such as land acquisition, municipal pipeline relocation, and inter-agency approvals (para. 150).

216. Financial compliance and project management excellence stand out: annual state audit findings confirm no significant fiduciary irregularities in the use of NDB funds across nearly all operations, with most project reports meeting NDB's quality and timeliness requirements. Project implementation agencies have effectively leveraged technological innovation to enhance outcomes — Qingdao Metro Line 6's PIU pioneered the global-first TACS system and flywheel energy storage, while the Jiangxi Natural Gas Transmission Project developed corrosion-resistant duplex stainless steel pipelines — boosting efficiency and elevating China's infrastructure standards globally (see paras. 151–152).

217. Borrowers consistently prioritise E&S responsibility by aligning their practices with NDB's safeguards through workforce development, community engagement, and ecological protection (para. 153). They also drive knowledge sharing by hosting delegations from other NDB member countries to replicate China's infrastructure best practices, positioning the partnership as a key South-South cooperation platform (para. 155).

218. While challenges persist — including first-time borrowers' initial unfamiliarity with NDB's policy frameworks and demand forecasting gaps for some projects — they are offset by the borrowers' and NDB's adaptive capacity and commitment to continuous improvement (para. 154). Overall, borrowers' strong performance complements NDB's efforts and capacities, ensuring effective delivery of project objectives and long-term investment sustainability.

(D) NON-LENDING ACTIVITIES DELIVER TARGETED VALUE BUT FACE INSTITUTIONAL CONSTRAINTS

219. NDB's non-lending activities in China have earned a "Moderately Successful" rating, reflecting progress aligned with its strategy yet constrained by resource limitations and institutional gaps. Notable achievements of partnership development are: NDB has forged strong collaborations with government agencies, national financial intermediaries, commercial banks, and selected international organisations. These partnerships have mobilised substantial resources — by October 2025, its panda bond issuances surpassed RMB 70 billion, including the world's first bond using UNDP's SDG Impact Bond Standards and China's SDG Financing Taxonomy, the first IFI green bond ever in the China Interbank Bond Market, and NDB's inaugural green syndicated loan. The innovative "CHINCA + MDB" platform has also boosted participation in procurement open tenders for NDB-financed operations (see paras. 188–194). Nonetheless, gaps persist: 20% of the 13 signed MoUs in China have not yet been operationalised, and strategic cooperation with academic, research institutions, CSOs, and BRICS PartNIR Center (Xiamen) remains undeveloped (see paras. 193 and 197).

220. Technical assistance has delivered targeted value for some flagship projects, addressing bottlenecks in climate risk assessment, procurement optimisation, and technological innovation (see paras. 159–161). However, it faces capacity constraints: NDB relies heavily on external consultants, given its shortage of

in-house subject-matter and sectoral experts and absence of dedicated teams, yet has not approved any PPF-funded TA projects — despite China contributing 44% of the PPF's total pledges. This has led to uneven coverage, with some projects receiving fragmented support and missed opportunities to systematically refine designs, feasibility studies, and demand modelling through sophisticated early-stage interventions (see paras. 162–165).

221. Capacity building has yielded some meaningful results, particularly for post-2022 operations. NDB has provided tailored workshops for selected borrowers to address specific capacity gaps, supporting the development of institutional systems such as ESG risk management frameworks (see paras. 168–173). Yet earlier projects received ad-hoc support amid resource constraints. The IEO is of the view that NDB should establish a unified policy and results framework, including formal mechanisms to track the outcomes of capacity development initiatives as well as the sustainability of corresponding gains, which would also benefit its efforts in China (see paras. 174–176).

222. Research and knowledge sharing leverage external collaborations to showcase China's development experiences, though internal research capacity is limited by staffing constraints. Project-driven knowledge transfer facilitates South-South cooperation, with China's green transport and water management good practices replicated in other NDB member countries. However, knowledge management remains fragmented — no standardised repository for project outputs exists, and online dissemination lags behind peer MDBs in China, reducing transparency and accessibility (see paras. 179–185).

(E) STRUCTURAL GAPS PRESENT OPPORTUNITIES FOR ENHANCED IMPACT

223. Despite the partnership's strong overall performance, several gaps constrain its full potential. The imperative to link NDB's lending with non-lending activities in China lacks explicit articulation in a dedicated partnership document, lacking clarity regarding the Bank's priority areas for expertise enhancement, tailored solutions, and TA to support the country in a more effective and impactful approach. NDB's financial product suite remains limited, with a focus on "plain vanilla" loans and an absence of flexible instruments such as currency conversion options, interest rate swaps, guarantees, or equity investments. This places NDB at a disadvantage compared to peers and limits its ability to continually expand its China operations. Additionally, NDB has not offered fixed-rate loans, making it less competitive for China's shorter-tenor non-sovereign operations, where borrowers prefer stable repayment terms (see paras. 68–71, 94–96).

224. With respect to the Bank's ongoing evolution of its monitoring and self-evaluation frameworks, although the quality of portfolio-level supervision has steadily improved since NDB's 2022 reorganisation, the IEO considers that several areas for improvement remain. Some early projects' DMFs could be further enhanced with clear theories of change to link inputs, activities, outputs, and outcomes, capturing critical assumptions and risks that affect the project results chain, alongside monitoring mechanisms, baseline data, and comprehensive measurable indicators. Moreover, the IEO is of the view that financial and economic analysis could also be strengthened — for example, through the application of consistent hurdle rates for economic net present value calculations and more sophisticated carbon reduction impact tracking. These enhancements would ultimately improve cross-project comparability and analytical accuracy (see paras. 134–136). Notably, NDB has recently undertaken several targeted initiatives, including a series of national workshops and training sessions in China to address these issues and improve quality (see paras. 146, 165, 172, and 176).

225. Constraining NDB's institutional capacity is the China Desk's informal administrative status and limited resources: as an operational team under the PPMD with only seven staff by 2025 (less than 10% of peer MDBs' Beijing resident mission workforces), it lacks sectoral/subject-matter experts, with no dedicated specialists for TA, capacity building, or knowledge management — limiting its ability to address complex portfolio challenges and maximise value addition. High staff turnover in early operations, partly resulting from the Bank's organisational restructuring, also disrupted knowledge continuity and delayed issue resolution (see paras. 139 and 147).

226. Finally, while NDB's partnerships with government and financial institutions are strong, engagements with CSOs, private sector entities in emerging sectors, and other development partners (e.g., China International Development Cooperation Agency, government-backed development funds) remain underdeveloped. Co-financing with peer MDBs in China is limited to one pre-2022 AIIB collaboration, with no substantive operational ties to the ADB, World Bank, and other IFIs (see para. 197). Expanding such cooperation via a roadmap with measurable goals, clear deliverables, defined interaction modes, and structured work plans to mainstream partnerships with Chinese stakeholders would unlock additional resources and expertise, enhancing the partnership's impact.

10 RECOMMENDATIONS

A. Recurring recommendations from previous evaluations
B. New strategic recommendations
C. New operational recommendations
D. New institutional strengthening recommendations

10 Recommendations

A. RECURRING RECOMMENDATIONS FROM PREVIOUS EVALUATIONS

227. Prior to this CPE, multiple recommendations from other IEO evaluations on China-related operations have been raised and are under Management's consideration. Rather than reissuing them as new, this CPE reiterates their relevance and elaborates further below:

(1) **Develop a tailored country strategy aligned with China's national priorities and NDB's mandate for the next general strategy cycle (2027–2031),** informed by comprehensive government consultations and lessons learned from the first decade of China-NDB cooperation. Against the backdrop of China's 15th Five-Year Plan (2026–2030), this document shall explicitly articulate the imperative to link NDB's lending to non-lending activities in China, further complement the existing model by outlining priority areas for capacity building, expertise enhancement, customised tools/solutions, and TA to support China more effectively. Serving as a guide for resource allocation and stakeholder engagement, it shall be subject to periodic reviews to align with China's evolving development priorities.

(2) **Optimise project preparation, implementation, and M&E processes for China projects.** NDB should formalise a more structured early engagement process: (i) Participate in high-priority project concept development with subject-matter experts, providing technical inputs on design and financial viability throughout the project lifecycle; (ii) Enhance feasibility study quality by requiring robust baseline data collection, scenario-based demand forecasting (leveraging regional economic and demographic data), and comprehensive risk assessments. Additionally, conduct regular sectoral and policy assessments to adapt to China's evolving regulatory frameworks; deliver regular China-specific DMF training, emphasising critical sections (e.g., theory of change, assumption and risk monitoring). Mandate projects to include phased targets (e.g., three-year ridership ramp-up for urban transit) and adaptive monitoring frameworks tied to implementation progress. Post-approval, DMFs shall be proactively reviewed and updated during MTRs to reflect evolving project contexts. Further, enhance Project Administration Manuals to clarify NDB's procurement, financial management, and ESG compliance requirements — by leveraging China's country systems to achieve NDB's objectives through accurate and detailed interpretations, targeted guidance, and standardised templates.

(3) **Systematise TA and capacity building for full lifecycle support.** Allocate dedicated PPF resources and budgets to China-focused TA, and develop a portfolio-wide TA programme through Chinese government consultations — focusing on thematic areas including advanced technology adaptation and industrial low-carbon transition. Improve transparency and visibility of TA application procedures and disseminate PPF eligibility criteria to project entities — ensuring broad access to support. Develop a structured capacity-building framework drawing on first-decade partnership lessons, covering capacity assessment, ESG management, sustainable procurement, and project monitoring; deliver regular China-specific training and establish long-term capacity sustainability monitoring. Partner with top Chinese think tanks and research institutions to develop context-specific technical guidelines (e.g., typhoon-resistant offshore wind design, ecological infrastructure protection) and share them as global public goods.

(4) **Strengthen research and knowledge sharing to position the Bank's China portfolio as a knowledge repository.** NDB should: (i) Bolster internal research capacity by recruiting additional sectoral experts in key areas and filling the chief economist role to lead China-focused research on sustainable development challenges

and actionable solutions; (ii) Establish a centralised repository for knowledge products from NDB's China portfolio (e.g., technical reports, case studies, project-related patents) and ensure access for NDB staff, project stakeholders, and other member countries — fostering South-South knowledge sharing; (iii) Develop flagship knowledge products: biennial reports on China-NDB cooperation impact, case studies of high-impact replicable practices, and policy briefs on green finance and infrastructure innovation. Expand online dissemination channels — including NDB's Chinese WeChat official account and its website (in member countries' official languages) — featuring video case studies, expert interviews, and interactive tools to boost transparency and stakeholder engagement.

(5) **Optimise loan disbursement processes and improve fund utilisation efficiency.** Launch a borrower-centric digital client portal for drawdown requests, document submissions, and progress reporting — reducing disbursement processing time and enhancing transparency, aligned with peer MDB digitalisation trends. Explore enabling unused loan funds to be reallocated to eligible complementary components (e.g., supporting infrastructure, ancillary facilities, capacity building) within the same project through more streamlined approval workflows. Provide enhanced technical support on financial management and disbursement procedures to project entities, especially first-time borrowers and those with limited experience/capacities — mitigating delays from unfamiliarity with IFI requirements.

228. In addition to the above five recurring recommendations, four new ones are proposed below to address the unique issues identified by this CPE.

B. NEW STRATEGIC RECOMMENDATIONS

229. **Recommendation 1: Diversify financial products and instruments to enhance competitiveness and address market gaps.** The Bank needs to expand its product portfolio to include flexible financing tools tailored to China's market characteristics and development needs: (i) Introduce currency conversion options (e.g., USD or EUR to RMB) and interest rate swap mechanisms (fixed/floating rates, interest rate caps/collars) over the loan tenor to swiftly mitigate market risks; (ii) develop innovative financial instruments such as guarantees, direct/fund-based equity investments, and mezzanine finance to mobilise private capital, with a focus on emerging sectors such as new-quality productive forces, energy storage facilities, and green manufacturing — to address the diversified financing needs of China's dynamic private sector and digital infrastructure projects; (iii) refine the results-based lending process by synthetising lessons learned from existing operations and explore asset securitisation for economically viable projects (e.g., renewable energy with stable cash flows) by leveraging China's mature capital market. Additionally, offer fixed-rate loans on competitive terms for non-sovereign operations (typically shorter tenor with demand for stable repayment structures) to align with NDB's strategic target of allocating 30% of total financing to non-sovereign lending.

230. **Recommendation 2: Deepen partnerships with key stakeholders to mobilise resources and replicate good practices.** The Bank should strengthen targeted collaboration to fill gaps in resource mobilisation and knowledge sharing: (i) Formalise partnerships with CSOs and leading Chinese private enterprises in new-quality productive forces and advanced manufacturing (e.g., energy storage, smart logistics) to share technical expertise, knowledge and replicate successful models; (ii) Scale up co-financing with national financial intermediaries and peer MDBs for large-scale infrastructure and climate action projects — prioritising initiatives aligned with China's national development priorities (e.g., inter-provincial transport corridors, regional energy grids) and NDB's mandate to deliver

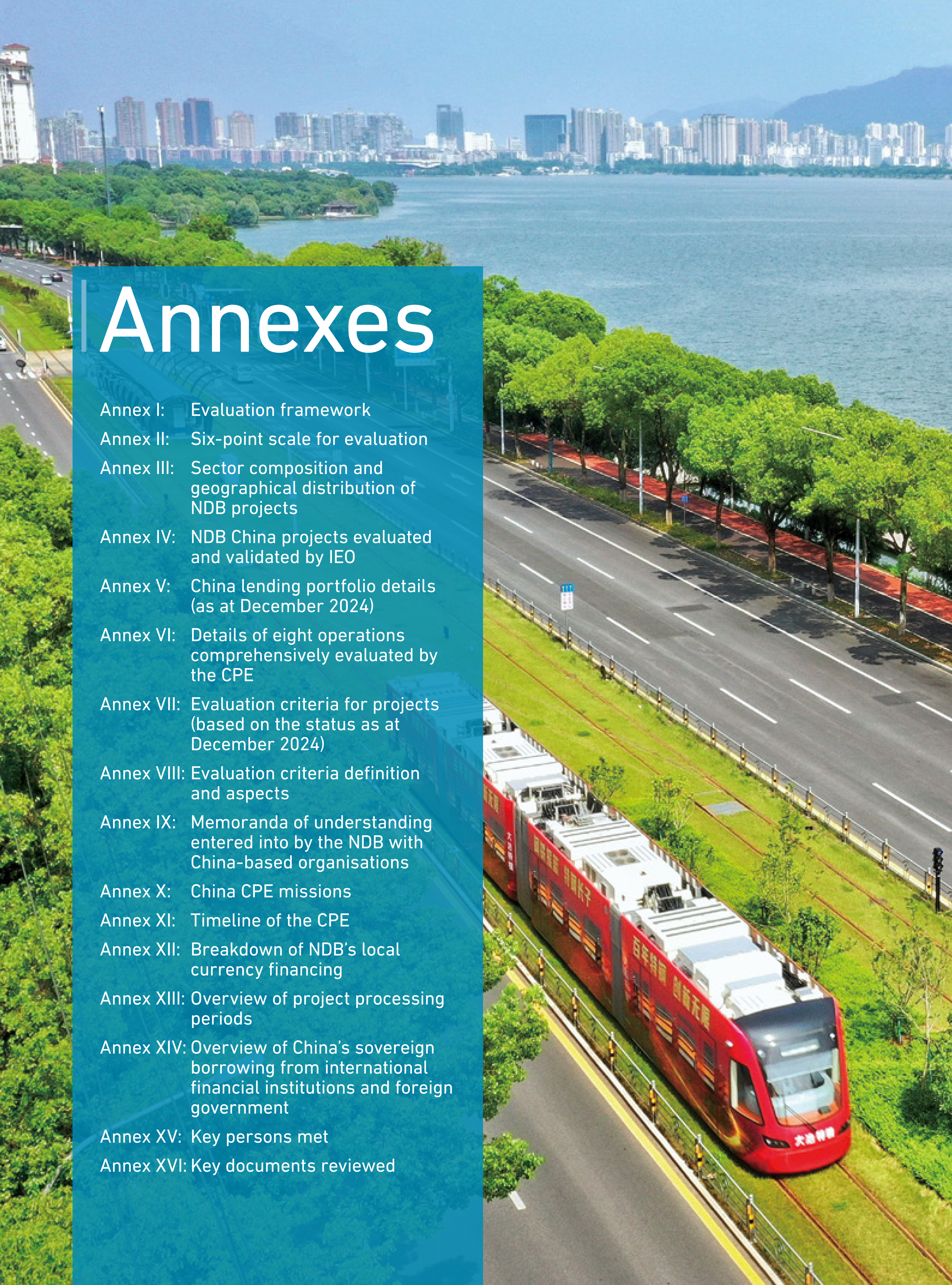
global public goods; (iii) Strengthen engagement with the MCDF and BRICS PartNIR Innovation Center, establish robust partnerships with the China International Development Cooperation Agency and other development partners (such as the government-based development funds) to access grants, joint TA, and policy coordination opportunities — addressing gaps in non-lending resource integration; (iv) Leverage existing partnerships with Chinese financial institutions to expand green syndicated loans and cross-border RMB financing, further advancing Shanghai's role as an international financial centre and promoting the usage of member countries' national currencies in NDB operations outside China. (v) Strengthening partnerships with United Nations and international organisations in China more widely for joint knowledge sharing, capacity building, research and mobilising resources to maximise the Bank's development impact.

C. NEW OPERATIONAL RECOMMENDATIONS

231. **Recommendation 3: Strengthen financial and economic appraisal methodologies through benchmarking common practices among peer MDBs, as well as tracking carbon reduction impacts for NDB-financed projects.** For instance, WACC calculations and financial analyses shall be consistently applied to operations generating notable revenue as part of the appraisal, where projects are not fully reliant on subsidies or other external support, such as annual government legislative appropriations or discretionary grants. Infrastructure residual value, if applicable, is suggested to be incorporated into EIRR models as a negative investment cost at the end of the project period, calculated as the proportion of an asset's remaining replacement life multiplied by its constant-price value. In addition, focusing on the specific parameters underpinning aggregate benefit or cost estimates in sensitivity analysis would improve assessment of the true impact of individual parameter changes, compared with a mechanical or isolated analytical approach. It is also recommended to identify switch values for each key variable and assess the project's risk exposure to those variables. The same hurdle rates should be applied consistently across all Bank-approved operations when calculating Economic Net Present Value (ENPV) and maintained consistently throughout the full lifecycle of individual projects for ENPV analysis. This ensures consistent benchmarking against approval-stage criteria to objectively verify whether a project has fully delivered on the expected economic viability committed at entry. Lastly, the Bank shall mandate consistent adoption of Scope 2 emissions accounting, requiring all applicable projects to integrate carbon reduction benefits into quantitative economic analysis and EIRR models. The IEO is of the view that these proposed refinements will further enhance the accuracy, comparability, and robustness of project appraisals and self-evaluations, and ensure that projects' financial sustainability, economic value, and environmental contributions are fully reflected.

D. NEW INSTITUTIONAL STRENGTHENING RECOMMENDATIONS

232. **Recommendation 4: Formalise and resource the China Desk to enhance portfolio management and processing capabilities.** Given the size of the current China portfolio and the country's future needs, NDB might need to consider: (i) Formalise the China Desk as a dedicated organisational unit with a clear mandate, a separate and dedicated budget and resources, and a direct reporting line to NDB Management (e.g., Vice President and Chief Operating Officer) — aligning with the structure of dedicated offices for other member countries; and (ii) Expand staffing to include sectoral experts, specialists for subject-matter, TA and knowledge management to ensure robust support for both lending and non-lending activities.



Annexes

Annex I: Evaluation framework

Criteria	Key questions	Main source of data and information
Lending activities		
Relevance	To what extent is the lending portfolio aligned with national development plans, policies, and strategies in the different thematic areas?	Study the national development plans, strategies and policies, project design documents; interview NDB staff (including, but not limited to, staff from strategy, research, and operations departments), government officials, and project authorities.
	In addition to traditional infrastructure areas, to what extent does the portfolio align with other development priorities of China (including but not limited to high-quality development, green and low-carbon development, climate change mitigation and adaptation, digital infrastructure, elderly care, childcare, and other related areas)?	
	Are the project designs compatible with the NDB general strategies, and to what extent? How thoroughly did the project design consider the use of technology for effectiveness, efficiency, innovation, and maximising development impact?	Study the NDB general strategies and project design documents. Interview NDB staff (operations and strategy, etc.) and project authorities.
	Did NDB select the most appropriate sectors/operations for financing and supporting China to pursue high-quality, balanced, inclusive, and sustainable development?	Perusal of relevant policy documents and national development plans, study projects, and operations financed by peer multilateral development banks in similar sectors and areas.
	Were there any expected synergies between and within the project portfolio, and the lending and non-lending activities (if any)?	Review of project documents (both design and implementation), and conduct interviews with NDB Management, staff members, and government stakeholders.
	Was the design realistic in terms of the context and implementation capacity?	

Criteria	Key questions	Main source of data and information
Effectiveness	To what extent did the selected project realise the envisaged objectives during implementation? *(Preferably one project in each of the NDB focus areas)*.	Evaluations of completed projects (e.g., project completion reports, monitoring and supervision reports, and country portfolio reviews). Interview project authorities and beneficiaries, if available. Field visits.
	Does the NDB China Desk have adequate capacity to discharge its mandate effectively? Is it well-equipped to effectively support project authorities and relevant in-country stakeholders?	Interview the NDB China Desk and government officials, review the Evaluation Synthesis Report - Preliminary Experience in Establishing NDB On-the-Ground Presence: The Role of Regional Offices.
	Given that the NDB's China portfolio largely focuses on transport infrastructure and clean energy, to what extent does the integration of innovation and technology into project design improve the accessibility and inclusivity of operations for all relevant stakeholders throughout implementation?	Study the national policy documents relating to transport infrastructure. Conduct Interviews with government officials and other stakeholders. Evaluations of completed projects, project completion reports, monitoring and supervision reports.
	How effective is the NDB portfolio in contributing to sector-specific outcomes and impacts, considering the sector-specific targets and goals of both the NDB and the Government of China, and balancing economic growth with social and environmental objectives?	Discussions with development partners, government officials, and other stakeholders. Review NDB annual reports and general strategies. Evaluations of completed projects, project completion reports, monitoring and supervision reports.
	Are the Design and Monitoring Frameworks sound, and to what extent are the performance indicators being monitored? To what extent was technology utilised to support the country's shift towards a more balanced and resilient economy in the project areas?	Evaluations of completed projects, project completion reports, project monitoring and supervision reports, and country portfolio reviews. Conduct focus group interviews and surveys with project authorities and relevant beneficiaries, using questionnaires, where possible during field visits.

Criteria	Key questions	Main source of data and information
Efficiency	How efficiently were the projects processed and implemented, such as: (i) project preparation and processing timeliness; (ii) implementation/disbursement timeliness (including project management performance); (iii) cost-benefit, economic internal rate of return; and (iv) project management cost.	Interview staff from NDB's Finance, Budget and Accounting Department (loan back office) and operations staff, including project managers. Evaluations of completed projects, project completion reports, project monitoring and supervision reports. Conduct focus group interviews and surveys with project authorities and relevant beneficiaries, if possible, during field visits. Study the Evaluation Synthesis Report - Preliminary Experience in Establishing NDB On-the-Ground Presence: The Role of Regional Offices.
	How were NDB's human resources deployed and organised to supervise and support the lending portfolio in China?	
	How did benefits and costs relate (e.g., net present value, economic internal rate of return)? How did this compare with similar operations or projects financed by peer international financial institutions (if the comparison is plausible) in the country?	
	Was the timeframe of the project design, appraisal, and implementation justifiable, considering the results achieved, the specific context, and unforeseeable events?	
Impact	To what extent has the portfolio contributed to social, environmental, and economic impact as outlined in NDB's general strategies and with the Government of China's targets, as well as balanced economic growth with social and environmental objectives in the project areas?	Review baseline and collected data, project completion reports, and implementation documents. Interview the parties concerned. Study the available data or evidence from similar projects. Study the relevant policy and strategy documents and interview affected parties.
	What positive changes or benefits have the projects brought to the targeted regions, communities, and beneficiaries? Did the projects strengthen climate and disaster resilience?	
	Have there been any unintended negative consequences, and if so, how were they addressed? Were there any unanticipated outcomes on climate change and disaster resilience?	
	How inclusive were the projects, and how transformative were the outcomes achieved? How did the projects monitor and measure the changes in the level and quality of inclusiveness among the stakeholders and beneficiaries in the project areas?	Review of project design documents and statistics available.

Criteria	Key questions	Main source of data and information
Sustainability	To what extent has the project design considered the financial sustainability of the operations? Is funding available for maintenance and capacity building to operate and maintain the infrastructure?	Discussions with relevant staff/ management and comparison with international norms.
	Was there a specific exit strategy, including the contingency plan for decommission, or an approach prepared and agreed upon by key partners to ensure sustainability post-NDB financing?	Review project design documents. Conduct focus group interviews and surveys with project authorities and relevant beneficiaries using questionnaires, if possible, during field visits.
	What are the chances that the benefits generated by the projects will continue after NDB's financing?	
	Is there a clear indication of financing commitment after the loan closing date, for example, in terms of provision of funds for selected activities, human resources availability, and institutional support? Did the project design anticipate that such support would be needed after NDB's financing?	
	How well have the projects considered environmental and social sustainability aspects?	
	What measures have been taken to ensure the long-term viability of project outcomes?	
NDB performance and additionality	What is the overall quality of the project concept note and project document to the Board?	Review project design documents and conduct interviews with government officials and project implementation agencies/units.
	What is the quality of the Design and Monitoring Framework in the project document to the Board and self-evaluation products prepared by NDB Management, such as the project performance assessment and project completion report?	
	Did NDB conduct project supervision, including participatory ones, and what was the frequency and quality of supervision processes and deliverables? How far did the supervision report address issues of inclusion and equity?	Review project monitoring and supervision reports, interview NDB staff members (from the Environmental, Social and Governance Department, the Finance, Budget and Accounting Department, and operations departments), and conduct surveys of the project implementation agencies/ units using questionnaires.
	Overall, what was NDB's financial and non-financial additionality? Is there evidence that lessons learned and knowledge generated through NDB operations have been effectively used to support the scaling up of successful initiatives?	Review project design documents, project completion reports, and conduct interviews with government officials and project implementation agencies/units.

Criteria	Key questions	Main source of data and information
Borrower performance	Did the Government and borrower provide oversight and strategic guidance during project design and implementation? Did the borrowers comply with the loan covenants and fulfil their fiduciary responsibilities according to the loan agreement? To what extent did the borrower and the project implementation agency demonstrate their ownership of operations?	Review project monitoring and supervision reports, the project performance assessment, and the project completion reports. Interview NDB staff members (from the Environmental, Social and Governance Department, the Finance, Budget and Accounting Department, and operations departments) and conduct surveys with the project implementation agencies/units using questionnaires.
	What is the quality of the project implementation documents, such as the project progress report, procurement plan, and project completion report, etc.? Were the project progress report and the project completion report done on time?	
	Has the project been implemented on time and within budget as planned? What is the relevant stakeholders' approach to managing knowledge on innovations and results from NDB projects, and through which channels?	
Non-lending activities		
Technical assistance	To what extent has NDB's technical assistance strengthened communication with local authorities and project units during project selection and design?	Review project design and implementation documents. Review NDB budget and human resources information, annual reports, and financial statements.
	Can the technical assistance provided by NDB be demonstrably linked to improvements in project implementation and efficiency?	Review project design and implementation documents, interview government officials, and conduct surveys of the project implementation agencies/units using questionnaires.
	Do NDB's technical assistance activities equip local counterparts with the skills and resources to maintain positive impacts beyond the project timeframe?	
Capacity building	Were resources earmarked for capacity building and explicitly specified? To what extent were capacity-building activities embedded in the loan portfolio?	Review NDB budget and human resources information, annual reports, and financial statements. Interview NDB staff (including, but not limited to, the strategy, research and operations departments).
	How coherent are the capacity-building activities with the lending portfolio? Did the Bank allocate sufficient human and financial resources to capacity-building activities in China?	Review project papers, including monitoring, implementation, and self-evaluation documents, as well as available project completion reports.
	Do NDB's capacity-building activities respond to the specific needs and challenges of project implementation in China, for example, any training or exchange sessions to help project implementation agencies better carry out projects and improve project quality?	Interview government officials and conduct surveys with the project implementation agencies/units using questionnaires.

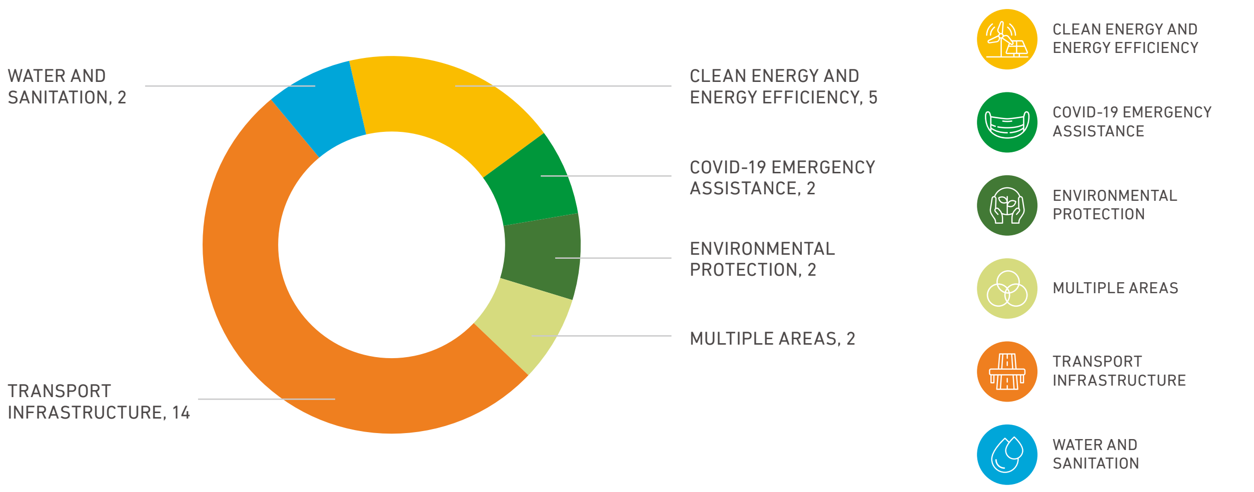
Criteria	Key questions	Main source of data and information
Research and knowledge sharing	How effectively do NDB's research and knowledge management activities address priority development challenges in China?	Interview government officials and NDB staff (strategy, research, and environmental, social and governance, etc.). Review the NDB annual reports and published knowledge products (if any).
	To what extent have lessons and knowledge generated through NDB-funded operations been collected, documented, and disseminated? To what extent have lessons from successes and failures been shared across NDB operations (e.g., between different projects and/or provinces)? And how have these informed the Bank's current and future general strategies, policies, guidelines, and project design?	Review project papers, including design documents, implementation and project completion reports. Interview NDB staff (operations, research, strategy, and environmental, social and governance, etc.) Conduct focus group interviews and surveys with project implementation agencies/units using questionnaires.
	Did the project meaningfully integrate and legitimise local knowledge, ensure meaningful participation from different demographic groups, document and share knowledge in accessible ways, and establish long-term knowledge retention and capacity-building mechanisms?	Review project papers, including design documents, implementation and project completion reports. Interview NDB staff (operations, research, strategy, environmental, social and governance, etc.) Conduct focus group interviews and surveys with project implementation agencies/units using questionnaires.
	Is there any evidence that lessons and knowledge generated through NDB lending and non-lending activities have been effectively used to support scaling up successful initiatives? Did the NDB operations teams produce any knowledge management or communication products? Was critical knowledge elicited and prioritised, to improve decision-making?	Interview government officials, project implementation agencies/authorities, and other development partners in China. Review the NDB annual reports and published knowledge products (if any).
Partnership development	Have NDB's partnership development efforts effectively and efficiently contributed to project outcomes and development impact?	Interview government officials, project implementation agencies, and peer multilateral development banks. Review project papers, including design documents, implementation and project completion reports.
	How did NDB position itself and its work in partnership with other development partners? Were there appropriate strategies to participate in sector meetings or events, formal partnerships, co-financing, resource mobilisation, etc.?	
	Did NDB operations contribute to creating and supporting partnerships at different levels (local, national, international) with the aim of leveraging resources and broker knowledge in and from China?	

Annex II: Six-point scale for evaluation

Score	Rating	Description
6	Highly Successful	The activity (project, programme, non-lending, etc.) achieved or surpassed all (indicatively, over 95%) of the main targets, objectives, expectations, and results and could be considered as a model within its project typology.
5	Successful	The activity achieved almost all (indicatively, between 80%–95%) of the main targets, objectives, expectations, and results.
4	Moderately Successful	The activity achieved the majority (indicatively, between 60%–80%) of the main targets, objectives, expectations, and results. However, a significant part of these was not achieved.
3	Moderately Unsuccessful	The activity did not achieve most (indicatively, less than 60%) of the main targets, objectives, expectations, and results.
2	Unsuccessful	The activity achieved only a minority (indicatively, less than 50%) of the main targets, objectives, expectations, and results.
1	Highly Unsuccessful	The activity achieved almost none (indicatively, less than 20%) of the main targets, objectives, expectations, and results.

Annex III: Sector composition and geographical distribution of NDB projects

Sector composition of NDB's portfolio in China (by number of projects)



Source: NDB Loan Dashboard by the Finance, Budget, and Accounting Department (December 2024) and IEO's analysis.

Projects' geographical distribution in China (excluding the cancelled operations)

Province-level divisions	Location in China	No. of projects	Key areas financed
Anhui	East	2	Transport (road-rail bridge and road networks development)
Beijing	North	1	Clean energy (LNG emergency reserve)
Fujian	East	1	Clean energy and energy efficiency (offshore wind)
Gansu	North-west	2	Transport (airport, multimodal logistics infrastructure)
Guangxi	South	2	Water and sanitation (1) and transportation (1)
Guangdong	South	1	Clean energy and energy efficiency (offshore wind)
Guizhou	South-west	1	Transportation (rural roads improvement)
Henan	Middle	1	Transportation (underground metro)
Hubei	Middle	2	Transportation (modern tram, logistics connectivity)
Inner Mongolia	North	1	Transportation (new airport)
Jiangxi	East	2	Environmental protection (1) and clean energy (1)
Liaoning	North-east	1	Multiple areas (industry upgradation and sustainable infrastructure, etc.)
Ningxia	North-west	1	Transportation (green bus system)
Shandong	East	1	Transportation (underground metro)
Shanghai	East	1	Clean energy (distributed solar power)
Shaanxi	North-west	1	Transportation (airport facilities expansion)
Zhejiang	East	2	Water and sanitation (1) and multiple areas (1)

Source: NDB Loan Dashboard by the Finance, Budget and Accounting Department (December 2024) and IEO's analysis.

Annex IV: NDB China projects evaluated and validated by IEO

IEO Rating: Highly Successful (6); Successful (5); Between Successful and Moderately Successful (4.5); Moderately Successful (4)

No.	Name of project	Type of work	Relevance	Effectiveness	Efficiency	Impact	Sustainability	Overall rating
1	Luoyang Metro Project	Project performance evaluation in 2023	5	5	6	6	5	5
2	NDB Emergency Assistance Programme in Combating COVID-19	Thematic evaluation in 2023	4	5	4	4.5	N/A*	4
3	NDB Emergency Assistance Programme in Supporting China's Economic Recovery from COVID-19		4	5	4	4.5	N/A	4
4	Shanghai Lingang Distributed Solar Power Project	Project completion report validation in 2024	5	5	4	5	5	5
5	Putian Pinghai Bay Offshore Wind Power Project	Project performance evaluation in 2024	5	6	5	6	5	5
6	Guangdong Yudean Yangjiang Shapa Offshore Wind Power Project	Project performance evaluation in 2025	5	5	4	6	5	5

* Sustainability was not rated for the NDB Emergency Assistance Programme in Combating COVID-19. For details, see: https://www.ndb.int/wp-content/uploads/2024/02/COVID-19_Evaluation-Report_Feb20_final.pdf.

Annex V: China lending portfolio details (as at December 2024)

No.	Project name	Type of loan	Key area	Approval date	Loan signing date
1	Lingang Distributed Solar Power Project	Sovereign	Clean energy and energy efficiency	13-Apr-2016	21-Dec-2016
2	Putian Pinghai Bay Offshore Wind Power Project	Sovereign	Clean energy and energy efficiency	22-Nov-2016	03-Sep-2017
3	Ecological Development Project in the Green Heart Center of the Hunan Chang-Zhu-Tan City Cluster	Sovereign	Water and sanitation	30-Aug-2017	N/A, Cancelled
4	Jiangxi Industrial Low Carbon Restructuring and Green Development Pilot Project	Sovereign	Environmental protection	30-Aug-2017	03-Sep-2017
5	Hohhot New Airport Project	Sovereign	Transport infrastructure	16-Nov-2018	24-Jan-2019
6	Chongqing Small Cities Sustainable Development Project	Sovereign	Multiple areas	28-May-2018	N/A, Cancelled
7	Luoyang Metro Project	Sovereign	Transport infrastructure	20-Jul-2018	16-Aug-2018
8	Guangdong Yudean Yangjiang Shapa Offshore Wind Power Project	Sovereign	Clean energy and energy efficiency	16-Nov-2018	03-Dec-2019
9	Jiangxi Natural Gas Transmission System Development Project	Sovereign	Clean energy and energy efficiency	16-Nov-2018	22-May-2019
10	Zhejiang Green Urban Project - Shengzhou Urban and Rural Integrated Water Supply and Sanitation Project Phase II	Sovereign	Water and sanitation	31-Mar-2019	31-Jul-2019
11	Guangxi Chongzuo Urban Water System Ecological Restoration Project	Sovereign	Water and sanitation	31-Mar-2019	14-May-2019
12	Ningxia Yinchuan Integrated Green Transport Development Project	Sovereign	Transport infrastructure	25-Jun-2019	30-Apr-2020
13	Lanzhou New Area Regional Hub Multimodal Logistics and Transport Infrastructure Demonstration Project	Sovereign	Transport infrastructure	25-Jun-2019	21-Aug-2019
14	Huangshi Modern Tram Project	Sovereign	Transport infrastructure	02-Dec-2019	31-Mar-2020
15	NDB Emergency Assistance Programme in Combating COVID-19	Sovereign	COVID-19 emergency assistance	19-Mar-2020	20-Mar-2020

Closing date	Loan currency	Approved million	Approved (in USD million)	Disbursed million	Disbursed (in USD million)	Status as at December 2024
21-Dec-2020	RMB	243	33	223	31	Completed/Project completion report validated in 2024
02-Sep-2021	RMB	2,000	275	1,969	271	Completed/Evaluated by IEO in 2024
	RMB	2,000	275.2	N/A, Cancelled		
03-Sep-2024	USD	200	200	178	178	Loan closed, but a few sub-projects were not completed by Q1 2025
23-Jul-2025	RMB	4,200	578	3,482.9	477.2	Disbursing (82.9%), under construction
	USD	300	300	N/A, Cancelled		
15-Aug-2022	USD	300	300	300	300	Closed/Evaluated by IEO in 2023
02-Dec-2022	RMB	2,000	275	2,000	275	Completed/Evaluated by IEO in 2025
21-May-2024	USD	400	400	246	246	Completed and operated by the end of 2024
30-Jul-2024	RMB	825	114	758.4	103.9	Completed and operated by the end of 2024
14-May-2024	USD	187	187	109	109	Disbursing (58%)
29-Apr-2024	RMB	2,100	289	1,798	248	Completed and operated by the end of 2024
20-Feb-2026	RMB	2,512	346	1,525.3	209	Disbursing (60.7%)
30-Mar-2024	RMB	2,760	380	2,449	337	Completed and operated by the end of 2023
31-Dec-2020	RMB	7,000	963	7,000	963	Completed and evaluated by IEO in 2023

No.	Project name	Type of loan	Key area	Approval date	Loan signing date
16	Beijing Gas Tianjin Nangang LNG Emergency Reserve Project	Sovereign	Clean energy and energy efficiency	09-Mar-2021	19-Apr-2021
17	NDB Emergency Assistance Programme for Supporting China's Economic Recovery from COVID-19	Sovereign	COVID-19 emergency assistance	26-Feb-2021	18-Mar-2021
18	Anhui Province Roads Development Project	Sovereign	Transport infrastructure	29-Jun-2021	21-Oct-2021
19	Qingdao Metro Line Six (Phase I) Project	Sovereign	Transport infrastructure	14-Dec-2021	17-Mar-2022
20	Lanzhou Zhongchuan International Airport Phase III Expansion Project	Sovereign	Transport infrastructure	18-Jul-2022	14-Nov-2022
21	Xi'an Xianyang International Airport Phase III Expansion Project	Sovereign	Transport infrastructure	18-Jul-2022	14-Nov-2022
22	Guangxi Trunk Road Network Improvement Programme	Sovereign	Transport infrastructure	13-Dec-2022	03-Aug-2023
23	Anhui Tongling G3 Road-Rail Bridge Project	Sovereign	Transport infrastructure	13-Dec-2022	24-Oct-2023
24	Guizhou Qianxinan Rural Roads Improvement Programme	Sovereign	Transport infrastructure	01-Mar-2023	23-Aug-2023
25	Bank of Huzhou Sustainable Infrastructure Project	Non-sovereign	Multiple areas	28-Nov-2023	28-May-2024
26	BoCom Financial Leasing LNG Transportation Project	Non-sovereign	Transport infrastructure	29-Aug-2024	-
27	Liaoning Industry Upgradation, Infrastructure and Environmentally Sustainable Development Project	Sovereign	Multiple areas	24-Oct-2024	-
28	Haitong Leasing Environmental Protection Project	Non-sovereign	Environmental protection	28-Nov-2024	-
29	Middle Reaches of the Yangtze River (Wuhan) Smart Logistics Hub Project	Sovereign	Transport infrastructure	7-Dec-2024	-

Closing date	Loan currency	Approved million	Approved (in USD million)	Disbursed million	Disbursed (in USD million)	Status as at December 2024
18-Apr-2026	EUR	436	466	371	397	Disbursing (85%), largely completed and partially operated
18-Sep-2022	RMB	7,000	963	7,000	963	Completed/Evaluated by IEO in 2023
20-Oct-2026	EUR	340	364	69	73	Disbursing (29%)
16-Mar-2027	RMB	3,237	446	3,237	446	Fully disbursed, completed, and operated in June 2024
13-May-2026	EUR	265	283	146.4	152.5	Disbursing (55.2%), largely completed and operated in Mar 2025
13-Nov-2026	RMB	805	111	570	78	Disbursing (79.4%) and under construction
31-Dec-2025	EUR	465	497	150.4	156.7	Disbursing (32.3%)
23-May-2028	RMB	2,190	301	443	61	Disbursing (74.6%) and under construction
30-Jun-2026	RMB	1,280	178	168.4	23.6	Disbursing (13.2%)
28-Nov-2025	RMB	358	49	358	49	Fully disbursed and under construction
-	RMB	1,087	150 (equivalent)	-	-	Approved but not signed
-	RMB	1,460	205.1	-	-	Approved but not signed
-	RMB	725.4	100	-	-	Approved but not signed
-	RMB	2,415	330.8	-	-	Approved but not signed

Annex VI: Details of eight operations comprehensively evaluated by the CPE

Table 1: Sovereign operations commercially operated (and fully disbursed) by December 2024

Project name	Approval date	Closing date	Date of last disbursement	Status of implementation
Huangshi Modern Tram Project	2-Dec-2019	30-Mar-2024	26-Sep- 2024	Commercial operation, started in December 2022; the borrower project completion report was finalised in July 2025.
Zhejiang Green Urban Project - Shengzhou Urban and Rural Integrated Water Supply and Sanitation Project Phase II	31-Mar-2019	30-Jul-2024	15-Nov-2024	Project closed in July 2024; the borrower project completion report was finalised in June 2025.
Ningxia Yinchuan Integrated Green Transport Development Project	25-Jun-2019	29-Apr-2024	27-Aug-2024	Project closed in April 2024; the borrower project completion report was finalised in July 2025.
Jiangxi Natural Gas Transmission System Development Project	16-Nov-2018	21-May-2024	15-Oct-2024	Project closed in May 2024; the borrower project completion report was finalised in July 2025.
Qingdao Metro Line Six (Phase I) Project	14-Dec-2021	16-Mar-2027	20-May-2024	Fully disbursed, commercial operation started in April 2024.

Table 2: Sovereign operations largely completed by December 2024

Project name	Approval date	Loan closing date	Disbursement ratio	Status of implementation
Jiangxi Industrial Low Carbon Restructuring and Green Development Pilot Project	30-Aug-2017	30-Sep-2024	94.5%	Project Finance Facility with 20 sub-projects: Most were completed by May 2025, with a few to be delivered by the end of the year.
Beijing Gas Tianjin Nangang LNG Emergency Reserve Project	9-Mar-2021	18-Apr-2026	85%	Construction was largely completed; Phases I and II of the project were already commercially operated in 2024.
Lanzhou Zhongchuan International Airport Phase III Expansion Project	18-Jul-2022	13-May-2026	55.2%	Construction was largely completed; Terminal T3 officially opened for operation on 20 March 2025.

Annex VII: Evaluation criteria for projects (based on the status as at December 2024)

No.	Project name	Approval date	Loan signing date	Loan last available date
1	Shanghai Lingang Distributed Solar Power Project	13-Apr-2016	21-Dec-2016	21-May-2021
2	Putian Pinghai Bay Offshore Wind Power Project	22-Nov-2016	30-Sep-2017	2-Mar-2022
3	Ecological Development Project in the Green Heart Center of the Hunan Chang-Zhu-Tan City Cluster	17-Aug-2017	Cancelled	
4	Jiangxi Industrial Low Carbon Restructuring and Green Development Pilot Project	17-Aug-2017	3-Sep-2017	3-Mar-2025
5	Chongqing Small Cities Sustainable Development Project	28-May-2018	Cancelled	
6	Luoyang Metro Project	20-Jul-2018	16-Aug-2018	15-Feb-2023
7	Hohhot New Airport Project	16-Nov-2018	24-Jan-2019	23-Jan-2026
8	Guangdong Yudean Yangjiang Shapa Offshore Wind Power Project	16-Nov-2018	3-Dec-2019	2-Jun-2023
9	Jiangxi Natural Gas Transmission System Development Project	16-Nov-2018	22-May-2019	12-Nov-2024
10	Zhejiang Green Urban Project - Shengzhou Urban and Rural Integrated Water Supply and Sanitation Project Phase II	31-Mar-2019	31-Jul-2019	30-Jan-2025
11	Guangxi Chongzuo Urban Water System Ecological Restoration Project	31-Mar-2019	14-May-2019	14-Nov-2027
12	Ningxia Yinchuan Integrated Green Transport Development Project	25-Jun-2019	30-Apr-2020	29-Oct-2024
13	Lanzhou New Area Regional Hub Multimodal Logistics and Transport Infrastructure Demonstration Project	25-Jun-2019	21-Aug-2019	20-Aug-2026
14	Huangshi Modern Tram Project	2-Dec-2019	31-Mar-2020	27-Sep-2024
15	NDB Emergency Assistance Programme in Combating COVID-19	19-Mar-2020	20-Mar-2020	30-Jun-2021

Disbursement ratio % as at December 2024	Relevance	Effectiveness	Efficiency	Impact	Sustainability
92% (NDB project completion report approved)	Project completion report validation in 2024				
98% (NDB project completion report approved)	Evaluated by IEO in 2024 (project performance evaluation)				
0%	Cancelled				
95% (loan closed but not completed/constructed)	✔	✔	✔		
0%	Cancelled				
100%	Evaluated by IEO in 2023 (project performance evaluation)				
83%	✔				
100%	Evaluated by IEO in 2025 (project performance evaluation)				
64% (loan closed, operated in 2024)	✔	✔	✔	✔	✔
92% (loan closed, operated in 2024)	✔	✔	✔	✔	✔
58%	✔				
87% (loan closed)	✔	✔	✔	✔	✔
61%	✔				
87% (loan closed, operated in Dec 2022)	✔	✔	✔	✔	✔
100% (NDB project completion report approved)	Evaluated by IEO in 2023 (thematic evaluation)				

No.	Project name	Approval date	Loan signing date	Loan last available date
16	Emergency Assistance Programme in Supporting China's Economic Recovery from COVID-19	26-Feb-2021	18-Mar-2021	15-Mar-2023
17	Beijing Gas Tianjin Nangang LNG Emergency Reserve Project	9-Mar-2021	19-Apr-2021	15-Oct-2026
18	Anhui Province Roads Development Project	29-Jun-2021	21-Oct-2021	19-Apr-2027
19	Qingdao Metro Line Six (Phase I) Project	14-Dec-2021	17-Mar-2022	13-Sep-2027
20	Lanzhou Zhongchuan International Airport Phase III Expansion Project	18-Jul-2022	14-Nov-2022	10-Nov-2026
21	Xi'an Xianyang International Airport Phase III Expansion Project	18-Jul-2022	14-Nov-2022	12-May-2027
22	Guangxi Trunk Road Network Improvement Programme	13-Dec-2022	3-Aug-2023	30-Jun-2026
23	Anhui Tongling G3 Road-Rail Bridge Project	13-Dec-2022	24-Oct-2023	20-Nov-2028
24	Guizhou Qianxinan Rural Roads Improvement Programme	1-Mar-2023	23-Aug-2023	27-Dec-2026
25	Bank of Huzhou Sustainable Infrastructure Project*	28-Nov-2023	28-May-2024 (non-sovereign)	
26	BoCom Financial Leasing LNG Transportation Project	29-Aug-2024	N/A	N/A
27	Liaoning Industry Upgradation, Infrastructure and Environmentally Sustainable Development Project	24-Oct-2024	N/A	N/A
28	Haitong Leasing Environmental Protection Project	28-Nov-2024	N/A	N/A
29	Middle Reaches of the Yangtze River (Wuhan) Smart Logistics Hub Project	7-Dec-2024	N/A	N/A

* This is NDB's first non-sovereign lending operation in China, approved by the Board of Directors in November 2023, signed in May 2024, with a closing date at the end of 2025. Therefore, it would be a methodological challenge to assess this project's financial, environmental, and social performance in its initial stage of implementation by using evaluation criteria for private sector operations, as well as assessing its Effectiveness and Efficiency, considering there is no operational data and the majority of the financed sub-projects are still under implementation and construction as at May 2025.

** Same as above.

Disbursement ratio % as at December 2024	Relevance	Effectiveness	Efficiency	Impact	Sustainability
100% (NDB project completion report approved)	Evaluated by IEO in 2023 (thematic evaluation)				
85% (partially operated in Q4 2024)	✔	✔	✔		
29%	✔				
100% (commercially operated in 2024)	✔	✔	✔	✔	✔
55% (operated in March 2025)	✔	✔	✔		
79% (construction ongoing as Q1 2025)	✔				
32%	✔				
75% (construction ongoing as Q1 2025)	✔				
13%	✔				
100%**	✔				
0%	Approved but not signed by the end of December 2024, non-sovereign operation				
0%	Approved but not signed by the end of December 2024				
0%	Approved but not signed by the end of December 2024, non-sovereign operation				
0%	Approved but not signed by the end of December 2024				

Annex VIII: Evaluation criteria definition and aspects

A. Lending activities	
Relevance **Is the intervention doing the right thing?**	Consistency of the development intervention objectives with beneficiary needs, the country's development or policy priorities and strategy, and the international financial institution's assistance strategy and corporate goals; and the adequacy of the project components (design) to achieve those objectives.
Effectiveness **Is the intervention achieving its objectives?**	The extent to which the project and portfolio achieved (or is expected to achieve) its stated objectives, taking into account their relative importance.
Efficiency **How well are resources being used?**	The extent to which the project and portfolio have converted their economic resources into results in a timely manner.
Impact **What difference does the intervention make?**	The extent to which the intervention has generated or is expected to generate significant positive or negative, intended or unintended effects. Impact addresses the ultimate significance and potentially transformative effects of the intervention. It seeks to identify social, environmental, and economic effects of the intervention that are longer-term or broader in scope than those already captured under the effectiveness criterion. Beyond the immediate results, this criterion seeks to capture the indirect, secondary, and potential consequences of the intervention. It does so by examining the holistic and enduring changes in systems or norms and potential effects on people's well-being, human rights, gender equality, and the environment.
Sustainability **Will the benefits last?**	The extent to which the net benefits of the intervention continue or are likely to continue. Includes an examination of the financial, economic, social, environmental, and institutional capacities of the systems needed to sustain net benefits over time. Involves analyses of resilience, risks, and potential trade-offs. Depending on the timing of the evaluation, this may involve analysing the actual flow of net benefits or estimating the likelihood of net benefits continuing over the medium and long-term.
NDB and borrower performance	This criterion assesses the contribution of NDB, borrower, and development partners to project design, execution, monitoring and reporting, supervision and implementation support, and evaluation. The performance of each party will be assessed on an individual basis with a view to the party's expected role and responsibility in the project life cycle and overall partnership.

Additional aspects/considerations for private sector operations	
Financial performance and fulfillment of project business objectives	Under this aspect, the incremental effect of the project on the borrower is assessed on a with- vs. without-project basis or a before- vs. after-project basis. The effect of the project on all financial stakeholders in the project and/or company should be considered. Both historic and, where relevant, projected performance should be taken into consideration. The rating also considers the fulfillment of project business objectives, that is, the extent to which the project has delivered on the process and business objectives stated at approval.
Economic sustainability	In evaluating the economic sustainability of the project (i.e., the contribution of the project and/or project company to growth in the economy), the incremental effect of the project on stakeholders is assessed on a with- vs. without-project basis or before- vs. after-project basis. Where possible and relevant, both historic and projected economic effects are taken into consideration. The effect of the project on all key economic stakeholders (including — and beyond — the project company's owners and financiers) is considered.
Contribution to NDB mandate	This indicator measures the project's contribution to the mandate objective of the international financial institution (such as stimulating development of the private sector and efficient capital markets, or transition to a market economy).
Environmental and social performance	The rating of environmental and social performance considers the project company's overall environmental and social performance within the project's area of influence, based primarily on the international financial institution's standards in effect at the time of approval, and secondarily, on the standards prevailing at the time of the evaluation. The assessment focuses on the project company's management of environmental and social aspects, and to the extent covered by the international financial institution's policies. In addition, the assessment should consider the adequacy and implementation of the financial intermediary's Environmental and Social Management System.
NDB additionality	The aspect of NDB's additionality considers the organisation's value proposition in providing support to the project. It is based on the counterfactual assessment of how the project would have (or would not have) proceeded without NDB support. It should consider all factors relevant to the role and contribution of the NDB.

B. Non-lending activities	
Technical assistance	This criterion assesses the extent to which technical assistance is embedded into the Bank's lending portfolio and equips local counterparts with the skills, knowledge, and resources for scaling up operations, making projects viable for private sector participation, assisting clients in solving technical problems, sharing their innovative learnings, and addressing skill or capability gaps.
Capacity building	The extent to which the capacity-building activities respond to the specific needs and challenges of project implementation in China, for example, training or capacity-building programmes to help project implementation agencies better carry out projects and improve project quality.
Research and knowledge sharing	This criterion assesses the extent to which the lessons, knowledge, and good practices generated through NDB activities and assistance have been effectively used to enhance the understanding of its members' economies, development contexts, challenges, policies, project pipelines, and practices related to infrastructure and sustainable development.
Partnership development	The extent to which deeper engagement with the international development community and private entities has supported NDB operations and resource mobilisation. The extent to which NDB intensifies its engagement with its partners by further leveraging their expertise, co-financing projects, and cooperating in other areas such as treasury and financial markets.

Annex IX: Memoranda of understanding entered into by the NDB with China-based organisations

No.	Date of signing	Name of counterparty	Location (Headquarters)	Type/nature of institution
1	14-Jan-2016	Bank of China	Beijing	Commercial bank
2	8-Jun-2016	China Construction Bank	Beijing	Commercial bank
3	10-Nov-2016	Bank of Communication	Shanghai	Commercial bank
4	1-Apr-2017	Asian Infrastructure Investment Bank	Beijing	Multilateral development bank
5	31-May-2017	Shanghai University of Finance and Economics	Shanghai	Academic
6	1-Sep-2017	China Development Bank	Beijing	National development bank
7	2-Sep-2017	Agricultural Bank of China	Beijing	Commercial bank
8	2-Sep-2017	Industrial and Commercial Bank of China	Beijing	Commercial bank
9	29-Jun-2020	Multilateral Cooperation Center for Development Finance	Beijing	Multilateral institution
10	28-May-2021	Export-Import Bank of China	Beijing	National development bank
11	14-Sep-2021	Agricultural Development Bank of China	Beijing	National development bank
12	14-Jun-2022	BRICS Partnership on New Industrial Revolution Innovation Center	Xiamen	Multilateral initiative
13	15-Jul-2025	Asia-Pacific Finance and Development Institute*	Shanghai	Academic

Note: Information is summarised from the NDB website: http://www.ndb.int/partnership/memoranda-of-understanding.
* The Memorandum of Understanding was entered into by the IEO of NDB with the Asia-Pacific Finance and Development Institute (AFDI) to enhance collaboration on evaluation matters, to create a framework for systematic collaboration between IEO and AFDI in ensuring credible and high-quality evaluations to enhance evidence-based policy and decision-making for greater impact and sustainability of NDB activities.

Annex X: China CPE missions

No.	Mission	Project	Area of operation
1	Nanchang Jiangxi, 18 to 19 April	Jiangxi Industrial Low Carbon Restructuring and Green Development Pilot Project	Environmental protection
		Jiangxi Natural Gas Transmission System Development Project	Clean energy and energy efficiency
2	Shengzhou Zhejiang, 28 to 29 April	Zhejiang Green Urban Project - Shengzhou Urban and Rural Integrated Water Supply and Sanitation Project Phase II	Water and sanitation
3	Beijing, 8 to 9 May	Beijing Gas Tianjin Nangang LNG Emergency Reserve Project	Clean energy and energy efficiency
4	Yinchuan Ningxia, 21 to 22 May	Ningxia Yinchuan Integrated Green Transport Development Project	Transport infrastructure
5	Lanzhou Gansu, 10 to 11 June	Lanzhou Zhongchuan International Airport Phase III Expansion Project	
		Lanzhou New Area Regional Hub Multimodal Logistics and Transport Infrastructure Demonstration Project	
6	Huangshi Hubei, 18 to 19 June	Hubei Huangshi Modern Tram Project	
7	Qingdao Shandong, 17 to 18 July	Qingdao Metro Line Six (Phase I) Project	

Annex XI: Timeline of the CPE

Stage	Date
Draft approach paper sent to members of the Evaluation Reference Group (ERG)	December 2024
Comments received on the draft approach paper	January 2025
Revised approach paper sent to the ERG for final review	February 2025
Approach paper finalised	March 2025
CPE Inception Workshop with members of the ERG at NDB Headquarters	25 March 2025
Desk review	February-April 2025
Main evaluation missions and selected project site visits	April-July 2025
Progress and interim report shared with the ERG for comments	August 2025
Comments received from the Ministry of Finance on the interim report	October 2025
Comments received from other members of the ERG on the interim report	November 2025
Draft CPE report sent to members of the ERG for comments	9 December 2025
Comments received from the Ministry of Finance on the draft CPE report	20 January 2026
Comments received from NDB Management on the draft CPE report	11 March 2026
Audit trail templates shared by IEO with NDB Management to address review comments	31 March 2026
CPE report finalised and sent to NDB Management to prepare the Management response	23 April 2026
Management response received on the final CPE report	28 May 2026
Presentation of the CPE to the NDB Board of Directors	9 June 2026
Final China CPE seminar	Second half of 2026
Dissemination and communication of the CPE report and related deliverables	Second half of 2026

Annex XII: Breakdown of NDB's local currency financing

Figure 1: Percentage of local currency financing (by member country) as at December 2024

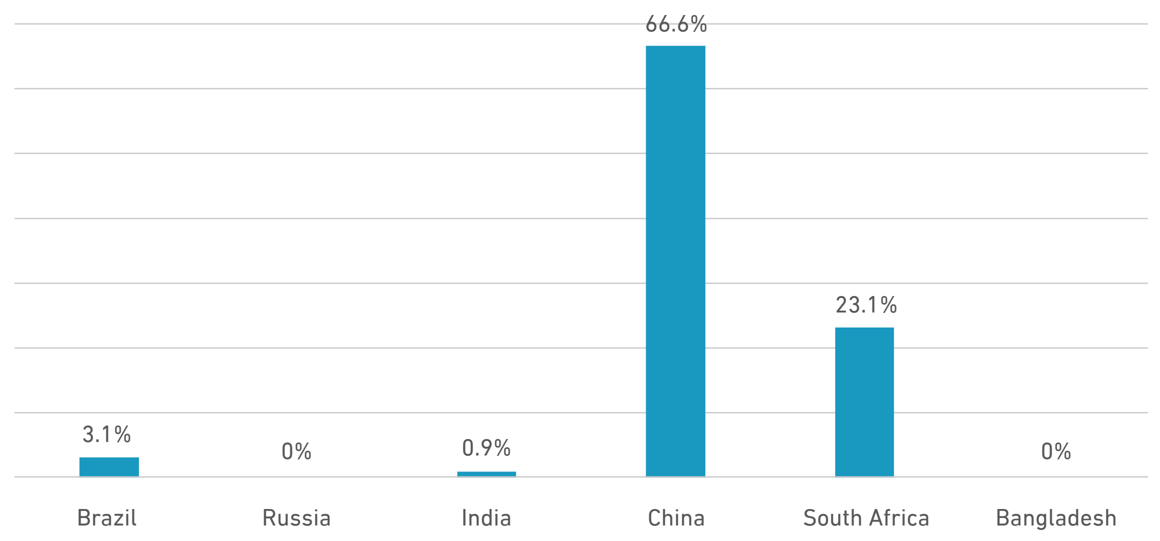
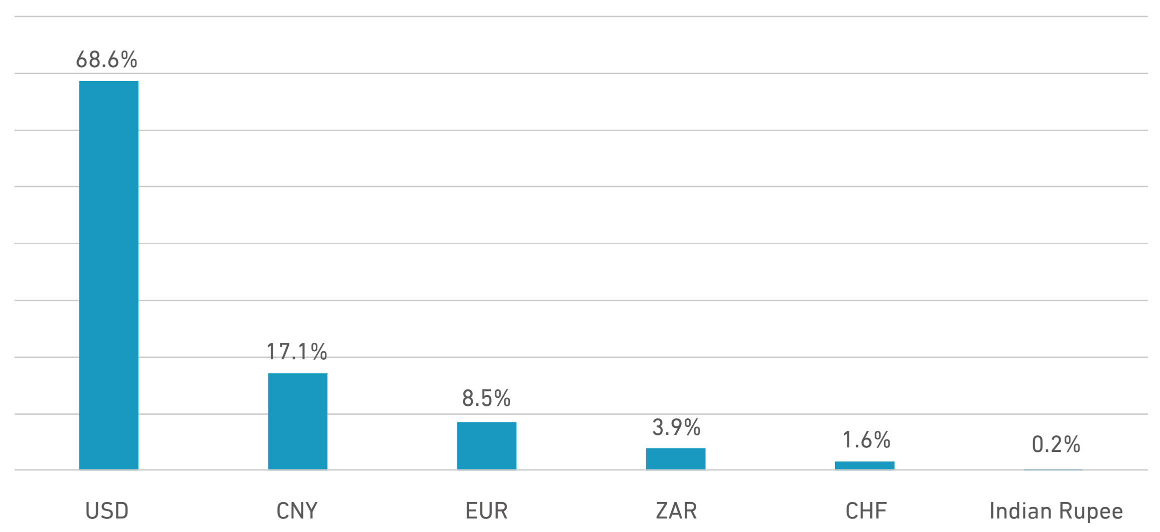


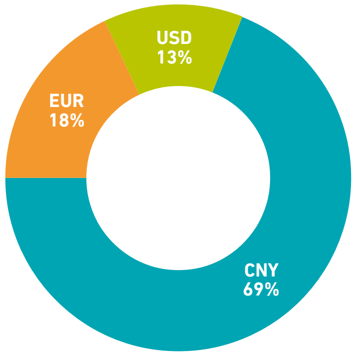
Figure 2: Distribution of NDB global portfolio by currency as at December 2024



Source: NDB Loan Dashboard by the Finance, Budget and Accounting Department (December 2024) and IEO's analysis. The cancelled operations have been removed from the data and analysis.
Note: The RMB figures are presented in Chinese Yuan (CNY).

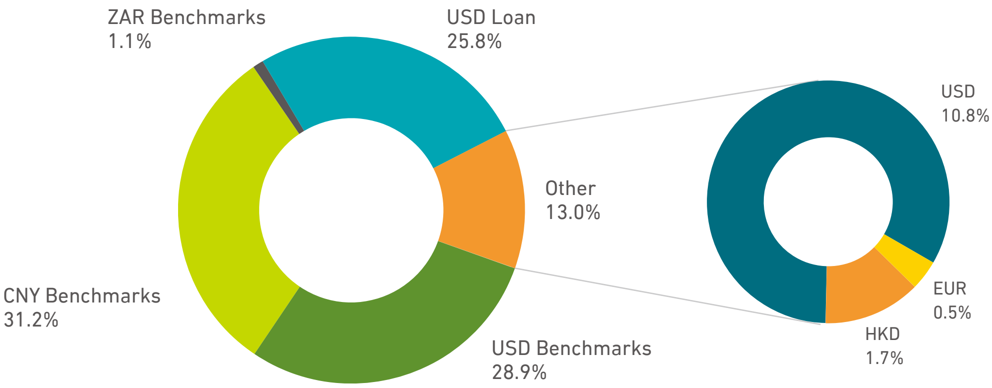
Figure 3: Distribution of NDB China portfolio by loan currency as at December 2024

Loan currency	Amount in USD (million)	Percentage
CNY	6,096	68.6%
EUR	1,569	17.7%
USD	1,200	13.5%
Total	**8,865**	**100%**



Source: NDB Loan Dashboard by the Finance, Budget and Accounting Department (December 2024) and IEO's analysis. Note: The RMB figures are presented in Chinese Yuan (CNY).

Figure 4: Breakdown of NDB's outstanding borrowings as at October 2024



Outstanding NDB panda bond as of October 2024

Size (CNY)	Coupon	Placement	Maturity
2.0bn	3.00%	7-Jul-2020	7-Jul-2025
2.0bn	3.02%	17-Sep-2021	17-Sep-2026
3.0bn	2.45%	27-Jan-2022	27-Jan-2025
7.0bn	2.70%	20-May-2022	20-May-2025
3.0bn	2.53%	26-Oct-2022	26-Oct-2025
8.5bn	2.86%	30-May-2023	30-May-2026
6.0bn	2.66%	1-Feb-2024	1-Feb-2029
8.0bn	2.03%	25-Jul-2024	25-Jul-2027

Source: NDB Investor Presentation – October 2024 (pages 22 to 24). https://www.ndb.int/wp-content/uploads/2024/08/Investor-Presentation-NDB.pdf
Note: The figures are presented in Chinese Yuan (CNY, RMB).

Annex XIII: Overview of project processing periods

Figure 1: Average period (days) taken from NDB Board of Directors' approval to loan agreement sign-off

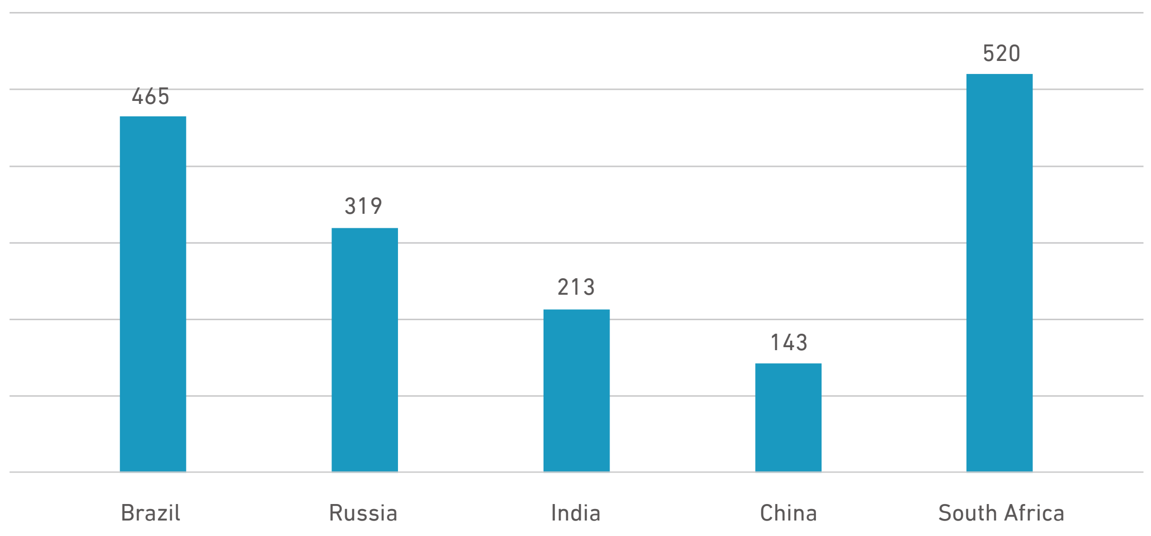
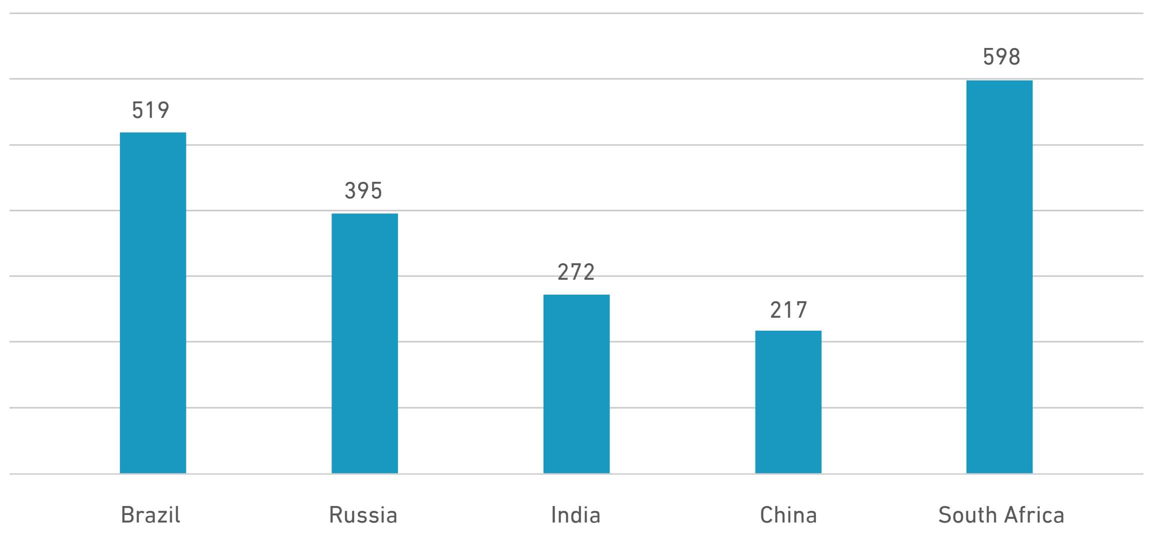


Figure 2: Average period (days) taken from NDB Board of Directors' approval to loan effectiveness



Source: NDB Loan Dashboard by the Finance, Budget and Accounting Department (December 2024) and IEO's analysis. The cancelled operations have been removed from the data and analysis.

Annex XIV: Overview of China's sovereign borrowing from international financial institutions and foreign governments

As of 31 December 2024, China's cumulative commitments to sovereign loans extended by international financial institutions (IFIs) and foreign governments totalled approximately USD 186.941 billion. Cumulative disbursements amounted to USD 154.695 billion, cumulative principal repayments reached USD 103.615 billion, and the outstanding debt balance (reflecting disbursed yet unrepaid loan amounts) stood at USD 51.078 billion.

A. CUMULATED SOVEREIGN LENDING TO CHINA BY SOVEREIGN LOANS FROM IFIs AND FOREIGN GOVERNMENTS

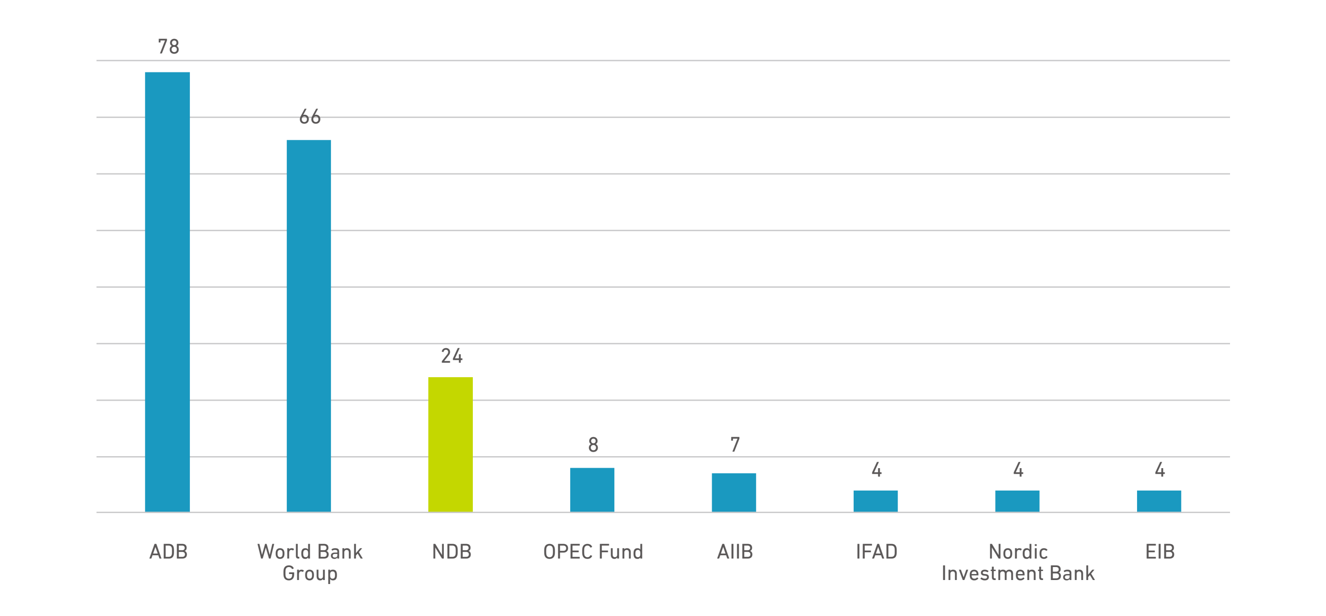
Lender	Number of projects	Cumulative commitment amount	Cumulative write-off amount	Cumulative disbursement amount	Undisbursed loan amount	Cumulative principal repayment
World Bank	462	682.24	54.47	579.70	48.07	432.94
ADB	305	448.65	26.00	346.82	75.83	171.85
IFAD	33	10.85	0.11	9.84	0.90	4.59
EIB	10	30.97	0.33	19.63	11.00	9.86
NDB	**24**	**87.02**	**7.86**	**63.67**	**15.49**	**2.58**
AIIB	7	27.67	0.00	13.39	14.27	0.36
OPEC Fund	16	4.42	0.19	2.53	1.71	0.72
NIB	324	14.80	0.42	14.37	0.00	14.22
Foreign government	2,586	562.79	46.40	497.00	19.40	399.03
Total	**3,767**	**1,869.41**	**135.78**	**1,546.95**	**186.67**	**1,036.15**

ADB – Asian Development Bank; **IFAD** – International Fund for Agricultural Development; **EIB** – European Investment Bank;
AIIB – Asian Infrastructure Investment Bank: **OPEC Fund** – OPEC Fund for International Development; **NIB** – Nordic Investment Bank

These financing instruments have underpinned the implementation of 3,767 projects nationwide, spanning sectors including air pollution abatement, energy conservation and environmental protection, climate change response, green development, rural revitalisation, transportation, urban infrastructure, education, healthcare, agriculture, and post-disaster reconstruction.

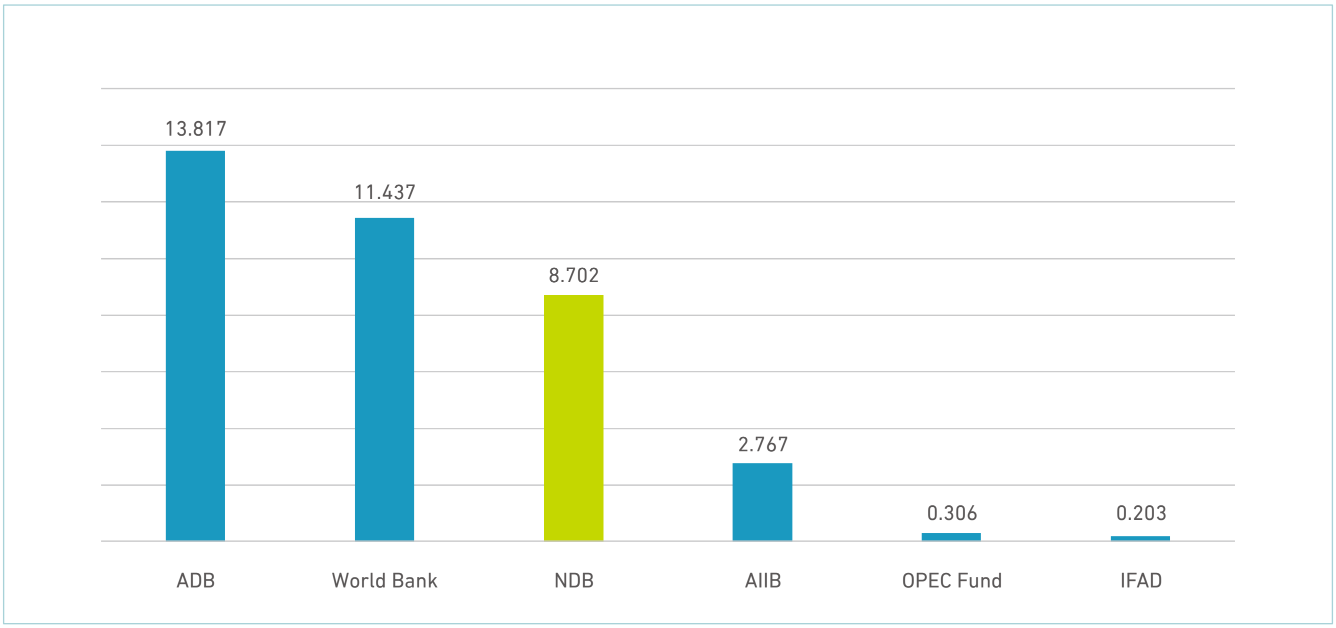
Source: Statistics by the Ministry of Finance, China (https://gjs.mof.gov.cn/zhengcefabu/202504/t20250423_3962562.htm):
The data have all been converted at the exchange rates published by the State Administration of Foreign Exchange as at December 31, 2024.

B. NUMBER OF APPROVED SOVEREIGN OPERATIONS FOR CHINA (FROM 2016 TO 2024) BY ALL INTERNATIONAL FINANCIAL INSTITUTIONS



Source: Compiled by IEO, based on statistics from China's Ministry of Finance covering the period from December 31, 2015 to December 31, 2024.

C. AMOUNT OF CUMULATIVE COMMITMENT TO CHINA (FROM 2016 TO 2024) BY THE TOP SIX INTERNATIONAL FINANCIAL INSTITUTIONS (IN USD BILLION)



Source: Compiled by IEO, based on statistics from China's Ministry of Finance covering the period from December 31, 2015 to December 31, 2024.

Annex XV: Key persons met

GOVERNMENTAL AGENCIES

Ministry of Finance

- Mr. Zhang Bo, Alternate Director of China for NDB, Deputy Director General of the Center for Evaluation of the World Bank Loan Projects
- Ms. Lyu Xia, Director of International Financial Institution Division IV, Department of International Economic and Financial Cooperation
- Ms. Yao Yixin, Operations 1 Division (Director Level), Department of International Economic and Financial Cooperation
- Mr. Yang Weifeng, Director of International Financial Institution Division IV, Department of International Economic and Financial Cooperation
- Ms. Huang Yue, Deputy Director of International Financial Institution Division IV, Department of International Economic and Financial Cooperation
- Ms. Mao Hui, International Financial Institution Division IV, Department of International Economic and Financial Cooperation
- Mr. Wang Siyu, Operations 1 Division, Department of International Economic and Financial Cooperation

Ministry of Commerce

- Ms. Liu Xian, Assistant Research Fellow, Institute of International Development Cooperation

Ministry of Ecology and Environment

- Ms. Zhou Qiyue, Senior Project Manager, Foreign Cooperation and Exchange Center

Jiangxi Provincial Department of Industry and Information Technology

- Mr. Jiang Mingcheng, First-Class Inspector

Jiangxi Provincial Department of Finance

- Ms. Ren Hong, Principal Staff Member
- Mr. Zhou Qingjun, Deputy Director of the Jiangxi Provincial Finance Public Service Center

Jiangxi Provincial Development and Reform Commission

- Mr. Chen Guangjun, Deputy Director of the Foreign Investment Division

Beijing Municipal Finance Bureau

- Mr. Pan Yichen, Officer of Foreign Affairs Division

Gansu Provincial Department of Finance

- Mr. Wang Jianzhong, Director, International Division
- Mr. Li Kedi, Deputy Director, International Division
- Ms. Li Feifei, Senior Officer, International Division
- Ms. Liu Jiani, Officer, International Division

Qingdao Municipal Finance Bureau

- Ms. Yan Wenyu, Principal Staff Member of the Government Debt Management Office

Department of Finance of Hubei Province

- Ms. Lu Xiaofeng, Deputy Director of International Cooperation Division

Zhejiang Provincial Department of Finance

- Ms. Ying Qixiang, Fourth-Level Researcher

Zhejiang Provincial Department of Housing and Urban-Rural Development

- Mr. Zhou Tingyu, Senior Staff, Planning and Finance Division

Zhejiang Provincial Development and Reform Commission

- Mr. Teng Lihui, Staff, Economic Information Center and Business Environment Division

Shengzhou Municipal Government

- Mr. Shan Weiyi, Vice Mayor
- Mr. Ma Yi, Mayor's Office

Shengzhou Municipal Bureau of Development and Reform

- Mr. Li Liangxiao

Shengzhou Municipal Bureau of Finance

- Mr. Yao Hanjiang

Shengzhou Municipal Bureau of Ecological Environment

- Mr. Zhou Yudong

Shengzhou Municipal Bureau of Water Resources

- Mr. Yu Daxing

Shengzhou Municipal Bureau of Housing and Urban-Rural Development

- Mr. Dong Jianguo

Huangshi Municipal Bureau of Finance

- Mr. Lu Yan, Chief of Finance Section

Huangshi Municipal Development and Reform Commission

- Mr. Zhang Shenghua

Ningxia Hui Autonomous Regional Department of Finance

- Mr. Li Hongsong, Director, Government Debt Management Center
- Ms. Ma Ru, Deputy Director, Government Debt Management Center
- Ms. Tao Yuan, Senior Staff, Government Debt Management Center

Yinchuan Municipal Bureau of Transportation

- Mr. Zhu Wenhe, Deputy Director-General

Yinchuan Municipal Bureau of Finance

- Ms. Liu Yuwei, Director of Government Debt Management Center
- Ms. Wang Min, Government Debt Management Center
- Mr. Qiao Jinxin, Government Debt Management Center

Office of the Xiamen for the Development of the BRICS Innovation Base

- Ms. Chen Zezhao, Deputy Director

Zhejiang Free Trade Development Center

- Ms. Chen Qiaoyan, Director, Secretariat of the China Cooperation Center for the BRICS Special Economic Zone
- Mr. Sheng Yanping, Director of Training Department, Secretariat of the China Cooperation Center for the BRICS Special Economic Zones

THE PROJECT IMPLEMENTATION AGENCIES AND UNITS

Jiangxi Provincial Industry and Informatization Integration Promotion Center

- Ms. Huang Aiqun, Secretary of the Party Committee and Director
- Mr. Zeng Daohuan, Member of the Party Committee and Deputy Director
- Ms. Shi Hong, Director of the Green Development Division
- Mr. Yang Chen, Deputy Director of the Green Development Division
- Mr. Yu Danfeng, Second-Class Researcher of the Green Development Division

Energy and Environmental Development Research Center

- Mr. Lu Bin, Senior Consultant

Jiangxi Provincial Natural Gas Group Co., Ltd.

- Mr. Wang Qifan, Director, Project Management Office
- Ms. Chen Yan, Administration Officer, Project Management Office
- Mr. Tan Zhen, Finance Officer, Project Management Office

Beijing Guofu Accountant Office, Jiangxi Branch

- Mr. Wu Jingen – Consultant

Qingdao Metro Group

- Mr. Huang Cheng, General Manager of Line 6 Company
- Mr. Wang Wei, Financial Director of Line 6 Company (Seconded by the Finance Department of Qingdao Metro Group)
- Mr. He Xin, Senior Engineer of the Chief Engineer's Office, Qingdao Metro Group
- Mr. Sun Qinglong, Deputy Director of the Finance Department, Qingdao Metro Group
- Ms. Ren Xiaoyan, Deputy Secretary of the Party Branch, Line 6 Company
- Ms. Zou Shan, Director of the Finance Department of the Operation Company
- Mr. Zhang Peng, Engineer of the Digital Intelligence Development Department, Qingdao Metro Group
- Mr. Zhang Zhiwei, Senior Engineer of the Equipment Technology Department, Qingdao Metro Group
- Ms. Wang Wenjing, Manager Assistant of the Finance Department, Operation Company
- Mr. Yuan Dezheng, Director Assistant of the Green and Smart Urban Rail Office, Science and Technology Innovation Department, Operation Company
- Mr. Ji Xiang, Project Marketing Head of Qingtie Real Estate Company
- Mr. Zhang Qiang, Media Operations Manager of Qingtie Commercial Company

Beijing Gas Group Co., Ltd.

- Ms. Yang Fuyan, Deputy Manager, Finance Department
- Ms. Si Wen, Staff of Finance Department
- Mr. Sun Likai, Deputy Manager, Beijing Gas Group (Tianjin) LNG Co., Ltd.
- Ms. Fan Lingyu, Staff of Finance Division, Beijing Gas Group (Tianjin) LNG Co., Ltd.
- Mr. Liu Hongchao, Staff of Business Management Department

Minmetals Consulting (Project Management Consultant of PIU)

- Mr. Kong Lingquan, General Manager
- Ms. Liu Yang, Project Manager
- Ms. Huang Zhenhua, Environmental Expert (Online)
- Ms. Hu Fangfang, Economic Expert (Online)

Huangshi Tram Project Management Office (PMO)

- Mr. Li Qiang, Director, Huangshi NDB PMO
- Mr. Zuo Cong, Vice General Manager, Huangshi Urban Railway Transport Operation Co., Ltd.
- Mr. Zhang Jianhua, General Manager, Huangshi Railway Construction Investment Co., Ltd.

- Mr. Peng Zhou, Huangshi Railway Construction Investment Co., Ltd.
- Mr. Jia Jiangang, Huangshi Railway Construction Investment Co., Ltd.
- Mr. Wei Xing, Huangshi Railway Construction Investment Co., Ltd.
- Mr. Shan Chao, Huangshi NDB PMO

CIECC Overseas Consulting Co., Ltd.

- Ms. Chen Ying, Project Manager

Shanghai Urban Construction Design and Research Institute (Group) Co.

- Mr. Wu Xianying, Deputy Director, Rail Transit and Underground Space Institute

China International Engineering Consulting Overseas Co., Ltd.

- Mr. Ji Xiaoqiang, Principal Expert, Planning Consulting Department (International Financial Institution Loan Advisory Center)
- Ms. Liu Rui, Financial Analysis Expert
- Ms. Hu Fangfang, Financial Analysis Expert

Gansu Civil Aviation Airport Group Company Ltd.

- Mr. Wu Tianfu, Director, Financial Management Department
- Ms. Zhou Weili, Head, Fund Management Center, Financial Management Department
- Mr. Luo Yifan, Deputy Head, Fund Management Center, Financial Management Department
- Ms. Ji Fanyi, Member, Project Implementation Office
- Mr. Wang Xiangyang, Member, Project Implementation Office
- Mr. Guo Libing, Member, Project Implementation Office
- Mr. Shi Anwen, Member, Project Implementation Office
- Mr. Xu Mingyang Member, Project Implementation Office
- Mr. Hu Guowei, Member, Project Implementation Office

Lanzhou New Area Foreign Investment Project Management Office

- Mr. He Ningshou, Director
- Mr. Xu Haining, Senior Staff

Yinchuan Public Transportation Corporation

- Mr. Li Yong, Deputy CEO
- Mr. Zhu Guanglie, Project Manager
- Mr. Wang Cunlei, Deputy Project Manager
- Mr. Jin Bo, Deputy Project Manager
- Mr. Liu Xin, Deputy Project Manager
- Ms. Liu Rui, Staff
- Ms. Ma Lin, Staff
- Mr. Li Xulong, Team Leader, Project Management Company
- Ms. Wang Xin, Project Manager, Project Management Company
- Mr. Chen Yijun, Financial Consultant, Project Management Company

Shengzhou Water Group Company

- Mr. Zhou Feng, Chairman of the Board of Directors
- Mr. Yu Chengkai, General Manager
- Mr. Zhang Gangyi, Deputy General Manager
- Mr. Yao Keke, Project Coordinator

Harmony Engineering Consulting Company

- Mr. Pei Xiaodong, Consultant (Financial Management Specialist)

NEW DEVELOPMENT BANK

China Desk of the Project Portfolio Management Department

- Ms. Han Su, Principal Professional (Head of the Desk)
- Mr. Sun Changqing, Principal Professional
- Mr. Wu Ning, Senior Professional
- Ms. Wang Diyun, Senior Professional
- Ms. Zhang Danwei, Professional
- Mr. Chen Xin, Professional
- Ms. Niu Zijing, Professional

Private Sector and Non-Sovereign Guaranteed Transactions

- Mr. Han Bin, Director-General

Environmental, Social and Governance (ESG) Department

- Dr. Novozhilov Roman, Chief
- Mr. Akulov Alexey, Principal Professional
- Mr. Chaudhary Naval, Principal Professional

Procurement Division of ESG Department

- Ms. Xu Hua, Senior Professional

Research Department

- Dr. Xu Bing, Principal Professional

Strategy, Policies and Partnerships Department

- Dr. Jiang Xiheng, Director-General
- Mr. Batista Fabio, Chief
- Dr. Meng Qingwei, Principal Professional
- Dr. Zheng Yuan, Professional

MULTILATERAL DEVELOPMENT BANKS AND INTERNATIONAL ORGANISATIONS

Asian Development Bank

- Mr. Parvez Safdar, Country Director, China Resident Mission
- Mr. Zhou Aiming, Deputy Country Director, China Resident Mission
- Ms. Terada-Hagiwara Akiko, Head of Economics and Strategy Unit, China Resident Mission
- Mr. Huang Biao, Unit Head, Private Sector Financial Institutions, East Asia Private Sector Operations Department
- Ms. Wang Xiaole, Head of Agriculture Business, ADB China Resident Mission

Asian Infrastructure Investment Bank

- Ms. Kng Hwee Tin, Chief Internal Audit Officer and Acting Managing Director of Complaints-resolution, Evaluation and Integrity Unit (CEIU)
- Mr. Zeleke Eskender, Senior Specialist, CEIU
- Mr. Mendoza Andrew, Head of Integrity, CEIU
- Ms. Hinkenhuis Marla, Analyst, CEIU
- Mr. Yang HongLiang, Manager of the Investment Solutions, Sectors, Themes, and Finance Solutions (STF) Department

International Finance Corporation

- Mr. Sun Hao, Senior Investment Officer, China Resident Mission
- Mr. Pei Fei, Senior Investment Officer, China Resident Mission

World Bank (International Bank for Reconstruction and Development)

- Mr. Cao Wendao, Senior Agriculture Economist, China Resident Mission

Multilateral Cooperation Center for Development Finance (MCDF)

- Mr. Wang Zhongjing, inaugural Chief Executive Officer (CEO)
- Mr. Wiltmann Frederic, Head of Programming
- Ms. Cai Linghui, Senior Program Officer
- Mr. Hendrickson David, Senior Communication Officer

United Nations International Children's Emergency Fund (UNICEF)

- Ms. Yang Sadie Xinxin, Multi-country Evaluation Specialist

United Nations Development Programme (UNDP), China Country Office

- Mr. Wang Cheng, Monitoring and Evaluation Specialist

ACADEMIA AND THINK TANKS

- Prof. Zhu Jiejin, School of International Relations and Public Affairs, Fudan University
- Prof. Lin Minwang, Institute of International Studies, Fudan University
- Dr. Tang Haihan, Associate Professor of Finance, School of International Finance, Fudan University
- Dr. Ye Yu, Deputy Director of the World Economy Research Institute, Shanghai International Studies Institute
- Prof. Zhou Yongmei, Director of Global Partnership, Institute of South-South Cooperation and Development (ISSCAD) of Peking University
- Prof. Huang Meibo, Dean, International Development Cooperation Academy, Shanghai University of International Business and Economics
- Prof. Wang Jinqiang, School of International Organizations, Shanghai University of International Business and Economics
- Prof. Jin Jiyong, Vice Dean of the School of International Relations and Public Affairs, Shanghai International Studies University
- Prof. Yang Kehu, Center for Evidence-based Social Science, Lanzhou University
- Prof. Wei Zhipeng, Center for Evidence-based Social Science, Lanzhou University
- Prof. Li Xiuxia, Center for Evidence-based Social Science, Lanzhou University
- Dr. Wang Youming, Director of the Institute of Developing Countries and Executive Director of the China Asia-Africa Cooperation Center, China Institute of International Studies
- Dr. Luo Guiliu, Project Manager of China Initiative, Finance for Development Lab, Paris School of Economics
- Dr. Meng Wenting, Chenhui Scholar of the School of Politics and International Relations, East China Normal University
- Dr. Chen Yanhong, Associate Professor of International Development, School of Economics and Management, Xiamen University of Technology
- Dr. Li Qing, Dean of Guangdong Institute of International Strategic Studies
- Dr. Li Boxuan, Lecturer, School of International Organizations, Beijing Foreign Studies University
- Dr. Zhou XiaoNong, Chief Scientist on Parasitic Diseases Control, Chinese Center for Disease Control and Prevention; Director, WHO Collaborating Centre for Tropical Diseases

FINANCIAL INSTITUTIONS AND THE PRIVATE SECTOR

Bank of Communications
- Ms. Hsu Lee, Deputy General Manager, Global Markets Department

Export-Import Bank of China
- Ms. Li Xiaowei, Deputy General Manager of the Strategic Planning Department

Bohai Bank
- Mr. Ding Baohua, Deputy General Manager, Internal Control and Compliance Division

Zhongtai Trust Co., Ltd.
- Mr. Hu Jie, President and Chairman

J.P. Morgan Securities (China) Company Ltd.
- Mr. Lam Johnny, Executive Director and Head of Operations

China Cinda Financial Leasing Co., Ltd.
- Mr. Xu Lei, Head of Business Department IV

Guangdong Guangzi International Engineering Investment Consulting Co., Ltd.
- Mr. Liu Yongfeng, Director and Deputy General Manager
- Ms. Long Liping, Director of the Project Evaluation Center

JA Solar Technology Co., Ltd.
- Ms. Li Jing, Vice President of Branding and Chief Sustainability Officer

Beijing Holdings Limited
- Mr. Dong Nan, Group Finance Department

Tianjin Municipal Engineering Design and Research Institute Co., Ltd.
- Mr. Jiang Yin, Senior Engineer, Vice President of the Comprehensive Transportation Development Research Institute

PricewaterhouseCoopers (PwC) Zhong Tian LLP
- Mr. Derrett Rob, Director of the China Partner Committee, Member of the Global Board
- Mr. Ni Qing, ESG and Sustainability Markets Leader

China Investment Association
- Mr. Li Zhiyong, Vice President of the Innovative Investment and Financing Professional Committee, Associated Expert of UNITAR Prosperity Alliance Beijing Centre

BRAZILIAN DELEGATION FROM ALAGOAS STATE

- Mr. Cavalcante Fernando, Economic Advisor – Municipality Government
- Mr. Oliveira Glauco, Director of the Maceió Department of Transportation – Municipality Government
- Mr. Vasconcelos Vitor, Technical Advisor – Municipality Government
- Mr. Fernandes Fabricio, Deputy Secretary of the Municipal Treasury – Municipality Government

Annex XVI. Key documents reviewed

Section A – NDB's policies and general strategies

- NDB General Strategy for 2022–2026: Scaling Up Development Finance for a Sustainable Future
- NDB General Strategy for 2017–2021
- Host Country Agreements for NDB Headquarters
- NDB Country Partnership Plan Policy (January 2016)
- Policy on Processing of Sovereign Loans and Loans with Sovereign Guarantee
- Policy on Transactions without Sovereign Guarantee
- Policy on Loans without Sovereign Guarantee to National Financial Intermediaries
- Procurement Policy
- Information Disclosure Policy
- Policy on Partnerships with National Development Banks
- Policy on Fast-track Emergency Response to COVID-19
- Environmental and Social Framework
- Country Partnership Plan Policy
- Technical Assistance Policy
- Policy on Financial Management and Financial Analysis, and Economic Analysis of Projects
- 1st Edition of the NDB Evaluation Manual (August 2024)

Section B – NDB's guidelines

- Project Preparation Fund Guideline
- Guideline on Approving Changes to NDB Operations
- Project Implementation Guidelines
- Environmental and Social Guidelines
- NDB Procurement Guidelines
- Budget Operational Guidelines
- Collateral Management Guidelines
- Operational Guidelines on Funding Activities

Section C – NDB operational documents and reports

- Reassignment Plan circulated by former Vice President and Chief Operating Officer in July 2021
- Terms of Reference of the Operations Vice Presidency (July 2021)
- NDB Loan Dashboard as at 31st December 2024, March and June 2025
- List of Approved and Proposed China Projects (summarised from NDB website, January 2025)
- List of Memoranda of Understanding (summarised from NDB website in December 2024)
- NDB Investor Presentation – October 2024
- Finalised Borrower Project Completion Reports for:
  (i) Zhejiang Green Urban Project – Shengzhou Urban and Rural Integrated Water Supply and Sanitation Project Phase II
  (ii) Huangshi Modern Tram Project
  (iii) Ningxia Yinchuan Integrated Green Transport Development Project
  (iv) Jiangxi Natural Gas Transmission System Development Project

- Finalised NDB Project Completion Reports for:
  (i) Lingang Distributed Solar Power Project
  (ii) Putian Pinghai Bay Offshore Wind Power Project
  (iii) Guangdong Yudean Yangjiang Shapa Offshore Wind Power Project

- Draft NDB Project Completion Reports for:
  (i) Huangshi Modern Tram Project
  (ii) Ningxia Yinchuan Integrated Green Transport Development Project
  (iii) Jiangxi Natural Gas Transmission System Development Project

Section D – IEO reports

- Project Performance Evaluation (PPE) Report for the Luoyang Metro Project
- Project Completion Report Validation for the Lingang Distributed Solar Power Project
- PPE Report for the Putian Pinghai Bay Offshore Wind Power Project
- Thematic Evaluation Report: NDB's Fast-Track Support to the COVID-19 Emergency
- PPE Report for the Guangdong Yudean Yangjiang Shapa Offshore Wind Power Project
- Corporate-Level Evaluation on NDB's Policy Framework
- Evaluation Synthesis Report: Preliminary Experience in Establishing NDB On-the-Ground Presence: The Role of Regional Offices

Section E – Government documents and data

- National Development and Reform Commission (NDRC): The 13th Five-year Plan for Economic and Social Development of The People's Republic of China
- NDRC: The Outline of the 14th Five-Year Plan for Economic and Social Development (2021–2025) and Long-Range Objectives through the Year 2035 of the People's Republic of China
- President Xi Jinping: Speech at the National Conference to Review the Fight Against Poverty and Commend Outstanding Individuals and Groups (February 25, 2021)
- Ministry of Civil Affairs: 2023 National Bulletin on the Development of Aging Causes and Social Services (October 2024)
- National Health Commission: Statistical Bulletin on the Development of Healthcare in China in 2023 (August 2024)
- State Council Information Office of China: The Belt and Road Initiative: A Key Pillar of the Global Community of Shared Future. (October 2023)
- National Bureau of Statistics of China: National Economy Witnessed Steady Progress amidst Stability with Major Development Targets Achieved Successfully in 2024 (January 2025)

Section F – Peer international financial institutions or other organisations' documents and data

- International Fund for Agricultural Development (IFAD): Country Strategy and Programme Evaluation - People's Republic of China – February 2024
- Asian Development Bank: People's Republic of China – Country Partnership Strategy (2021–2025)
- World Bank: Four Decades of Poverty Reduction in China: Drivers, Insights for the World, and the Way Ahead (April 2022)
- World Bank: Country Partnership Framework for the People's Republic of China for the Period FY2020–2025 (November 2019)

INDEPENDENT EVALUATION OFFICE
New Development Bank

1600 Guozhan Road,
Pudong New District
Shanghai 200126
The People's Republic of China

ieo@ndb.int
www.ndb.int/governance/independent-evaluation

SCAN THE QR CODE TO
DOWNLOAD THE REPORT