

REPORT ON NDB'S DEVELOPMENT RESULTS

WITH A FOCUS ON CLIMATE
AND ENVIRONMENT

FIRST EDITION



INDEPENDENT
EVALUATION OFFICE

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PREFACE



I am pleased to present the *Report on NDB's Development Results (RDR)*, the first edition of a consolidated assessment by the Independent Evaluation Office (IEO) of the New Development Bank's (NDB) operational achievements. This report synthesises findings from 13 independent evaluations conducted by IEO from its establishment in April 2022 until 2024. The projects evaluated represent approximately 56% of NDB's total disbursed financing by July 2024, providing a comprehensive assessment of the Bank's results.

The RDR evaluates the relevance, effectiveness, efficiency, impact and sustainability of NDB's interventions, offering insights into the strengths of its activities on the ground and areas requiring attention. The report finds that NDB-financed projects have been broadly aligned with national priorities, NDB general strategies, and the Sustainable Development Goals, particularly in renewable energy, transport infrastructure, and water supply. However, challenges persist in ensuring better project efficiency, in particular mitigating administrative and implementation delays, and enhancing the sustainability of investments through robust exit strategies.

A key feature of this edition is a dedicated focus on climate change and environmental management, reflecting NDB's mandate to promote green and resilient development. The analysis highlights how the Bank's investments in renewable energy and transport infrastructure have contributed to substantial reductions in carbon emissions while identifying the need for stronger integration of climate adaptation and resilience strategies into project designs.

The report also underscores the importance of NDB's non-lending activities, including technical assistance, capacity-building, partnerships and knowledge-sharing. In this regard, while NDB has demonstrated success in mobilising financing for large-scale projects, its non-financial additionality remains limited so far. While recognising the relatively limited human resource availability for such work, the RDR underscores the importance of deeper efforts and investments by the Bank in non-lending activities for wider impact and scaling-up of success stories across countries and regions.

As NDB expands its operations and continues to support development efforts in emerging economies, the lessons from this RDR provide a valuable foundation for improving the Bank's development effectiveness. I hope that the insights gained will help refine strategies to enhance project design, implementation, impact and sustainability, ensuring that NDB's investments contribute meaningfully to inclusive and sustainable growth.

I extend my sincere appreciation to all stakeholders who contributed to the first edition of the RDR, in particular to NDB Management and staff, and the Board of Directors.



Ashwani K. Muthoo
Director General
Independent Evaluation Office

ACKNOWLEDGEMENTS

The Independent Evaluation Office (IEO) of the New Development Bank (NDB) extends its sincere appreciation to all contributors who played a significant role in the preparation of this first edition of the Report on NDB's Development Results (RDR). This report represents a consolidated analysis of NDB's operational achievements across its member countries.

The report was produced under the overall supervision of Mr. Ashwani K. Muthoo, Director General, IEO. Mr. Manas Puri, Senior Professional at IEO, led the preparation and the drafting of the report. Special recognition is due to Mr. Michael Flint, the lead consultant, whose expertise and analytical insights greatly enhanced the depth of the findings; and to Ms. Denise Siloto de Araujo, who served as the lead author of the Climate and Environment section, contributing her specialized knowledge to a critical area of NDB's impact. We also thank Mr. Luciano Lavizzari, former Director of the Independent Office of Evaluation of the International Fund for Agricultural Development, who acted as external reviewer for the report.

IEO is also grateful for the cooperation and insights from NDB Management, who facilitated access to essential documents, coordinated engagements, and provided constructive feedback during various stages of the report's development. Their collaboration was pivotal in capturing a holistic view of NDB's contributions to sustainable development.

Finally, we recognise the contributions of Ms. Jaqueline Rabelo Souza, IEO communication and outreach expert, and Mr. John Laird, IEO evaluation editor and content creator, who provided essential support in editorial quality assurance, proof-reading, communications, and outreach.

IEO holds exclusive responsibility for the content and conclusions presented within this report.

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ABBREVIATIONS & ACRONYMS

CAF	Development Bank of Latin America and the Caribbean
CLE	Corporate-Level Evaluation
CO ₂	Carbon Dioxide
CPE	Country Portfolio Evaluation
DMF	Design and Monitoring Framework
EMDC	Emerging Market and Developing Country
ESF	Environmental and Social Framework
ESR	Evaluation Synthesis Report
MDB	Multilateral Development Bank
MTR	Mid-Term Review
MW	Megawatt
PCR	Project Completion Report
PCRV	Project Completion Report Validation
PIA	Project Implementation Agency
PPE	Project Performance Evaluation
RDR	Report on NDB's Development Results
SDG	Sustainable Development Goal
TE	Thematic Evaluation

EXECUTIVE SUMMARY

1 This first edition of the Report on NDB's Development Results (RDR), prepared by the Independent Evaluation Office (IEO), consolidates insights from independent evaluations of NDB's portfolio completed between 2022 and 2024. By assessing project performance across relevance, effectiveness, efficiency, impact and sustainability, as well as NDB and borrower contributions, this report presents a comprehensive analysis of NDB's development effectiveness, especially in climate action, infrastructure, and socio-economic development.

I. KEY FINDINGS BY EVALUATION CRITERIA

2 Overall, most evaluated projects were rated as "successful" for **overall project achievement**. An analysis of performance across evaluation criteria indicates strengths in relevance, effectiveness and impact, while efficiency and NDB performance received lower ratings. The following paragraphs outline the main findings for each criterion.

3 **Relevance** ratings show that approximately 73% of evaluated projects achieved a "successful" rating, while the remaining 27% were rated as "moderately successful". No projects received a "highly successful" rating, indicating that there are areas where NDB could improve. Projects were largely aligned with national priorities, the socio-economic needs of member countries, and the United Nations' Sustainable Development Goals (SDGs). However, the lack of NDB country-specific strategies hindered the Bank's ability to fully tailor its interventions to local needs, particularly in underserved sectors like environmental protection and social infrastructure.

4 **Effectiveness** was positively rated, with the majority of projects, 82%, rated as "successful" while one project received a "highly successful" rating and another was rated as "moderately successful". Projects consistently achieved their objectives, especially in renewable energy, infrastructure and water management. Strong local implementing agencies were essential to good effectiveness. However, NDB's limited mid-course

supervision and the inconsistent application of comprehensive theories of change constrained the potential for some projects to achieve higher effectiveness.

5 **Efficiency** emerged as one of the criteria with lower-ratings, with 82% of projects rated as "moderately successful" and only a few achieving "successful" ratings. Delays, administrative bottlenecks, and budget overruns frequently impacted efficiency. Factors such as lengthy loan negotiations, complex project scopes, and external shocks, like the COVID-19 pandemic, contributed to these delays. While some projects showed improved efficiency with proactive local management, future NDB efforts should focus on reducing administrative delays, ensuring more thorough project appraisals, and enhancing contingency planning to improve efficiency.

6 **Impact** received positive ratings overall, with 80% of projects deemed "successful" and 20% as "highly successful". Projects demonstrated meaningful socio-economic and environmental impacts, notably in areas like carbon emissions reduction and the provision of economic opportunities. Despite clear environmental and socio-economic benefits, many projects lacked structured frameworks for assessing long-term impacts, limiting the ability to capture comprehensive benefits over time. The integration of long-term impact indicators at the design stage could strengthen future assessments and allow for a more complete view of the transformational outcomes achieved.

7 **Sustainability** was rated as "successful" in 78% of cases, with a few projects receiving lower ratings. Strong environmental safeguards and technically robust designs in renewable energy projects were crucial in promoting sustainability. Energy projects were financially supported through favourable pricing mechanisms and long-term contracts, while transport and infrastructure projects would benefit from additional measures, such as explicit exit strategies, improved community engagement, and a focus on climate resilience to ensure sustained benefits post-completion.

II. NDB PERFORMANCE

8 NDB's performance received one of the lower ratings, alongside efficiency, with about half of the projects evaluated achieving only "moderately successful" or lower scores. A third of projects were rated "successful". NDB's performance was impacted by high staff turnover, limited in-house expertise, and inadequate technical support, which affected project design quality and oversight during implementation. Project supervision was inconsistent, and the Bank's limited technical assistance, knowledge-sharing, and capacity-building support restricted its non-financial additionality.

III. BORROWER PERFORMANCE

9 Borrower performance was a strong point across NDB's operations, with all but one project rated as "successful" or better. Borrower agencies often demonstrated substantial capacity in implementing project activities, showcasing strong national ownership and a high degree of commitment. Efficient administrative coordination, alignment with national priorities, and adaptability to NDB's operational standards contributed to the success of many projects. Nonetheless, delays in loan processing and variability in implementation quality at the state level, as observed for example in India, introduced occasional challenges. The findings highlight the importance of sustained borrower engagement and fostering stronger partnerships with national institutions to maintain high performance levels.

IV. FINDINGS ON NON-LENDING ACTIVITIES

10 NDB's non-lending activities, encompassing partnerships, technical assistance, capacity-building and knowledge-sharing, were evaluated across multiple projects. Partnerships with local governments and implementing agencies were instrumental in enhancing project outcomes, yet collaboration with other multilateral development banks (MDBs), international organisations, and technical partners was limited. NDB's broader impact could be expanded by mobilising additional financing and expertise through enhanced partnerships. Technical assistance and capacity-building efforts were inconsistently applied, with support often limited to project design rather than extending throughout the implementation phase. The Bank's limited technical capacity and sector specialists hindered its ability to offer ongoing technical support, thereby reducing the non-financial additionality of its contributions. Increased investment in technical assistance and capacity-building resources could

significantly elevate project outcomes, particularly in complex sectors like renewable energy and infrastructure.

11 Knowledge generation and sharing emerged as areas needing substantial development. Although some regional offices organised procurement seminars and other localised knowledge-sharing events, there was a lack of a systematic knowledge management framework to capture and disseminate learnings across the Bank. Establishing a structured knowledge management framework would facilitate cross-country learning, enable project innovation, and strengthen NDB's role as a thought leader in sustainable development.

V. CLIMATE AND ENVIRONMENTAL CONSIDERATIONS

12 NDB's investments in renewable energy and sustainable transport demonstrate the Bank's commitment to climate action, with projects yielding considerable environmental benefits, including reductions in greenhouse gas emissions. The Environmental and Social Framework (ESF) supported adherence to member countries' regulations and enhanced project safeguards. However, there remains potential for a more proactive approach in embedding climate resilience, adaptation, and inclusiveness within project designs. Expanding attention to non-climate environmental issues and improving project exit strategies would strengthen NDB's contributions to long-term environmental sustainability.

VI. CONCLUSION

13 NDB's evaluated projects show alignment with member countries' strategic priorities and have the potential to deliver significant socio-economic and environmental benefits. While effectiveness and impact have been strong, areas such as efficiency, NDB's performance, and non-lending activities require targeted improvements. Enhancing technical assistance, strengthening partnerships, expanding knowledge-sharing frameworks, and improving climate resilience within project designs are essential to maximising NDB's development impact. By addressing these areas, NDB can continue to support sustainable development while driving transformational change across its portfolio.



I. Introduction

I Introduction

1. This is the first edition of the Report on NDB's Development Results (RDR) produced by the Independent Evaluation Office (IEO). The purpose of this report is to provide a consolidated and aggregate-level overview of the Bank's results based on the findings of independent evaluations conducted by IEO. It also identifies cross-cutting systemic issues and lessons across the portfolio of NDB-financed operations that merit attention for the way forward.
2. This first edition is informed by all 13 evaluations completed by IEO from its establishment in 2022 up to late 2024. IEO plans to produce further editions in the future on a periodic basis, once additional evaluations are available that can provide further insights on progress, opportunities and challenges. Provisionally, the plan is to produce the RDR every two years.
3. Given the nature of the report and its purpose, it neither includes an NDB Management Response nor specific recommendations; both of which are normally included in individual IEO evaluation reports as per the NDB Evaluation Policy.¹
4. This report is structured as follows: *chapter II* includes an overview of the methodological approach used in the construction of this document; *chapter III* provides a high-level analysis of the projects that were evaluated by IEO between 2022–2024; *chapter IV*, which is the core of the report, provides an account of the results of NDB operations along with a summary of the proximate causes of performance; *chapter V* covers the performance of NDB and the borrower respectively; *chapter VI* is a dedicated thematic chapter on climate and environment, identifying cross-cutting issues and lessons from the evaluations conducted; and *chapter VII* is devoted to high-level conclusions from the analysis, raising attention to matters that merit attention moving forward.

1 [See here](#). Management Responses provide an account of how and to what extent NDB Management plans to implement the IEO recommendations.



II. Methodological approach

II Methodological approach

5. **Number and nature of evaluations.** The report is based on a systematic review² of all 13 existing evaluation reports produced by IEO between 2022 and 2024, which are laid out in table 1 below. These evaluations cover a variety of countries, sectors and topics. The report has also benefitted from feedback from NDB Management and staff.
6. As may be seen from table 1, the 13 independent evaluation reports comprise: seven project performance evaluations (PPEs), one project completion report validation (PCRv), one country portfolio evaluation (CPE), one evaluation synthesis report (ESR), one thematic evaluation (TE) and two corporate-level evaluations (CLEs).
7. **Evaluation criteria and ratings**
IEO evaluations follow the main provisions in the NDB Evaluation Manual, which includes the assessment of projects based on internationally recognised evaluation criteria such as relevance, effectiveness, efficiency, impact and sustainability (see annex 2 for definitions). Two additional criteria – NDB performance and borrower performance – are also assessed in each operation. Based on the evidence and analysis undertaken, each criterion is assigned a performance rating on a six-point rating scale, with a rating of 6 (Highly Successful) being the highest score and 1 (Highly Unsuccessful) being the lowest.³ These ratings facilitate the aggregation of results providing a consolidated overview of performance of the projects evaluated. Notwithstanding the aforementioned, the report devotes careful attention to analysing the proximate causes of performance, as a means to generate lessons and identify good practices that may be helpful for the design of new operations and the implementation of ongoing ones.
8. It is important to note that while 13 evaluation reports have provided the basis of the analysis for this report, IEO has been able to draw on evaluation ratings from 11 NDB-financed projects covered by these evaluations. These include seven stand-alone PPEs, one PCRv, two projects assessed as part of the India CPE,⁴ and the TE of NDB's response to the COVID-19 pandemic. The other reports mentioned above (one ESR and two CLEs) do not include performance ratings by evaluation criteria but have provided useful supporting insights that have been used, as appropriate, to further strengthen the explanations of performance documented in this report.

2 A systematic review is a summary of existing evidence that answers a specific clinical question, contains a thorough, unbiased search of the relevant literature, explicit criteria for assessing studies and structured presentation of the results.

3 Rating scale adopted by IEO: 6 – Highly Successful; 5 – Successful; 4 – Moderately Successful; 3 – Moderately Unsuccessful; 2 – Unsuccessful; and 1 – Highly Unsuccessful. See annex 3 for more information.

4 In these two projects, IEO conducted dedicated impact surveys as part of the CPE process, to collect and analyse primary data to strengthen the credibility and robustness of the findings.

Table 1: Evaluation reports by IEO that have informed this first edition of the Report on NDB's Development Results

Sr. No.	Country	Type of evaluation	Project name	Sector	Nature of loan	Approval year	Loan closing date	Evaluation completion year
1	Brazil	PPE	Renewable Energy Projects and Associated Transmissions Project	Renewable energy and energy efficiency	Non-Sovereign	13-04-2016	26-04-2020	2023
2	Brazil	PPE	Pará Sustainable Municipalities Project	Multiple areas	Sovereign	05-03-2018	10-09-2024	2024
3	China	PPE	Luoyang Metro Project	Transport infrastructure	Sovereign	20-07-2018	15-08-2022	2023
4	China	PPE	Putian Pinghai Bay Offshore Wind Power Project	Renewable energy and energy efficiency	Sovereign	22-11-2016	02-09-2021	2024
5	India	PPE	Madhya Pradesh Major District Roads Project	Transport infrastructure	Sovereign	22-11-2016	31-03-2022	2022
6	South Africa	PPE	Greenhouse Gas Emissions Reduction and Energy Sector Development Project	Renewable energy and energy efficiency	Non-Sovereign	20-07-2018	28-01-2024	2023
7	South Africa	PPE	Renewable Energy Sector Development Project	Renewable energy and energy efficiency	Non-Sovereign	31-03-2019	06-12-2023	2024
8	China	PCRv	Lingang Solar Project	Renewable energy and energy efficiency	Sovereign	13-04-2016	21-12-2020	2024
9	Multi-country	TE	NDB Fast Track Response – COVID-19 Support	Emergency support	Sovereign	2020-2021*	2020-2022	2023
10	-	ESR	Preliminary Experience in Establishing NDB On-the-Ground Presence: The Role of Regional Offices	Evaluation synthesis	-	-	-	2023
11	-	CLE	Evaluation of NDB's Policy Framework	Corporate-level evaluation	-	-	-	2024
12	-	CLE	Evaluation of NDB's Financial Architecture	Corporate-level evaluation	-	-	-	2024
13	India	CPE	Country Portfolio Evaluation for India**		-	-	-	2024

Source: NDB loan dashboard and evaluation authors.

* NDB approved nine COVID-19 emergency support projects to member countries between March 2020 and April 2021. Consequently, the closing date of the project ranges from December 2020–June 2022. IEO evaluated these nine COVID-19 support projects as a single thematic, multi-country evaluation in 2023.

** Ratings from two projects from the CPE were used in the analysis of the ratings.

- 9. Thematic focus.** Beyond providing an account of the results of NDB operations, this report includes a dedicated thematic chapter on a priority topic, which will be a regular feature moving forward. The main purpose of including such a chapter in this report is to promote learning on critical topics of importance to NDB and its membership. This edition's thematic chapter focusses on climate and the environment (see chapter VI), given both its global importance with regard to sustainable development but also because the numerous evaluations completed by IEO thus far focus on renewable energy more than on any other sector. The topic was also selected for this year's report because the 30th Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC COP30) will be hosted in 2025 in one of NDB's member countries, Brazil, thus providing reflections that may be useful in the forthcoming discussions and for NDB Management to define the position of the Bank related to the conference.
- 10. Limitations of this report.** Firstly, while the evaluations cover all of the original five borrowing countries and a range of sectors, it is important to emphasise that results in this report do not necessarily represent the performance of the entire NDB project portfolio. Nevertheless, the results do provide an indication of the directions in which the portfolio is performing and moving, including the underlying opportunities and challenges faced in further increasing the impact of the Bank on the ground.
- 11.** Representing around 11% of projects approved by the Bank since 2015, the sample size of 11 projects evaluated that have informed this report may be considered insufficiently large to provide a robust assessment of the entire portfolio. While this is a reality, in practice IEO has evaluated all of the projects that have reached completion stage. Additional projects are being and will be evaluated by IEO that will further expand the evidence base for future editions of this report. Moreover, it is useful to recall that one of the 11 projects evaluated is the COVID-19 response loans, which totalled USD 9 billion in the five founding member countries – a large proportion of the USD 33 billion in total approvals by the Bank thus far.
- 12.** Furthermore, IEO finalised the Evaluation Manual in the middle of 2024. As such, the evaluations undertaken between 2022–2024 did not benefit from a documented and consistent evaluation methodology to follow, which may have led to some variations in the interpretation of the evaluation criteria applied and ratings assigned. Notwithstanding the aforementioned however, throughout this period IEO evaluations were guided by international good practices – such as the Good Practice Standards by the Evaluation Cooperation Group of the MDBs – and experiences and methodologies of peer organisations, appropriately customised to the NDB context.

III.

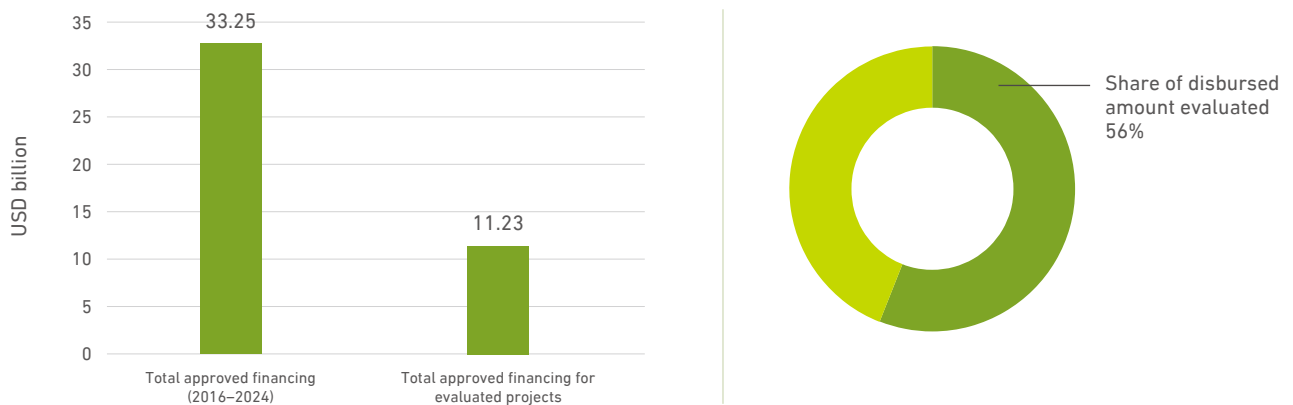
Overview of the projects evaluated



III Overview of the projects evaluated

- 13.** The following analysis of project ratings is based on the evaluation of the 11 projects.⁵ These evaluated projects represent 11% of the 98 projects approved by NDB as of July 28, 2024, and all of the projects that have reached completion stage.
- 14.** In terms of financing, by the end of July 2024, NDB had approved a total of USD 33.25 billion, of which USD 19.41 billion had been disbursed. IEO has evaluated projects with a total approved financing of USD 11.23 billion, of which USD 10.81 billion has been disbursed. This indicates that IEO has evaluated 56% of the total disbursed amount to date.

Figure 1: Total approved financing by NDB between 2016 and 2024 (left) and total cumulative approved financing of the evaluated projects between 2022 and 2024 (right)



Source: NDB loan dashboard and evaluation authors.

- 15.** As shown in tables 2 and 3, the projects evaluated cover all the main sectors and all five founding member countries where NDB has been active since the beginning of its operations. In particular, table 2 shows that the evaluations covered most of the Bank's priority areas. However, the table also shows that no projects have so far been evaluated on environmental protection and social and digital infrastructure, mainly because the Bank has financed very few projects in these areas so far, or any such projects are still in very early stages of implementation.

⁵ The RDR has assessed 13 evaluation reports which includes CLEs and ESRs that do not provide ratings. Consequently, of the 13 reports, 11 provide ratings which include 8 stand-alone project evaluations, 1 PCRV and 2 projects from the India CPE.

Table 2: Distribution of NDB portfolio and the subset of evaluated projects by focus area 2016–2024

Focus area	NDB portfolio		Evaluated projects	
	No. of projects	Approved amount (USD million)	No. of projects	Approved amount (USD million)
Transport infrastructure	37	12,895	3	1,000
Multiple areas	17	3,493	1	50
Water and sanitation	14	2,790	1	345
Clean energy and energy efficiency	13	3,323	5	972
COVID-19 emergency assistance	9	8,860	1*	8,860
Environmental protection	3	700	0	-
Social infrastructure	3	810	0	-
Digital infrastructure	2	374	0	-
Total	98	33,245	11	11,227

Source: NDB loan dashboard and evaluation authors.

* In total nine individual projects were approved under the COVID-19 support programme across member countries. However, for evaluation purposes the programme was considered as one single multi-country project.

16. Table 3 below shows the current country coverage of IEO evaluations in borrowing member countries. There are two points to highlight:

- (i) No evaluations have been done so far in Bangladesh, as the first NDB-financed project in this country had not been approved at the time of the evaluation; and
- (ii) Project designs for financing are currently being finalised in Egypt. No individual project evaluation has so far been

undertaken in Russia, given that IEO was only established in April 2022, which more-or-less coincided with the beginning of the crisis situation in the region. Nevertheless, the loans provided to Russia in response to the COVID-19 pandemic were covered as part of the thematic evaluation on the subject. Moreover, Russia was also included in the evaluation synthesis report that analysed NDB's initial experience in setting up regional offices to strengthen its on-the-ground presence.

Table 3: Distribution of evaluated projects by country 2016–2024

Country	NDB portfolio		Evaluated projects	
	No. of projects	Approved amount (USD million)	No. of projects	Approved amount (USD million)
Brazil	21	6,205	2	350
Russia	14	4,266	0	0
India	27	8,963	3**	1,045
China	23	7,998	3	609
South Africa	13	5,816	2	363
Bangladesh	0	0	0	0
Egypt	0	0	0	0
COVID-19 emergency assistance (Multiple countries)*		8,860	1	8,860
Total	98	33,245	11	11,227

Source: NDB loan dashboard and evaluation authors.

* In total nine individual projects were approved under the COVID-19 support programme across member countries. However, for evaluation purposes the programme was considered as one single multi-country project.

** This included one project evaluated by IEO in 2022 (Madhya Pradesh Major District Roads Project) and two projects from the CPE (Rajasthan Water Sector Restructuring Project and Bihar Rural Roads Project).

IV.

Portfolio performance

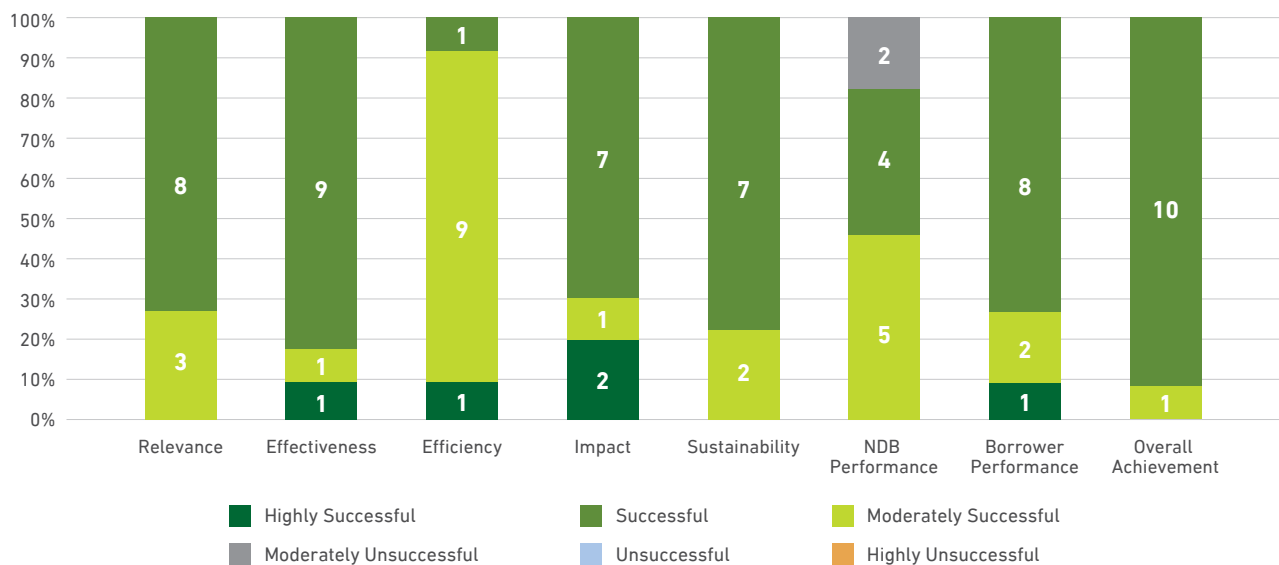
- A. Relevance
- B. Effectiveness
- C. Efficiency
- D. Impact
- E. Sustainability
- F. Overall portfolio achievement

IV Portfolio performance

17. This chapter presents a summary and discussion of the evaluation ratings for relevance, effectiveness, efficiency for impact and sustainability related to the 11 projects that have been evaluated by IEO. It also draws on the qualitative findings from three other evaluations, namely: the CPE in India, the ESR on NDB's regional offices, and the CLE on NDB's Policy Framework, respectively.

18. A broad overview of the ratings is depicted in figure 2. It should be noted that the evaluation of the Pará Sustainable Municipalities Project (Brazil) did not provide a rating for impact,⁶ so only 10 ratings are available for this criterion. Similarly for sustainability, the data is based on nine evaluation reports as the aforementioned Pará Project and the COVID-19 evaluation did not include ratings for sustainability.

Figure 2: Summary of IEO evaluated projects' rating performance



Source: Evaluation authors.

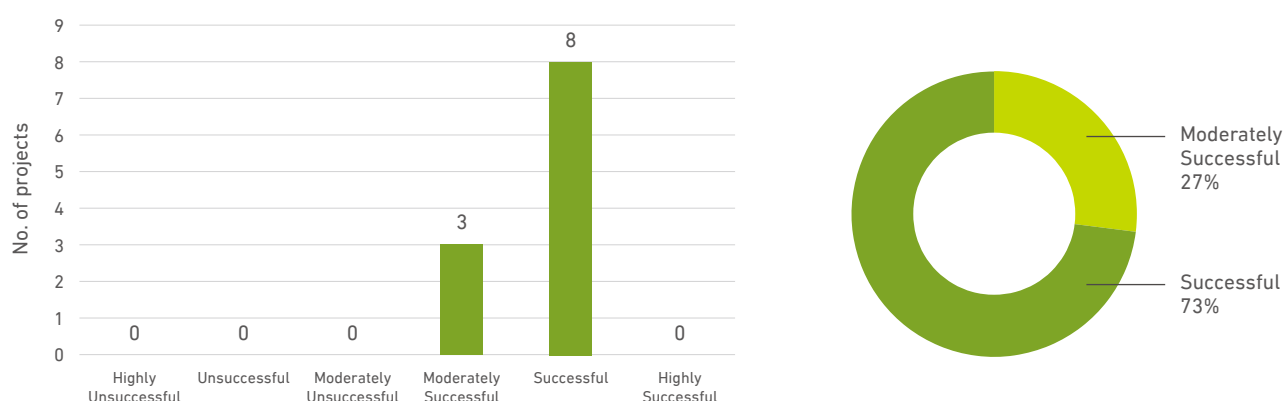
A. RELEVANCE

19. Relevance is the assessment of the degree of alignment of the objectives of NDB-financed projects with NDB and government strategies and priorities, and the needs of project beneficiaries. It also assesses the overall design logic in meeting project objectives.

20. Summary of performance. As may be seen from figure 3, the majority of projects evaluated (73%) were rated as “successful” for relevance, whereas 27% were considered “moderately successful”. However, none of the projects evaluated were rated “highly successful” for relevance, which implies there is further scope for improvement in the design of NDB-financed operations.

⁶ This is because the project was still under implementation at the time of evaluation.

Figure 3: Distribution of relevance ratings by number (left) and percentage (right)



Source: Evaluation authors.

- 21. Relevance of objectives.** Based on an analysis of evaluations conducted by IEO, NDB-financed projects were broadly aligned with national and/or sub-national priorities and plans, the NDB general strategies, and with relevant United Nations Sustainable Development Goals (SDGs). They were also consistent with the needs of the end beneficiaries. For example, the Madhya Pradesh Major District Roads Project (India) was consistent with the Madhya Pradesh State Road Development Plan to promote mobility and promote economic development. The Luoyang Metro Project (China) was consistent with the transport plans in the City Master Plan to enhance efficiency in transportation and reduce carbon dioxide (CO₂) emissions. The overall conclusion of all the evaluations is that the project objectives were relevant when assessed against existing national and local plans and the NDB General Strategy for 2022–2026.
- 22. Relevance of design.** While the design of NDB-financed projects is generally robust, evaluations have revealed that there are areas that require more attention. Firstly, the absence of NDB country strategies to guide the design of projects in member countries limits the quality of design, for example in terms of prioritising the selection of sectors for investments and choice of partner institutions. In this regard, the India CPE found that there was concentration of NDB operations in one state (Madhya Pradesh) in India, and that other more lagging states (e.g. Chhattisgarh and Jharkhand) have not yet benefitted from any NDB financing. The CPE also noted that the limited attention given to areas such as environmental protection and social and digital infrastructure may have diminished the wider relevance of the NDB portfolio in India.
- 23.** While all project design reports incorporate a Design and Monitoring Framework (DMF), the quality of these frameworks varies, with at least five evaluations identifying weaknesses in indicators' selection and alignment. The Madhya Pradesh Major District Roads Project (India) noted that indicators focused heavily on outputs (e.g. kilometres of roads constructed) rather than socio-economic impacts such as improved livelihoods. Similarly, the Luoyang Metro Project in China found its monitoring metrics were limited to operational efficiency, without capturing the project's broader environmental or developmental benefits. The Pará Sustainable Municipalities Project (Brazil) evaluation flagged that objectives were framed mostly at the output level (e.g. roads paved), rather than higher-level impacts like enhanced access to services. Across these projects, the evaluations recommend improving DMF structures to ensure better alignment between project activities and long-term impacts, thereby strengthening accountability and the ability to demonstrate meaningful outcomes.
- 24.** The overall relevance of NDB's portfolio in meeting the investment priorities of emerging markets and developing countries (EMDCs) has been constrained by lower than envisioned loan volumes and an insufficiently diversified range of financial instruments. Loan volumes have fallen short of what was envisioned under the General Strategy for 2017–2021 and have slowed further in 2022 and 2023. NDB has taken

a measured approach to membership expansion, which has progressed relatively slowly, though a new member, Algeria, joined the Bank in 2024.⁷ Expanding its membership while at the same time mobilising additional resources and making these resources available under more attractive terms (e.g. via local currency loans and concessional lending or grant resources) will be key to increasing the overall relevance of NDB's operations to EMDCs. Expanding membership more expeditiously would be consistent with the NDB's Articles of Agreement, which calls for the Bank to finance projects in Brazil, Russia, India, China and South Africa (BRICS) as well as in other EMDCs. This was further reiterated in the 2024 BRICS leaders' summit final declaration.⁸

25. Furthermore, the CLE report on NDB's Policy Framework observed that, while the Policy on Guarantees has been in place for eight years, no guarantees have yet been processed in member countries. It also highlighted opportunities to enhance NDB's catalytic role, as outlined in its General Strategy for 2022–2026, by developing frameworks for mobilising private capital, creating non-project-based investment pools, and establishing securitisation vehicles, along with quantitative measures to monitor progress in these areas.
26. "Inclusiveness" is one of the three cross-cutting considerations in the current NDB General Strategy. However, limited attention to the needs and priorities of local communities, and particularly to disadvantaged and vulnerable groups, was a reason for the moderately successful ratings for relevance in three evaluations. The evaluation of the Renewable Energy Projects and Associated Transmission (Brazil) found limited attention to gender, social development and the impact on communities. While benefiting from a national programme requirement for socio-economic inclusion, the Greenhouse Gas Emissions Reduction and Energy Sector Development Project (South Africa) did not comprehensively include specific components and initiatives for social development in the project design. Overall, the evaluation of NDB's Fast Track Support to the COVID-19 Emergency concluded that the support was in line with NDB policy and borrower needs. However, the limited analysis of the impact on, and attention to, vulnerable groups such as health workers somewhat reduced the relevance of the support, though this dimension was appropriately considered in the Russia operations.
27. Some of the project evaluations raised other types of concerns related to project design. The evaluation of the Renewable Energy Sector Development Project (South Africa) found that some of the technologies supported (e.g. concentrated solar power) were untested and potentially posed a risk. The choice of concrete over bitumen in the Madhya Pradesh Major District Roads Project (India) was not adequately analysed leading to significantly increased costs. Transmission challenges in the Renewable Energy Projects and Associated Transmission (Brazil), and the availability of rooftop sites in the Lingang Distributed Solar Power Project (China), were also insufficiently considered in these project designs.
28. Overall, while the majority of projects demonstrated alignment with national plans and NDB's strategic priorities, several important lessons emerge. The absence of country and sector-specific strategies was identified as one factor potentially reducing relevance. The limited focus on vulnerable groups in some cases highlights the need for a more targeted approach in addressing the specific needs of disadvantaged communities. Additionally, ensuring that project objectives are not only relevant but also grounded in robust theories of change and comprehensive frameworks could increase the future relevance of NDB's interventions. Strengthening coherence with broader NDB objectives, such as by providing technical assistance and promoting purposeful partnerships, will further ensure that projects achieve maximum impact.

7 Algeria has been admitted by NDB's Board of Governors as a prospective member and will officially become a member country once its instrument of accession is deposited with the Bank.

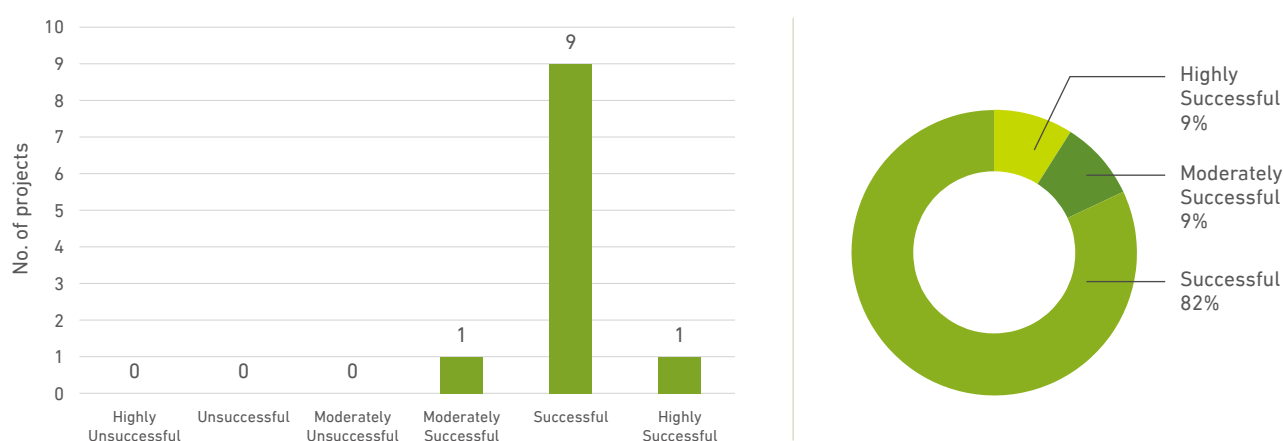
8 "We support the further expansion of NDB membership and expedited consideration of applications of BRICS countries in line with the NDB General Strategy and related policies" – October 23, 2024.

B. EFFECTIVENESS

29. The effectiveness criteria assesses whether a project has met its objectives or is likely to do so.
30. **Summary of performance.** Figure 4 shows that nine out of 11 projects (82%) evaluated were “successful” in terms of effectiveness, one was “moderately successful” and one “highly successful”. This is a positive result, although also a reflection of what was mentioned earlier: many project objectives are framed merely at the output level (e.g. number of kilometres of roads constructed), rather than at the impact level.

Impact is the ultimate transformational change NDB interventions should be aspiring to make (e.g. improvements in economic conditions of ultimate beneficiaries through improvements in mobility due to construction of roads). Therefore, assessing higher-order impact is essential for the Bank, and projects should be “evaluable” with a coherent theory of change. In this regard, the recently issued Evaluation Manual should provide clarity and guidance for NDB Management and staff in defining project objectives and conducting their own impact assessments over time.

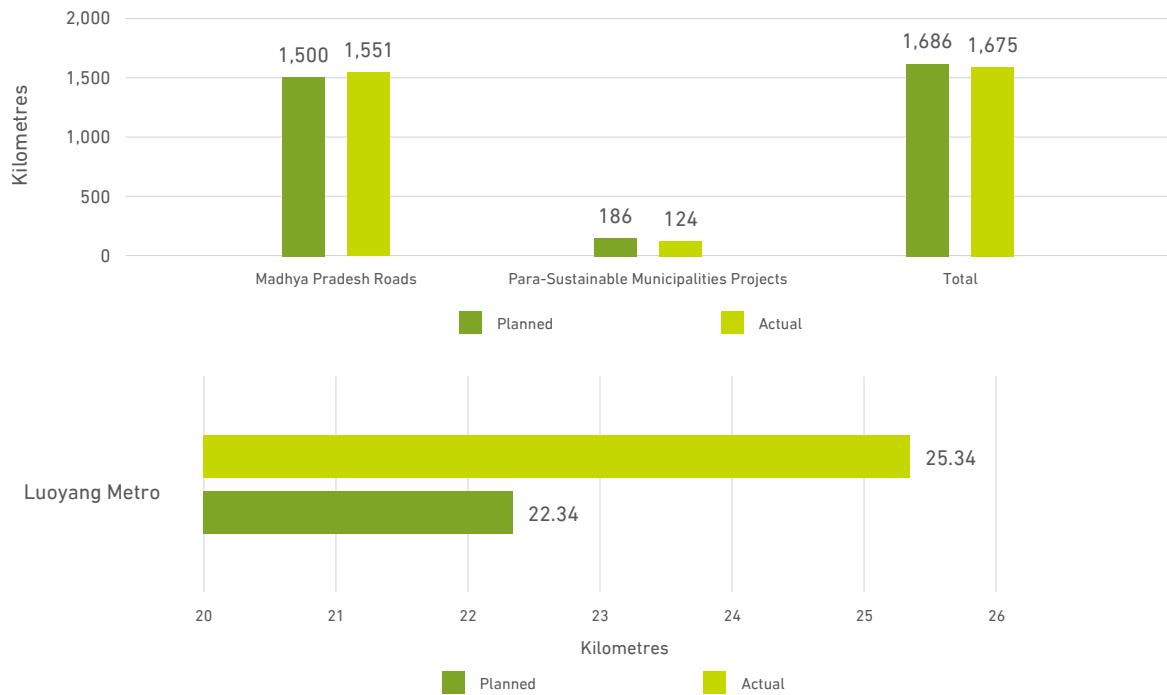
Figure 4: Distribution of effectiveness rating of evaluated projects by number (left) and percentage (right)



Source: Evaluation authors.

31. Notwithstanding the absence of agreed quantitative targets, the COVID-19 programme supported by NDB has been perceived as effective by the borrowing countries. Interventions that exceeded planned results include the Renewable Energy Projects and Associated Transmission (Brazil) which created an additional 835 megawatts (MW) of installed renewable power capacity compared to the targeted 600 MW; the Madhya Pradesh Major District Roads Project (India) which upgraded 1,551 km of roads compared to the target of 1,500 km; the Renewable Energy Sector Development Project (South Africa) which is expected to produce 1,340 GWh/annum, which is more than twice the targeted 512 GWh/annum; and the Greenhouse Gas Emissions Reduction and Energy Sector Development Project (South Africa) which created an additional 1,147 MW of installed power generation capacity in 12 local communities compared to the targeted 375 MW.
32. Three of the projects were also evaluated as successful in terms of leveraging private sector finance. For example, the Renewable Energy Projects and Associated Transmission (Brazil) leveraged an additional USD 855 million of cofinancing from the private sector. The Greenhouse Gas Emissions Reduction and Energy Sector Development Project (South Africa) leveraged USD 2.2 billion of private financing. The projects supported by the Renewable Energy Sector Development Project (South Africa) also attracted USD 1.4 billion of other funding. However, in the latter case, the evaluation concluded that the NDB investment did not significantly impact the mobilisation of financing from other sources, including the private sector. The issue of financial additionality is discussed in chapter V (NDB performance).

Figure 5: Kilometres of roads (top) and metro systems (bottom) built in the evaluated projects

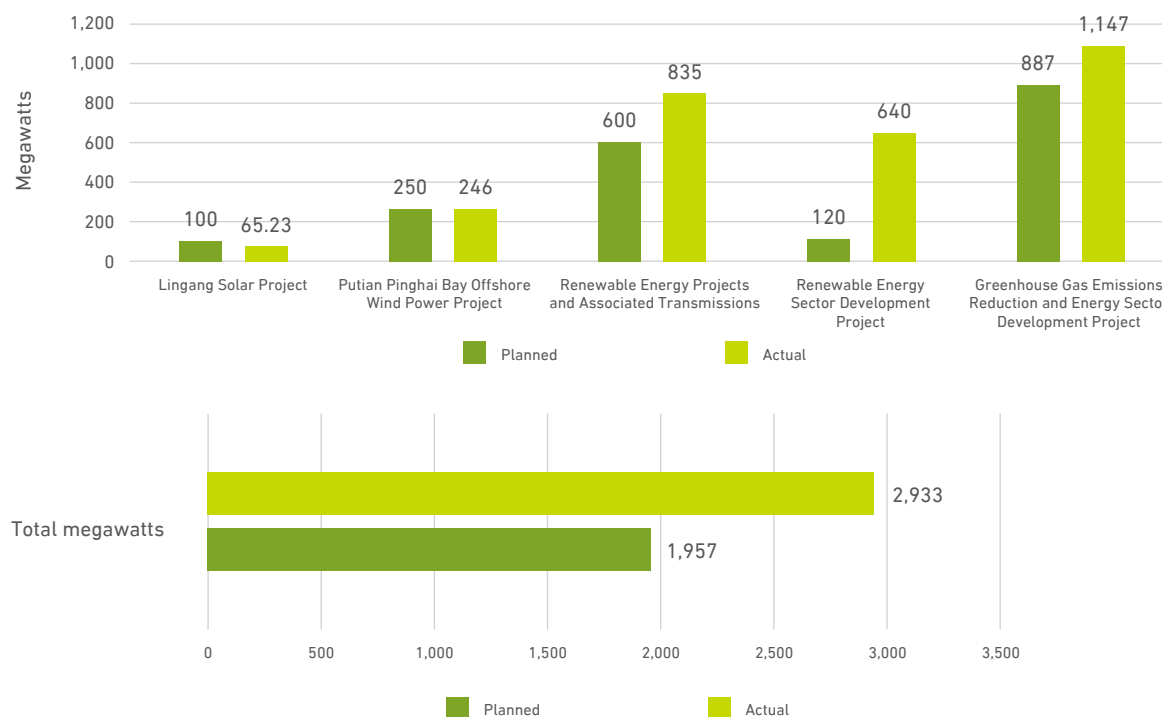


Source: Evaluation authors.

33. The strong capacity of local implementing partners is key to the effectiveness of projects. This was particularly evident in the Renewable Energy Projects and Associated Transmission project in Brazil, where the partnership with the Brazilian Development Bank (BNDES) played a crucial role. BNDES, with its extensive experience in infrastructure financing, significantly contributed to the project's successful delivery, enhancing renewable energy capacity while aligning with state priorities. Similarly, in the Luoyang Metro Project in China, the Luoyang Rail Transit Corporation (LRTC) was central to the project's

success. Drawing on lessons from previous projects, LRTC engaged expert consultants and coordinated the construction process effectively, ensuring smooth execution. In South Africa, the collaborations with the Development Bank of Southern Africa and the Industrial Development Corporation provided a critical bridge between NDB financing and on-the-ground implementation. These partnerships facilitated investments in renewable energy projects (such as solar and wind power) while aligning them with national socio-economic inclusion policies, ensuring both sustainable and inclusive outcomes.

Figure 6: Renewable energy capacity planned* vs actual by project (top) and aggregate capacity planned vs installed by all projects (bottom)



Source: Evaluation authors.

* In the project document to the Board, the performance indicator for the expected project output is set at the level of 120 MW of renewable energy sources.

34. Effectiveness could have been further improved with enhanced supervision and implementation support from NDB. The effectiveness of the Madhya Pradesh Major District Roads Project (India) was constrained by insufficient supervision and implementation support: supervision missions were short, and there was no mid-term review (MTR). The Putian Pinghai Bay Offshore Wind Power Project (China) would also have benefited from deeper technical support at the project design stage and during the implementation process. Recognising that the Project Preparation Fund was established after the Putian Project was approved, such technical assistance could have been provided by mobilisation of consultant/sector specialists for short-term inputs. The latter evaluation also found that capacity-building efforts were insufficient, with training limited to safety and maintenance, hindering the development of technical expertise. Greater early-stage technical assistance could have improved

operational efficiency and mitigated risks during execution. Significant knowledge accumulation and dissemination was nonetheless undertaken with support of NDB that includes release of a handbook for developing offshore wind power projects in China.

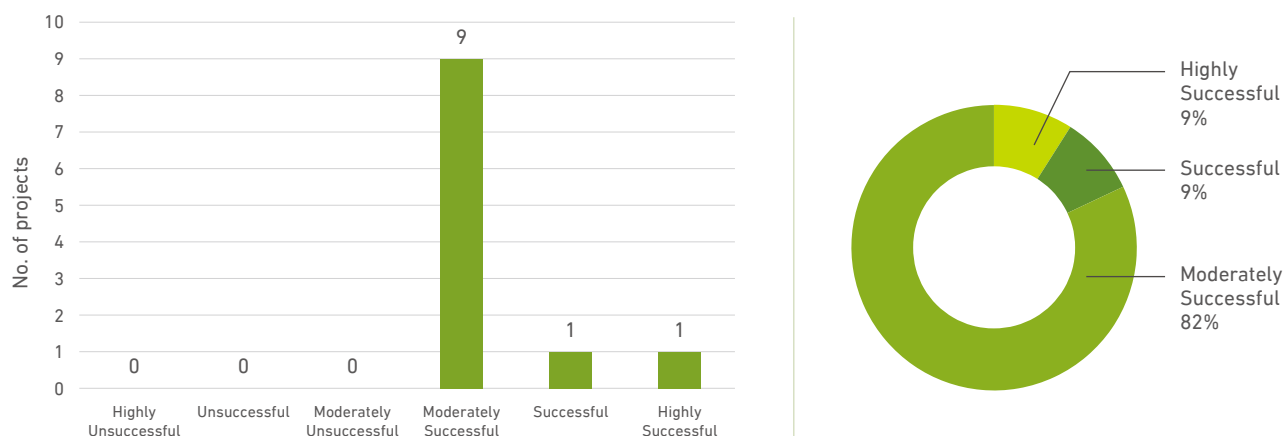
35. Overall, the effectiveness of NDB-supported projects has generally been strong, with many interventions achieving or exceeding their intended results. The ability to leverage private sector financing and the presence of strong local implementing partners were critical factors in ensuring success. However, the evaluations also highlight areas where effectiveness could be further enhanced, particularly through more robust supervision, MTRs, and greater technical support and capacity-building. Addressing these challenges will be essential for ensuring that future projects not only meet the targets but also deliver sustained, long-term benefits.

C. EFFICIENCY

36. Efficiency assesses the extent to which projects have delivered, or are likely to deliver, results in an economical and timely way.

37. Summary of performance. Figure 7 illustrates that, along with NDB performance, ratings for project efficiency were the lowest of all evaluation criteria. Nine of the eleven projects were rated as only “moderately successful” (i.e. 82% of the projects evaluated).

Figure 7: Distribution of efficiency rating of evaluated projects by number (left) and percentage (right)



Source: Evaluation authors.

38. In most cases this was due to time delays, but higher than planned costs were also noted in two examples (see para. 44 below). However, a few of the projects evaluated were notably efficient, such as the Luoyang Metro Project (China). This project was delivered nine months ahead of schedule despite the challenges connected with the COVID-19 pandemic; actual projects costs were slightly lower than originally estimated, and the recalculated economic rate of return is higher than estimated at appraisal. The strong capacity of the project implementation agency (PIA), as well as effective cooperation between the PIA, government authorities and NDB staff, all contributed to the high efficiency of the project.

39. Administrative and implementation delays were a major cause of lower efficiency. As noted by the evaluation synthesis on NDB's regional offices, extended delays between project approval and loan effectiveness are common to operations in all countries. The Lingang Distributed Solar Power Project (China) had experienced a one-year delay in loan effectiveness, and then a two-year delay in

restructuring the project scope following a change in the subsidy regime. Negotiation of the terms and conditions for the loan agreement of the Greenhouse Gas Emissions Reduction and Energy Sector Development Project (South Africa) took longer than expected and resulted in a delay of six months to the loan signature. Multiple and frequent changes to the loan agreement led to further delays in allocating and on-lending NDB's funds to the sub-borrowers, which added extra difficulties to project implementation and caused inefficiencies. Similarly, negotiations regarding several aspects of the loan agreement for the Renewable Energy Projects and Associated Transmission (Brazil) led to a delay of almost two years between the signing of the loan agreement and loan effectiveness. Once effective, however, this project was delivered on time and with minimal cost escalations.

40. The time lag between loan approval, loan signature and then loan effectiveness has decreased over time in the India portfolio. There was a delay of almost seven months

between project approval and loan effectiveness of the Madhya Pradesh Major District Roads Project which delayed project start up.

However, the overall picture from the India CPE shows improving efficiency over time, with a decline in the average number of days between project approval and loan effectiveness between 2016 and 2023. One contributing factor may be considered the establishment of the Indian Regional Office (IRO) in 2022, which has enabled stronger dialogue between NDB and national stakeholders.

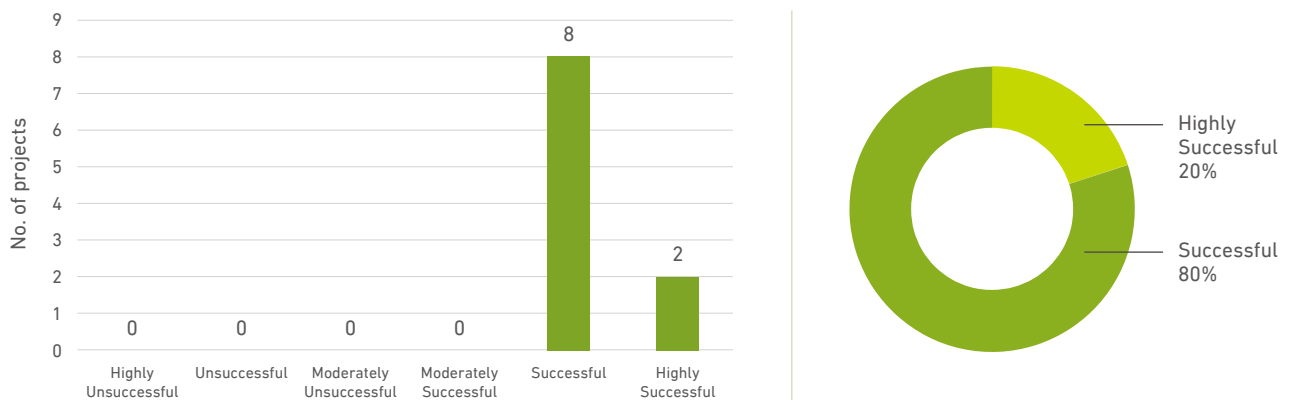
41. A number of projects experienced significant implementation delays. In the case of the Putian Pinghai Bay Offshore Wind Power Project (China), and some of the projects covered by the India CPE – such as the Madhya Pradesh Major District Roads Project – COVID-19 was a major factor. However, in all these cases there were other contributory factors. In the case of the Madhya Pradesh Major District Roads Project, delays also resulted from problems in obtaining approvals from various government departments, changes in the scope of work, and adverse climatic conditions. The Putian Project was delayed by two years due to design challenges and supply chain shortages, as well as by a shortage of workers resulting from COVID-19. In the India portfolio, local political instability exacerbated implementation challenges in the Manipur Water Supply Project, as did natural disasters in this project and the Himachal Pradesh Rural Water Supply Project. According to the India CPE, better supervision, risk management, contingency planning and management information systems at NDB might have reduced these implementation delays.
42. Several projects evaluated experienced time overruns due to various challenges. The COVID-19 pandemic disrupted supply chains and workforce availability, further extending the timeline. Similar delays were noted in the Lingang Distributed Solar Power Project (China), where supply chain disruptions and administrative bottlenecks slowed down the construction phase, necessitating timeline extensions. These cases highlight the importance of proactive planning and flexibility in handling unforeseen events to avoid significant time overruns.
43. The financial and economic efficiency of projects has been mixed. Some projects have been delivered under-budget and have delivered higher economic rates of return as compared with the original design. As in the case of the Luoyang Metro Project (China), the Lingang Distributed Solar Power Project (China) delivered a reduction in unit costs and a higher economic rate of return than estimated at appraisal. The reduction in unit cost is due to two major factors: sector dynamics driving down the prices of modules, and the deployment of efficient procurement practices. The Putian Pinghai Bay Offshore Wind Power Project (China) also shows a higher economic rate of return than originally estimated for similar reasons.
44. Costs were higher than necessary in two of the projects evaluated. Costs per kilometre of road and per beneficiary were high by international standards in the Madhya Pradesh Major District Roads Project (India), in large part due to the decision to opt for more expensive concrete rather than bitumen surfaces. While concrete roads have a longer life span and lower maintenance costs, the 60% higher cost meant that a shorter length of road was constructed. Better appraisal might also have reduced the significant cost overruns which occurred in the Pará Sustainable Municipalities Project (Brazil).
45. In summary, while a few projects demonstrated notable efficiency, such as the Luoyang Metro Project (China), efficiency overall was the weakest of the evaluation criteria. Administrative and implementation delays, compounded by challenges in project scope changes, design complexities, and external factors like the COVID-19 pandemic, significantly impacted the timely delivery of results. Although improvements in efficiency have been observed over time, particularly in the India portfolio, financial and economic efficiency remains mixed. These findings underscore the need for more rigorous project appraisal, enhanced risk management, and stronger contingency planning (including vulnerability to climate change impacts) to ensure that future projects are not only completed on time but also within budget, while maximizing their economic returns.

D. IMPACT

- 46.** Impact assesses the extent to which the intervention has generated, or is expected to deliver, significant positive or negative, intended or unintended, higher-level effects.
- 47. Summary of performance.** Figure 8 illustrates that ratings for impact were either rated

“successful” or “highly successful”. Ratings were based on 10 projects. The Pará Sustainable Municipalities Project (Brazil) was not rated as the project was under implementation and therefore deemed not sufficiently ready to be rated for impact. In all evaluated projects, eight projects were rated as successful while two projects were rated highly successful.

Figure 8: Distribution of impact rating* of evaluated projects by number (left) and percentage (right)



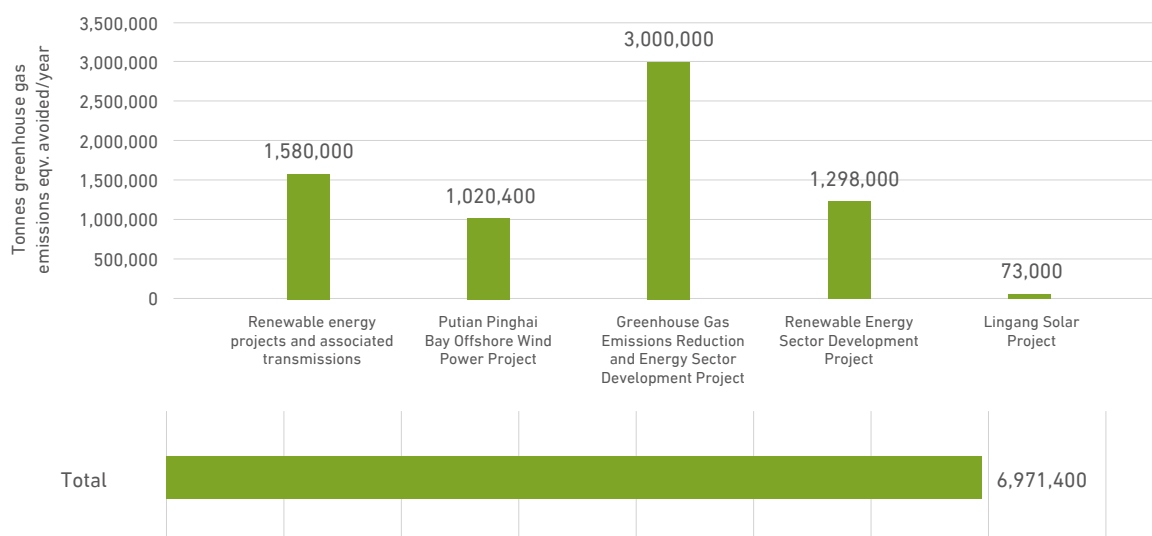
Source: Evaluation authors.

* Impact of Pará Sustainable Municipalities Project (Brazil) not rated.

- 48.** All the projects evaluated have generated significant positive impacts or are likely to. Significant environmental, economic and other impacts were identified. Two of the projects in China – the Luoyang Metro Project and Putian Pinghai Bay Offshore Wind Power Project – were rated as highly successful for impact. Other projects have already produced multiple benefits. For example, an impact study carried out as part of the India CPE found that the Rajasthan Water Sector Restructuring Project had significantly improved water availability for cultivation, leading to an increase in the number of crops grown by farmers and improved crop yields.
- 49.** Large amounts of carbon dioxide emissions have been avoided as a result of the energy projects supported. In addition to increasing the supply and reliability of electricity, the five

energy investments evaluated are likely to have generated a significant positive environmental impact in terms of avoided carbon emissions. The Lingang Distributed Solar Power Project (China) and Putian Pinghai Bay Offshore Wind Power Project (China) avoided around 46,133 and 1 million tonnes of CO₂ emissions per year respectively. The Renewable Energy Sector Development Project (South Africa) and Greenhouse Gas Emissions Reduction and Energy Sector Development Project (South Africa) expect to reduce greenhouse gas emissions by 1.3 and over 3 million tonnes per year respectively. And the Renewable Energy Projects and Associated Transmission (Brazil) reduced emissions by approximately 1.6 million tonnes per year. No significant negative environmental impacts were identified in any of the projects (see chapter VI).

Figure 9: Greenhouse gas emissions potentially avoided per year by energy projects (top) and aggregate (bottom)



Source: Evaluation authors.

50. The transport projects have delivered significant positive benefits. An impact study of the Mumbai Metro Rail Project carried out as part of the India CPE found significantly improved urban mobility and safety; reduced travel time for commuters; a perception of greater safety for women; and a significant reduction in the use of private vehicles. Initial evidence for the Madhya Pradesh Major District Roads Project (India) likewise found reductions in travel times to medical and educational facilities and increases in local road construction employment. Although difficult to attribute to the improved roads alone, fatal accidents have declined, roadside business establishments have increased, as have monthly incomes of local beneficiaries. Similar attribution challenges apply to the Luoyang Metro Project (China): the transport project has been considered by a wide range of stakeholders interviewed to contribute to improvements in the business environment, employment and investment in the city, but there is limited data that can be used to estimate the magnitude of the contribution.
51. Positive socio-economic benefits were identified but might have been greater in some of the projects if prioritised during design and implementation. Despite not being addressed in the design and assessment reports, the Greenhouse Gas Emissions Reduction and Energy Development Project (South Africa) noted benefits from increased community shareholding, local procurement content, temporary jobs, and local socio-economic development and enterprise development programmes. Expenditure on the latter was twice the minimum compliance threshold required by such national programmes in South Africa. Initial data from the Pará Sustainable Municipalities Project (Brazil), Madhya Pradesh Major District Roads Project (India), and Putian Pinghai Bay Offshore Wind Power Project (China) suggest that these projects have, or are likely to, generate socio-economic benefits for local residents and communities. Companies involved with the Renewable Energy Projects and Associated Transmission (Brazil) also facilitated some social development initiatives, but these were unplanned and did not explicitly consider how resource-poor communities and marginalised groups, such as women, could benefit from the energy project.
52. Improvements in the Design and Monitoring Frameworks and impact assessment are required. Most of the projects evaluated were completed relatively recently (less than three years after project completion) or were still ongoing at the time of evaluation. This makes robust impact assessment both difficult and premature. However, as the India CPE concluded, the assessment of long-term impacts requires long-term indicators in DMFs, as well as a more structured approach to measuring and documenting impacts.

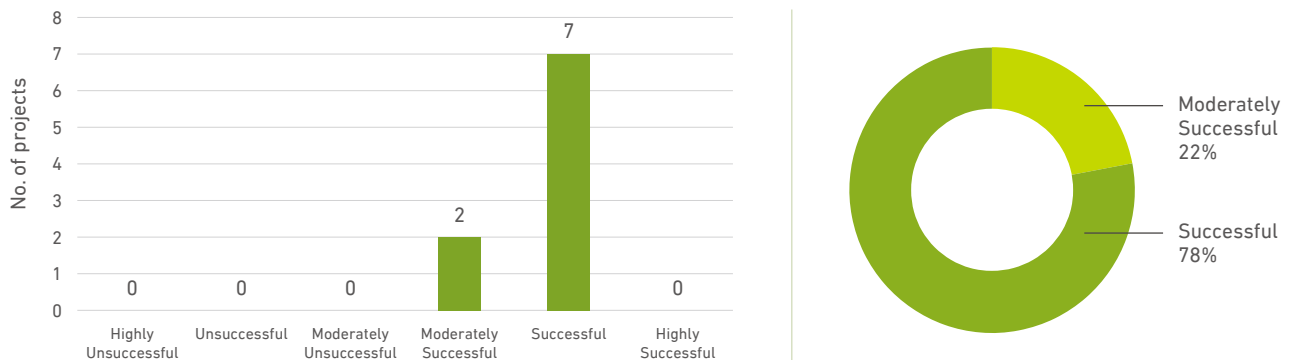
53. In conclusion, the projects evaluated have generated positive impacts, particularly in environmental sustainability and socio-economic development. From substantial reductions in carbon emissions to improvements in urban mobility, these projects have demonstrated the likelihood to deliver long-lasting benefits. However, there are areas for improvement. The evaluations indicate that greater attention to socio-economic outcomes, particularly for vulnerable and marginalised groups, could amplify project impacts. Additionally, enhancements in DMFs are necessary to ensure that long-term impacts are properly assessed and documented. By refining these aspects, NDB can further strengthen the transformative potential of its projects across the portfolio.

E. SUSTAINABILITY

54. Sustainability assesses the extent to which the net benefits of the intervention continue or are likely to continue after project completion.

55. Summary of performance: As shown in figure 10 below, seven of the projects were rated as “successful” for sustainability of the nine evaluation reports that rated this criterion. Although too early to judge actual sustainability, most projects reveal a strong commitment to sustainability via robust environmental and social safeguards, technically strong designs, and a focus on financial viability. However, in a few projects, the lack of exit strategies and/or sufficient community engagement and capacity-building has weakened the prospects for sustainability.

Figure 10: Distribution of sustainability* rating of evaluated projects by number (left) and percentage (right)



Source: Evaluation authors.

* The data is based on nine evaluation reports as the Pará Sustainable Municipalities Project (Brazil) and the COVID-19 evaluation did not rate the sustainability of the projects.

56. Adherence to strong environmental safeguards and a focus on renewable technology in energy generation projects have contributed to environmental sustainability. All the energy projects, and the India portfolio more generally, have adhered to environmental safeguards. Most of the projects relied primarily on national/local environmental and social (E&S) policies and systems. For example, there was a comprehensive system for environmental review and management for all the sub-projects funded by the Renewable Energy Sector Development Project (South Africa), and the Lingang Distributed Solar Power Project (China) complied with all essential environmental licences. Where negative environmental effects

arose during implementation – as happened in the Renewable Energy Projects and Associated Transmission (Brazil) project – appropriate measures were taken to address these. Further discussion of environmental policies, safeguards and impacts is contained in chapter VI.

57. Technically strong designs have contributed to sustainability in most cases. The technical sustainability of one sub-project – concentrated solar power – financed by the Renewable Energy Sector Development Project (South Africa) is uncertain due to the complex nature of the technology but, apart from that case, designs were technically sound. In one project the technical design prioritised sustainability over

efficiency. Although more costly than bitumen, the concrete road design used by Madhya Pradesh Major District Roads Project (India) will have longer lifespan and lower maintenance costs. In another project – the Pará Sustainable Municipalities Project (Brazil) – NDB added some elements to enhance sustainability: procurement of pressure washing trucks for drainage system maintenance and training workshops on road and draining maintenance.

- 58.** Financial viability is a strong guarantee of sustainability for energy projects. A favourable revenue and pricing structure underpinned by a guarantee for off-takers should help ensure the financial viability of sub-projects funded under both the South African energy projects (the Renewable Energy Sector Development project, and the Greenhouse Gas Emissions Reduction and Energy Development Project). Long-term energy generation contracts, coupled with a growing energy demand, were similarly supportive in the case of the Renewable Energy Projects and Associated Transmission (Brazil). The importance of guaranteed long-term pricing was highlighted by analysis in the PCRV on the Lingang Distributed Solar Power Project (China), which showed that the project was financially viable with current government subsidies, but non-viable without them. Sensitivity analysis of the Putian Pinghai Bay Offshore Wind Power Project (China) showed the project to be financially viable up to 2035 (the last repayment year) at current and projected subsidised tariff prices under a variety of possible conditions.
- 59.** The sustainability of transport projects is even more dependent on the availability of external government resources. A key sustainability factor for roads is the capacity and resources available for maintenance. An innovative feature of the Madhya Pradesh Major District Roads Project (India) was ensuring that the construction contractor was responsible for road maintenance for five years after completion. Other features should also ensure the sustainability of the investment: robust institutional arrangements, an assurance
- of adequate road funding from the state government, and a road asset management system that is under development. Despite this, as concluded by the India CPE, there is inevitable uncertainty about the future allocation of state funds for maintenance in this and other transport initiatives. The same applies to the Luoyang Metro Project (China). The metro, much like other metro projects globally, is not currently sustainable on the revenue it generates, but there are plans to increase these, as well as a strong government commitment to subsidise the operations as required.
- 60.** Well designed and resourced exit strategies could enhance the prospects for sustainability. Despite the generally successful ratings for sustainability, a number of the evaluations concluded that the prospects for sustainability could be further improved by the existence of explicit and resourced exit strategies.⁹ Other areas for sustainability improvement identified by the India CPE include increased stakeholder and community engagement (such as through water user associations), and a greater focus on climate resilience (see chapter VI).
- 61.** Overall, while a majority of projects have shown strong commitment to sustainability, particularly through adherence to environmental safeguards and technically robust designs, there remain areas for improvement. The lack of explicit exit strategies and the limited engagement of local communities and stakeholders in some cases have created uncertainties around long-term sustainability. Moreover, financial viability in energy projects has been reinforced by favourable pricing structures, but transport projects are more reliant on external government resources, introducing potential risks. To further strengthen sustainability outcomes, projects to be financed by NDB in the future should integrate clearer exit strategies, enhance community involvement, and prioritise climate resilience measures, ensuring that the benefits of these interventions endure over time.

⁹ Madhya Pradesh Major District Roads Project (India); Greenhouse Gas Emissions Reduction and Energy Development Project (South Africa); Putian Pinghai Bay Offshore Wind Power Project (China); India CPE.

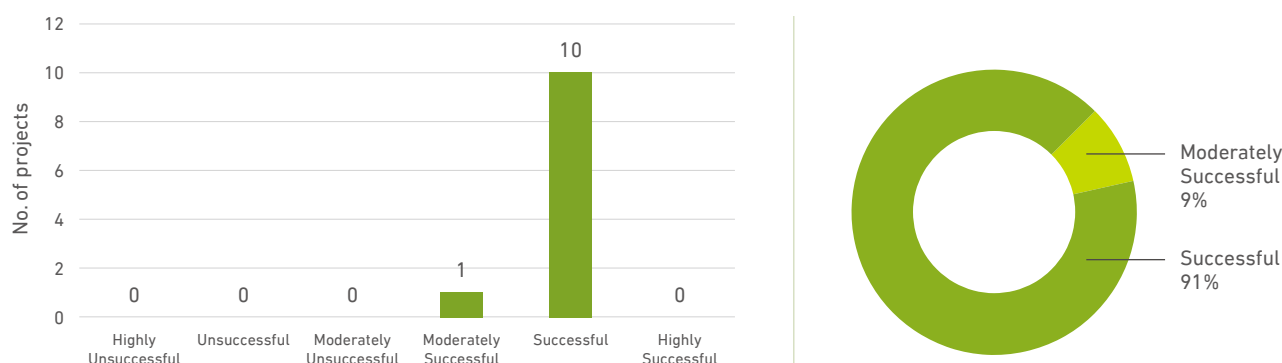
F. OVERALL PROJECT ACHIEVEMENT

62. Overall project achievement is a composite criterion providing a holistic assessment of project achievement. It is based on the ratings of five core criteria: relevance, effectiveness, efficiency, impact and sustainability. The rating for overall project achievement is not an arithmetic mean of these ratings but rather

represents IEO's holistic judgment of the projects' successes and weaknesses. The universally successful rating is indicative of IEO's judgment that the former considerably outweighs the latter.

63. Summary of performance. Figure 11 shows that the vast majority of projects were rated as "successful" for overall performance.

Figure 11: Distribution of overall rating of evaluated projects by number (top) and percentage (bottom)



Source: Evaluation authors.

64. While successful overall, a number of common areas for improvement were identified by the evaluations. The lack of a country and/or sector strategy to further improve the relevance of initiatives, and the lack of exit strategies to strengthen sustainability, was a common finding. Better supervision and implementation support; improved design and monitoring frameworks; and more emphasis on capacity-building, technical assistance and knowledge management were also identified. These latter issues will be discussed in more detail in chapter V.

65. Two of the three non-project evaluations rated overall performance as moderately satisfactory.¹⁰ The thematic evaluation of the NDB's Fast Track Support to the COVID-19 Emergency found the programme to be relevant, effective and timely, but not differentiated to the specific situation in each of the five borrowing countries. The India CPE found strong alignment with national priorities and a significant contribution to transport, water and sanitation sectors. However, a country partnership plan,

a more strategic focus on non-lending operations (see chapter V below), as well as better Design and Monitoring Frameworks, would enhance the impact of the portfolio.

66. In summary, the overall performance of the evaluated projects has been rated as successful, demonstrating strong achievements across key evaluation criteria such as relevance, effectiveness, and impact. However, the evaluations highlight areas for further improvement, particularly in the development of country and sector strategies, the implementation of robust exit strategies, and the need for enhanced supervision and technical assistance. Additionally, the inclusion of better DMFs, coupled with a greater emphasis on knowledge management and capacity-building, will further enhance the effectiveness and sustainability of future initiatives. Addressing these areas will ensure that NDB's portfolio continues to deliver strong development outcomes while improving in key areas where weaknesses have been identified.

¹⁰ The ESR on the Preliminary Experience in Establishing NDB On-The-Ground Presence – The Role of Regional Offices, does not contain ratings.



V.

NDB and borrower performance

A. NDB performance

B. Borrower performance

V NDB and borrower performance

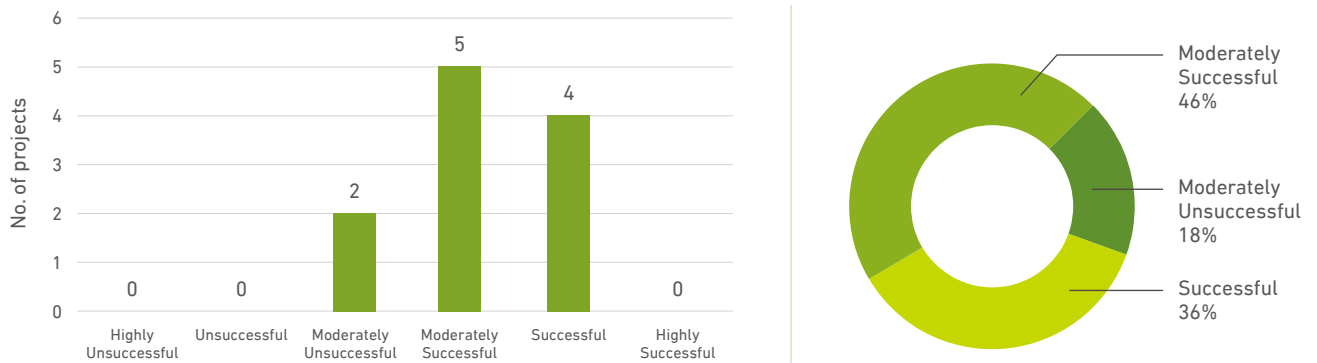
67. This chapter synthesises the evaluation ratings and findings on NDB and borrower performance respectively. NDB performance is sub-divided into two categories: lending and non-lending performance. The latter includes consideration of partnerships, technical assistance, capacity-building and knowledge-sharing.

A. NDB PERFORMANCE

68. NDB performance reports on NDB's contribution to both lending and non-lending activities. It assesses the contribution of NDB to project design, execution, monitoring, evaluation and reporting, supervision and implementation support as well as aspects like knowledge management, technical support and partnership development.

69. Summary of performance. Along with efficiency, ratings for NDB performance were the lowest of all evaluation criteria. No projects are rated "highly successful" for NDB performance. Only four of the 11 projects evaluated rated NDB performance as "successful" and two were considered "moderately unsuccessful". There are a number of explanatory factors for this. Loan processing was timely and efficient, but high staff turnover and limited technical capacity contributed to limited project supervision. NDB's non-lending activities – partnerships, technical assistance and knowledge management – require greater emphasis. Non-financial additionality has been limited.

Figure 12: Distribution of overall rating of evaluated projects by number (left) and percentage (right)



Source: Evaluation authors.

70. As mentioned above, two projects were rated as moderately unsuccessful for NDB performance, the only criteria where this rating was assigned. The Renewable Energy Sector Development Project (South Africa) evaluation found limited NDB engagement in the country, and limited NDB involvement in monitoring, implementation support and knowledge-sharing. This was largely a result of the on-lending modality for this type of project, which does envisage the same level of NDB involvement as for direct project loans. The Madhya Pradesh Major District Roads Project (India) evaluation concluded that weak project design and supervision limited the performance of the project, with frequent changes of the NDB task manager.

71. Some of the weaknesses in NDB performance can be explained by the nature of the Bank during the early years of operation. As noted in several evaluations the Bank remains a relatively young organisation compared to most other MDBs. In the early years, most NDB policies and manuals were not yet in place or were under development. Human resource capacity was limited, and regional offices were not yet established. No country or sector strategies existed. This explanation was used in connection with four of the projects evaluated: Renewable Energy Projects and Associated Transmission (Brazil); Greenhouse Gas Emissions Reduction and Energy Development Project (South Africa); Luoyang Metro Project (China); and Pará Sustainable Municipalities Project (Brazil). Furthermore, the ESR on NDB's regional offices also observed that NDB's current information systems lack sufficient digital interfaces for borrower engagement and rely on manual processes, resulting in slow processing times and inefficient client interaction, compounded by connectivity challenges in some regional offices and centres.

(i) Lending operations

72. Loan processing was timely and efficient and, where available, lending in local currencies was appreciated. NDB financial operations were rated as good in two of the projects in China: the Luoyang Metro Project and the Putian Pinghai Bay Offshore Wind Power Project. Several evaluations noted that local currency loans were limited, and recommended that options to increase local currency financing should be explored. The Renewable Energy Sector Development Project (South Africa) evaluation also recommended that loan agreements include a greater degree of structured flexibility. The CLE on NDB's Policy Framework noted that an important gap relates to guidance on approval of changes to operations. There is only one set of such guidelines, and it only applies to two types of projects:

- (i) Transactions without sovereign guarantee; and
- (ii) Loans to international organisations.

Hence there are no procedures for approving changes to sovereign and sovereign guaranteed operations, loans to national financial intermediaries (NFIs) without sovereign guarantee, and technical assistance. Therefore, all revisions to these operations, even minor adjustments, need to be approved by NDB's non-resident Board.

73. High NDB staff turnover, and limited NDB human resource capacity more generally, was cited as a negative factor in four of the project evaluation reports.¹¹ This resulted in limited Bank oversight and contributions during project implementation, notably in terms of weaker than desirable project supervision. The India CPE found that project supervision had

¹¹ Madhya Pradesh Major District Roads Project (India); Luoyang Metro Project (China); Putian Pinghai Bay Offshore Wind Power Project (China); and Lingang Distributed Solar Power Project (China).

been moderately effective, but that the lack of in-house sector specialists impacted the quality of technical supervision. Another evaluation – on the Renewable Energy Projects and Associated Transmission (Brazil) – described the Bank's role as “relatively hands-off”, with no technical cooperation or knowledge products, and limited Bank visibility. This light touch approach made the success of projects very dependent on the quality of the local implementing partner and country systems.

- 74.** The quality of project design was found to be insufficient in five evaluation reports.¹² The absence of a thorough rooftop resource assessment for the Lingang Distributed Solar Power Project (China) led to a lower than expected availability of suitable sites during implementation, which resulted in a significant extension of the project's timeline. Technical issues relating to the design of the Madhya Pradesh Major District Roads Project (India) and Greenhouse Gas Emissions Reduction and Energy Development project (South Africa) have already been mentioned. The India CPE recommended strengthening theories of change and Design and Monitoring Frameworks. The need for an enhanced DMF was repeatedly mentioned in the evaluation of the Putian Pinghai Bay Offshore Wind Power Project (China) as well as other evaluation reports. The CLE on NDB's Policy Framework noted that while the Bank's General Strategy for 2022–2026 emphasises enhancing service quality and adopting a client-centric approach, and recognises the importance of collaborative efforts across functions to ensure a seamless borrower experience throughout project lifecycles, the absence of adequate policies, tools, and an operational client-centricity programme limits the Bank's ability to effectively implement these goals, impacting overall quality assurance and client satisfaction.
- 75.** Financial additionality¹³ was unclear in three of the non-sovereign operations evaluated, since NDB did not clearly demonstrate what it brought to the borrowers was specifically unavailable from the market apart from a long-term tenure and a relatively attractive grace period. In the case of the two South African energy projects, the evaluations state that all the sub-projects would have been implemented without NDB financing. In the case of the Renewable Energy Projects and Associated Transmission (Brazil), it is very likely that the sub-projects would have been implemented even without NDB support. Indeed, two of the three sub-projects were fully operational before the NDB loan was effective.
- 76.** Loan volumes, local currency borrowing, the amount of project co-financing, and membership expansion have fallen short of what was envisioned. Several evaluations pointed out that accelerated deployment of resources may require some combination of an expansion of local currency borrowing and co-financing; consideration of a concessional/grant facility; and the review and revision of financial policies, organisation and governance.
- 77.** Evaluations reveal a systematic gap in mid-term reviews and a limited number of high-quality project completion reports (PCRs) across NDB projects, impacting the ability to make mid-course corrections and capture lessons respectively. For example, the Madhya Pradesh Roads Project (India) lacked an MTR, reducing oversight on delays and missed opportunities for adjusting strategies to improve implementation efficiency. Similarly, the Bihar Rural Roads Project (India) experienced supervision challenges, with weak monitoring frameworks that could have been strengthened by a structured MTR. Though a number of PCRs were prepared, they were often inconsistent in technical depth and lacked detailed insights into financial performance and sustainability outcomes, as seen in the Lingang Distributed Solar Power Project (China).

12 Madhya Pradesh Major District Roads Project (India); Greenhouse Gas Emissions Reduction and Energy Development Project (South Africa); Lingang Distributed Solar Power Project (China); COVID-19 thematic evaluation; and the India CPE.

13 Additionality means the outcome or impact over and above what would have resulted anyway.

(ii) Non-lending operations

78. NDB's non-financial additionality has been limited. As shown by the summary of findings relating to partnerships, technical assistance and knowledge management below, NDB's non-lending activities require greater emphasis. Two of the evaluations – Renewable Energy Projects and Associated Transmission (Brazil) and the Putian Pinghai Bay Offshore Wind Power Project (China) – concluded that NDB had provided useful financial support, but little in the way of technical assistance, capacity-building, knowledge generation, engagement or visibility. As mentioned above, in the case of the former project this was largely a result of the on-lending modality, which does envisage the same level of NDB involvement as for direct project loans. In the case of the Putian Project, the innovation features and lessons learned in project design and construction have been documented and shared by NDB through a number of international and domestic fora.

Partnerships

79. NDB needs to build stronger partnerships with national-level institutions. This was recommended by five of the evaluations.¹⁴ All of the evaluations in Brazil and South Africa recommended building stronger national partnerships. NDB should use the opportunity provided by its investments to build relationships, share learning, and highlight its visibility. The India CPE found that limited partnerships have been developed with national development banks, international non-governmental organisations (NGOs), or other MDBs; that NDB's co-financing tended to be parallel rather than collaborative and integrated with other financing partners; and that its limited engagement in partnerships has impacted its ability to mobilise additional resources and expertise. The India CPE rated partnership development as moderately unsuccessful for these reasons.

80. The Pará Sustainable Municipalities Project (Brazil) involved parallel co-financing with the Development Bank of Latin America and the Caribbean (CAF), a collaboration that aimed to enhance the financial scope and project impact. CAF's involvement brought additional financing, facilitating the extension of infrastructure and service delivery beyond the original scope. However, the evaluation highlighted that while co-financing provided essential resources, coordination between NDB and CAF presented challenges, particularly in aligning timelines, reporting standards, and monitoring frameworks. Strengthening inter-institutional coordination was recommended to enhance efficiency and oversight in future co-financed projects.

81. The evaluations of projects in Brazil and South Africa also emphasised the need to keep strengthening partnerships with national agencies and technical ministries. In Brazil, the evaluations recommended deeper engagement with public institutions and technical stakeholders to enhance project oversight and unlock co-financing opportunities. In South Africa, the reports highlighted that NDB could have collaborated more closely with key government entities and leveraged institutional knowledge, which could have amplified the impact of its investments. Both evaluations call for more proactive efforts to build strategic alliances, ensuring smoother project delivery and more sustainable development outcomes.

82. Regional offices are playing an important role in strengthening dialogue and partnerships between NDB and a range of organisations according to the ESR. The four regional offices and centres established since 2018 (in South Africa, Brazil, Russia and India) have advanced partnerships with ministries of finance, state/provincial level authorities, national development banks, and the private sector. This progress needs to be accompanied by greater attention to partnerships with other

¹⁴ Renewable Energy Projects and Associated Transmission (Brazil); Renewable Energy Sector Development Project (South Africa); Greenhouse Gas Emissions Reduction and Energy Development Project (South Africa); India CPE; and the Pará Sustainable Municipalities Project (Brazil).

organisations, such as sector ministries, peer MDBs, the United Nations, civil society organisations, and research and academic centres/institutions.

Technical assistance and capacity-building

- 83.** Sufficient technical support has usually been lacking. The Luoyang Metro Project (China) would have benefited from increased technical assistance in the initial stage of the project. In India, technical assistance was rated as moderately successful by the CPE. However, although technical assistance has usefully been provided to some projects at the design stage, few projects have benefited from sufficient technical assistance and oversight through implementation. The lack of sufficient in-house sector specialists has been a significant challenge and has led to insufficient technical oversight from NDB.
- 84.** Examples of NDB support for capacity-building do exist. For example, the Procurement Division of NDB organised a capacity-building workshop for 120 participants from Chinese project entities, and many of the projects include capacity-building sub-components. Similarly, around 110 participants participated in a capacity development programme organised by NDB for Indian clients, and the Procurement Division delivers training to PIAs for each new project. However, a common finding is that capacity-building was given insufficient attention. In the Pará Sustainable Municipalities Project (Brazil), the project management office and other stakeholders would have benefited from early capacity-building initiatives. In India, the CPE found that the NDB was lagging behind other MDBs in its provision of capacity-building, technical assistance and knowledge-sharing. The lack of sufficient sector specialists has also limited the support regional offices have been able to provide towards capacity-building.

Knowledge-sharing

- 85.** In spite of the successful experiences of several NDB operations (e.g. the Luoyang Metro Project and the Putian Pinghai Bay Offshore Wind Power Project in China), the Bank has played a minimal role in knowledge generation and sharing. Seven of the evaluation reports include this

observation of NDB's performance. In the case of the Lingang Distributed Solar Power Project (China), there were no knowledge products apart from the project completion report, which was itself delayed. No knowledge products were prepared in connection with the Pará Sustainable Municipalities Project (Brazil) up to the time of the evaluation. Eight of the evaluation reports contain a recommendation relating to knowledge products and communication. The COVID-19 thematic evaluation noted insufficient attention to systematic knowledge-sharing across NDB design teams in different countries, and recommended that NDB should develop a corporate knowledge management strategy and action plan. While a formal knowledge management strategy is missing, the Bank has made some efforts to establish more systematic knowledge management mechanisms, and a significant number of knowledge-sharing and capacity-building initiatives have been conducted by NDB. For example, the Procurement Division has organised stakeholder seminars in India and has also published and disseminated a knowledge product assessing procurement systems in India identifying achievements as well as challenges. A high-level seminar on energy was arranged on the sidelines of the NDB Annual Meeting in 2024. Some of the regional offices have conducted or are planning knowledge-related work and activities, which is a step in the right direction.

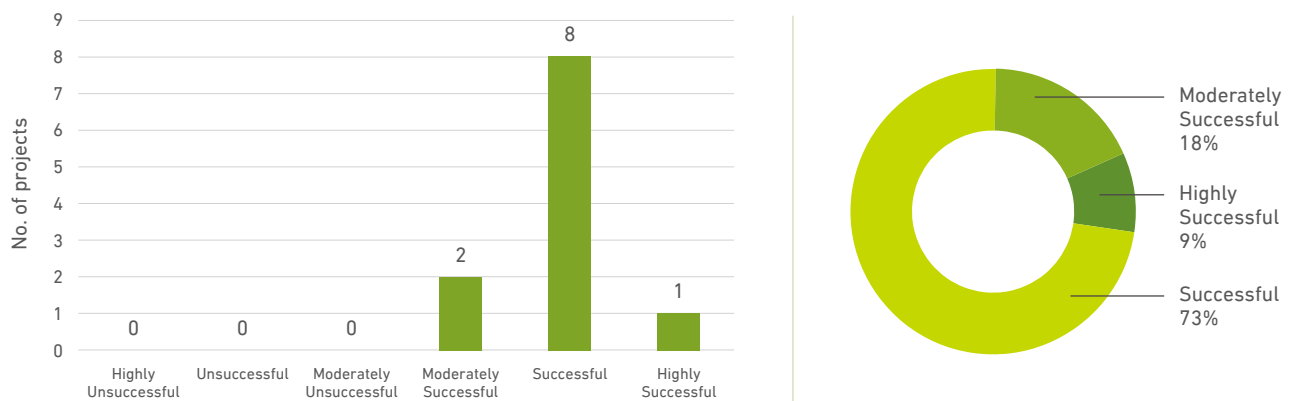
- 86.** In conclusion, while NDB performance remains mixed, in recent years the Bank has made efforts to make adjustments that are likely to lead to better results in the future. For instance, based on the Bank's proposal, the Board recently approved the expansion of the Project Preparation Fund to include financing for support during project implementation. Similarly, while the evaluations note that the number and expertise of NDB's human resources remain constrained, some important initiatives have been taken in the HR sphere which should help strengthen project performance, such as opportunities to mobilise short-term consultants and interns located in the regional offices. Improved decision-making through the establishment of the Executive Committee should also, over time, contribute to better results.

B. BORROWER PERFORMANCE

- 87. Borrower performance assesses the contribution of the borrower and national implementing agencies to design, execution, monitoring and reporting, supervision and implementation support, and evaluation.
- 88. **Summary of performance.** Borrower performance was rated as successful or better in all the evaluations, with only one exception. In two cases – Renewable Energy Projects and Associated Transmission (Brazil) and the

Greenhouse Gas Emissions Reduction and Energy Development Project (South Africa) – the strong capacity of the local implementing agency was a key reason for the success of the project. In two of the three projects in China, the performance of government departments and implementing partners was a major factor in the successful delivery of the projects. In the case of the COVID-19 emergency assistance, representatives of borrowers on the NDB Board actively engaged in supporting and streamlining the loan processing steps, thus expediting the fast-track support to countries.

Figure 13: Distribution of borrower performance of evaluated projects by number (left) and percentage (right)



Source: Evaluation authors.

- 89. As mentioned above in relation to efficiency, national procedures and regulations sometimes increased the delay between project approval and loan effectiveness. In the Lingang Distributed Solar Power Project (China) there were delays in loan effectiveness and reporting because the project implementing agency was unfamiliar with NDB-related procedures. The only project rated as moderately successful for borrower performance was the Renewable Energy Sector Development Project (South Africa). In this project there were delays in various regulatory approvals; sub-projects did not always comply with all the selection criteria agreed with NDB; and although timely, reporting was uninformative in some respects.
- 90. The India CPE found that borrower performance was satisfactory at the national and federal levels, with strong collaboration between NDB and the Ministry of Finance. This ensured smooth project approvals and strategic alignment with national priorities. However, performance at the state level was less consistent. Challenges arose due to limited local capacity, fragmented coordination, and variability in project execution across different states, which impacted the timeliness and quality of implementation.



VI.

Climate and the environment

- A. Overview of climate and environmental framework
- B. Findings by sector
- C. Cross-cutting issues

VI Climate and the environment

- 91.** Since its inception, NDB has prioritised the integration of climate action into its operations, recognising the urgency of addressing environmental and social challenges. The Bank's current General Strategy for 2022–2026 focuses on financing projects in critical sectors like renewable energy, environmental protection, water management, and transport infrastructure. By aligning its projects with the United Nations SDGs and global climate objectives, such as reducing greenhouse gas emissions and promoting resilience to climate change, NDB is playing an important role in fostering sustainable development within its member countries. Climate change and disaster resilience, technology integration, and inclusiveness, were identified as key cross-cutting considerations across the portfolio.
- 92.** NDB's approach to climate and environment is framed by its General Strategy for 2022–2026, which commits the Bank to allocate 40% of total project approvals to climate-related initiatives and focus on specific areas such as environmental protection. This is a significant increase from the 26% recorded at the end of 2021. The Bank's Environmental and Social Framework (ESF) plays a crucial role in ensuring its investments are safeguarded. The ESF comprises the Environmental and Social Policy and Environmental and Social Standards, which apply to all projects financed by the Bank, ensuring the management of environmental and social risks across its operations.
- 93.** A defining feature of NDB's approach is its primary reliance on country systems to manage environmental and social risks. This allows NDB to work within the regulatory frameworks of its member countries, while filling any gaps with the Bank's ESF requirements. This approach not only ensures local ownership and alignment but also has the potential to strengthen local frameworks. The ESF reflects the Bank's commitment to sustainable development and the responsible management of environmental and social risks, contributing to both short- and long-term sustainability.
- 94.** To operationalise the "country systems approach" in the preparation, assessment, monitoring, and implementation of Bank-supported projects, NDB conducted comprehensive reviews of the environmental and social safeguard systems of its member countries. The initial reviews of the systems in Brazil, Russia, India, China and South Africa were carried out in 2015–2016 during the development and approval of the ESF. These studies were subsequently updated in 2020 to incorporate any changes in the member countries' systems and to reconfirm the adequacy of using these systems in the Bank's operations. In 2023, the country system reviews were completed for Bangladesh and Egypt following their accession to NDB. After completing the country system studies, a series of workshops were held with key stakeholders in the respective member countries to present the outcomes of the studies, seek feedback and share knowledge and experience on using country systems to manage the environmental and social risks of projects financed by the Bank.

A. OVERVIEW OF CLIMATE AND ENVIRONMENTAL FRAMEWORK

B. FINDINGS BY SECTOR

RENEWABLE ENERGY PROJECTS

- 95.** NDB's renewable energy projects in Brazil, China and South Africa have made important contributions to climate mitigation by expanding the share of renewable energy in national grids and reducing dependence on fossil fuels. In South Africa for instance, the introduction of state-of-the-art storage technologies by NDB's projects brings significant benefits to the energy sector. These innovations enhance energy stability by providing dispatchable power, ensuring a reliable electricity supply during both peak and off-peak times. The ability to store excess electricity helps balance supply and demand, reducing the risk of power outages and improving overall grid stability. Additionally, the innovative solutions implemented in the four sub-projects offer valuable lessons that can be shared and replicated. China's Putian Pinghai Bay Offshore Wind Power Project added clean energy capacity, potentially reducing greenhouse gas emissions significantly. Similarly, South Africa's Greenhouse Gas Emissions Reduction and Energy Sector Development Project diversified the country's energy mix, which may reduce reliance on coal. While these projects highlight NDB's success in promoting renewable energy, some could benefit from clearer environmental targets, such as more specific CO₂ reduction goals, to better measure their full impact.
- 96.** By diversifying the energy mix and enhancing stability in the countries where they took place, these renewable energy projects may have contributed to improving energy security, which is crucial for adapting to climate change. For instance, the Greenhouse Gas Emissions Reduction and Energy Sector Development Project's onshore wind sub-projects in South Africa are particularly instrumental during the evening peak, helping to prevent exacerbated load-shedding. Another example is the Renewable Energy Projects and Associated Transmissions, which improved Brazil's national grid's reliability by adding 600 MW and diversifying the energy production matrix that relies on hydro and is vulnerable during drought years.

TRANSPORT INFRASTRUCTURE PROJECTS

- 97.** NDB's metro projects, such as the Mumbai Metro Project in India and the Luoyang Metro Project in China, have contributed to more sustainable urban mobility by encouraging the use of public transport over private vehicles. In Mumbai, for example, 40% of metro users shifted from using private vehicles, contributing to lower fuel consumption and a reduction in greenhouse gas emissions. These projects demonstrate the positive environmental impact of public transport infrastructure.
- 98.** While contributing to SDG 9 (building inclusive and resilient infrastructure to promote economic and social development) projects involving road construction do not contribute to climate mitigation, and may, in some circumstances, lead to increased transport emissions. Some transport projects also faced delays due to extreme weather events, underscoring the importance of assessing climate risks for project implementation and building climate disaster resilience into future transport systems to ensure their long-term sustainability.

WATER AND SANITATION PROJECTS

- 99.** The Rajasthan Water Sector Restructuring Project in India aimed to improve water access and management in a region facing significant water scarcity. By enhancing water availability, the project helps build climate resilience, particularly in agriculture-dependent communities. However, delays in adopting water-efficient practices, such as micro-irrigation, are limiting the project's overall impact on climate adaptation. Additionally, the reliance on a single water source – the Indira Gandhi Main Canal – raised concerns about long-term sustainability in the face of increasing water stress, but the project's focus on optimising water use remains a critical step toward resilience.

C. CROSS-CUTTING ISSUES

INTEGRATION OF CLIMATE AND ENVIRONMENTAL CONSIDERATIONS

100. NDB has used its Environmental and Social Framework effectively to safeguard its operations. However, there is room for a more proactive approach to address environmental concerns other than climate, and deeper integration of climate resilience, particularly in infrastructure projects. As of July 2024, the NDB portfolio contains three environmental protection projects.

101. Several projects, such as road construction initiatives in India and Brazil, could benefit from using more climate-conscious materials to withstand extreme weather events. Additionally, renewable energy projects would benefit from clearer exit strategies and decommissioning plans to ensure sustainability beyond their operational lifecycles. These areas offer opportunities for further enhancement, building on the Bank's existing strengths.

COLLABORATION AND PARTNERSHIPS

102. NDB has made progress in collaborating with member countries, but deeper engagement with international development partners and other MDBs could enhance the effectiveness of its projects. The Bank has developed parallel co-financing with the Asian Development Bank, Asian Infrastructure Investment Bank and CAF in China, India and Brazil, respectively. However, true co-financing – where joint project implementation and appraisals are done – is still limited. The India CPE notes that, for instance, several United Nations organisations provide grant financing for development projects in several of NDB's priority areas. Such grant financing would complement NDB loans and make the NDB loans even "more attractive" to borrowers. Having said that, partnerships with such organisations need not be limited to co-financing but could also cover other areas of significance such as knowledge-sharing, technical assistance, staff exchanges and others. Strengthening partnerships, especially through the South-South and Triangular Cooperation mechanism, could help NDB leverage experiences from its member countries to achieve more impactful climate and environmental sustainability results to countries in the global south.

GENDER AND SOCIAL CONSIDERATIONS

103. Climate change and environmental degradation exacerbate existing gender inequalities. Lack of gender-sensitive and other social project targets and indicators are critical challenges. For example, in the Rajasthan Water Sector Restructuring Project (India), despite adopting a gender sensitisation plan in its design, the evaluation survey did not find women members across the water user associations. Similarly, the Greenhouse Gas Emissions Reduction and Energy Sector Development Project (South Africa) missed the opportunity to include specific indicators related to gender and impact in local communities by proactively leveraging with the country's national programme. As recognised by the emphasis on inclusiveness in the General Strategy for 2022–2026, addressing gender and social inclusion is essential for creating compelling, equitable, sustainable environmental and climate solutions.

104. In conclusion, NDB has made significant progress in embedding climate action and environmental sustainability into its operations. However, there are opportunities to enhance the long-term impact of its projects by strengthening climate resilience; including appropriate indicators within project and corporate monitoring frameworks; developing comprehensive exit strategies; and increasing the focus on climate adaptation and environmental protection. Additionally, emphasising gender and social inclusion will ensure that NDB's investments benefit all segments of society, particularly those most vulnerable to climate change. By continuing to build on these strengths and addressing these challenges, NDB can play a vital role in fostering sustainable development and supporting the global transition toward a more climate-resilient future.



VII.

Conclusions

VII Conclusions

105. This report presents a consolidated synthesis of NDB's development results based on the 13 evaluations completed by IEO since 2022.

The 11 projects rated represent approximately 11% of the 98 projects approved by NDB, over half of total disbursements of the Bank since it started its operations up to July 2024, and all of the projects that have been completed. While not selected to be representative of the NDB portfolio at large, the evaluations cover all the major sectors and all founding NDB member countries. Taken as a whole, the evaluation reports provide a number of common findings and lessons which would strengthen the impact of ongoing and future activities.

106. Almost all the projects evaluated were rated as successful overall. However, none of the projects evaluated were highly successful, and project efficiency and NDB performance are two areas that show relatively weaker performance. Similarly, insufficient attention has been devoted to non-lending activities, such as knowledge management, technical assistance and partnership-building, which are essential components to transform the organisation to meet the targets and outcomes envisaged in its general strategies. There is therefore room for improvement for NDB to fulfil its wider potential in fostering sustainable and inclusive development in its member countries.

107. The lack of country strategies or country partnership plans is limiting the Bank's ability to promote greater impact through replication and scaling up of successful models and internalisation of lessons and good practices.

Though the Bank's Board took the decision back in 2016 to introduce country partnership plans, no such plans have thus far been put in place. The majority of the IEO evaluations conducted since 2022 find that the lack of such plans or country strategies is constraining the Bank from building a "country programme approach" to NDB development assistance in its borrowing members. Projects are generally "stand-alone" interventions in specific geographic areas, with only some attention to promoting synergies across operations and

cross-fertilisation of lessons and experiences. The wider linkages between NDB lending and non-lending activities in country portfolios are rather limited, which is constraining replication and scaling up of successful development models and technologies promoted through individual operations.

108. NDB-financed projects have shown strong alignment with member countries' development strategies, addressing key national priorities in sectors such as renewable energy, transport, and water management.

This alignment reflects NDB's commitment to ensuring its interventions are well-integrated with government objectives, enhancing the relevance of its operations. Projects were generally effective and are on track to deliver significant and sustainable socio-economic and environmental impacts. Many projects have achieved or exceeded their intended results and strong local implementing partners were often key. Relevance could however be further enhanced by increasing the availability of lower cost, local currency financing, guided by NDB's national and/or sectoral strategies. Designs would also benefit from deeper focus on transformational changes and developmental impact, rather than merely on the generation of outputs.

109. As mentioned above, most projects were less efficient than they might have been.

Administrative and implementation delays were a significant factor, and financial and economic efficiency was mixed. Although there have been improvements in project efficiency, particularly in India where approval timelines have shortened, delays due to administrative hurdles, loan negotiations and external factors such as COVID-19 were a challenge in the projects evaluated in all countries. Time and cost overruns have affected several projects, highlighting the need for more rigorous project appraisal, stronger risk management, enhanced supervision, and more adaptive project designs that can mitigate delays and improve overall efficiency.

- 110. Evaluations point to gaps in NDB project supervision and technical assistance.** High staff turnover and limited in-house expertise have hindered consistent oversight. Strengthening regional office capacity, improving implementation-support during project execution, and increasing staffing resources dedicated to project supervision, mid-term reviews and preparation of project completion reports in a timely manner are critical steps to ensure more reliable project performance and long-term success. The Project Preparation Fund which has been in place for several years has thus far not been adequately utilised as an instrument to support member countries at the project design stage to improve the project readiness. The Bank is therefore encouraged to make timely use of the fund, as a way also to strengthen NDB's broader additionality.
- 111. In sum, while bulk of the Bank's efforts and resources appear to be invested in the project design phase, IEO believes that the NDB needs to devote more attention to the "continuum" between design, implementation and completion,** particularly by devoting greater energies than currently invested during the implementation and completion stages. This is likely to lead to greater development impact at completion, which is ultimately the overarching objective of the NDB.
- 112. The potential of partnerships and knowledge-sharing has been under-exploited.** NDB has formed effective partnerships with governments and local implementing agencies, and in some instances with peer MDBs, but there is scope for deeper collaboration with MDBs, international organisations and technical partners. Expanding partnerships, particularly through South-South Cooperation and enhancing project co-financing, and expanding the Bank's role in knowledge generation and dissemination would amplify the impact of its operations and foster greater innovation and learning. The priority attached to this in the General Strategy for 2022–2026 needs to be adequately reflected in staffing and resource allocations, project Design and Monitoring Frameworks, as well as in the forthcoming corporate results framework.
- 113. Positive climate-related impacts – notably from emissions avoided as a result of renewable energy and metro investments – reflect NDB's clear commitment to supporting climate action within member countries.** Adherence to strong environmental and social safeguards have substantially avoided or addressed negative impacts in the projects evaluated. NDB's overall environmental contribution would benefit from: a more proactive approach to addressing environmental issues apart from climate; greater attention to climate risks and resilience in design and implementation; and more consideration of long-term environmental impacts beyond the NDB financing period (e.g. decommissioning infrastructure).
- 114. Monitoring, evaluation, and long-term sustainability need strengthening.** The absence of robust monitoring and evaluation (M&E) frameworks has limited NDB's ability to fully assess the results of projects during the implementation period and the long-term impacts. While immediate results are tracked, outcome-based indicators and long-term performance metrics are often missing. Strengthening M&E systems and ensuring that sustainability measures – such as exit strategies, climate resilience, and social inclusion – are integrated into project and corporate results frameworks will be crucial for improving the long-term success of NDB's interventions.
- 115. Inclusive development and social equity require greater attention.** While NDB's projects are overall aligned with national strategies, their focus on inclusive development – especially in addressing gender equity, social inclusion, and the needs of vulnerable groups – has been limited. Several evaluations highlighted that more explicit attention to disadvantaged communities in project design and implementation would enhance NDB's developmental impact and ensure more equitable growth outcomes. Stronger project Design and Monitoring Frameworks, guided by appropriate indicators in the corporate results framework, would help to ensure focused attention on gender equity and vulnerable and marginal groups.



Annexes

Annex 1: List of evaluations covered

Project performance evaluations (PPEs)										
Sr. No.	Country	Project name	Relevance	Effectiveness	Efficiency	Impact	Sustainability	NDB Performance	Borrower Performance	Overall rating
1	Brazil	Financing of Renewable Energy Projects and Associated Transmission Project	4	5	4	5	5	4	5	5
2	Brazil	Pará Sustainable Municipalities Project	5	5	4	-	-	5	5	5
3	China	Luoyang Metro Project	5	5	6	6	5	4	6	5
4	China	Putian Pinghai Bay Offshore Wind Power Project	5	6	5	6	5	5	5	5
5	India	Madhya Pradesh Major District Roads Project	5	5	4	5	5	3	5	5
6	South Africa	Greenhouse Gas Emissions Reduction and Energy Sector Development Project	4	5	4	5	5	4	5	5
7	South Africa	Renewable Energy Sector Development Project	5	5	4	5	5	3	4	5
Project completion report validation (PCRv)										
Sr. No.	Country	Project name	Relevance	Effectiveness	Efficiency	Impact	Sustainability	NDB Performance	Borrower Performance	
8	China	Lingang Solar Project	5	5	4	5	5	4	5	
Selected projects from the country portfolio evaluation (CPE) for India										
Sr. No.	Country	Project name	Relevance	Effectiveness	Efficiency	Impact	Sustainability	NDB Performance	Borrower Performance	
9	India	Rajasthan Water Sector Restructuring Project	5	4	4	5	4	5	4	
10	India	Bihar Rural Roads Project	5	5	4	5	4	5	5	
Corporate-level evaluations (CLEs), thematic evaluations (TEs) and evaluation synthesis reports (ESRs)										
Sr. No.	Country	Project name	Type of evaluation	Relevance	Effectiveness	Efficiency	Impact	Sustainability	NDB Performance	Borrower Performance
11	-	NDB Fast Track Response - COVID 19	TE	4	5	4	(between 4 and 5)	NA*	4	5
12	-	Preliminary Experience in Establishing NDB On-the-Ground Presence: The Role of Regional Offices**	ESR	N/A	N/A	N/A	N/A	N/A	N/A	N/A
13	-	NDB Policy Framework**	CLE	N/A	N/A	N/A	N/A	N/A	N/A	N/A
14	-	NDB's Financial Architecture**	CLE	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Given the nature of the project being emergency support, the sustainability criteria was not addressed.

**Given the scope and nature of ESRs and CLEs, these evaluations did not provide ratings for the evaluation criteria.

Annex 2: Evaluation criteria

Is the intervention doing the right things?

Relevance

The extent to which the intervention objectives and design respond to beneficiaries' global, country, and partner/institution needs, policies, and priorities, and continue to do so if circumstances change.

Is the intervention achieving its objectives?

Effectiveness

The extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups.

How well are resources being used?

Efficiency

The extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way.

What difference does the intervention make?

Impact

The extent to which the intervention has generated or is expected to generate significant positive or negative, intended or unintended, higher-level effects.

Will the benefits last?

Sustainability

The extent to which the net benefits of the intervention continue or are likely to continue.

Annex 3: IEO rating scale

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 4 List of key persons met

STAFF OF THE NEW DEVELOPMENT BANK



ENVIRONMENTAL, SOCIAL AND GOVERNANCE DEPARTMENT (ESG)

Anand Kumar Srivastava, Chief, Procurement Division
Bala J, Principal Professional, Procurement Division
Alexey Akulov, Principal Professional, ESG Division



STRATEGY POLICIES AND PARTNERSHIPS DEPARTMENT (SPPD)

Qingwei Meng, Principal Professional, SPPD
Anastasia Aladysheva, Senior Professional, SPPD



RISK MANAGEMENT DEPARTMENT (RMD)

Gustavo Forgiarini Jerez, Chief, Enterprise and
Operational Risk Division
Shubham Prakash, Senior Professional, Enterprise
and Operational Risk Division



PROJECT PORTFOLIO MANAGEMENT DEPARTMENT (PPMD)

Karan Raj Gulshan, Senior Professional, PPMD

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