Validated Terminal Review of the UNEP Project

“Sharing Experience and Knowledge for a Sustainable Belt and Road (PIMS ID 1993)”

(2018 – 2022)

UNEP Industry and Economy Division

Validation date: June 2025

This report has been prepared by an external consultant as part of a Terminal Review, which is a management-led process to assess performance at the project's operational completion. The UNEP Evaluation Office provides templates and tools to support the review process and provides a formal assessment of the quality of the Review report, which is provided within this report's annexed material. In addition, the Evaluation Office formally validates the report by ensuring that the performance judgments made are consistent with evidence presented in the Review report and in-line with the performance standards set out for independent evaluations. As such the project performance ratings presented in the Review report may be adjusted by the Evaluation Office. The findings and conclusions expressed herein do not necessarily reflect the views of Member States or the UN Environment Programme Senior Management.

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Sharing Experience and Knowledge for a Sustainable Belt and Road
(PIMS ID 1993)
(September/2023)

ACKNOWLEDGEMENTS

This Terminal Review was prepared for UNEP Industry and Economy division by Ms. Iva Bernhardt.

The reviewer would like to express their gratitude to all persons met and who contributed to this review, as listed in Annex VII.

The review team would like to thank the project team and in particular Mr. Rowan Palmer and Mr. Shunsuke Nakai for their contribution and collaboration throughout the review process. The reviewer would also like to thank the Foreign Environmental Cooperation Office at the Ministry of Ecology and Environment of Chine, Ministry of Foreign Affairs of Singapore, Infrastructure Asia, Ministry of Environment of Rwanda, United Nations Institute for Training and Research, United Nations Economic and Social Commission for Asia and the Pacific, and GIZ.

The review consultant hopes that the findings, conclusions and recommendations will contribute to the successful finalisation of the current project, formulation of a next phase and to the continuous improvement of similar projects in other countries and regions.

BRIEF EXTERNAL CONSULTANT(S) BIOGRAPHY

Ms. Iva Bernhardt is an independent senior evaluation expert with over two decades of international experience in development cooperation. She has managed and led over fifty high-quality evaluations of complex projects, programmes, countries, thematic, strategic, peer-reviews, etc. for the United Nations System, Multilateral Development Banks, European Union, bilateral cooperation agencies and other international organizations. The evaluations were mainly in the areas of climate change and environment, sustainable energy and industrial energy and resource efficiency, integrated natural resources management, chemical waste management, and youth employment and development. Moreover, she possesses university experience as a scientific researcher, and held different managerial and internal auditor positions in the steel industry and the private sector. She holds a Master's Degree in Master of Business and Engineering (MBE) in Information Technologies, and a Dipl.-Ing. Engineering Degree in Technical Environmental Protection.

Review team
Iva Bernhardt – Senior Evaluation Expert

ABOUT THE REVIEW

Joint Review: No

Report Language(s): English.

Review Type: Terminal Review

Brief Description: This report is a management-led Terminal Review of a UNEP project implemented between 2018 and 2022. The project's overall development goal was to improve the technical capacities of countries developing infrastructure under the Belt and Road Initiative to channel investments in sustainable infrastructure. The review sought to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The review has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP, the Chinese Ministry of Ecology and Environment and the relevant agencies of the project participating countries.

Key words: Infrastructure; Sustainable Infrastructure; Sustainable Development Goals; Belt and Road Initiative

Primary data collection period: Jan 2023 – August 2023

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LIST OF ACRONYMS

ASEAN	Association of Southeast Asian Nations
BIG-E	Batumi Initiative on Green Economy
BRI	Belt and Road Initiative
BRIGC	Belt and Road Initiative International Green Development Coalition
CAEC	China-ASEAN/SCO Environmental Cooperation Center
CAS	Chinese Academy of Sciences
CCA	Climate Change and Adaptation
China-MEP	Ministry of Environmental Protection of China
CTF	China Trust Fund
EA	Expected Accomplishment
EM	Evaluation Matrix
FECO	The Foreign Environment Cooperation Center of the Ministry of Ecology and Environment of China
GDP	Gross Domestic Product
GGKP	Green Growth Knowledge Platform
GIZ	German Development Cooperation (German Society for International Cooperation) / Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
IGE	Inclusive Green Economy
IGEM	Integrated Green Economy Modelling Tool
ILO	International Labour Organization
Inquiry	Inquiry into the Design of a Sustainable Financial System
ITC	International Training Centre at the International Labour Organization
LAC	Latin America and the Caribbean
MoU	Memorandum of Understanding
NbI	Nature-based Infrastructure
NDCs	Nationally Determined Contributions
PAGE	Partnership for Action on Green Economy
Paris Agreement	The Paris Climate Change Agreement
PEI	Poverty Environment Initiative
PMT	Project Management Team
PoW	Programme of Work
RADI	Remote Sensing and Digital Earth at the Chinese Academy of Sciences
RCB	Regional Capacity Building
Rio+20	United Nations Conference on Sustainable Development
SCP	Singapore Cooperation Programme of the Government of Singapore
SCP	Sustainable Consumption and Production
SDGs	Sustainable Development Goals
ToC	Theory of Change
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNEP-FI	United Nations Environment Programme Finance Initiative
UNESCAP	United Nations Economic and Social Commission of Asia and the Pacific
UNECE	United Nations Economic Commission for Europe
UNITAR	United Nations Institute for Training and Development
10YFP	10 Year Framework of Programmes for Sustainable Production and Consumption
2030 Agenda	The 2030 Agenda for Sustainable Development

PROJECT IDENTIFICATION TABLE

Table 1 Project Identification Table

UNEP PIMS ID:	PIMS No: 01993; UMOJA No:36711		
DONOR	China Trust Fund from the Ministry of Ecology and Environment of China.		
Implementing Partners	*Foreign Environmental Cooperation Centre of the Ministry of Ecology and Environment of the People's Republic of China*		
Relevant SDG(s):	SDG7, targets 7.2, 7A, 7B SDG 8, target 8.3 SDG 9, targets 9.1, 9.2, 9.4 SDG 11, targets 11.2, 11A, SDG 17, targets 17.3, 17.5, 17.7, 17.9, 17.14, 17.16, 7.17		
Sub-programme:	Resource Efficiency Finance and Economic Transformations	Expected Accomplishment(s):	(a) Science-based approaches that support the transition to sustainable development through multiple pathways, including inclusive green economy and sustainable trade, and the adoption of sustainable consumption and production patterns at all levels; (b) Public, private and financial sectors increasingly adopt and implement sustainable management frameworks and practices.
UNEP approval date:	02/2018	Programme of Work Output(s):	2018-2019, 2020-2021, 2022-2023 *Outcome 1A* *Outcome 2A* *Outcome 3A* *Outcome 1B* *Outcome 2B* *Outcome 3B* *Outcome 1C* *Outcome 2C* *Outcome 3C*
Expected start date:	08/2018	Actual start date:	10/2018
Planned completion date:	02/2020	Actual operational completion date:	12/2022
Planned project budget at approval:	USD 1, 610,700 (MEE's Grant of USD 1,000,000; UNEP in-kind USD 610,700)	Actual total expenditures:	93% expenditure rate as of April 2022
Planned Environment Fund allocation:	USD 610,700	Secured Environment Fund allocation:	USD 237,500

Planned Extra-Budgetary Financing:	USD 1,000,000	Secured Extra-Budgetary Financing:	USD 1,000,000
First disbursement:		Planned date of financial closure:	01/2023
No. of formal project revisions:	2	Date of last approved project revision:	12/2021
No. of Steering Committee meetings:	N/A	Date of last/next Steering Committee meeting:	Last: N/A Next: N/A
Mid-term Review/ Evaluation *(planned date):*	Not anticipated in a project designed to be implemented in less than 4 years.	Mid-term Review/ Evaluation (actual date):	Not added when the project was revised/extended by two years.
Terminal Review *(planned date):*	12/2022	Terminal Review (actual date):	01/2023 - 06/2023
Coverage - Country(ies):	Bangladesh, Bhutan, Cambodia, China, Ethiopia. India, Indonesia, Kazakhstan, Kenya, Kyrgyzstan, Lao PDR, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Rwanda, Sri Lanka, Tajikistan, Thailand, Turkmenistan, Uganda, Uzbekistan, Viet Nam, Zambia, Mexico, Honduras, Paraguay, Chile, Ecuador, Dominican Republic, Colombia, Argentina, Brazil, Peru, Bolivia, Venezuela, Costa Rica, Guatemala, and ASEAN Secretariat	Coverage - Region(s):	Asia Pacific, Europe, Africa (initial) Rev 3 : Asia Pacific, Africa and Latin America
Dates of previous project phases:	N/A	Status of future project phases:	Proposal submitted in June 2022

EXECUTIVE SUMMARY

Project background

1. This terminal review report presents the findings of the Terminal Review of the project: "Sharing Experience and Knowledge for a Sustainable Belt and Road", implemented by the United Nations Environment Programme (UNEP) with a financing grant provided by the China Trust Fund (CTF) from the Ministry of Ecology and Environment of China (MEE).

This Review

2. The external reviewer, Ms. Iva Bernhardt, conducted the Terminal Review from February 2023 to May 2023. The review was done remotely through numerous online individual interviews and focus-group discussions with the Project Management Team at the UNEP Industry and Economy Division in Geneva, UNEP Early Warning and Assessment Division in Nairobi and in the country offices, the Chinese counterparts, and other various counterparts that contributed to the five Regional Capacity Building (RCB) trainings throughout the globe.
3. The overall project objective and purpose was to improve the Belt and Road countries' technical capacities to channel investments in sustainable infrastructure. This in turn was intended to contribute to Belt and Road Investments contributing to the Sustainable Development Goals (SDGs) and their Nationally Determined Contributions (NDCs) under the Paris Climate Change Agreement (Paris Agreement).
4. The Terminal Review questions were answered using the OECD/DAC and UNEP evaluation criteria, with the main ones assessing the Relevance/Coherence, Effectiveness, and Sustainability of Belt and Road Initiative (BRI) project activities and outputs.
5. The key questions of the Terminal Review of the Sustainable Belt and Road project were:
    - Has the project contributed to enhancing stakeholders' (particularly in Output 2) understanding of sustainable infrastructure; the importance of integrated approaches to infrastructure looking at it as a system-of-systems and the applicability and advantage of Nature-based-Infrastructure (NbI)?
    - Has the project contributed to accelerating countries' commitment to sustainable infrastructure, leading to the creation of better enabling environment to align infrastructure investment with the SDGs and the Paris Agreement?
    - What changes were made to adapt to the effects of COVID-19 and how might any changes affect the project's performance (Where relevant)?
6. The review covers the period from August 2018 to the end of the project in December 2022.

Key findings

The project was rated Satisfactory (S). The summary of the Overall Ratings with the review Assessment is found in Table 2. The version of this table, as adjusted through the validation process of the Independent Evaluation Office of UNEP, is found in the Conclusions section of this report

Table 2 Specific ratings with Summary Assessment according to all UNEP Evaluation Criteria

Criterion	Summary Assessment	Rating
A. Strategic Relevance (The extent to which the project is relevant to local and national environmental priorities and policies and global environmental benefits and how this relevance is changing over time)	Project "Sharing Experience and Knowledge for a Sustainable Belt and Road" has contributed to climate risk reduction, environmental protection, sustainable infrastructure development and green economy in 39 Belt and Road countries throughout Asia Pacific, Africa and LAC while raising awareness, strengthening capacities, and creating an enabling environment for investment in green and nature-based infrastructure. This is in line with global sustainable development agendas and local and national priorities, as articulated in 1) the SDGs, Paris Agreement, and other multilateral environment agreements (MEAs), 2) local and national sustainable development policies and strategies on BRI countries, 2) the MEE strategic priorities and objectives and 3) UNEP's mandate. **Overall Project Relevance is HIGHLY SATISFACTORY (HS).**	**HS**
B. Quality of Project Design (The extent to which the project design is relevant to local and national environmental priorities and policies and global environmental benefits and how this relevance is changing over time)	Based on the analysis, the **project design is rated as MODERATELY SATISFACTORY (MS)** because the overall project design is relevant and innovative in risks mitigation and Climate Change and Adaptation (CCA) by using sustainable and resilient infrastructure in the BRI countries. The Project was identified and prepared through cooperation with diverse stakeholders. The Project Results Framework, with its outcomes and outputs, as well as target indicators, were developed adequately (with measurable elements of the SMART indicator) and allowed for proper adaptive management and monitoring of project results. However, the project document did not contain a Theory of Change (ToC), which prevents a rating of SATISFACTORY	**MS**
C. Nature of External Context	Rating for Nature of the external context was **MODERATELY FAVOURABLE (MF)** due to lack of detailed risks identification and mitigation in project design and Covid-19 interruptions during project implementation.	**MF**
D. Effectiveness (The extent to which project's objectives have been achieved or how likely they are to be achieved)	**Project effectiveness at the time of the Terminal Review is rated as SATISFACTORY (S)** in the light of overall satisfactory project finalization and implementation. The main outputs achieved by the time of the Terminal Review are: ***Project Output 1a*—fully achieved.** The report: "BRI Green Development Case Study Report and its Table of Contents (2020)" was published in December 2020 and included 13 case studies. The report was added to UNEP's sustainable infrastructure case study database hosted on the Green Growth Knowledge Partnership (GGKP)[1]. ***Project Output 1 b*—partially achieved.** All three foresight briefs: 1. Building a digital ecosystem for the planet, 2. Blockchain Technology and Environmental Sustainability, and 3. Nature-Based Solutions for Urban Challenges planned in the project document were prepared and published on the UNEP website: World Environment Situation Room Data, Information and Knowledge on the Environment[2]. Full integration of the World Environment Situation Room (WESR) and the data platform of the Institute of Remote Sensing and Digital Earth's (RADI) of the Chinese Academy of Sciences (CAS) and	**S**

[1] https://www.greengrowthknowledge.org/case-studies/bri-green-development-case-study-report
[2] https://wesr.unep.org/article/foresight-briefs

Criterion	Summary Assessment	Rating
	scoping work for integrating WESR with the Foreign Environment Cooperation Center's (FECO) BRI Big Data platform was not achieved. However, the planning and documentation support on Application Programming Interface (API) and interoperability was completed, and the geospatial components are now interoperable[3]. ***Project Output 2—*****fully achieved, and even overachieved.** Instead of organizing the three planned RCB trainings, five RCB trainings were organized worldwide by the end of the project: one for Central Asia, two for Association of Southeast Asian Nations (ASEAN), one for East Africa and one for Latin America and the Caribbean, where a total of 126 participants participated from 39 Belt and Road countries. Considering the Project's overperforming delivery of outputs, it is rated as **HIGHLY SATISFACTORY (HS).** The Achievement of Project Outcomes is rated as **SATISFACTORY (S)**, as 126 participants from 39 Belt and Road countries on the five RCB trainings have increased awareness and understanding of the sustainable development opportunities and challenges associated with Belt and Road investments and policy conditions required to enable and address them, even though it is too early to say to which extent this was the case. The likelihood of the project to make a substantive contribution to the long-lasting changes represented by the SDGs and/or the intermediate-level results reflected in UNEP's Expected Accomplishments and the strategic priorities of funding partners, i.e., the Likelihood of Impact is considered as **LIKELY (L).**	
E. Financial Management	In view of the incomplete financial information and slight delays in the transfer of funds to subcontractors**, the Financial Management is rated MODERATELY SATISFACTORY (MS).**	**MS**
F. Efficiency (The extent to which results have been delivered with the least costly resources possible)	The Terminal Review has concluded that the efficiency of the Project is **HIGHLY SATISFACTORY** (HS) as it ensured to produce cost-effectiveness (Efficiency of results delivered) during project implementation. The project was financed by the MEE's grant of USD 1,000,000, together with the UNEP's in-kind contribution of USD 237,500 that was made available in August 2018, amounting to the total project costs of USD 1,237,500. The project was generally perceived as cost-effective. All project partners have delivered much more than in their Terms of Reference (ToR). The project lived through two non-cost extensions of two years due to the Covid-19 pandemic. However, they did not affect project efficiency. Results from project management and financial management at time of the Terminal Review suggest that the **Project Efficiency is rated HIGHLY SATISFACTORY (HS)**.	**HS**
G. Monitoring and Reporting	**Monitoring and Reporting is rated MODERATELY SATISFACTORY (MS)**, as the main reports were completed with detail. However, there was no budgeted monitoring plan and no evidence to suggest how co-financing as in-kind contribution was used in project monitoring (as was planned with staff time).	**MS**
H. Sustainability (Overall Rating) (The likely ability of an intervention to continue to deliver benefits for an	Overall, the sustainability rating for the Project at the time of the Terminal Review is **MODERATELY LIKELY (ML), which means that there are moderate risks affecting the socio-political and financial dimension of sustainability.** An assessment is given taken into	**ML**

[3] https://data.unep.org/article/wesr-resources

Criterion	Summary Assessment	Rating
extended period after the project's completion)	consideration moderate risks to sustainability after the project ends, namely, the financial risks to sustainability.	
I. Factors Affecting Performance and Cross-Cutting Issues	The project was well prepared and ready to implement at the start of the project in August 2018, with functioning project management throughout the project implementation through the difficult times of the Covid-19 pandemic (during which the project overcame the challenges through overachieving in RCB) until December 2022. Furthermore, the project has well taken into consideration the gender and human rights dimensions, as well as environmental, social, and economic elements. The Project also had good communications and public awareness and built strong partnerships with diverse organizations within the UN and with Government and Development Cooperation Organizations worldwide. As a result, **Factors Affecting Performance and Cross-Cutting Issues is rated HIGHLY SATISFACTORY (HS).**	**HS**
Overall Project Rating		**S**

Conclusions

7. The overall Satisfactory rating of the Project results from the fact that Project Relevance was highly satisfactory as CCA is one of the top priorities of the BRI Countries' Governments, facing few implementation challenges in monitoring and reporting, financial management and socio-political sustainability. Furthermore, it results from the excellent project implementation despite facing difficulties in working conditions under the Covid-19 pandemic, which resulted in the two years delay of the Project. The Project is solidly conceptualized, innovative and ambitious.
8. The project management has displayed flexibility and effectiveness in reaching highly satisfactory results, with strong facilitation, particularly in establishing partnerships with the following organizations: BRI International Green Development Coalition, RADI, FECO, United Nations Institute for Training and Development (UNITAR), International Training Centre at the International Labour Organization (ITC-ILO), German Development Cooperation (GIZ), Singapore Cooperation Programme (SCP) of the Government of Singapore, Infrastructure Asia, Civil Service College (CSC) of Singapore, Government of Rwanda, Government of Mexico, and United National Economic and Social Commission for Asia and the Pacific (UNESCAP). The subcontracting to the above-mentioned organizations was necessary to successful project implementation because of the broad scope and multidisciplinary project, which had participants from 39 countries globally.
9. The country "ownership" of the project's subject matter (resulting from this increased capacity) sits mostly within the Ministries of Environmental Protection, Ministries of Energy and Infrastructure and other similar ministries. It is likely that the socio-political sustainability for establishing sustainable and resilient infrastructure will be secured in the future as it is an obligation under the Paris Agreement to fulfil the NDCs. All the 39 BRI countries from this project are signatory parties to the Paris Agreement.
10. The Project has good prospects of reaching its long-term objective to reduce climate change risks in the BRI countries while raising awareness, strengthening capacities, and creating an enabling environment for investment in sustainable and resilient infrastructure as planned in the Project Document.
11. The project delivered excellent quality products, which are highly useful for application and building a knowledge base on sustainable and resilient infrastructure in the BRI

countries. The general objectives, outcomes and outputs as prevised in the original Project Document have been met, and, overall, the project has been effective.

12. During implementation, there were five RCB training containing numerous webinars (more than 50), with the total participation of more than 130 persons from 39 countries throughout the globe.

13. The project was highly efficient, as it ensured to produce cost-effectiveness (Efficiency of results delivered) during project implementation. The project was financed by the MEE's Grant of USD 1,000,000, together with the UNEP's planned in-kind contribution of USD 610,700, amounting to the total project costs of USD 1,610,700[4]. The perception of cost-effectiveness is very good. The project lived through two non-cost extensions of two years due to the Covid-19 pandemic, yet they did not affect project efficiency.

14. The Project is fully relevant to local and national climate change adaptation plans, energy priorities, policies, and strategies of the Governments of the BRI countries, as well as China's MEE strategic priorities and objectives and to UNEP's mandate. The Project contributed to reducing climate change risks, environmental protection, sustainable infrastructure, and green economy in 39 Belt and Road countries throughout Asia Pacific, Africa and LAC while raising awareness, strengthening capacities and creating an enabling environment for investment in green and nature-based infrastructure. This project addressed MEE's objective and focal areas in the BRI regions, assisting countries in attaining the NDCs under the Paris Agreement.

15. Finally, the project has a clear value added and potential for replicability: the RCB trainings were very successful gathering diverse public sector officials from diverse ministries of environment, energy, and infrastructure to build capacities in their countries, respectively, on environmental leadership in sustainable and resilient infrastructure. This model of capacity building trainings can be replicated anywhere around the world. In summary, this well-managed project laid a strong foundation of knowledge that the BRI countries can take and further build on effectively.

16. It is evident that the Project is likely to be sustainable, given that it will be worked further on the financial, socio-political and sustainability of the institutional framework and governance.

Lessons Learned

17. Lessons learned are used to bring together any insights gained during the project that can be usefully applied in future projects. Capturing lessons learned from the project implementation is of extreme importance, as it may result in more effective and efficient future rollout of project activities and organizational learning. Seizing lessons learned and turning that hindsight into best practices will achieve far greater long-term project success, which can be captured and possibly replicated within UNEP and broader.

18. <u>Lesson 1:</u> The "Sharing Experience and Knowledge for a Sustainable Belt and Road" Project was a best practice example of how partnerships are created, a good network and also good results sharing on various different platforms and conferences.

19. <u>Lesson 2:</u> Creating strong partnerships can enhance peer-to-peer capacity, strengthen project resilience, and enhance the quality of project results. It can furthermore facilitate the replication of the project through local trainings done in local institutions by the participants of the RCB trainings.

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[4] The final expenditure report can only be prepared after completing all expenditures, including payment for a consultant for this terminal review. Therefore, as of the preparation of this terminal review report, it does not exist and cannot be attached here. The expenditure report is being prepared by the UNON and the Project Manager and will be shared with relevant parties once ready.

20. Lesson 3: Delays to the start of implementation of this project were caused by the lack of clarity in the approval process between UNEP and the donor, which also resulted in two different versions of the project document.
21. Lesson 4: The level on which the work for the interoperability of the Big Data Platforms was to be performed was not well defined in the project document. The scope of work in the Project document was too broad to execute for the finances available.
22. Lesson 5: The funding of the project activities was not planned when creating the baseline. It needed to be realistic, adequate, and feasible. Funding planning should be done more attentive at the beginning of the project.
23. Lesson 6: Parts of the project did not have well-defined deliverables and outcomes, as well as the scope of work and the associated funding for it.
24. Lesson 7: There were not enough technical capacities to connect the two existing big data platforms, as the scope was too broad.
25. Lesson 8: Online training does not suit the working culture in some BRI countries. However, it was the only way to continue implementation during the Covid-19 pandemic due to the global scale of the project as well.
26. Lesson 9: Given the number of partners involved in the training, it was challenging to get all the partners on the same page, particularly in understanding the various roles of each of the partner organizations.
27. Lesson 10: The RCB workshops did not have a thorough and detailed enough example of financial guidelines for financing sustainable and resilient infrastructure.
28. Lesson 11: The RCB workshops contained only the best practice examples of what kind of sustainable infrastructure exists in developed countries, but not the way how they got there.
29. Lesson 12: There were delays in issuing contracts to the implementing partners due to administrative issues.
30. Lesson 13: The inclusion of sharing from the private sector was beneficial for the participants as some tend to only see Sustainable Infrastructure as a public business and assume that the private sector's involvement is purely from the revenue perspective, which is not always the case. Inviting the private sector could give participants a different viewpoint on their interest in developing Sustainable Infrastructure and focus more on Public-Private Partnerships.

Recommendations

31. Based on the Terminal Review and findings of this report, the reviewer prepared several recommendations that can contribute to Climate Change Adaptation and Mitigation in the BRI countries by using the approach to sustainable and resilient infrastructure in the future after the termination of this project. One of the major general recommendations to UNEP is to clearly define and lay out the process assigning and explaining the roles of the donor and the implementing agency in the approval process for the project.

Recommendations for UNEP for dealing with future big data platform integrations:

32. Recommendation 1: The level on which you are working should be well defined in the project document. Concretely, interoperability of the Big Data Platforms could be more easily achieved if the level was defined at the beginning of the project, taken there was substantial funding for it.
33. Recommendation 2: The funding of the project activities needs to be planned when creating the baseline. It needs to be realistic, adequate, and feasible.

34. Recommendation 3: The project needs to have well-defined deliverables and outcomes, as well as the scope of work and its associated funding.
35. Recommendation 4: There should be enough technical capacities for the implementation of a platform.

Recommendations for UNEP for organizing future RCB workshop trainings:

36. Recommendation 1: Future RCB training would need to confirm the resource personnel in advance to have a detailed trainers manual as well as participants manual readily available prior to the training.
37. Recommendation 2: If future trainings are to be conducted online, organizers should provide participants with reliable internet connections.
38. Recommendation 3: Consider in-person trainings when the Covid-19 situation improves. Preparing for the kind of training held in person will enhance the knowledge of the participants.
39. Recommendation 4: Clearly define the role of each organization during training design, planning, organization, and execution.
40. Recommendation 5: The contracts for the subcontractors need to be ready on time and delays in the processing of payments should be avoided.
41. Recommendation 6: The UN–UN Agreements should be finalized with enough planning to allow the contracting of facilitators and engagement with experts for the planning of individual sessions.
42. Recommendation 7: Engage with the implementing partner during the communication with the experts, showing “one face to the customer” in front of counterparts.
43. Recommendation 8: Define the narrative coherence of the sessions prior to confirming the participation of the experts.
44. Recommendation 9: Expand the search for experts beyond institutional strategic partners or allies.
45. Recommendation 10: Prioritize the development of thematic content and deliver them with sufficient time. More does not always mean effective.
46. Recommendation 11: Prioritize experts fluent in the language in which the course is taught or make use of the interpretation support.

Recommendations for UNEP for future RCB workshop training contents:

47. Recommendation 1: Practical and field training is very important to adopt and apply. A follow-up and preparing a field studies tour would be beneficial to harmonize the theory with practice.
48. Recommendation 2: RCB training should give a fair insight into a legal framework and law enforcing agencies’ roles for compelling the citizens to adhere to government instructions. How the government achieved this level of commitment from its people should be explained stepwise.
49. Recommendation 3: Future greater inclusion of private sectors can give participants a different viewpoint on their interest in developing Sustainable Infrastructure and focus more on Public-Private Partnerships.
50. Recommendation 4: RCB trainings needed better and more thorough examples of financial guidelines for financing sustainable and resilient infrastructure. The existing guidance was too general, when in reality, funds and resources need to be raised for each infrastructural activity and vulnerability assessment individually.

51. Recommendation 5: RCB training should not only contain the best practice examples of what kind of sustainable infrastructure exists in developed countries but also show how the country can reach this level of development, showcasing the different levels of pathways: legislative, societal change of thinking and acting, funding, level of commitment, etc.

52. Recommendation 6: The agenda and content for RCB training were too broad and too general. UNEP approach to Infrastructure is cross-sectoral. The partners think that it should be considered on how to do it more in-depth for a specific topic, or to have different modules for different groups of people working on a specific topic.

Validation

53. The report has been subject to an independent validation exercise performed by UNEP's Evaluation Office. The performance ratings for the Belt and Road project, set out in the Conclusions and Recommendations section, have been adjusted as a result. The overall project performance is revised at the **'Moderately Satisfactory'** level. The Evaluation Office has found the overall quality of the report to be '**Moderately Satisfactory**' (see Annex XII).

I. INTRODUCTION

1. The ancient Silk Road that once served as a crucial trade route that united West and East through commerce was stretching from Europe through the Middle East and across the steppes of Central Asia to China. The Chinese President Xi Jinping announced China's intention to develop The Silk Road Economic Belt and the 21st Century Maritime Silk Road in 2013—an initiative aimed to expand the ancient trade route, both geographically and thematically. Also known as the Belt and Road Initiative (BRI), China's efforts are aimed at enhancing economic development and inter-regional connectivity by focusing on five areas of cooperation:
   - infrastructure,
   - trade,
   - policy,
   - finance, and
   - people.
2. The ambitious BRI of China was expected to bring trillions of dollars of investment to more than 60 countries over the coming decades, which presented an excellent opportunity for countries to use these investments to help transform their economies and achieve the Sustainable Development Goals (SDGs) and their Nationally Determined Contributions (NDCs) under the Paris Climate Change Agreement (Paris Agreement). Together, the BRI countries represent approximately 40% of the earth's total land area, 30% of global GDP, 55% of total CO2 emissions, and 60% of the world's population. The outcomes of BRI development were expected to have a profound impact on the planet and on human development.
3. To maximize the positive impacts of BRI, countries should avoid investments that lock in carbon-intensive infrastructure and transport networks, and focus on investments in green infrastructure, clean energy, clean technology, and human capital that can take advantage of sustainable development opportunities. Many challenges are associated with large-scale development BRI, such as ensuring that social and environmental safeguards are in place, that would equitably distribute benefits of job creation among different socioeconomic groups, genders, ethnicities, and cultures, and that projects include effective stakeholder engagement. This requires a good understanding of the baseline situation, the developments proposed, as well as the changes resulting from the BRI as the initiative evolves.
4. There are numerous challenges that may prevent the BRI investments from contributing to the SDGs in recipient countries, such as:
   - failure of governments to adopt and implement sustainable development policies,
   - lack of institutional capacity and commitment to invest in sustainable management practices, and
   - weak national regulatory frameworks.
5. Various contributing factors are causes of these challenges, including a lack of knowledge and data to inform and support sustainable policy, management, investing, and business choices, and a lack of collaboration within and among the key stakeholders who can trigger a shift in investment priorities.
6. Many UN Member States and stakeholder groups have stated the lack of data and information as a hindrance to sustainable development Moreover, the lack of communication between stakeholders from the public and private sectors could result in

a lack of understanding of other stakeholders' needs, which can lead to the adoption of sustainability policies and practices that do not address the challenges in a sustainable manner, and therefore fail to achieve the desired impact.

II. REVIEW METHODS

A. Introduction to the Terminal Review

7. According to the UNEP Evaluation Policies and Guidelines, Terminal Reviews are mandatory for all projects. Hence, UNEP acted as an Implementing Agency of the project financed by the Ministry of Ecology and Environment of China (MEE), and in accordance with both UNEP's Evaluation Policies, has contracted a Senior Evaluation Expert to conduct a Management Led Terminal Review of the project: "Sharing Experience and Knowledge for a Sustainable Belt and Road" in the period from 30 January 2023 to 22 May 2023. The review was conducted remotely, and no field missions took place. The results of the terminal review of the Project were used for measuring the impact of the project and the level of achievement of the established project objectives to describe if the desired attributes of interventions were relevant to the context, coherent with other interventions, delivered results in an efficient way, and had positive impacts that last.

B. Review scope, purpose, objectives and intended use

8. The Terminal Review of the project: "Sharing Experience and Knowledge for a Sustainable Belt and Road" that was financed by MEE through a grant agreement amounting to USD 1,000,000 and implemented by UNEP Industry and Economy Division in Geneva covered the full duration of the project from July 2018 to the project completion date in December 2022. It assessed project performance and progress against the OECD/DAC and UNEP evaluation criteria: relevance and design, coherence, effectiveness, efficiency, impact, and sustainability.
9. The Project enabled increased technical capacities with the aimed impact to contribute to the Resource Efficiency Subprogramme Objective of UNEP by 2030, and enable BRI countries to achieve energy, material and resource efficiency by using economic tools, technical assistance, policy assessments and capacity-building provided to countries and regions to support achievement of the SDGs through multiple pathways, policies and action plans. The project had a specific emphasis on capacity building through Regional Capacity Building (RCB) trainings, with directly trained officials and further training of colleagues through a peer-to-peer approach for sustainable infrastructure along the BRI countries.
10. The overall project objective and purpose of this project was to improve technical capacities in the BRI countries in investments in sustainable infrastructure. The BRI Investments should have contributed to the SDGs and their NDCs under the Paris Agreement.
11. The Public Sector BRI stakeholders in the project countries should have increased awareness and understanding of the sustainable development opportunities and challenges associated with BRI investments, and policy conditions required to enable and address them by knowledge and data collection and sharing, and through capacity building. The BRI Investments stakeholders from the public sectors should have better understood each other's sustainable development and sustainable investing needs and the sustainable development opportunities and challenges presented by BRI investments.
12. The reviewer provided an analysis of the attainment of the main objective and specific objectives under the two core project components. Through the assessment, the reviewer enabled UNEP, MEE, The Foreign Economic Cooperation Office (FECO) of MEE of China, Chinese Academy of Sciences (CAS) Institute of Remote Sensing and Digital

Earth (RADI), the Government counterparts in the countries where the Regional Capacity Building Trainings took place and other stakeholders and donors to:

- Verify prospects for development impact and sustainability, providing an analysis of the attainment of global environmental objectives, project objectives, delivery and completion of project outputs/activities, and outcomes/impacts based on indicators; and
- Enhance project relevance / coherence, effectiveness, and sustainability by proposing a set of recommendations and lessons learned with a view to ongoing and future activities after the project implementation has finished.

13. The Terminal Review questions were answered using the OECD/DAC and UNEP evaluation criteria, mainly assessing the Relevance/Coherence, Effectiveness, and Sustainability of project activities and outputs. The key questions of the Terminal Review of the Project were:

    - Has the project contributed to enhancing stakeholders' (particularly the stakeholders in Output 2 understanding of sustainable infrastructure, the importance of integrated approaches to infrastructure looking it as a system-of-systems, and the applicability and advantage of Nature-based-Infrastructure (NbI)?
    - Has the project contributed to accelerating countries' commitment to sustainable infrastructure, leading to the creation of better enabling environment to align infrastructure investment with the SDGs and the Paris Agreement?
    - (Where relevant) What changes were made to adapt to the effects of COVID-19 and how might any changes affect the project's performance?

14. The key specific questions of the Terminal Review were:

    - Relevance/Coherence: To what extent are the project interventions compatible with other interventions in a country, sector, or institution?
    - Effectiveness: To what extent the intervention has achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups?
    - Sustainability: To what extent will the net benefits of the intervention continue or are likely to continue?

15. The Terminal Review process is structured in three phases: 1) inception phase; 2_ data collection and analysis phase of information from individual interviews and focus-group discussions; and 3) Terminal Review reporting and dissemination phase.

C. Review approach and methodology

16. The terminal review of the Project was conducted in accordance with the UNEP Evaluation Policy using the OECD/DAC and UNEP evaluation criteria: relevance and design, coherence, effectiveness, efficiency, impact and sustainability. It was carried out as an in-depth review using a participatory approach whereby all key parties associated with the project are kept informed and regularly consulted throughout the evaluation. The reviewer liaised with the Project Manager and Project Management Team (PMT) on the conduct of the review and methodological issues.
17. The reviewer was required to use different methods to ensure that data gathering, and analysis deliver evidence-based qualitative and quantitative information, based on diverse sources: desk studies and literature review, statistical analysis, individual virtual interviews with UNEP and FECO staff, and focus group discussions. This approach did

not only enable the review to assess causality through quantitative means but also to provide reasons for why certain results were achieved or not and to triangulate information for higher reliability of findings.

18. The reviewer developed interview guidelines. Virtual took place either in the form of focus-group discussions or individual semi-structured interviews.

19. The methodology was based on the following:

    - **Desk review** of project documents including, but not limited to:
        - ➢ The original project document, monitoring reports (such as progress and financial reports of UNEP and other project implementation reports), output reports (case studies, foresight briefs, publications, action plans, sub-regional strategies, etc.) and relevant correspondence.
        - ➢ Minutes from the committee meetings involved in the project.
        - ➢ Other project-related material produced by the project.
    - **Project logical framework (LogFrame)** was used for the wider programme: "614.5 "Greening the Belt and Road Initiative" and created a reconstructed Theory of Change (ToC) for the concrete project that was evaluated: "Sharing Experience and Knowledge for a Sustainable Belt and Road" as none existed at the project design and implementation phase, the project time schedule, and the project monitoring plan.
    - **Interviews with project management and technical support** including staff and management at UNEP Industry and Economy Division, UNEP Early Warning and Assessment Division, and the field offices as well as International Training Centre at the International Labour Organization (ITC-ILO), United Nations Institute for Training and Development (UNITAR) and United National Economic and Social Commission for Asia and the Pacific (UNESCAP) officers as shown in the Stakeholder Analysis Individual Interviews and Focus-Group Discussions in Annex VII.
    - **Interviews with project partners including Government counterparts** in the BRI countries and a variety of stakeholders with differing backgrounds (Government counterparts, authorities, research, science committee; organizers, content creators and participants at the regional capacity building trainings etc.) as shown in the Stakeholder Analysis Individual Interviews and Focus-Group Discussions in Annex VII.

    20. **Individual interviews and Focus-Group Discussions with intended users** for the project outputs and other stakeholders involved with this project. The reviewer shall determine whether to seek additional information and opinions from representatives of any donor agencies or other organizations.

    - **Interviews with the project's team coordination members** and the various national and sub-regional authorities dealing with project activities as necessary.

    21. **Other interviews, surveys or document reviews** as deemed necessary by the reviewer and/or UNEP and MEE.

    22. **The inception report** provides details on the methodology used by the review team and include a review matrix as shown in Annex VI of this report.

23. The Terminal Review was conducted primarily as a desk review and as a management-led exercise with oversight from the UNEP Industry and Economy Division according to the following key principles to ensure a balanced and fair outcome:

24. **Forward-looking approach and learning**: The reviewer adapted the Results Based Management (RBM) principles, tools and indicators (i.e., the review matrix), based on the needs and context of this review, with the aim of increasing the potential for learning and focus on the project achievements. Lessons learned and recommendation for UNEP and MEE for future programme/ project design and implementation were one of the focuses of this Terminal Review, with focus on best practices, and improvement mechanisms for plans and processes that did not function well in form of lessons learned and recommendation to be used in similar UNEP projects.

- **Focus on results**: Expected results, key performance indicators, as well as potential risks are identified to ensure coherent and integrated results-based management to frame the Terminal Review.
- **Participatory approach**: The review process ensured a consultative and collaborative approach with the UNEP project staff members, and other relevant counterparts and stakeholders who were kept informed and regularly consulted throughout the assessment.

25. **Evidence-based**: The review aimed to gain insights and conclusions based on a variety of data and data collection methods, and, wherever possible, triangulating information to ensure the reliability and validity of review analysis and conclusions.

26. Figure 1 is a representation of the review approach and key methodological elements.

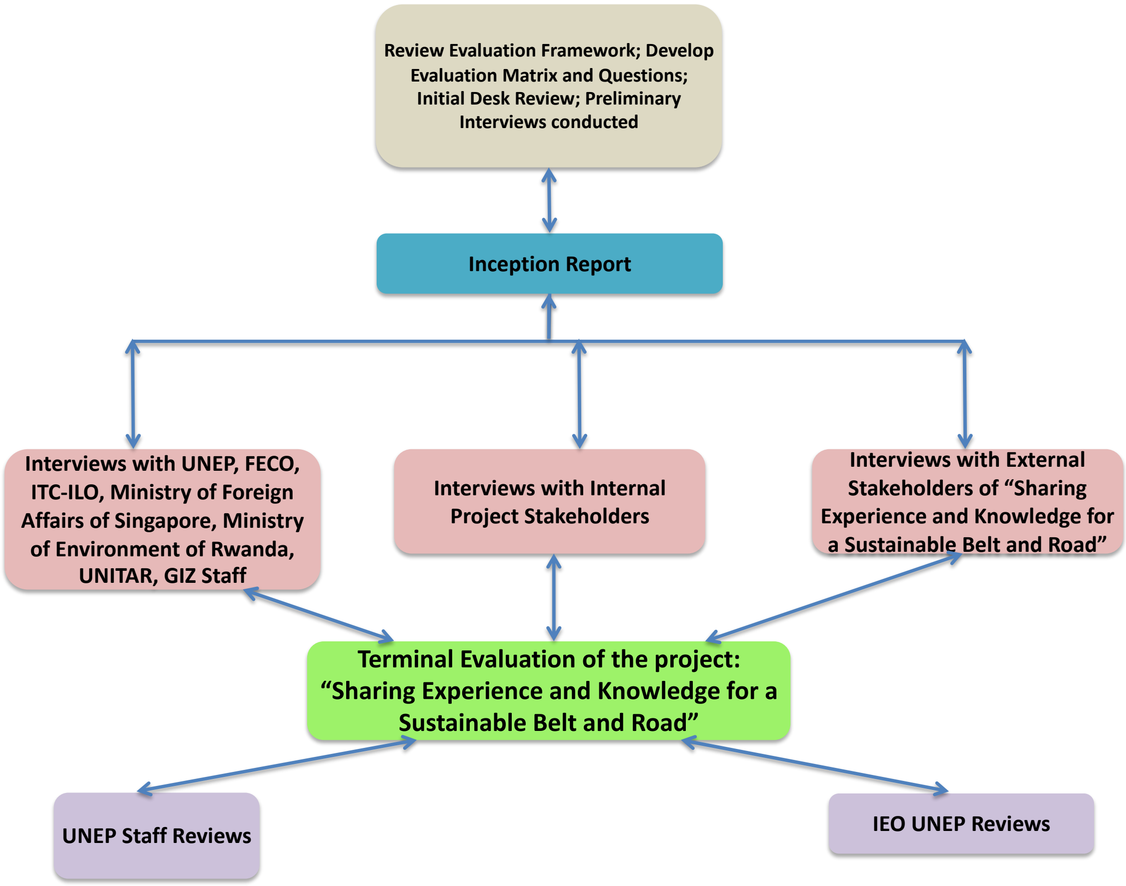

Figure 1 Terminal Review approach and key methodological elements for the Terminal Review

D. Terminal Review phasing

27. Once the methodology was agreed between stakeholders with the approval of the Inception report, the reviewer undertook an additional in-depth desk review of all concerned project documents and conduct further face-to-face interviews with the project management team, as well as external actors at each stage of the review to fine tune and focus data collection efforts to ensure maximum relevance to stakeholders. The main phases of the review are described in the following sections.

Inception Phase

28. Preliminary documentation review and virtual individual interviews and focus-group discussions

    To prepare this inception report, the reviewer has conducted a preliminary documentation review to help clarify the context of the Project and has begun to identify the main challenges of the review interviewing phase and information gaps to be filled.

29. Preparation of the review matrix

    Based on the documentation review, an review matrix has been prepared. The review matrix is a key tool for data collection and analysis. It includes the review questions as set in the terms of reference for this terminal, following the main OECD/DAC and UNEP criteria of Evaluation. The review matrix as it is seen in Annex VI of this Terminal Review Report details the most relevant qualitative and quantitative indicators that inform the review questions, data collection methods, and respective information sources.

30. Inception report

    The inception report was prepared based on preliminary literature review and first contacts with key project staff. This draft inception report was submitted for comments and discussion with UNEP staff and their Evaluation Office and provides these key stakeholders with the opportunity to inform and help finalize the methodology.

Data Collection and Analysis Phase

31. **In-depth documentation review**

    A comprehensive desk review enabled the Terminal Review to reflect main issues and achievements, while looking out for unanticipated results.

    Project Data and documentary analysis: Both primary and secondary data were collected and analysed as part of the Terminal Review process. Secondary data were obtained mainly from the UNEP project staff, MEE, as well as other relevant counterparts. Primary data were gathered through qualitative and quantitative methods, including desk reviews and semi-structured individual interviews and focus-group discussions. Key strategic documents for the Project include all annexes, implementation progress reports, meeting minutes, webinars, evaluation, and main reports of the five RCB trainings under Output 2, case studies under Output 1a, and foresight briefs and publications under output 1b, regional consultations workshops reports, webinars on green infrastructure reports, and some others. These documents were desk reviewed during the inception phase and then reviewed in-depth prior to the preparation of the Terminal Review report. There were no review field missions undertaken by the reviewer.

32. **Individual Interviews / Focus group discussions / Internal and External Stakeholders Surveys**

33. **Key Informant in individual interviews**: The reviewer conducted adapted semi-structured interviews with representatives of UNEP project management team, UNEP Industry and Economy Division, UNEP Early Warning and Assessment Division, FECO, the present Foreign Environmental Cooperation Center at MEE, UNITAR, UNESCAP, German Development Cooperation (GIZ), Government of Singapore, Government of Rwanda, among other counterparts, stakeholders and beneficiaries that were defined through detailed consultation with UNEP Industry and Economy Division Project Manager and the PMT.

    Subsequent individual interviews during the data collection phase were primarily semi-structured, based on the review matrix presented in Annex VI, and were conducted with a wide array of project stakeholders in order to encompass a global perspective, breadth and accountability of the evaluation: UNEP project management team, UNEP Industry and Economy Division, UNEP Early Warning and Assessment Division, FECO, UNITAR, UNESCAP, GIZ, Government of Singapore, Government of Rwanda, different counterparts, stakeholders and training beneficiaries (participants) – 3 from each RCB training from the five RCB trainings in project output 2.

34. **Focus-Group Discussions (FGD)**: Where useful, group interviews, i.e., focus group discussions, were also conducted. Most importantly, open-end questions were posed so that the interviewee was not limited only to responding the questions determined by the reviewer but were also free to express concerns and issues that are found of relevance to the person in question.

35. **Individual Interviews / Focus group discussions / Internal and External Stakeholders Surveys**

    At the beginning, the reviewer believed in the benefits of having a survey constructed with short questions for the project stakeholders to demonstrate breadth and accountability of the evaluation. However, while writing the inception report, the reviewer reconsidered not to perform the stakeholders survey, taken that the survey response rate could range from 10 percent to 20 percent (which is statistically insignificant) according to the reviewer's recent experiences. Therefore, the agreement was to conduct the individual interviews and focus-group discussion with main project stakeholders as shown in the Stakeholders Analysis in Annex VII instead of a survey to increase response rate and increase efficiency, effectiveness, and targeted responses by the stakeholders. The inputs for the review stemmed from a variety of stakeholders with differing backgrounds (project management team, Government counterparts, authorities, research, science committee, organizers, content creators and participants at the RCB trainings, etc.) to ensure breadth and accountability of information. Additionally, the review results of the answers of the participants of each of the five regional capacity building trainings (Eastern Europe, Association of Southeast Asian Nations (ASEAN) 1, Eastern Africa, ASEAN 2, and Latin America and the Caribbean) were adopted, analysed, and triangulated with the information received from the individual interviews and focus-group discussions.

Data Analysis and Reporting Phases

36. **Data analysis and triangulation of information**

    This stage included the comprehensive analysis of key relevant quantitative and qualitative data through the integration and comparison of findings from phone and online interviews, and documentation review. The reviewer compiled and analysed all collected data on the Project achievements towards results, and gaps reported, if any. Quantitative data, where applicable, were analysed with the appropriate tools. The

EOU did not find any evidence in the report that quantitative data were used, beyond financial information. It does not appear that planned surveys were carried out.

Secondary data sources from UNEP, MEE, FECO, ITC-ILO, UNITAR, UNESCAP, and other institutions or government counterparts were also applied for these analyses. The review matrix as shown in Annex VI served as a guiding framework within which the reviewer analysed information, ensure verification of data, and formulate key findings, conclusions, and recommendations, as well as lessons learned.

Review analysis is valid if it derives from several sources of information. It requires cross-verification and demonstration of the evidence on which an assessment is based. As it can be seen in Figure 2, triangulation is a key factor in a review to the extent that it fosters quality and soundness and ensures that the findings are supported by clear and multiple lines of evidence; it entails confirmation, enrichment, and explanation, and it is used as a tool for answering review questions. Three levels of triangulation were envisaged and applied for this evaluation: the reviewer's level, the methodological level, and the data level. The reviewer applied both deductive and inductive logic for interpretive analysis of findings in relation to key evaluative criteria.

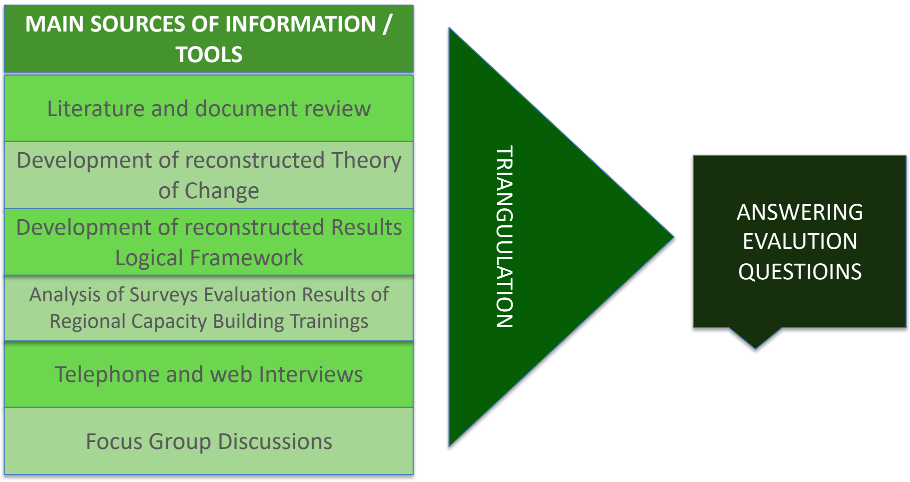

Figure 2 Main sources of information and tools

37. **Draft Terminal Review Report**

The collection of information and filling in the terminal review framework were completed with the integration of the results of the virtual individual interviews, focus-group discussions and the processing of the data collected from observations and interviews. This consolidated framework was the starting point for the preparation of the Terminal Review report.

During the synthesis phase the information gathered during the documents review, analysis and interviews phase were used to enrich, balance, and amend the data gathered during the solely documentary phase so as to allow formulation of the final answers to the review Questions. The conclusions, lessons learned, and recommendations of the Terminal Review were drafted accordingly.

This phase culminated in the drafting of a draft Terminal Review report to be presented to the UNEP Industry and Economy Division for discussion by 23 May 2023. Based on these exchanges a Terminal Review report version was prepared. Once this final comprehensive Terminal Review report was approved, an executive summary report was prepared. As with previous reports based on exchanges and comments received, a final version (with executive summary) was submitted to PMT and to UNEP Evaluation Office.

38. **Terminal Review Report**

A Terminal Review report was submitted by 31 May 2023 based on analysis and exchanges with UNEP Project Management Team, UNEP Evaluation Office and counterparts on the draft Terminal Review report. It has approximately 100 pages of text, excluding annexes, and incorporated, points of clarification, information as well as relevant observations, views and suggestions expressed by program partners and respective reviewers.

E. Information sources

39. Written documents and reports from the Project were reviewed in the inception phase of this terminal review. Furthermore, relevant project documents the UNEP project: “Sharing Experience and Knowledge for a Sustainable Belt and Road” were provided by the UNEP project management team, UNEP Industry and Economy Division, UNEP Early Warning and Assessment Division, FECO at MEE, UNITAR, UNESCAP, GIZ, Government of Singapore, Infrastructure Asia, and Government of Rwanda.
40. The documents reviewed include a wide range of document connected to the climate change, UNEP guidelines for evaluation, programmes, roadmaps, reports, frameworks, implementation, and review documents as well as documents related to other climate change practices.
41. Interviews and focus-group discussions with project management, donors, subcontractors and project stakeholders and beneficiaries were held virtually. There were no review field missions for this terminal review (A list of interviewed project stakeholders and beneficiaries is provided in the Stakeholders Analysis in Annex VII of this Terminal Review Report).

F. Review limitations

42. Various risks and limitations were identified in the methodological proposal and during the inception and data collection analysis phases. Mainly, the review risks and limitations were the fear of poor quality and availability of data, as well as absence of useful information for the conduct of a review from project planning, implementing, and monitoring documents the documentation review that might have yielded in incomplete results. However, all the information was complete and available, and only on rare occasions where information was incomplete, the risks were mitigated by triangulating information gathered from various sources to provide evidence-based conclusions pertaining to the review questions by the reviewer.

G. Intended use of the Terminal Review Report

43. This Terminal Review Report of the Project is of interest to concerned UNEP staff at UNEP Industry and Economy Division in Geneva and UNEP Early Warning and Assessment Division at the Headquarter in Nairobi and in the field, FECO, UNEP’s counterparts, stakeholders and beneficiaries of this projects that participated at the RCB trainings in Turin for the Central Asian countries, ASEAN, Eastern African countries and the Latin American and the Caribbean countries.

III. THE PROJECT

A. Context

44. The UNEP project: "Sharing Experience and Knowledge for a Sustainable Belt and Road" aimed to address above mentioned challenges that prevent the BRI investments from contributing to the SDGs in recipient countries by increasing BRI stakeholders' awareness and understanding of the opportunities and challenges for sustainable development associated with BRI investments, as well as policy conditions required to enable and address them. The project document prevised that this was to be done by:

- Collecting and disseminating case studies (Output 1a),
- Making integrated environmental data available (Output 1b), and
- Providing RCB training for Belt and Road stakeholders from selected Belt and Road countries (Output 2). RCB training will provide a forum for dialogue between Belt and Road stakeholders.

45. Increased knowledge, capacity, and understanding of different stakeholders' sustainable development priorities would allow project participants from the public and private sectors to increasingly apply sustainable development pathways, such as green economy and ecological civilization, to the BRI. This, in turn, can help ensure that BRI investment in Sustainable Infrastructure can be an alternative contributor to most of the SDGs – Agenda 2030 of the United Nations.

46. The long-term objective of the Project was to contribute to the reduction of climate change risks in BRI countries region while raising awareness, strengthening capacities, and creating an enabling environment for investment in green infrastructure. Public and Private Sector BRI stakeholders in the project countries should have increased awareness and understanding of the sustainable development opportunities and challenges associated with sustainable infrastructure investments, and policy conditions required to enable and address them. The project was to achieve this outcome through knowledge and data collection and sharing, and capacity building through RCB trainings.

47. The UNEP Industry and Economy Division has formulated and implemented the Project contributing to UNEP PoW Project 614.5 "Greening the Belt and Road Initiative", financed by the MEE) through a grant agreement from the China Trust Fund (CTF).

B. Objectives and components

48. UNEP's Project: "Sharing Experience and Knowledge for a Sustainable Belt and Road" aimed to assist BRI countries in strengthening adaptation capacities through two project outputs and three project activities. For better understanding of the Project, the Project Logical Framework is shown in Annex IV to this Terminal Review Report.

49. <u>Project Output 1</u>: Knowledge Products related to the sustainable development of the Belt and Road Initiative are generated and disseminated, with two main activities:

- <u>Activity 1a</u>: Collection and Dissemination of Case studies

  Output 1a focused on the collection and dissemination of sustainable development case studies from BRI projects, as well as other case studies that may be applicable to BRI development (for example, from previous Chinese overseas infrastructure projects). These case studies included both best practices and lessons learned. The project released annual case study briefs, which were compiled and released in a report at the end of the project. The Case studies were supported and underpinned by data and were promoted and disseminated at regional project and events from the Coalition—Belt and Road Initiative International Green Development Coalition (BRIGC)—making use of Coalition partners' networks. Output 1a was planned to be implemented by the China-ASEAN Environmental Cooperation Center, including the following knowledge products:

- 2 annual Case Study Briefs to be published online (1 brief in each of the first two years of the project), and
- 1 Case Study Report to be published online and in hard copy in the final year of the project.

- Activity 1b: Environmental Data and Information

  The project has planned to include preliminary work to explore and develop the links between UNEP Live with the China-ASEAN Environmental Cooperation Centre's Belt and Road Big Data Platform. This was supposed to take the form of initial scoping work and stakeholder consultations on data needs and availability to assess the feasibility and potential for data interchange and information/knowledge management. The ultimate objective of this work was to provide Belt and Road stakeholders with access to accurate, credible, and policy-neutral scientific data and information upon which they can base policy choices and other decisions. The data interchange was to cover geospatial, earth observation and remote sensing data on the environment, through the world environment situation room (the outfit platform of UNEP for the Big Data on the Environment, integrating geospatial, indicators and statistics on SDGs and global environmental monitoring). The project also aimed to pilot a program for the release of environmental data briefs, based upon UNEP Foresight Briefs, for selected Belt and Road countries. The specific activities of this project component were to include:

  - Expert and stakeholder consultation meeting(s) (and ongoing consultation following meeting) to assess data needs and availability,
  - Stakeholder mapping,
  - Data platform integration assessment,
  - Data interchange through the World Environment Situation Room,
  - 3 Foresight data briefs (1 per project year), and
  - Formulation of a project proposal to apply for funding to scale up the assessment and data integration work.

50. Project Output 2: BRI Stakeholders have increased capacity to identify and apply ways in which BRI investments can contribute to the SDGs and associated targets, and the policy conditions required to enable these investments.

- Activity 2a: Develop and deliver regional capacity building training, technical support, and policy guidance to Belt and Road Stakeholders.

  This output was to focus on building capacity of BRI stakeholders to identify sustainable development opportunities and challenges associated with BRI investments, and policy conditions required to enable and address them. This includes ways in which BRI investments can help to address pollution issues. The project was to develop and deliver training curricula targeted to policymakers in Southeast Asia, Central Asia, and South Asia. Separate curricula were to be developed for each region, but in general the training on sustainable infrastructure for policymakers should focus on reducing risks through a better understanding of Multilateral Environmental Agreements (MEAs) and international norms and standards. On the opportunities side, the thematic modules greatly focused on the identification of specific sustainable investment needs and the creation of enabling policy environments. Trainings should have also included information on mainstreaming gender into policies, and other social safeguards. Policy makers were to come from member states as well as relevant sub-regional intergovernmental forums including ASEAN Secretariat, the Interstate Commission for Sustainable Development, and others.

RCB trainings were to be held once per year (3 courses total), with policymakers from a different region receiving training each year (for instance: Central Asia, Southeast Asia, and South Asia). The training courses were planned to be developed in consultation with the respective regional stakeholders to ensure that they are needs-based and user focused. This was to be achieved in part through user-needs surveys that have already been circulated to stakeholders, and through ongoing close coordination with UNEP Regional and Country Offices, which serve as the organization's formal link to member states. The curricula were also developed in cooperation with partner organizations to leverage the best existing information and expertise on topics relevant to sustainable infrastructure development through BRI.

For selection of the policymaker participants from Belt and Road regions, the project team was to work closely with the relevant UNEP Regional and Country teams, as well as national government focal points and other national and regional stakeholders such as regional environmental NGOs or think tanks to identify the right participants from the participating countries. In most countries, the Ministries of Environment or the equivalent were the project's primary target, as well as relevant legal and regulatory stakeholders. Countries were to be selected based on criteria including level of involvement in the BRI, capacity building needs, level of interest and commitment to sustainability, past engagement with UNEP and its project partners, geographic balance, and feasibility of participation. In selecting countries, it was also prevised for the project to seek synergies with other related UNEP projects, such as those under the Partnership for Action of Green Economy, the UNEP-UNDP Poverty Environment Initiative, UNEP Finance Initiative, and others. Efforts were to be made to ensure that project capacity building activities achieve a gender balance, including amongst meeting participants and trainers. The training curricula were to include information on gender aspects of sustainable development. Gender perspectives were also to be incorporated into project knowledge and data products, as applicable. The database work under project Output 1b was to proceed with the goal of maximizing the availability of gender-disaggregated data on public databases and platforms (i.e., subject to data availability).

C. Stakeholders

51. The Project engaged with various international and national implementing and technical partners[5] to achieve the best efficiency and effectiveness of the project implementation. See the list blow for the major project partners.

Table 3 List of major project partners

Partner	Role

[5] For the purposes of this report, an "implementing partner" is an organization that was contracted by UNEP, whereas a "technical partner" made their own in-kind contributions to the activity(ies).

FECO	Implementing partner for Activity 1a on the collection and dissemination of sustainable development case studies from Belt and Road projects, as well as other case studies that may be applicable to Belt and Road development.
RADI	Technical partner for Activity 1b on environmental data platform integration to assess interoperability of RADI's and UNEP's platforms.
ITC-ILO	Implementing partner to develop a curriculum for and implementation of a regional capacity building training in Central Asia in 2018.
Ministry of Foreign Affairs of Singapore	Technical partner for Activity 2a to hold a regional capacity building training in South and Southeast Asia in 2021 and 2022 by helping outreach to regional policymakers from various ministries and linking us with local technical partners such as Infrastructure Asia.
Infrastructure Asia	Technical partner for Activity 2a to develop a curriculum for and implementation of a regional capacity building training in South and Southeast Asia in 2021.
Ministry of Environment of Rwanda	Implementing partner for Activity 2a to develop a curriculum for and implementation of a regional capacity building training in East Africa in 2021.
UNITAR	Implementing partner for Activity 2a to develop a curriculum for and implementation of regional capacity building trainings in East Africa in 2021 and Latin America in 2022.
UNESCAP	Technical partner for Activity 2a to develop a curriculum for and implementation of a regional capacity building training in South and Southeast Asia in 2022.
GIZ	Technical partner for Activity 2a to develop a curriculum for and implementation of a regional capacity building training in Latin America in 2022.

D. Project implementation structure and partners

52. The UNEP Industry and Economy Division in Geneva was responsible for implementing the UNEP Project: "Sharing Experience and Knowledge for a Sustainable Belt and Road" and it co-financed the activities of the project with USD 610,700 in-kind contribution, the delivery of the planned outputs and achievement of the expected outcomes and impact. UNEP was executing the project in collaboration with the respective Ministries/Counterparts in the respective BRI countries, especially for the five regional capacity building trainings.

53. Under the supervision of UNEP's Industry and Economy Division, this Project was managed by UNEP South-South Cooperation Principal Officer as the Project Manager, and jointly implemented by project teams in UNEP's Industry and Economy Division and UNEP's Science Division (today UNEP's Early Warning and Assessment Division).

54. The Project Manager was responsible for coordinating with parallel initiatives such as BRICG, Green Growth Knowledge Partnership (GGKP), UNEP Live, and others, as required, to ensure consistency and enhance synergies with on-going UNEP activities.

55. The UNEP Early Warning and Assessment Division led the work on data integration between UNEP Live and MEE's Belt and Road Big Data Platform.

56. The UNEP Industry and Economy Division led the overall implementation of the project, and inputs into the capacity building services could potentially come from different divisions within UNEP.

57. As seen in Figure 3, the following diagram illustrates the governance structure of this Project and the executing arrangements with internal and external stakeholders.

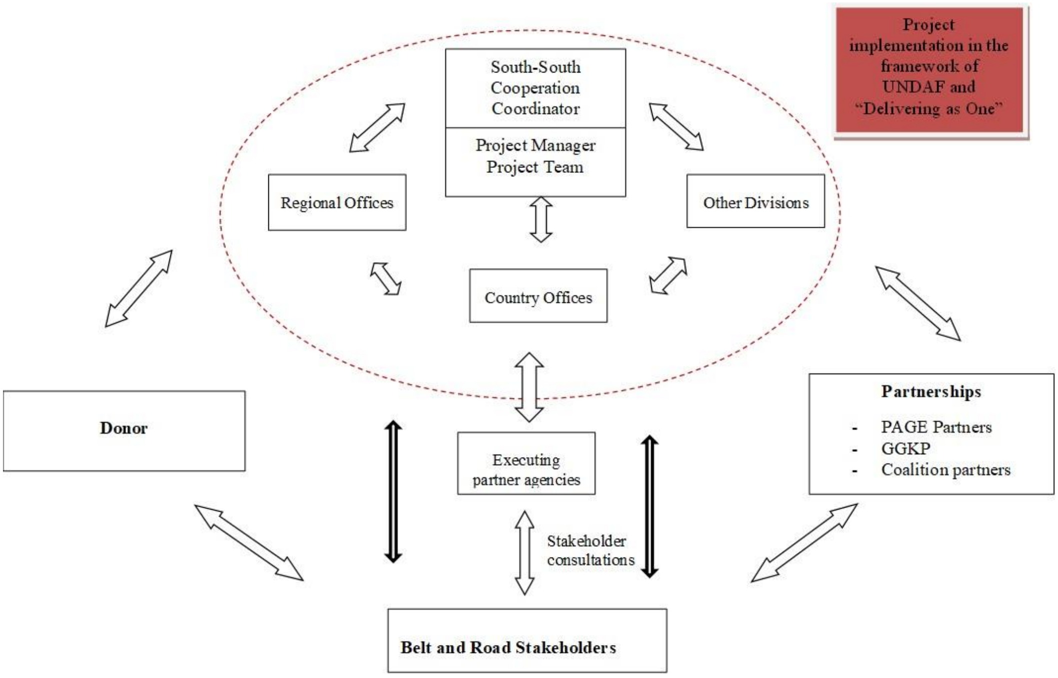

Figure 3: Project Organizational Diagram for the Project

58. UNEP's project management method provided a structured framework to manage the full course of the project and ensured that the project achieved its objectives. The implementing agency used a project cycle management method together with logical framework matrix to design, implement, monitor, and control, and evaluate projects. The activities covered by this project have been implemented between 2018 and 2022 by the UNEP's Industry and Economy Division, this Project was managed by UNEP South-South Cooperation Principal Officer as the Project Manager, and jointly implemented by project teams in UNEP's Industry and Economy Division and UNEP Early Warning and Assessment Division.

59. UNEP was responsible for:

- The general management and monitoring of the Project.
- Reporting on project performance to the donor, MEE.
- Procuring the international expertise needed for delivering the planned outputs under the three project components.
- Managing, supervising, and monitoring the work of the international teams and ensuring that the deliverables are technically sound and consistent with the project requirements.

60. The UNEP PMT had the following responsibilities:

- Coordination of all project activities carried out by the national and international project experts and other partners by having close association with the Ministries/Counterparts.

- Day-to-day management, monitoring and evaluation of project activities as per planned project work.
- Organization of the various seminars, webinars, and trainings to be carried out under Project Outputs 1a, 1b and 2.

61. The expected results and main activities from the project logical framework (see Annex IV) were transferred into the time schedule referred to as Milestones Attainment Date for the entire duration project implementation. The time schedule was used as management and monitoring tool by the PMT, and UNEP and it was reviewed and updated appropriately on an annual basis.

E. Changes in design during implementation

62. The project has experienced several challenges, but the most significant one has been the impact of COVID-19, causing human resource issues and the inability to convene in-person trainings and other events. In close communication with relevant stakeholders and the donor, the implementation team has addressed the challenge efficiently by switching the delivery modality of activities to virtual and extending the duration until 2022 to accommodate delayed activities and spend the left-over funds.

63. Following the first revision, the project underwent two additional revisions. The second project revision was done in September 2021 to extend the implementation period to 31 December 2021, reflecting the extension of the CTF framework agreement between UNEP and the donor, which extended the duration of the CTF grant until 31 December 2022.

64. At the end of December 2021 all the planned project activities had been completed, but because of the shift from in-person to virtual training courses under Output 2 (due to COVID), there were significant funds left over. In order to use the leftover funds, the donor approved the addition of two extra capacity building courses and the extension of the implementation period to 31 December 2022. The additional activities included two capacity building seminars held under Output 2: one in Asia and one Latin America, which allowed for increased geographical scope and number of participants for the project.

F. Project financing

65. The Project's total budget is USD 1,610,700, whereas MEE's contribution through CTF amounts to USD 1 million (62%) in a form of grant together with different elements of the budget. UNEP contributed USD 610,700 (38%) as in-kind contribution to the Project. The total project budget is presented on Table 4.

Table 4 Budget Estimate for the Sustainable Belt and Road Project (2018-2022)[6]

TYPE OF FUNDING	SOURCE OF FUNDING	Details	Year 1 (USD)	Year 2 (USD)	Year 3 (USD)	Year 4 (USD)	Year 5 (USD)	**Total (USD)**
CASH	Extra Budgetary Funding (XB) (posts + non-post + Programme	China Trust Fund T4	331,819	326,319	226,819			**884,956**
		Programme Support Cost on	43,136	42,421	29,486			**115,044**

[6] Source: UNEP ToR Terminal Review Non-GEF_04.08.21

	Support Cost (PSC))	Secured funds						
	SUB- TOTAL		**374,955**	**368,740**	**256,305**			**1,000,000**
TOTAL PROJECT PLANNED BUDGET (without EF & RB posts' costs) from CTF			**424,110**	**372,695**	**203,195**			**1,000,000**
In Kind (EF & RB Posts)	Environment Fund post costs		183,300	183,300	133,300	110,800		**610,700**
TOTAL PROJECT PLANNED BUDGET (without EF & RB posts' costs) from CTF and UNEP In-Kind Contribution - Funding secured			**558,255**	**552,040**	**389,605**	**110,800**		**1,610,700**

IV. THEORY OF CHANGE AT REVIEW

66. The UNEP Industry and Economy Division, in discussion with MEE, has designed the project: "Sharing Experience and Knowledge for a Sustainable Belt and Road" with the aimed impact by 2030 to contribute to the Resource Efficiency Sub-programme Objective of UNEP, and enable the BRI countries to achieve energy, material and resource efficiency by using economic tools, technical assistance, policy assessments and capacity-building provided to countries and regions to support achievement of the SDGs through multiple pathways, policies and action plans.

67. The Intermediate State of the Project was intended to be that the BRI Investments contribute to the SDGs and their National NDCs under the Paris Agreement as it can be shown in the Reconstructed ToC. The reviewer has prepared for the Terminal Review of the UNEP Project: “Sharing Experience and Knowledge for a Sustainable Belt and Road.”

68. The purpose of the Project was to improve the technical capacities in the Belt and Road countries in investments in sustainable infrastructure. The planned Project Outcome for the project impacts from 2018 to 2022 was that the Public Sector Belt and Road stakeholders in the project countries have increased awareness and understanding of the sustainable development opportunities and challenges associated with Belt and Road investments, and policy conditions required to enable and address them. The project was supposed to achieve this outcome by knowledge and data collection and sharing, and through capacity building.

69. The intermediate state for the project outcomes of the Project aims to increase the public sector BRI stakeholders’ understanding in the needs for sustainable investment in sustainable infrastructure and in opportunities and challenges for sustainable development presented by Belt and Road investments.

70. The project document prevised that this was to be done by:

    - Collecting and disseminating case studies (Output 1a),
    - Making integrated environmental data available (Output 1b), and
    - Providing Regional Capacity Building (RCB) training for Belt and Road stakeholders from selected Belt and Road countries (Output 2).

71. The project contributed directly to UNEP’s Resource Efficiency Sub-Programme’s Expected Accomplishment (a) “Science-based approaches that support the transition to sustainable development through multiple pathways, including inclusive green economy and sustainable trade, and the adoption of sustainable consumption and production patterns at all levels” and (b) “Public, private and financial sectors increasingly adopt and implement sustainable management frameworks and practices”, as it can be seen from the ToC of the Programme of Work (PoW): UNEP PoW Project 614.5 “Greening the Belt and Road Initiative” (Figure 4). The project contributed primarily to PoW Output 4 for Expected Accomplishment (a) of Sub-Programme 6 Resource Efficiency: “Economic tools, technical assistance, policy assessments and capacity-building provided to countries and regions to support achievement of the SDGs through multiple pathways, policies and action plans[7].”

[7] Eventually, Project 614.5, “Greening the Belt and Road Initiative,” was not officially launched. Instead, the Sharing Experience and Knowledge for a Sustainable Belt and Road Project became an independent project with its own impact and outcome. ToC for this project was not developed at the project initiation phase and was reconstructed by the reviewer (see 3.2.4).

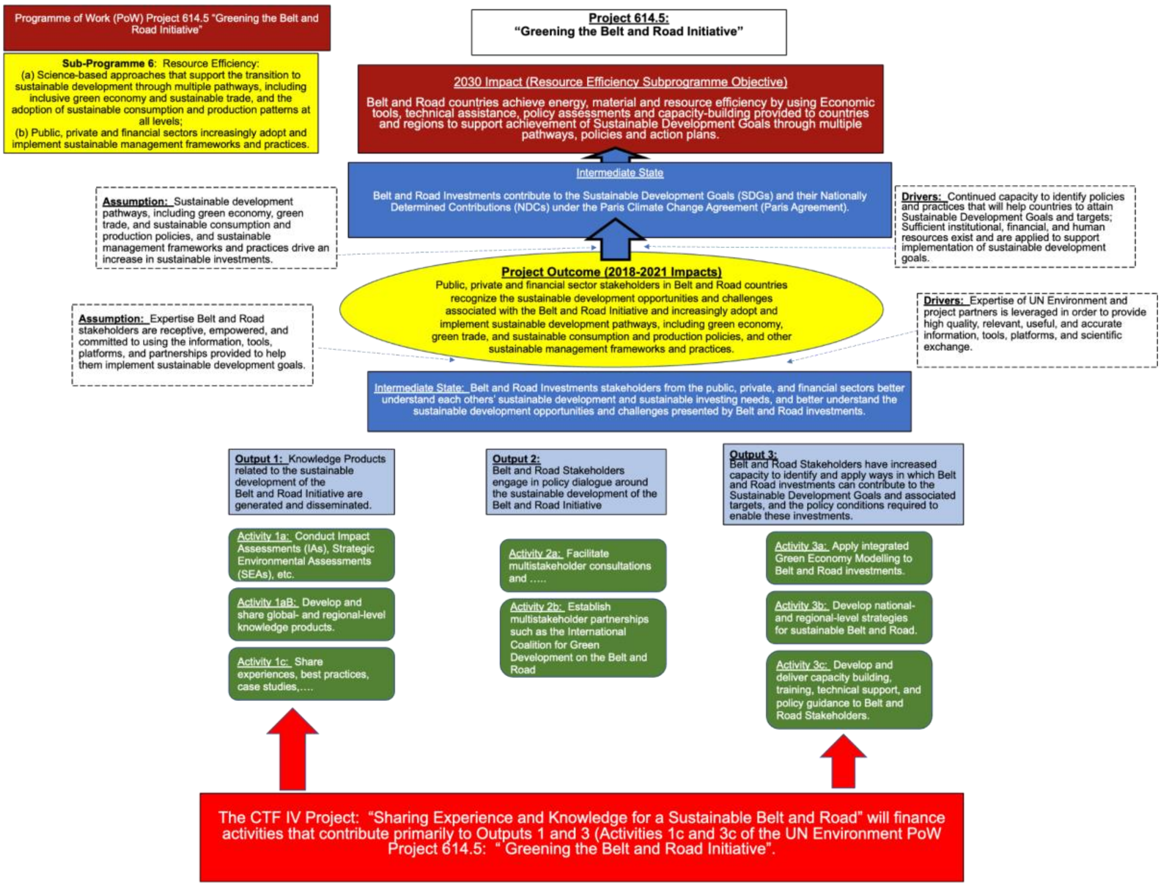

Figure 4 ToC of the UNEP PoW Project 614.5 "Greening the Belt and Road Initiative"

72. Eventually, Project 614.5, "Greening the Belt and Road Initiative," was not officially launched. Instead, the Sharing Experience and Knowledge for a Sustainable Belt and Road Project became an independent project with its own impact and outcome. ToC for this project was not developed at the project initiation phase and was reconstructed by the reviewer. See Quality of Project Design under V. Review Findings below for more details.

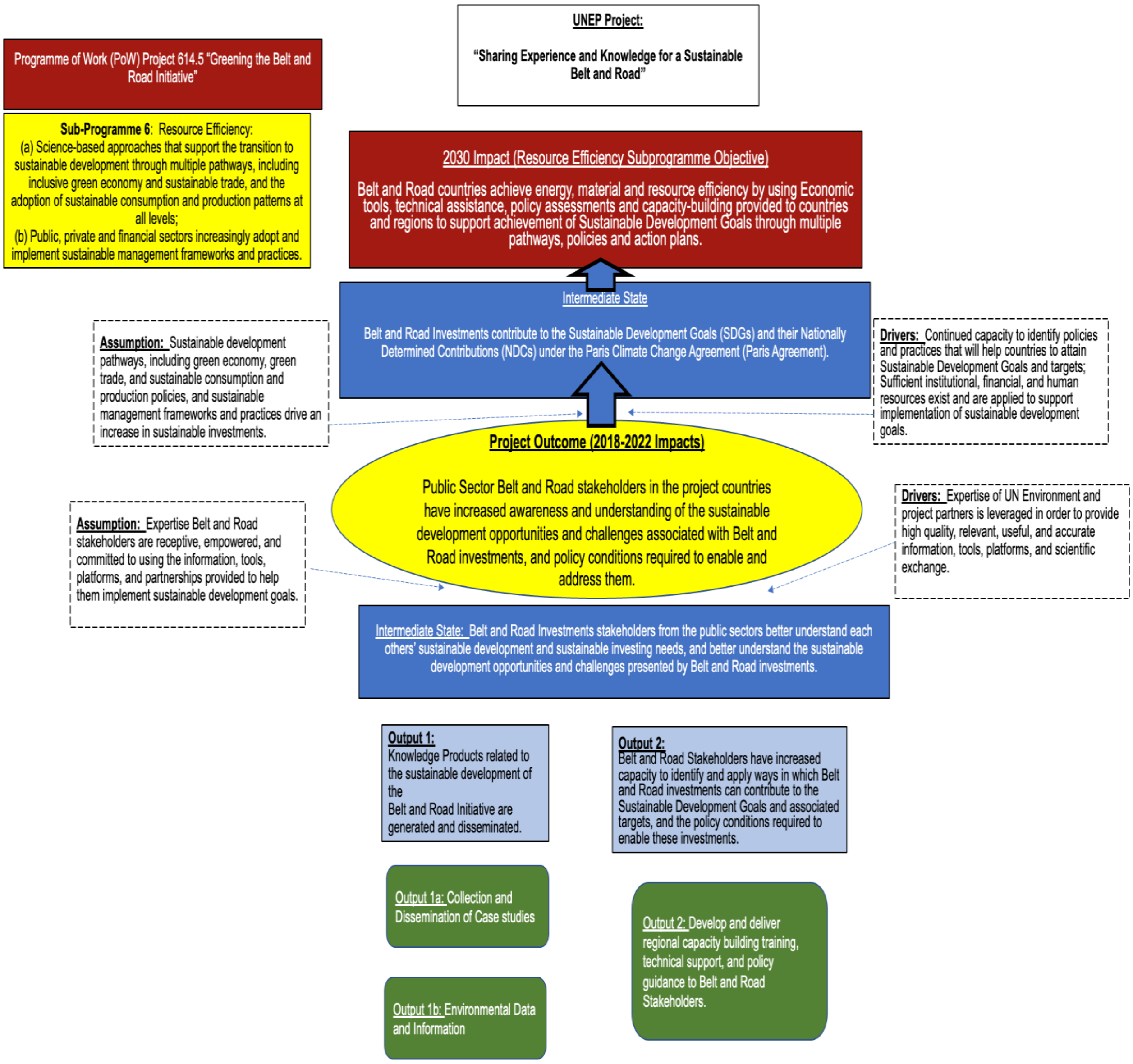

Figure 5 Reconstructed Theory of Change (ToC) by the reviewer at the time of Terminal Review

V. REVIEW FINDINGS

A. Strategic Relevance

73. The assessment of project relevance takes into consideration the project's contribution to the achievement of national objectives regarding Climate Change and Adaptation (CCA) and their obligation under the Paris Climate Change Agreement in 39 BRI countries throughout Asia Pacific, Africa, and Latin America and the Caribbean (LAC): Bangladesh, Bhutan, Cambodia, China, Ethiopia. India, Indonesia, Kazakhstan, Kenya, Kyrgyzstan, Lao PDR, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Rwanda, Sri Lanka, Tajikistan, Thailand, Turkmenistan, Uganda, Uzbekistan, Viet Nam, Zambia, Mexico, Honduras, Paraguay, Chile, Ecuador, Dominican Republic, Colombia, Argentina, Brazil, Peru, Bolivia, Venezuela, Costa Rica, and Guatemala. Furthermore, consideration should be taken on the strategic priorities of China's Ministry of Ecology and Environment, and the project's relevance to UNEP's mandate.

74. Generally, in the period of Project design in 2018 and the completion of its implementation in 2022, the Project has remained throughout very relevant. This has been assessed through the review of documentation and interviews with the project stakeholders in many of the BRI countries that were part of this project.

Alignment to UNEP's UNEP Medium Term Strategy (MTS), Programme of Work (POW) and Strategic Priorities

75. The Project is fully in line with UNEP's mandate, core competences and can benefit from UNEP's comparative advantage as China's MEE Implementing Agency in the CCA domain, as well as with UNEP's work in the BRI countries. UNEP's mandate is to be the leading global environmental authority that sets the global environmental agenda with the mission is to provide leadership and encourage partnership in caring for the environment by inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising that of future generations. UNEP works on delivering transformational change for people and nature by addressing the root causes of the three planetary crises of climate change, nature and biodiversity loss, and pollution and waste. This CCA project falls under the theme of environment and energy (climate change and adaptation)/ environmental protection.

76. The Project "Sharing Experience and Knowledge for a Sustainable Belt and Road" contributed to the UNEP directly to the Resource Efficiency Sub-Programme's Expected Accomplishment:

    - "Science-based approaches that support the transition to sustainable development through multiple pathways, including inclusive green economy and sustainable trade, and the adoption of sustainable consumption and production patterns at all levels", and
    - "Public, private and financial sectors increasingly adopt and implement sustainable management frameworks and practices".

77. The project contributed primarily to PoW Output 4 for Expected Accomplishment (a) of Sub-Programme 6 Resource Efficiency: "Economic tools, technical assistance, policy assessments and capacity-building provided to countries and regions to support achievement of Sustainable Development Goals through multiple pathways, policies and action plans."

78. The project responded to the United Nations Environment Assembly (UNEA) Resolution 2/5: "Delivering on the 2030 Agenda for Sustainable Development" by enhancing the coordinated and integrated delivery of the 2030 Agenda through fostering multi-

stakeholder partnerships and cooperation, engaging with regional coordination mechanisms, building institutional and human capacity, and engaging with the private sector. It also responded to Resolution 2/8 on “Sustainable Consumption and Production” by improving the availability of information that enables investors, companies, and governments to make informed decisions, inviting the private sector to adopt sustainable practices, promoting public procurement practices that are sustainable, and engaging both public- and private-sector interests, to collaborate to initiate partnerships and alliances in order to find innovative ways of achieving resource-efficient societies. In addition, it contributed to the implementation of UNEA Resolutions 4/5 and 5/9 on Sustainable and Resilient Infrastructure, both of which were adopted after the start of the project but are both highly relevant. Finally, the project also supported South-South cooperation as mandated under the Bali Strategic Framework for Technology-support and Capacity Building.

79. In addition, this project supported the achievement of the 2030 Agenda for Sustainable Development, and in particular Goal 8 on inclusive and sustainable economic growth, Goal 9 on building resilient and sustainable industry, innovation, and infrastructure, Goal 12 on responsible consumption and production, and Goal 17 on building partnerships for the goals.

80. Overall, the Project is highly relevant with UNEP’s mandate, MTS, PoW and strategic priorities, and its relevance to them is rated **HIGHLY SATISFACTORY (HS)**.

Alignment to Donor/Partners Strategic Priorities

81. The project is fully in line with the Donor’s (MEE) strategic priorities, as the BRI presents an excellent opportunity for countries to use these investments to help transform their economies and achieve the SDGs and their NDCs under the Paris Agreement. Together, BRI represent approximately 40% of the earth’s total land area, 30% of global GDP, 55% of total CO2 emissions, and 60% of the world’s population. The outcomes of BRI development will therefore have a profound impact on a greener planet and on human development.

82. In 2013, Chinese President Xi Jinping announced China’s intention to develop The Silk Road Economic Belt and the 21st Century Maritime Silk Road, which aims to expand the ancient trade route, both is geographic and thematic scope. Also known as BRI, China’s efforts are aimed at enhancing economic development and inter-regional connectivity by focusing on five areas of cooperation: infrastructure, trade, policy, finance and people. China’s ambitious Belt and Road Initiative is expected to bring trillions of dollars of investment to more than 60 countries over the coming decades.

83. In light of the above, UNEP has signed a Memorandum of Understanding (MoU) with MEE in December 2016 in which the two parties agreed to work together to promote international cooperation for the sustainable development of the Belt and Road Initiative by promoting international cooperation to share concepts and good practices; enhance communication on policies, regulations, and standards; conduct joint research; facilitate international dialogues; and enhance information and data exchange.

84. Under this MoU, UNEP and MEE were to lead the establishment an international coalition of investors and stakeholders who are committed to promoting green and sustainable investments that helped Belt and Road countries to achieve goals and targets associated with the Sustainable Development Goals and the Paris Agreement. BRICG aims to bring together a diverse range of international organizations, non-governmental organizations, and other stakeholder groups to engage with private sector investors and businesses that are involved in Belt and Road development. BRICG represents the best international expertise on sustainable development in the context of the Belt and Road Initiative. Using “green” as a cross-cutting theme with which to link the five areas of Belt

and Road connectivity, BRICG helps policymakers, businesses, investors, and other stakeholders ensure that BRI investments contribute to sustainable development.

85. The work under the UNEP project, "Sharing Experience and Knowledge for a Sustainable Belt and Road" is in line with the objectives and priorities of both the MoU and BRICG. The Project utilized the network of Coalition partners to identify stakeholders, leverage expertise, communicate project results and information, and develop platforms for policy dialogue.

86. The Sustainable Belt and Road Project is highly relevant with China MEE's strategic priorities, and its relevance to them is rated **HIGHLY SATISFACTORY (HS)**.

Relevance to Global, Regional, Sub-regional and National Priorities

87. The Sustainable Belt and Road project was implemented in 39 Belt and Road countries throughout Asia Pacific, Africa, and Latin America and the Caribbean: Bangladesh, Bhutan, Cambodia, China, Ethiopia. India, Indonesia, Kazakhstan, Kenya, Kyrgyzstan, Lao PDR, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Rwanda, Sri Lanka, Tajikistan, Thailand, Turkmenistan, Uganda, Uzbekistan, Viet Nam, Zambia, Mexico, Honduras, Paraguay, Chile, Ecuador, Dominican Republic, Colombia, Argentina, Brazil, Peru, Bolivia, Venezuela, Costa Rica, and Guatemala. Its relevance takes into consideration the project's contribution to the achievement of national objectives regarding CCA and their obligation under the Paris Climate Change Agreement, especially concerning Sustainable Infrastructure.

88. The objective of using BRI investments to help countries achieve the SDGs aligns well with the objectives of BRI itself. There is significant overlap between the five official Belt and Road priority areas (infrastructure, trade, policy, finance and people) and the global 2030 Agenda for Sustainable Development, with strong potential for complementarity. MEE has released a guidance document that outlines different avenues through which they plan to improve environmental sustainability across the five priority areas of BRI, which includes collaboration with UNEP on components of this project that is being prepared.

89. Since Rio+20, many Belt and Road countries have shown a growing commitment towards sustainable and inclusive development through Green Economy, Sustainable Consumption and Production, and other pathways. For example, in Central Asia, Kazakhstan led the development of the Green Bridge programme and has developed a Concept for Transition of Republic of Kazakhstan to Green Economy, Tajikistan produced a report entitled Towards a 'Green' Economy in Tajikistan that identified resource efficiency and sustainable consumption and production models as national priorities, and Kyrgyzstan has joined the Programme for Action on Green Economy as a member country. In other BRI regions, some examples of country-level green economy work include Kenya's development of a Green Economy Strategy and Implementation Plan, Sri Lanka's Blue-Green Development strategy, and the pan-European Batumi Initiative on Green Economy (BIG-E), under which many countries have committed to a variety of green economy actions. The Central Asian countries mentioned above, as well as Eastern African countries like Kenya were the first ones having participants on the regional capacity building workshop trainings.

90. Overall, the Sustainable Belt and Road Project is highly relevant with the national development, energy and environmental priorities and strategies of the Governments of the BRI countries, and it is rated **HIGHLY SATISFACTORY (HS).**

Complementarity with Existing Interventions/Coherence

91. China has also committed to sustainable and inclusive development through Ecological Civilization policy framework, and has done work on Green Economy, such as the UNEP-

CAEP publication Measuring China's Environmental Industry, the UN Environment-PRCEE report China's Green Long March; UNEP-ISTIC's Modelling China's Green Economy 2010-2050; and the UNEP-CAS Indicator System for Measuring Sustainable Consumption and Production offer valuable information on the implementation of sustainable and inclusive development. Furthermore, previous UNEP South-South Cooperation projects, including South-South Cooperation in Mongolia and Central Asian Countries: Sharing Knowledge on Inclusive Green Economies and Ecological Civilization, and South-South Cooperation for a Sustainable Belt and Road involved Green Economy scoping work in Belt and Road regions and have created a solid foundation for further cooperation between China and BRI countries.

92. At the general level, UN Member States have signaled a strong commitment to sustainable development with the adoption of the Paris Agreement and the SDGs. More specifically, Member States in BRI regions of Central Asia and Southeast Asia have increasingly recognized the potential for Belt and Road investments to help them meet their national sustainable development goals and have expressed desire to align national and regional development strategies to maximize the potential of BRI investments drivers of sustainable development. For stakeholders in such countries, this project helped build the capacity and create synergies between them.

93. South-South cooperation was an important mechanism for the delivery of this project, particularly in the cooperation between China and other countries, as well as among various BRI countries themselves. In addition to being the donor for this project, China was also a valuable source of case studies and lessons learned, BRI investments and expertise on technology transfer. Chinese institutions and partner organizations were important implementing partners. Project capacity- and partnership- building activities across all five Belt and Road priority areas used South-South cooperation as the core delivery mechanism. The knowledge sharing component of this project constituted another major area of South-South cooperation.

94. The project made strong effort throughout the implementation to align and create Synergies with other interventions to increase efficiency, effectiveness, and sustainability of results, especially in the collaboration within the regional capacity building workshop trainings with GIZ for LAC, UNITAR for Eastern Africa, and ITC-ILO for the Central Asian countries. The project document clearly does not outline concrete project linkages to similar projects that have already been implemented, as until today there were no such large projects with such a broad scope encompassing stakeholders from 39 Belt and Road countries.

95. The complementarity with other relevant existing interventions is rated **SATISFACTORY (S)**, as there were not similar initiatives on global scale.

Project "Sharing Experience and Knowledge for a Sustainable Belt and Road" has contributed to the climate risk reduction, environmental protection, sustainable infrastructure development and green economy in 39 Belt and Road countries throughout Asia Pacific, Africa and LAC while raising awareness, strengthening capacities, and creating an enabling environment for investment in green and nature-based infrastructure. This project addressed the objective and focal areas of the Chinese Ministry of Ecology and Environment in the BRI regions, assisting countries to complete the NDCs under the Paris Agreement. Based on the assessment of project relevance to 1) local and national priorities, policies and strategies on climate change adaptation and energy of the Governments of the BRI countries, 2) China's MEE strategic priorities and objectives and 3) UNEP's mandate, **overall Project Relevance is HIGHLY SATISFACTORY (HS).**

Rating for Strategic Relevance:	**HS**

B. Quality of Project Design

Project design

96. The assessment of project design assesses the adequateness of the project to clear thematically focused development objectives set by MEE and the UNEP, the attainment of which can be determined by a set of verifiable indicators. The projects are expected to be prepared in a participatory manner and with contributions of national stakeholders and/or target beneficiaries. The project followed the requirement to formulate the project based on the logical framework approach.

97. The Project document has been prepared based on results of various research and studies, and diverse stakeholders were actively involved in the project design. The Project very innovative and there are no precedent of other similar initiatives nor projects globally with such a broad scope encompassing stakeholders from 39 BRI countries.

98. The UNEP approach in Climate Change and Adaptation Projects focuses not only on technical improvement and implementation of demonstration projects or tools, but also on improvement in policy, management, investment strategy, operations, and financing. The overall project design is relevant, with its strength of strong participation of various stakeholders in project identification.

99. The LogFrame with its outcomes and outputs, and target indicators are developed adequately [measured with SMART (Specific, Measurable, Achievable, Relevant and Time-bound) indicator and they allow for proper adaptive management and monitoring of project results.

Project objectives, outcomes, and outputs

100. The Project was developed with the objective to improve the capacities of the 39 countries in sustainable infrastructure and investments in this sector, and, in effect, reduce vulnerability of infrastructure to climate change in the BRI countries through adopting best practices with regards to sustainable, green, and nature-based infrastructure in their development as part of NDCs under the Paris Agreement.

101. Based upon interviews with various stakeholders and review of Project documentation, the reviewer considers that this objective remains highly relevant to addressing the issues of Climate Change and Adaptation and Sustainable Infrastructure and Green Economy in the BRI countries.

102. There was only one project outcome: “Public Sector Belt and Road stakeholders in the project countries have increased awareness and understanding of the sustainable development opportunities and challenges associated with Belt and Road investments, and policy conditions required to enable and address them” that was completely interrelated and are inclusive of cross-cutting issues of climate change; capacity development, awareness raising/public participation and application of sustainable, green and nature-based infrastructure as an adaptation measure, a valuable, multi-functional yet underutilized approach for climate change adaptation. This approach used sustainable and resilient infrastructure as part of an overall adaptation strategy to help the BRI countries to holistically adapt to the negative effects of climate change and secure their long-term sustainable development.

103. Outputs of this project included capacity development of government officials and experts, climate risk mitigation, strengthening and promotion of good environmental governance. The project also contributed to improved knowledge and understanding on best practices on investments in and financing of sustainable and resilient infrastructure. This is intended to be done by disseminating information on sustainable infrastructure through: case studies, foresight briefs, sharing of environmental data and

information, and most importantly, through regional capacity building workshop trainings.

104. The key impact targets included the improved technical capacities of the countries in the BRI countries in environmental leadership in sustainable and resilient infrastructure. Primary target beneficiaries of the project are citizens of BRI countries with the benefits they have from the improved sustainable infrastructure. Major project stakeholders were government and private sector officials, participants on the regional capacity building workshop trainings, primarily the Ministries of Environment and Spatial Planning, Ministries of Transport, Economy and Infrastructure and the Road Authorities, potential private sector actors (managers, developers, and civil and environmental engineers) and many others.

105. In addition to the one project outcome there are two project outputs:

- Knowledge Products related to the sustainable development of the BRI are generated and disseminated through:
  - Activity 1a: Collection and Dissemination of Case studies, and
  - Activity 1b: Environmental Data and Information,
- BRI Stakeholders have increased capacity to identify and apply ways in which BRI investments can contribute to the SDGs and associated targets, and the policy conditions required to enable these investments through regional capacity building workshop trainings, technical support, and policy guidance BRI Stakeholders.

106. Their short overview containing the expectations within the project components is presented in Figure 6.

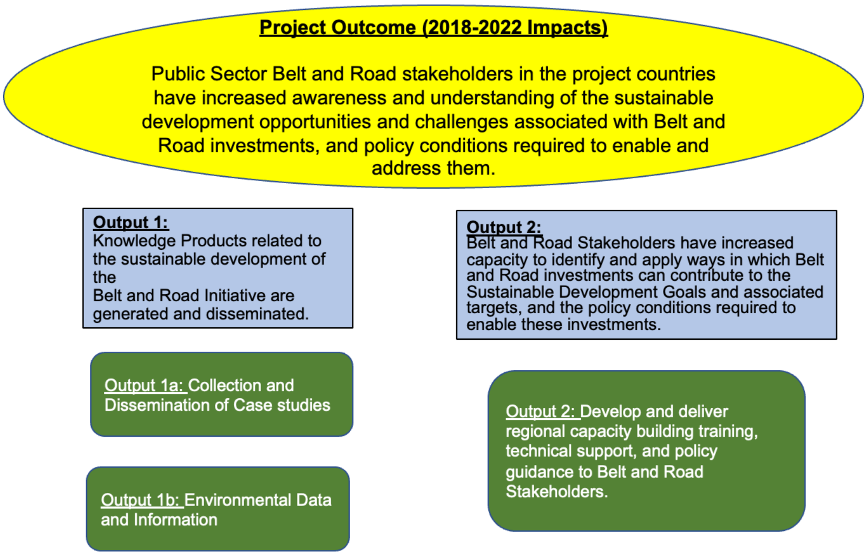

Figure 6 Short overview of the explanations within the project components

107. The targets from the LogFrame for all the project components that have been met can be found in the text below under the Effectiveness section.

Project Logical Framework (LogFrame)

108. According to the UNEP's project management cycle and principles and quality criteria for programme and project design including equity, participation, and empowerment, the LogFrame shows details of the Project's objectives, intervention logic, the objectively verifiable indicators, results achieved, sources of verification and

assumptions/risks for each of the project activities, for the project outcomes and overall project impact.

109. Generally, there was a solid consistency between the description of the project and what was included in the project LogFrame at project design which displayed a full understanding between outputs and outcomes.

Theory of Change (ToC) at Terminal Review

110. ToC is a particularly important framework for assessing project performance and results-achievements of the terminal review. While it needs to maintain the elements of the original targets and intended results of the project (as the project was designed), it also needs to allow the reviewer to understand the flow from outputs through to project outcomes, intermediate states to the eventual long-lasting impact of the project, and the long-term impact to which the Project aims to contribute.

111. There was no ToC developed at project design phase, nor did it speak to the causal pathways between the outputs and outcomes (or components) of the project. This is because at the time of project design, the project was intended to be “housed” under a different UNEP PoW Project that was under development at the time, which had its own ToC. As such, this project was approved without a standalone ToC. However, it was subsequently decided by UNEP Senior Management not to follow through with the “parent” PoW Project, and this project was left without a ToC.

112. The reviewer reconstructed a ToC as part of the Terminal Review as it can be seen on Figure 7. The ToC kept some components of the original LogFrame, i.e., outputs and outcomes were left as is. The project objective was formulated as the project impact, the intermediate states were formulated from the project components.

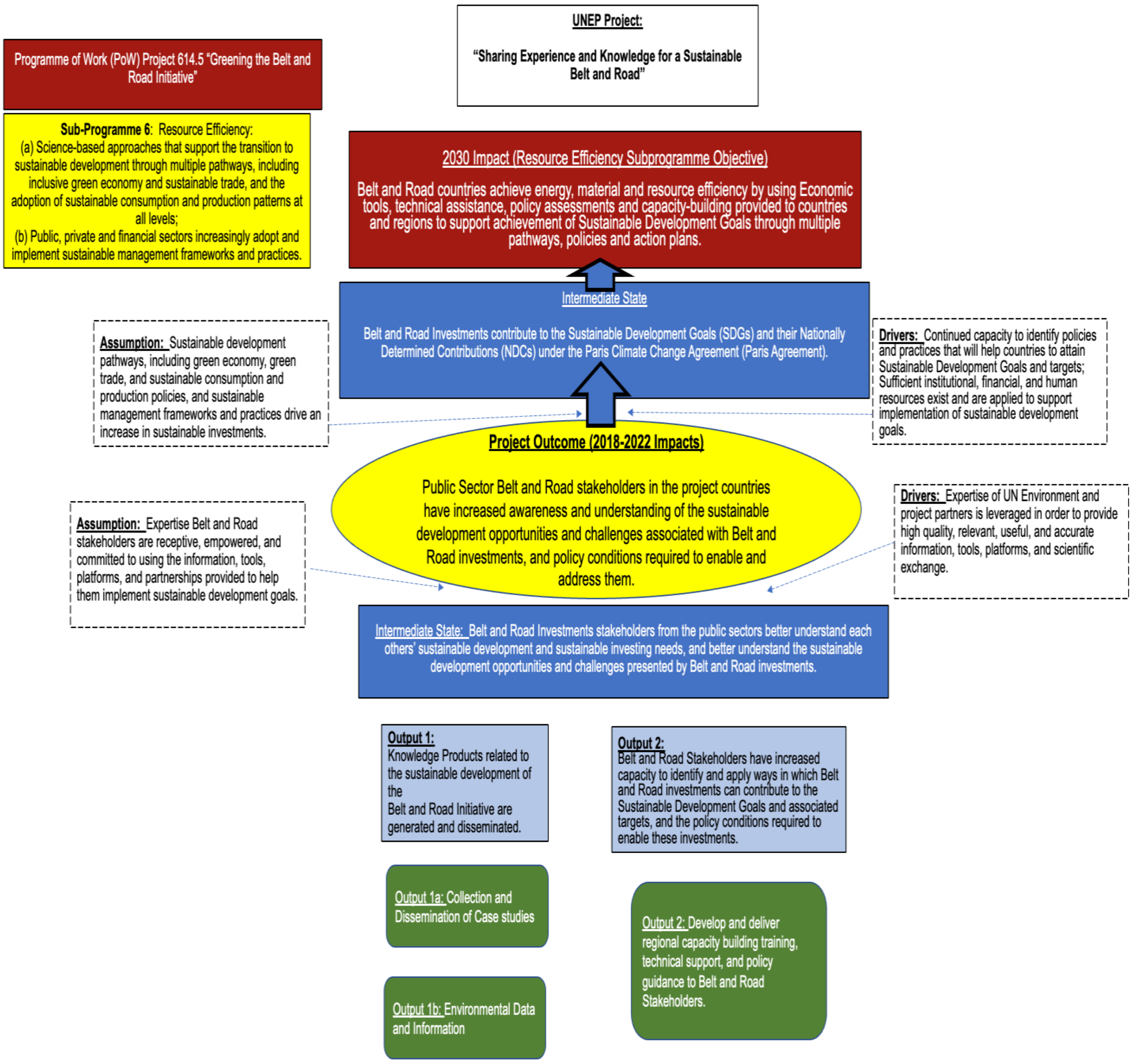

Figure 7 Reconstructed ToC by the reviewer at the time of Terminal Review

Based on the analysis, the project design is rated as **MODERATELY SATISFACTORY (MS)**, because the overall project design is relevant and innovative in risks mitigation and CCA by using sustainable and resilient infrastructure in the BRI countries. The Project was identified and prepared through cooperation with diverse stakeholders. The Project Results Framework with its outcomes and outputs, as well as target indicators were developed adequately (with measurable elements of the SMART indicator) and allowed for proper adaptive management and monitoring of project results. There was no ToC developed for this project.

Rating for Project Design: MS

C. Nature of the External Context

113. The reviewer's assessment of how the project design addressed the nature of external context, including risk, as moderately satisfactory/moderately favourable. While the design did have some risks identified, it could have done a better job assessing the external context by identifying the likely or probable issues, like change of organizational priorities.

114. The project experienced the major event of the Covid-19 pandemic which took place at the tail-end of project completion and had implications on project implementation of

having to extend the project for two years. However, because face-to-face regional capacity building workshop trainings were not possible resulting of the Covid-19 pandemics, virtual trainings were held instead of in-person trainings. This resulted in a significant cost savings, and consequently, Output 2: "providing the regional capacity building workshop trainings" surpassed its target by two additional sustainable infrastructure trainings organized (they were not planned for in the original project document and work plan): ASEAN 2 and Latin America and the Caribbean.

Rating for Nature of the external context was **MODERATELY FAVOURABLE (MF)** due to lack of detailed risks identification and mitigation in project design and Covid-19 interruptions during project implementation.

Rating for Nature of the external context: MF

D. Effectiveness

115. Project effectiveness assesses to what extent the project outcomes, outputs and long-term project objectives have been achieved.

116. This section focuses on the Project's effectiveness through the full course of project implementation, which means, the extent to which the Project has achieved its end results in terms of stated outputs, short- to medium-term outcomes, and progress toward longer-term impact including global environmental benefits and replication effects. Furthermore, this chapter contains the targets, overall results achieved by the end of the Project and global environment objectives achieved by the Project (see Table 6 and 7 for a summary of progress towards meeting targets). Other elements that contribute to the effectiveness of programmes, including the implementation approach and the Project's risk management strategy to date, are included in later sections on project co-ordination and management of this Terminal Review Report.

Availability of Outputs

117. The project managed to deliver all its outputs with excellent quality. The foundational knowledge both in capacity within partners and through the publication of various high-quality products is useful not only for the 39 BRI countries for which the regional capacity building workshop training were designed, but they can be replicated also for all the developing countries worldwide.

118. Generally, the UNEP Project has achieved the expected outputs and outcomes stated in the original Project Document in 2018 though having concluded two years behind the original schedule due to the Covid-19 pandemics.

119. The main achievements on output level by the time of the Terminal Review of the Sustainable Belt and Road Project are given in Table 6.

Table 5 Main project achievements on output level by the end of the Project[8]

Achievement of results to date of project Terminal Review			
Output (s)	**Indicator(s)**	**Target**	**Achieved/ Not Achieved/On target**
1a) Collection and dissemination of case studies	a) Number of knowledge products published	[baseline: 0 target: 3]	**Achieved**
1b) Environmental data needs assessment, platform integration scoping, and creation and dissemination of environmental data briefs	a) Number of expert meetings held to assess data needs and availability	[baseline:0 target: 1]	**Achieved, 3 expert meeting held**
	b) Number of data platform integration assessments	[baseline 0 target: 1]	**Achieved**
	c) Number of Foresight Data Briefs published	[baseline: 0 target: 3]	**Achieved, 3 Foresight Data Briefs published**
	d) Number of project proposals formulated	[baseline: 0 target: 1]	**Partially Achieved**
	e) Number of Big data platforms interoperable	[baseline 0 target: 2]	**Partially Achieved, it was not possible to reach interoperability of the big data platforms with the financing available**
2) Capacity building for Belt and Road stakeholders	a) Number of capacity building seminars held	[baseline: 0 target: 3]	**Achieved, 5 regional capacity building (RCB) trainings held**
	b) Number of stakeholders that attend capacity building seminars	[baseline: 0 target: 75]	**Achieved, 126 stakeholders from 39 countries attended the RCB workshop trainings**
	c) Gender balance of seminar participants	[baseline: 0 target:50% male, 50% female]	**Partially Achieved, with 56% male, 44% female**

Project Output 1a: Collection and dissemination of case studies (Achieved)

120. Output 1a focused on the collection and dissemination of sustainable development case studies from BRI projects, as well as other case studies that may be applicable to BRI development (for example, from previous Chinese overseas infrastructure

[8] Source: Revision 3 of the Project Document for Sharing Experience and Knowledge for a Sustainable Belt and Road from 2022

projects). These case studies should have included both best practices and lessons learned. The project should have released annual case study briefs, which were to be compiled and released in a report at the end of the project. Case studies were to be supported and underpinned by data and promoted and disseminated at regional project and BRICG events, making use of BRICG partners' networks.

121. Output 1a was to be implemented by the China-ASEAN Environmental Cooperation Center, which later became BRICG and was to include the following knowledge products:

- 2 annual Case Study Briefs to be published online (1 brief in each of the first two years of the project).
- 1 Case Study Report to be published online and in hard copy in the final year of the project.

122. After lengthy delays in contracting the implementing partner, the agreement between UNEP and the implementing partner BRICG was signed on 30 April 2020. In April 2019, Chinese and international partners officially launched BRIGC at the Second Belt and Road Forums for International Cooperation. BRIGC aims to establish a policy dialogue and communication platform, an environmental knowledge and information platform, and a green technology exchange and transfer platform, to advance global consensus, understanding, cooperation, and action of a green BRI.

123. As a result of the late start to implementing the activities, it was decided that all the case studies would be published in one report, instead of in two briefs and a final report that can be seen on Figure 8.

124. The report showcases 13 projects covering eight fields, namely:

- Biodiversity and ecosystem,
- Clean energy,
- Clean water,
- Sustainable transportation,
- Solid waste treatment,
- Sustainable consumption and production,
- Green buildings, and
- Corporate social responsibility.

125. The successful implementation of these projects has made great contributions to the socio-economic development in the countries where the projects are launched. Aiming at achieving green development, these projects, in their implementation, adhered to the concept of ecological civilization in combination with China's strict environmental protection systems and international standards, and take various measures of environmental protection based on the conditions of the local environment. With the joint efforts of local governments, businesses, and communities, these projects have yielded good results thanks to the optimization of design and construction plans, strict control over different types of pollutants, and local protection of species and ecosystems. The experience and practice of these 13 projects set an example for other projects and countries.

126. The report: “BRI Green Development Case Study Report (2020)” was published in December 2020 and included 13 case studies. The report was added to UNEP’s sustainable infrastructure case study database hosted by GGKP[9].

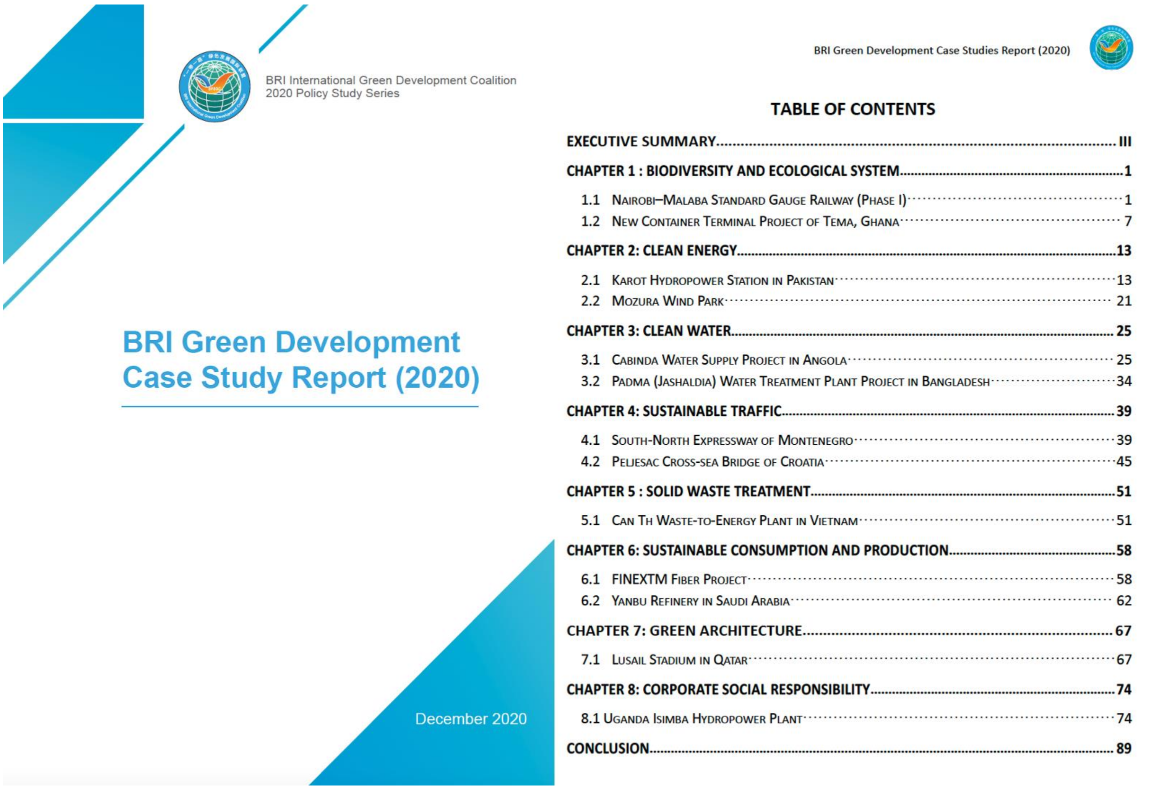

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Figure 8 BRI Green Development Case Study Report and its Table of Contents (2020) [10]

Project Output 1b: Environmental data needs assessment, platform integration scoping, and creation and dissemination of environmental data briefs (Partially Achieved)

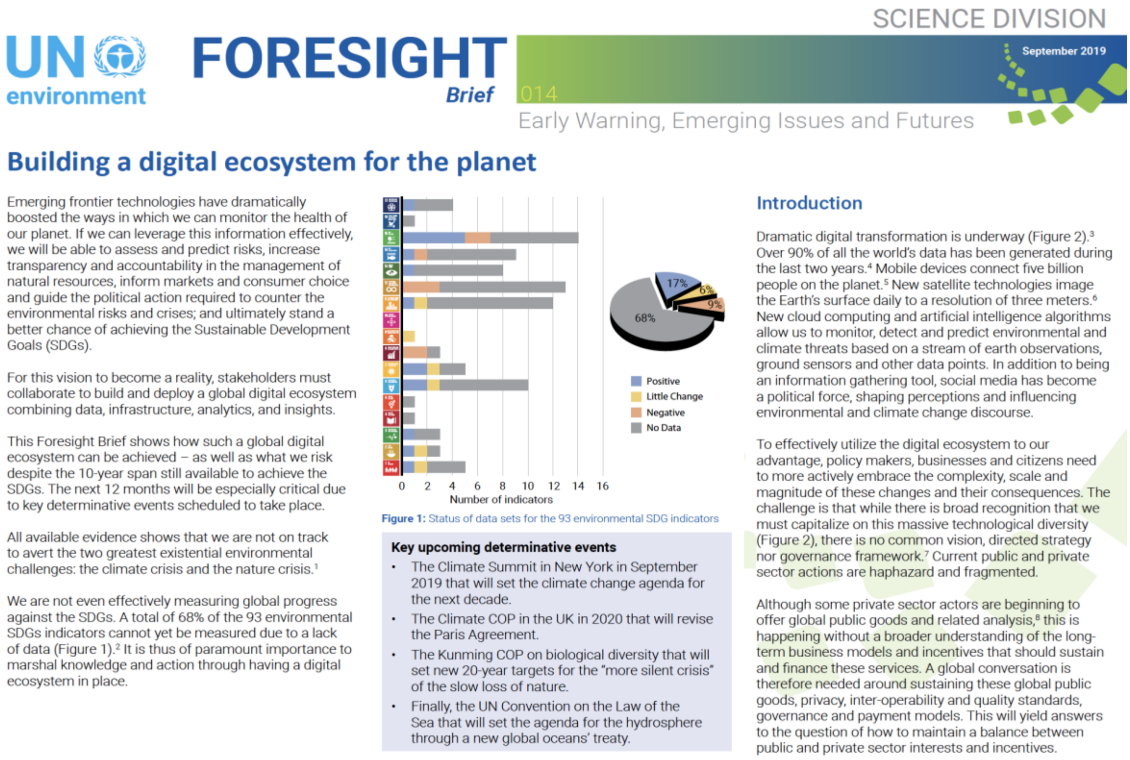
127. The project was planned include preliminary scoping work to explore and develop the links between UNEP Live with the China-ASEAN Environmental Cooperation Centre’s Belt and Road Big Data Platform. This was explored, but in the end the work under Output 1b focused on linking the World Environment Situation Room (WESR) (the successor to UNEP Live) with RADI’s data platform instead of the Belt and Road Big Data Platform. This was to take the form of initial scoping work and stakeholder consultations on data needs and availability to assess the feasibility and potential for data interchange and information/knowledge management. The ultimate objective of this work was to provide BRI stakeholders with access to accurate, credible, and policy-neutral scientific data and information upon which they can base policy choices and other decisions. The data interchange would cover geospatial, earth observation and remote sensing data on the environment, through WESR (the outfit platform of UNEP for the Big Data on the Environment, integrating geospatial, indicators and statistics on SDGs and global environmental monitoring). The project was also to pilot a program for the release of environmental data briefs, based upon UNEP Foresight Briefs, for selected Belt and Road countries. The specific activities of this project component included:

[9] https://www.greengrowthknowledge.org/case-studies/bri-green-development-case-study-report
[10] Source: BRI Green Development Case Study Report (2020), December 2020

- Expert and stakeholder consultation meeting(s) (and ongoing consultation following meeting) to assess data needs and availability,
- Stakeholder mapping,
- Data platform integration assessment,
- Data interchange through the World Environment Situation Room,
- 3 Foresight data briefs (1 per project year),
- Formulation of a project proposals to apply for funding to scale up the assessment and data integration work.

128. All three foresight briefs that were planned in the project document prepared and published on the UNEP website: WESR Data, Information and Knowledge on the Environment[11]. The three foresight briefs are:

- Building a digital ecosystem for the planet (September 2019),
- Blockchain Technology and Environmental Sustainability (October 2020), and
- Nature-Based Solutions for Urban Challenges (March 2021)



SCIENCE DIVISION

UN environment

FORESIGHT Brief

014

September 2019

Early Warning, Emerging Issues and Futures

Building a digital ecosystem for the planet

Emerging frontier technologies have dramatically boosted the ways in which we can monitor the health of our planet. If we can leverage this information effectively, we will be able to assess and predict risks, increase transparency and accountability in the management of natural resources, inform markets and consumer choice and guide the political action required to counter the environmental risks and crises; and ultimately stand a better chance of achieving the Sustainable Development Goals (SDGs).

For this vision to become a reality, stakeholders must collaborate to build and deploy a global digital ecosystem combining data, infrastructure, analytics, and insights.

This Foresight Brief shows how such a global digital ecosystem can be achieved – as well as what we risk despite the 10-year span still available to achieve the SDGs. The next 12 months will be especially critical due to key determinative events scheduled to take place.

All available evidence shows that we are not on track to avert the two greatest existential environmental challenges: the climate crisis and the nature crisis.[1]

We are not even effectively measuring global progress against the SDGs. A total of 68% of the 93 environmental SDGs indicators cannot yet be measured due to a lack of data (Figure 1).[2] It is thus of paramount importance to marshal knowledge and action through having a digital ecosystem in place.

Figure 1: Status of data sets for the 93 environmental SDG indicators

Key upcoming determinative events

- The Climate Summit in New York in September 2019 that will set the climate change agenda for the next decade.
- The Climate COP in the UK in 2020 that will revise the Paris Agreement.
- The Kunming COP on biological diversity that will set new 20-year targets for the "more silent crisis" of the slow loss of nature.
- Finally, the UN Convention on the Law of the Sea that will set the agenda for the hydrosphere through a new global oceans' treaty.

Introduction

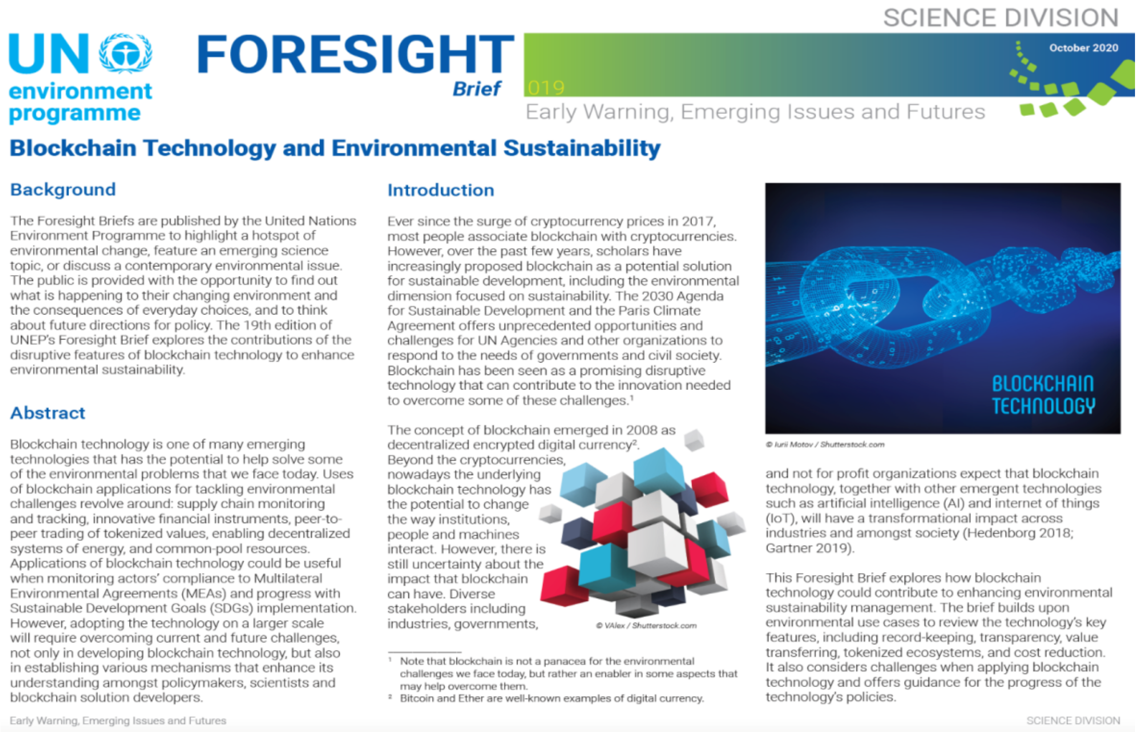
Dramatic digital transformation is underway (Figure 2).[3] Over 90% of all the world's data has been generated during the last two years.[4] Mobile devices connect five billion people on the planet.[5] New satellite technologies image the Earth's surface daily to a resolution of three meters.[6] New cloud computing and artificial intelligence algorithms allow us to monitor, detect and predict environmental and climate threats based on a stream of earth observations, ground sensors and other data points. In addition to being an information gathering tool, social media has become a political force, shaping perceptions and influencing environmental and climate change discourse.

To effectively utilize the digital ecosystem to our advantage, policy makers, businesses and citizens need to more actively embrace the complexity, scale and magnitude of these changes and their consequences. The challenge is that while there is broad recognition that we must capitalize on this massive technological diversity (Figure 2), there is no common vision, directed strategy nor governance framework.[7] Current public and private sector actions are haphazard and fragmented.

Although some private sector actors are beginning to offer global public goods and related analysis,[8] this is happening without a broader understanding of the long-term business models and incentives that should sustain and finance these services. A global conversation is therefore needed around sustaining these global public goods, privacy, inter-operability and quality standards, governance and payment models. This will yield answers to the question of how to maintain a balance between public and private sector interests and incentives.

Figure 9 Foresight brief: Building a digital ecosystem for the planet (September 2019)[12]

[11] https://wesr.unep.org/article/foresight-briefs
[12] https://wedocs.unep.org/bitstream/handle/20.500.11822/30612/Foresight014.pdf?sequence=1&isAllowed=y



SCIENCE DIVISION

UN environment programme — FORESIGHT Brief 019 — October 2020

Early Warning, Emerging Issues and Futures

Blockchain Technology and Environmental Sustainability

Background

The Foresight Briefs are published by the United Nations Environment Programme to highlight a hotspot of environmental change, feature an emerging science topic, or discuss a contemporary environmental issue. The public is provided with the opportunity to find out what is happening to their changing environment and the consequences of everyday choices, and to think about future directions for policy. The 19th edition of UNEP's Foresight Brief explores the contributions of the disruptive features of blockchain technology to enhance environmental sustainability.

Abstract

Blockchain technology is one of many emerging technologies that has the potential to help solve some of the environmental problems that we face today. Uses of blockchain applications for tackling environmental challenges revolve around: supply chain monitoring and tracking, innovative financial instruments, peer-to-peer trading of tokenized values, enabling decentralized systems of energy, and common-pool resources. Applications of blockchain technology could be useful when monitoring actors' compliance to Multilateral Environmental Agreements (MEAs) and progress with Sustainable Development Goals (SDGs) implementation. However, adopting the technology on a larger scale will require overcoming current and future challenges, not only in developing blockchain technology, but also in establishing various mechanisms that enhance its understanding amongst policymakers, scientists and blockchain solution developers.

Introduction

Ever since the surge of cryptocurrency prices in 2017, most people associate blockchain with cryptocurrencies. However, over the past few years, scholars have increasingly proposed blockchain as a potential solution for sustainable development, including the environmental dimension focused on sustainability. The 2030 Agenda for Sustainable Development and the Paris Climate Agreement offers unprecedented opportunities and challenges for UN Agencies and other organizations to respond to the needs of governments and civil society. Blockchain has been seen as a promising disruptive technology that can contribute to the innovation needed to overcome some of these challenges.[1]

The concept of blockchain emerged in 2008 as decentralized encrypted digital currency[2]. Beyond the cryptocurrencies, nowadays the underlying blockchain technology has the potential to change the way institutions, people and machines interact. However, there is still uncertainty about the impact that blockchain can have. Diverse stakeholders including industries, governments,

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[1] Note that blockchain is not a panacea for the environmental challenges we face today, but rather an enabler in some aspects that may help overcome them.
[2] Bitcoin and Ether are well-known examples of digital currency.

BLOCKCHAIN TECHNOLOGY

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and not for profit organizations expect that blockchain technology, together with other emergent technologies such as artificial intelligence (AI) and internet of things (IoT), will have a transformational impact across industries and amongst society (Hedenborg 2018; Gartner 2019).

This Foresight Brief explores how blockchain technology could contribute to enhancing environmental sustainability management. The brief builds upon environmental use cases to review the technology's key features, including record-keeping, transparency, value transferring, tokenized ecosystems, and cost reduction. It also considers challenges when applying blockchain technology and offers guidance for the progress of the technology's policies.

Early Warning, Emerging Issues and Futures — SCIENCE DIVISION

Figure 10 Foresight brief: Blockchain Technology and Environmental Sustainability (October 2020)[13]

SCIENCE DIVISION

UN environment programme — FORESIGHT Brief 023 — March 2021

Early Warning, Emerging Issues and Futures

Nature-Based Solutions for Urban Challenges

Background

The Foresight Briefs are published by the United Nations Environment Programme to highlight a hotspot of environmental change, feature an emerging science topic, or discuss a contemporary environmental issue. The public is provided with the opportunity to find out what is happening to their changing environment and the consequences of everyday choices, and to think about future directions for policy. The 23rd edition of UNEP's Foresight Brief provides an overview of the current state of knowledge on the implementation and effectiveness of nature-based solutions (NbS), and their potential to provide a broad range of important ecosystem services.

Summary

Climate change was recently added to the wide range of agelong social challenges stemming from urbanisation. These challenges are becoming increasingly urgent to address. This is because cities are developing at the fastest pace. Nature-based solutions (NbS) can be used to address certain social challenges in urban areas as they pertain to climate change and thus to improve the cities' resilience to climate change, quality of life of the city's dwellers and to increase biodiversity in the city through the creation of green spaces. In this Brief we focus on the potential and application of NbS towards adaptation to climate change in urban areas.

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Figure 11 Foresight brief: Nature-Based Solutions for Urban Challenges (March 2021)[14]

129. Full integration of the WESR and RADI's data platform with FECO's BRI Big Data platform was never achieved, which was clear after the scoping work for integration of the two platforms was done.

[13] https://wedocs.unep.org/bitstream/handle/20.500.11822/34226/FB019.pdf?sequence=1&isAllowed=y
[14] https://wedocs.unep.org/bitstream/handle/20.500.11822/35864/FB023.pdf

130. RADI became a member of this GRID Centers Network. An MoU was signed with RADI and UNEP, and RADI became a formal collaborative Partner of UNEP. The Partnership with RADI is going well. Geospatial maps were produced pro-bono by RADI and was revised and validated by UNEP in the Global Environmental Outlooks (GEO). Geospatial maps (90 of them) were produced by RADI to GEO. These maps were created by RADI and revised and validated by UNEP for the GEO.

131. For integration of WESR and RADI's platforms, the planning and documentation support on Application Programming Interface (API) and interoperability was completed, and the geospatial components are now interoperable. Regarding interoperability, the planning and documentation support for interoperability between the WESR and RADI big data platforms has been achieved, but not the actual implementation between interoperability platforms (support documentation available[15] as it can be seen on Figure 12).

Figure 12 Documentation support for interoperability between the WESR and RADI big data platforms

132. Furthermore, a publication for the Guidelines for Interoperability of the WESR CCA with Regional Knowledge and Data Hubs and other Platforms was issues as it can be seen on Figure 13.

[15] https://data.unep.org/article/wesr-resources

Figure 13 Guidelines for Interoperability of the WESR CCA with Regional Knowledge and Data Hubs and other Platforms

133. Work to achieve full-scale interoperability was not possible to be completed in the frames of this project due to lack of financial resources. Interoperability between the 2 big data platform is technically feasible with adequate financial resources. The scope of work was too broad.

134. The level on which the Projects are working should be well defined in the project document. Concretely, interoperability of the Big Data Platforms was easier to be achieved if it was known what level it is to be done for at the beginning of the project, taken there was a substantial funding for it. The funding of the project activities needs to be planned when creating the baseline, it needs to be realistic, adequate, and feasible. The project needs to have defined very well its deliverables and the outcomes, as well as the scope of work and the associated funding for it. There should be enough technical capacities for implementation of a platform.

135. UNEP Early Warning and Assessment Division is already implementing interoperability between platforms with: UN Regional Economic Commissions, Latin American and Caribbean and Asian Pacific regions. There is a prospect of achieving the actual interoperability of the Big Data Platforms in a future project. There was very good work done in interoperability platforms in the areas of air and water quality monitoring at

city level for the following cities: City level Cape Town, Nairobi, and Addis Ababa in Africa[16]. This was funded by China South-South funds.

136. The current big data platform is globally focused. The plan is to have regional and national platforms, which requires more substantive funding of about USD 1 million per country for a proper National Environment Situation for the Technology and Capacity Building elements.

Project Output 2: Capacity building for BRI stakeholders

137. This output focused on building capacity of BRI stakeholders to identify sustainable development opportunities and challenges associated with BRI investments, and policy conditions required to enable and address them. This includes ways for BRI to address pollution issues. The project was to develop and deliver training curricula targeted to policymakers in Southeast Asia, Central Asia, and South Asia. Separate curricula were developed for each region, but in general the training for policymakers focused on reducing risks through a better understanding of Multilateral Environmental Agreements and international norms and standards. On the opportunities side, the thematic modules were similar to those covered under the private sector curriculum, but with a greater focus on the identification of specific sustainable investment needs and the creation of enabling policy environments. Training also included information on gender mainstreaming in policies, and other social safeguards. Policy makers came from member states as well as relevant sub-regional intergovernmental forums including ASEAN Secretariat, the Interstate Commission for Sustainable Development, and others.

138. Capacity building seminars were to be held once per year (3 courses total), with policymakers from a different region receiving training each year (e.g., Central Asia, Southeast Asia, and South Asia). The training courses were developed in consultation with the respective regional stakeholders to ensure that they are needs-based and user focused. This was achieved in part through user-needs surveys that have already been circulated to stakeholders, and through ongoing and close coordination with UNEP Regional and Country Offices, which serve as the organization's formal link to member states. The curricula were also developed in cooperation with partner organizations to leverage the best existing information and expertise on topics relevant to the sustainable development of the Belt and Road.

139. For selection of the policymaker participants from BRI regions, the project team worked closely with the relevant UNEP Regional and Country teams, as well as national government focal points and other national and regional stakeholders (e.g., regional environmental NGOs or think tanks) to identify the right participants from the right countries. In most countries, the Ministries of Environment, or equivalent, were the project's primary target, as well as relevant legal and regulatory stakeholders. Countries were selected based on level of involvement in BRI, capacity building needs, level of interest and commitment to sustainability, past engagement with UNEP and its project partners, geographic balance, and feasibility of participation, among other criteria. In selecting countries, the project sought synergies with other related UNEP projects, such as those under the Partnership for Action of Green Economy, the UNEP-UNDP Poverty Environment Initiative, UNEP Finance Initiative, and others.

140. Efforts were made to ensure that project capacity building activities achieve a gender balance, including amongst meeting participants and trainers. The training curricula included information on gender aspects of sustainable development.

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[16] https://data.unep.org/article/african-cities-air-and-water-quality

141. Project Output 2 was fully achieved, and even overachieved. Instead of organizing the three planned Regional Capacity Building workshop trainings, by the end of five trainings were held worldwide: one for Central Asia, two for ASEAN, one for East Africa and one for Latin America and the Caribbean, where 126 participants came from 39 Belt and Road countries.

142. The first Regional Capacity Building workshop training: "Environmental Leadership Programme for the Green Development for the "BRI" for Central Asia was held in October 2018 in Turin, Italy. On this training, 15 delegates seen on Figure 14 from Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, Uzbekistan coming mainly from different branches of government such Foreign Affairs, Transportation, Investment and Development and Economic Development amongst others, gathered for a one-week training course, to discuss the challenges and opportunities for the development of the BRI from an environmental and social perspective. The training course was the product of a successful collaboration between UN Environment, the International Labour Organization and its International Training Centre located in Turin Italy.

Figure 14 Participants in the first face-to-face Regional Capacity Building training for Central Asia in October 2018

143. Given restrictions regarding travel and in-person meeting due to the COVID-19 crisis, all next four Regional Capacity Building workshop trainings were conducted online.

144. UNEP and the Government of Singapore, through the Infrastructure Asia initiative, jointly organized an online RCB workshop: "Environmental Leadership Programme for Sustainable Infrastructure" from 1-5 March 2021, with 25 participants from the following ASEAN countries: representing Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, Maldives, Myanmar, Pakistan, Philippines, Sri Lanka, and Viet Nam. This programme contained seven modules:

- Module 1: Infrastructure and Sustainable Development in the regional context: infrastructure linkages with SDGs, infrastructure needs in the region. Environmental and Social Challenges for Infrastructure Projects.

- Module 2: Macro-level infrastructure planning and integrated approaches.
- Module 3: Institutional Arrangements and Tools for Systems-level Infrastructure.
- Module 4: Green Finance: Access to Green Finance Under IFIs Funding Mechanism.
- Module 5: Labour/social considerations; Green Capacity building in local workforce and green jobs creation.
- Module 6: Urban-based infrastructure solutions, and
- Module 7: Nature-based infrastructure solutions.

145. The third RCB training: "Environmental Leadership Programme on Sustainable and Resilient Infrastructure" for East Africa was organized in partnership with UNITAR and the Government of Rwanda and was held online from 30 November to 8 December 2021. As seen on Figure 15, it was attended by 29 participants from 5 African countries: Ethiopia, Kenya, Rwanda, Uganda and Zambia, representing various governmental institutions involved in infrastructure development and planning in their respective countries. The course training material are available on the training course page hosted on the UN CC:Learn knowledge sharing platform[17]:

146. The training was structured around eight sessions:

- International Good Practice Principles for Sustainable Infrastructure.
- Systems-Level Infrastructure Planning.
- Financing Sustainable Infrastructure and Access to Green Finance.
- Resilient And Sustainable Social Housing.
- Nature-Based Infrastructure Solutions.
- Landscape-Scale Infrastructure Planning.
- Creating An Enabling Environment for Green Digital Technology And Case Study Digitalization Of Sustainable Transportation Infrastructure.
- Access To and Interpretation of Climate Data For Enhanced Forecasting And Early Warning Systems.

[17] https://www.uncclearn.org/materials-environmental-leadership-programme-on-sustainable-and-resilient-infrastructure-1st-edition/

Figure 15 Participants in the third virtual Regional Capacity Building training for East Africa in December 2021

147. The fourth RCB workshop training: “Environmental Leadership Programme on Sustainable and Resilient Infrastructure” for ASEAN was organized in partnership with the Government of Singapore, Infrastructure Asia and the Civil Service College (CSC) of Singapore and was held online from 4 to 8 July 2022. As seen on Figure 16 with an innovative way of presenting the participants for a training, it was attended by ASEAN Secretariat and 18 officials from 8 countries: Bhutan, India, Pakistan, Myanmar, Malaysia, Nepal, Philippines, and Sri Lanka.

Figure 16 Participants in the fourth virtual Regional Capacity Building training for ASEAN in July 2022

148. The UNEP Green Forum (Figure 17) was used as a repository for participants to access asynchronous and synchronous materials such as speaker bios, presentation materials, suggested pre-readings, articles, or other learning materials easily.

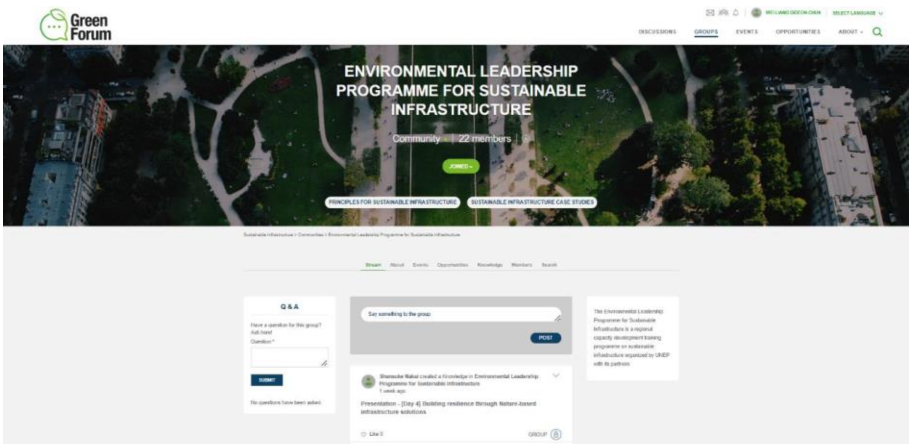

Figure 17 UNEP's Green Forum Learning Platform

149. The Outputs of the Group Work for this programme can be found on Figure 18.

GROUP 1

Programme	Learning Points

Day 1	• 10 principles of sustainable infrastructure
	• Infrastructure development as a driver for SDGs
	  ○ Infrastructure influences all dimensions of sustainable development (e.g., economy, environment, and society)
	• Integrated approach to infrastructure development
	  ○ Infrastructure as a system of system (environmental, economic, social)
	• Key challenges for infrastructure development
	  ○ Poor institutions
	  ○ Planning process
	  ○ Contract level agreements
	  ○ Finance
	  ○ Service level agreements
	  ○ Aging infrastructure assets

GROUP 1

Programme	Learning Points

Day 2	• Infrastructure project facilitation in Asia
	• 5 pillars of SG green plan
	  ○ Sustainable living
	  ○ City in nature
	  ○ Green economy
	  ○ Resilient future
	  ○ Energy resilience
	• Sustainable finance modes/ framework
	• Nature-based solutions

Day 3	• Capacity building for sustainable infrastructure (e.g., green construction)
	• Principles of decent work
	• Formalising the informal (e.g., work pass and pension schemes)
	• Tools/ frameworks for implementing sustainable infrastructure
	  ○ Integrated rural accessibility plans
	  ○ ABC water programme

GROUP 1

Programme	Learning Points

Day 4	• Nature-based/ **green-gray** infrastructure solutions
	  ○ Coastal protection
	  ○ Water security
	  ○ Flood control
	• Restoration of nature
	• Players, field, and the plays for green-gray infrastructure project strategies
	  ○ Organizational risk
	  ○ Strategies for green-gray infra. dev.
	    ■ Demonstrate cost effectiveness
	    ■ Cross-sector partnerships
	    ■ Promoting investors and sources of finance
	• Role of private sector (e.g., architectural, engineering and contractor) in sustainable infrastructure development

Day 5	• Technology in sustainable water management • Visualising carbon in infrastructure projects • SG integrated water system

GROUP 2

Programme	Learning Points
Day 1	• Introduction of Sustainable Infrastructure and sustainable good practices • Localising the SDGs for Asia and Asia Pacific • Relation between Infrastructure and SDGs and its dependency on Infrastructure • Challenges for Sustainable Infrastructure Planning • Evidence based Infrastructure for resilient and inclusive development
Day 2	• SG sustainable approach towards Singapore Green Plan 2030 • Supporting to Asia social and Infrastructure Development • Green Finance for Sustainable Development • Financing Instruments and Mechanism with municipalities
Day 3	• Importance of the capacity building in developing sustainable-infrastructure • Labour based project for employment • Water/Wastewater Management in Singapore case study

GROUP 2

Programme	Learning Points
Day 4	• Nature Based Infrastructure Development • Private sector experience in Sustainable Infrastructure • How Green Gray Infrastructure can be implemented in developing countries •
Day 5	• Water management • Knowledge sharing from abroad

GROUP 3

Programme	Learning Points
Day 1	Introduction to Sustainable Infrastructure and how important the infrastructure to overall SDGs Infrastructure can lead to damage to human lives like in earthquakes, therefore, sustainable infrastructure is required. Learn about international good practice principles for sustainable infrastructure
Day 2	Learnt about Green finance Learnt about Infrastructure Asia to support the regional growth Case of Singapore Green Plan 2030- will strengthen Singapore efforts to implement the Paris Agreement and the 2030 Agenda for Sustainable Goal. There are 5 pillars which are City in nature, sustainable living, energy reset, green economy and resilient future
Day 3	Waste water can be treated through NEWater plants and used for drinking, Singapore is the case study. Marina Barrage is a water reservoir; a site for excursion; and also helps in preventing floods in Singapore. Workforce capacity building Introduction to Quality Infrastructure Investment Principles

GROUP 3

Programme	Learning Points
Day 4	Case Study of green-gray infrastructure Learning on Nature-based Infrastructure Solutions principles and also nature-based solutions principles in a more broad sense
Day 5	Peer learning and reflections on how other countries in the region are dealing with similar challenges. for example, Pakistan has water in abundance but has water management problems which leads to flash floods during monsoon rains and summer season.

Figure 18 Outputs of the group work for the fourth virtual Regional Capacity Building workshop training in July 2022

150. The fifth RCB workshop: “Environmental Leadership Programme on Sustainable and Resilient Infrastructure for Latin America” for ASEAN was organized in partnership with the Government of Mexico, UNITAR and GIZ, and was held online from 26 September to 7 October 2022. As seen on Figure 19, it was attended by 38 participants from the Governments of Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, Paraguay, Peru, and Venezuela. A total of 206 expressed interests in participating in the training workshop and 45 participants were selected and admitted to the training. The training was fully organized online via Zoom.

151. The training programme focused on enhancing capacity of government officials to plan, assess, finance, build, maintain and decommission sustainable and climate-resilient infrastructure in countries in the Latin America region. A broad range of government agencies and other stakeholders involved in infrastructure planning, delivery, operation, monitoring, and evaluation were trained.

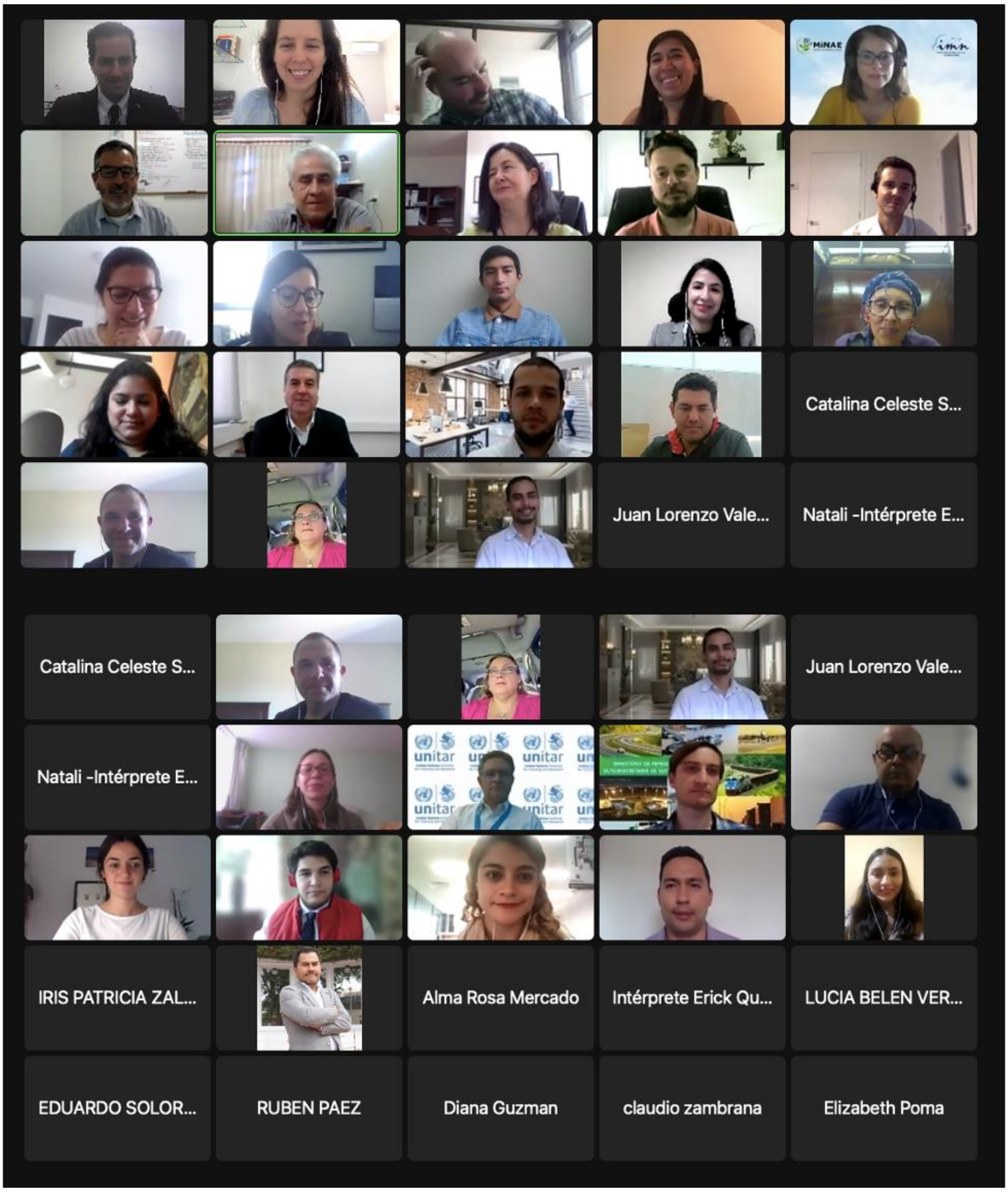

Figure 19 Participants in the fifth virtual Regional Capacity Building training for Latin America and the Caribbean in October 2022

152. The training was structured around eight topics in 15 sessions:

- Infrastructure Lifecycle and Strategic Planning of Sustainable Infrastructure Systems.
- Climate Resilience, Adaptation and Mitigation.
- Sustainable Finance.
- Public Participation and Indigenous Rights.

- Nature-based Solutions and Biodiversity.
- Human Rights and Gender Mainstreaming.
- Labor Markets and Green Jobs.
- Transparency, Anti-corruption and Evidence-based decision-making.

153. Overall, the participants of all five RCB trainings found this programme useful and relevant to their area of work in the evaluations they have done after the trainings have ended. Participants liked the pace and structure of the programmes, along with the presentations and sharing from different angles e.g., international organizations, public and private sectors.

154. Considering the overperforming of the project in its delivery of outputs, especially output 2, it is rated as **HIGHLY SATISFACTORY (HS)**.

Achievement of Project Outcomes

155. The achievement of the project's outcomes was evaluated based on the reconstructed ToC's causal pathways between outputs and outcomes, and the key review questions as they can be found Table 7.

Table 6 Main project achievements on outcome level by the end of the Project[18]

Achievement of results to date of project Terminal Review			
Outcome 1	**Indicator(s)**	**Target**	**Achieved/ Not Achieved/On target**
Public Sector Belt and Road stakeholders in the project countries have increased awareness and understanding of the sustainable development opportunities and challenges associated with Belt and Road investments, and policy conditions required to enable and address them.	Number of public sector stakeholders that are aware of the sustainable development opportunities and challenges associated with the Belt and Road Initiative (BRI).	[baseline: 0 target: 75]	Achieved Total Public Sector Belt and Road Stakeholders in the 39 Belt and Road countries that are aware of the sustainable development opportunities and challenges associated with the BRI are 126

156. This project had only one Project Outcome: "Public Sector BRI stakeholders in the project countries have increased awareness and understanding of the sustainable development opportunities and challenges associated with BRI investments, and policy conditions required to enable and address them." and both Project Outputs 1 (a and b) and 2 were following the logical pathway through an Intermediate state of: "Belt and Road Investments stakeholders from the public sectors better understand each other's sustainable development and sustainable investing needs, and better understand the sustainable development opportunities and challenges presented by BRI investments." To serve to fulfil the only project outcome.

157. The indicator for this outcome was the number of public sector stakeholders that are aware of the sustainable development opportunities and challenges associated with

[18] Source: Revision 3 of the Project Document from 2022

the BRI. Target of 75 public sector stakeholders was planned to be achieved. The target was overachieved by having 126 Public Sector BRI Stakeholders from 39 BRI countries that are aware of the sustainable development opportunities and challenges associated with the BRI, as well as with Sustainable and Resilient Infrastructure.

158. Indeed, the 126 participants from 39 BRI countries in the five RCB workshops have increased awareness and understanding of the sustainable development opportunities and challenges associated with BRI investments, and policy conditions required to enable and address them. The extent to which it achieved this goal was too early to assess in this case.

159. Generally, the Project has achieved the expected outputs and outcomes as they were stated in the original Project Document in 2018. The project has ended two years behind the original schedule due to the Covid-19 pandemics. Details on achievements per project component, outcome, output, containing the quantified and time-bound indicators and targets can be found in Table 8.

160. The Achievement of Project Outcomes is rated as **SATISFACTORY (S)**.

Table 7 Main project outcome and output-level indicators and their results achieved[19]

<table>
<tr>
<td colspan="2">Project Objective:
The project aims to equip public and private sector Belt and Road stakeholders in the project countries with the information and increased capacity to identify and apply ways in which Belt and Road investments can contribute to the Sustainable Development Goals and associated targets, and policy conditions required to enable these investments.</td>
<td colspan="2">Relevant Programme of Work Outcomes:
<u>Climate Action</u>
Outcomes:
- 1A: Decision-makers at all levels adopt decarbonization, dematerialization and resilience pathways.
- 1B: Countries and stakeholders have increased capacity, finance and access to technologies to deliver on the adaptation and mitigation goals of the Paris Agreement.
Indicators:
- (iii) Positive shift in public opinion, attitudes and actions in support of climate action as a result of UNEP action
<u>Nature Action</u>
Outcome:
- 2C: Nature conservation and restoration are enhanced.
Indicators:
- (iii) Number of countries and national, regional and subnational authorities and entities that incorporate, with UNEP support, biodiversity and ecosystem-based approaches into development and sectoral plans, policies and processes for the sustainable management and/or restoration of terrestrial, freshwater and marine areas
- (v) Positive shift in public opinion, attitudes and actions in support of biodiversity and ecosystem approaches</td>
<td>Sub-programme:
Climate Action ■
Nature Action ■ Chemicals and Pollution Action ☐
Science-Policy ☐ Environmental Governance ☐
Finance and Economic Transformations ■
Digital Transformations ☐</td>
</tr>
<tr>
<td>1. Project Outcome</td>
<td>Indicators</td>
<td>Relevant PoW Outcome(s) and indicator(s)</td>
<td>Relevant SDG target(s) and indicators</td>
<td>Outcome risks</td>
</tr>
</table>

[19] Source: Revision 3 of the Project Document from 2022

Public Sector Belt and Road stakeholders in the project countries have increased awareness and understanding of the sustainable development opportunities and challenges associated with Belt and Road investments, and policy conditions required to enable and address them.	1. Number of public sector stakeholders that are aware of the sustainable development opportunities and challenges associated with the Belt and Road Initiative; [baseline: 0 Rev 2 target: 75 New Rev 3 target: 100] *Achieved with 126*	Climate Action Outcomes: 1A, 1B Indicators: (iii) Nature Action Outcome: 2C Indicators: (iii), (v)	- SDG7, targets 7.2, 7A, 7B - SDG 8, target 8.3 - SDG 9, targets 9.1, 9.2, 9.4 - SDG 11, targets 11.2, 11A, - SDG 17, targets 17.3, 17.5, 17.7, 17.9, 17.14, 17.16, 7.17	Risk: Political instability and lack of political prioritization of sustainable development in the project countries Mitigation: Close communication with the counterparts of the project countries to confirm the political situation and continued prioritization of sustainable infrastructure.
Project outcome milestones			**Milestone attainment date**	
M1: 10 public sector stakeholders are aware of the sustainable investment opportunities associated with the Belt and Road Initiative			December 2018	
M2: 10 additional public sector stakeholders are aware of the sustainable investment opportunities associated with the Belt and Road Initiative			June 2019	
M3: 10 additional public sector stakeholders are aware of the sustainable investment opportunities associated with the Belt and Road Initiative			December 2019	
M4: 10 additional public sector stakeholders are aware of the sustainable investment opportunities associated with the Belt and Road Initiative			June 2020	
M5: 10 additional public sector stakeholders are aware of the sustainable investment opportunities associated with the Belt and Road Initiative			December 2020	
M6: 10 additional public sector stakeholders are aware of the sustainable investment opportunities associated with the Belt and Road Initiative			June 2021	
M7: 15 additional public sector stakeholders are aware of the sustainable investment opportunities associated with the Belt and Road Initiative			December 2021	
M9: 100 public stakeholders are aware of the sustainable investment opportunities associated with the Belt and Road Initiative			December 2022	
2. Project Outputs	**Indicators**	**Relevant PoW Direct Outcome(s)**	**Relevant SDG target(s) and indicators**	**Output risks**

1a) Collection and dissemination of case studies	a) Number of knowledge products published [baseline: 0 ; Rev 2 target: 3] *Achieved*	1.1. 1.2.1.3.1.4.1.5. 2.5. 2.7. 3.1.3.4. 3.5. 3.6. 3.7.	- SDG7, targets 7.2, 7A, 7B - SDG 8, target 8.3 - SDG 9, targets 9.1, 9.2, 9.4 - SDG 11, targets 11.2, 11A - SDG 17, targets 17.3, 17.5, 17.7, 17.9, 17.14, 17.16, 7.17	Risk: Political instability and lack of political prioritization of sustainable development in the project countries Mitigation: Close communication with the counterparts of the project countries to confirm the political situation and continued prioritization of sustainable infrastructure.
1b) Environmental data needs assessment, platform integration scoping, and creation and dissemination of environmental data briefs	a) Number of expert meetings held to assess data needs and availability [baseline:0 target: 1] *Achieved* b) Number of data platform integration assessments [baseline 0 target: 1] *Achieved* c) Number of Foresight Data Briefs published [baseline: 0 target: 3] *Achieved* d) Number of project proposals formulated [baseline: 0 target: 1] *Achieved* e) Number of Big data platforms interoperable [baseline 0 target: 2] *Partially achieved*	1.1. 1.3. 2.5.2.7.	- SDG 9, targets 9.1, 9.4 - SDG 11, targets 11A - SDG 17, targets 17.7, 17.9, 17.14, 17.16	Risk: Political instability and lack of political prioritization of sustainable development in the project countries Mitigation: Close communication with the counterparts of the project countries to confirm the political situation and continued prioritization of sustainable infrastructure.
2) Capacity building for Belt and Road stakeholders	a) Number of capacity building seminars held [baseline: 0 Rev 2 target: 3 *Achieved* Rev. 3 target: 5]	1.1.1.2. 1.3. 1.4. 1.5. 2.2. 2.5. 2.7. 3.1. 3.4. 3.5. 3.6. 3.7.	- SDG7, targets 7.2, 7A, 7B - SDG 8, target 8.3 - SDG 9, targets 9.1, 9.2, 9.4	Risk: Political instability and lack of political prioritization of sustainable development in the project countries

	b) Number of stakeholders that attend capacity building seminars [baseline: 0 Rev 2 target: 75 A*chieved* Rev. 3 target 100] c) Gender balance of seminar participants [baseline: 0 target: 50% male, 50% female] *Partially achieved, 56% male, 44% female*		- SDG 11, targets 11.2, 11A, - SDG 17, targets 17.3, 17.5, 17.7, 17.9, 17.14, 17.16, 7.17	Mitigation: Close communication with the counterparts of the project countries to confirm the political situation and continued prioritization of sustainable infrastructure.

Achievement of Likelihood of Impact

161. Based on the articulation of long-lasting effects in the reconstructed ToC, the Terminal Review assessed there to be a reasonable likelihood of actualizing the intended positive impacts.

162. The 2030 Project Impact stated: "BRI countries achieve energy, material and resource efficiency by using Economic tools, technical assistance, policy assessments and capacity-building provided to countries and regions to support achievement of Sustainable Development Goals through multiple pathways, policies and action plans". This is part of the UNEP Resource Efficiency Sub-programme Objective. The project objective should help achieve this impact through the intermediate state of: "BRI Investments contribute to the SDGs and their NDCs under the Paris Agreement.".

163. The Terminal Review did not find that the project result in any unintended negative effects—for example, vulnerable groups including those living with disabilities and/or women and children were not disproportionally affected by the project. In contrast, the project gives opportunities of green jobs creation through using green, sustainable and resilient infrastructure and including the vulnerable groups, women and youth.

164. The project has played a catalytic role and promoted scaling up of using sustainable and resilient infrastructure as a condition long-lasting impact of Sustainable Development and fulfilling the UN Agenda 2030.

165. Ultimately, UNEP and all its partners aim to bring about benefits to the environment and human well-being. It is difficult for this project to have likely impact statements that reflect such long-lasting or broad-based changes. However, the Review assessed the Project's likelihood to make a substantive contribution to the long-lasting changes represented by the SDGs and/or the intermediate-level results reflected in UNEP's Expected Accomplishments and the strategic priorities of funding partner(s), and its contribution is considered likely.

166. The likelihood of the project to make a substantive contribution to the long-lasting changes represented by the SDGs, and/or the intermediate-level results reflected in UNEP's Expected Accomplishments and the strategic priorities of funding partners, i.e., the Likelihood of Impact is considered as **LIKELY (L)**.

Project effectiveness at time of the Terminal Review is rated as SATISFACTORY (S) in the light of overall satisfactory project finalization and implementation. Main outputs achieved by the time of the Terminal Review are:

***Project Output 1a*—fully achieved.**

The report: "BRI Green Development Case Study Report and its Table of Contents (2020)" was published in December 2020 and included 13 case studies. The report was added to UNEP's sustainable infrastructure case study database hosted on GGKP[20].

Project Output 1 b—partially achieved.

All three foresight briefs:

1. Building a digital ecosystem for the planet,
2. Blockchain Technology and Environmental Sustainability, and
3. Nature-Based Solutions for Urban Challenges

planned in the project document were prepared and published on the UNEP website: World Environment Situation Room Data, Information and Knowledge on the Environment[21].

Full integration of WESR and RADI data platform, and scoping work for integrating WESR with FECO's BRI Big Data platform was not achieved. However, the planning and

[20] https://www.greengrowthknowledge.org/case-studies/bri-green-development-case-study-report

[21] https://wesr.unep.org/article/foresight-briefs

documentation support on API and interoperability was completed, and the geospatial components are now interoperable[22].

***Project Output 2—*fully achieved, and even overachieved.** Instead of organizing the three planned RCB training, five RCB trainings were organized worldwide by the end of the project: one for Central Asia, two for ASEAN, one for East Africa and one for Latin America and the Caribbean, where total of 126 participants participated from 39 Belt and Road countries.

Considering the overperforming of the project in its delivery of outputs is rated, it is rated as **HIGHLY SATISFACTORY (HS).**

The Achievement of Project Outcomes is rated as **SATISFACTORY (S)**, as 126 participants from 39 Belt and Road countries on the five RCB training have increased awareness and understanding of the sustainable development opportunities and challenges associated with Belt and Road investments, and policy conditions required to enable and address them, even though it is too early to say to which extent this was the case.

The likelihood of the project to make a substantive contribution to the long-lasting changes represented by the Sustainable Development Goals, and/or the intermediate-level results reflected in UNEP's Expected Accomplishments and the strategic priorities of funding partners, i.e. the Likelihood of Impact is considered as **LIKELY (L).**

Rating for Effectiveness: S

E. Financial Management

Adherence to UNEP's Financial Policies and Procedures

167. Contracts and agreements with service providers adhered to UNEP policies and procedures. There were slight delays in the transfer of funds to subcontractors for the RCB workshop trainings.

168. The rating given is **MODERATELY SATISFACTORY (MS)**, as there were slight delays in the transfer of funds to subcontractors for the RCB training workshops.

Completeness of Financial Information

169. Project financial information is incomplete, and the reviewer did not receive all the annual financial expenditure reports. Progress Reports 5 to 7 contained a basic budget table with Budget, spent Budget, Remaining budget, and Expenditure rate per Output, but not exactly for which activities they were spent. As part of the 5th and 8th report there was a detailed excel table on detailed expenditures dated 12.03.2020 and 28.02.2022 accordingly. However, the reviewer received the last detailed budget revision that was done in 2021. The expenditure report shows expenditures per project component.

170. Co-financing information was complete, with an in-kind contribution from UNEP for personnel costs, that were stated in the Budget Revision for the Project from 21.07.2022.

171. Financial completeness is rated as **MODERATELY SATISFACTORY (MS)**, as Project financial information is incomplete.

Communication Between Finance and Project Management Staff

[22] https://data.unep.org/article/wesr-resources .

172. Communication was good between the project management and the financial management officer. No problems were flagged.

173. Communication between finance and project management staff is rated as **SATISFACTORY (S)** as their communication was good.

In view of the incomplete financial information and slight delays in the transfer of funds to subcontractors, the Financial Management is rated **MODERATELY SATISFACTORY (MS).**

Rating for Financial Management: MODERATELY SATISFACTORY (MS)

F. Efficiency

174. The assessment of efficiency should answer whether the project is implemented in a cost-effective way and presents a lowest-cost option. It needs to consider if the project was delayed, and if so, whether the delay affects cost-effectiveness. Efficiency also considers adequacy of contributions of governments as well as the national executing agency for project implementation.

175. This subchapter gives an overview on the extent to which the Project has produced the results (outputs and outcomes) within the expected time frame.

176. The progress of the project was assessed against the existing LogFrame and corresponding targets and indicators. The submitted quarterly and annual progress reports indicated the progress against planned timeline of targets. Although the project was delayed by two years due to the Covid-19 pandemics, and some activities are behind schedule, stakeholders interviewed did not raise any serious issues regarding the timing of their delivery and the timing of project completion.

177. The Chinese MEE Grant of USD 1,000,000 (62% of total project costs) (as described in Table 9), together with the UNEP's planned in-kind project contribution of USD 610,700 (38% of total project costs) was made available in August 2018, amounting the total project budget of USD 1,610,700.

Table 8 Total Sustainable Belt and Road Project Financial Budget

Type of Allocation	Total Sustainable Belt and Road Project Budget (USD)
MEE Grant	1,000,000
UNEP	610,700[23]
Total Project Costs	**1,610,700**

178. The total interim project costs for the Project are presented in Figure 20. Out of the total project budget, for Output 1a, USD 213,527 were spent for project management, whereas USD 75,000 for development of Case Studies (BRI Green Development Case Study Report (2020)). For Output 1b – Data Platform Integration and the Publication: "Environmental Assessment of Information Technology Highway in the region of West Asia" were spent USD 137,641, and for the four Data Foresight Brief USD 9,590. For the Output 2, USD 78,778 were spent for project management; USD 86,058 for the Central Asia Regional Capacity Building workshop training; USD 90,049 for the Asia (ASEAN) Regional Capacity Building workshop training; USD 83,300 for Africa Regional Capacity Building workshop training; USD 66,000; and USD 45,000 for the Project Terminal

[23] The UNEP contribution of USD 237,750 was in-kind.

Evaluation. The Project Support Costs (PSC) for all the Outputs were USD 115,052. The UNEP in-kind contribution for the Project Personnel costs amounted to USD 237,750.

179. The EOU notes that the figures in para 178, above, indicate expenditure of a total value USD 999,995 from a grant of USD 1,000,000 with in-kind contributions to a value of USD 237,750 against the planned figure of USD 610,700.

180. Whereas the original Budget Estimate for the Project from UNEP ToR Terminal Review was USD 1,610,700 inclusive of the planned UNEP in-kind contribution of USD 610,700, the in-kind contribution as of July 2022 became USD 237,750 (which is only 39% of the planned in-kind contribution at project design phase)[24]. The Chinese MEE contribution from the CTF remained at USD 1,000,000.

[24] The final expenditure report can only be prepared after completing all expenditures, including payment for a consultant for this terminal review. Therefore, as of the preparation of this terminal review report, it does not exist and cannot be attached here. The expenditure report is being prepared by the UNON and the Project Manager and will be shared with relevant parties once ready.

Project	PIMS ID: 1993: 614.5b Sharing Experience and Knowledge for a Sustainable Belt and Road
LogFrame Element	L4
Version	Revision/Initial

Output	Activity	Description (Output/Activity)	CLASS	2018 Amount	2019 Amount	2020 Amount	2021 Amount	2022 Amount	Grand Total
Output 1a	Activity a	Project Management	Total	55,000	47,185	111,342			213,527
			CONTRACT SERVICE						
			IP-PSC		1,920				1,920
			OPERAT OTH COSTS						
			STAFF PERSONNEL		9,737	111,342			121,079
			TRANSFER/GRANT TO IP	55,000	35,528				90,528
			TRAVEL						
Output 1a	Activity b	Development of Case studies	Total			75,000			75,000
			CONTRACT SERVICE						
			IP-PSC						
			OPERAT OTH COSTS						
			STAFF PERSONNEL						
			TRANSFER/GRANT TO IP			75,000			75,000
			TRAVEL						
Output 1b	Acivity a	Data Platform Integration	Total		103,468	4,619	29,554		137,641
			CONTRACT SERVICE		3,927	(1,210)	(16)		2,701
			IP-PSC						
			OPERAT OTH COSTS			5,957	1,225		7,182
			EQUIP VEH FURNIT						
			STAFF PERSONNEL		12,993				12,993
			TRANSFER/GRANT TO IP		80,000		30,000		110,000
			TRAVEL		6,548	(128)	(1,655)		4,765
Output 1b	Acivity b	Data Foresight Briefs	Total				9,595		9,595
			CONTRACT SERVICE				95		95
			IP-PSC						
			OPERAT OTH COSTS						
			STAFF PERSONNEL				9,500		9,500
			TRANSFER/GRANT TO IP						
			TRAVEL						
Output 2	Acivity a	Project Management	Total			10,515	51,238	17,025	78,778
			CONTRACT SERVICE						
			IP-PSC						
			OPERAT OTH COSTS				10,163		10,163
			STAFF PERSONNEL				41,075		41,075
			TRANSFER/GRANT TO IP						
			TRAVEL			10,515		17,025	27,540
Output 2	Acivity b	Central Asia Regional Capacity Building Course	Total	95,659	6,704	(16,305)			86,058
			CONTRACT SERVICE						
			IP-PSC	7,636		(7,636)			
			OPERAT OTH COSTS	256					256
			STAFF PERSONNEL						
			TRANSFER/GRANT TO IP	76,364		(8,669)			67,695
			TRAVEL	11,403	6,704				18,107
Output 2	Acivity c	Asia Regional Capacity Building Course	Total		83,743	6,931	(625)		90,049
			CONTRACT SERVICE						
			IP-PSC						
			OPERAT OTH COSTS		(152)	(104)			(256)
			STAFF PERSONNEL			7,035			7,035
			TRANSFER/GRANT TO IP		83,894				83,894
			TRAVEL				(625)		(625)
Output 2	Acivity d	Africa Regional Capacity Building Course	Total				83,300		83,300
			CONTRACT SERVICE						
			IP-PSC						
			OPERAT OTH COSTS						
			STAFF PERSONNEL					84	84
			TRANSFER/GRANT TO IP				83,300		83,300
			TRAVEL						
		Latin America Regional Capacity Building Course	Total					66,000	66,000
			CONTRACT SERVICE						
			IP-PSC						
			OPERAT OTH COSTS						
			STAFF PERSONNEL						
			TRANSFER/GRANT TO IP					66,000	
			TRAVEL						
Output 2	Acivity e	Project terminal evaluation	Total					45,000	45,000
			CONTRACT SERVICE						
			IP-PSC						
			OPERAT OTH COSTS						
			STAFF PERSONNEL					45,000	45,000
			TRANSFER/GRANT TO IP						
			TRAVEL						
UNEP PSC (all outputs)			UN-PSC	6,519	20,513	31,185	17,284	39,551	115,052
			Totals	157,178	261,612	223,287	190,347	167,576	1,000,000

			2018	2019	2020	2021	2022	Total
In Kind EF & RB Posts	Environment Fund post contribtutions	D1, South-South Cooperation Principle Officer, Policy and Programme Division	25,000	25,000				50,000
		P5, Head, Economic and Trade Policy Unit, Economy Division	13,000	13,000	26,000	26,000	26,000	104,000
		D1, Chief of Country Outreach, Technology and Innovation Branch, Science Division	12,500	12,500	12,500	12,500		50,000
		P5, Head, Thematic Assessments Unit, Science Division	11,250	11,250	11,250			33,750
			61,750	61,750	49,750	38,500		
						Total in kind		237,750
						Total secured+in kind		1,237,750

Name and signature of Project Manager
Date:

Digitally signed by Fulai SHENG
Reason: Head, Economic and Trade Policy Unit
Date: 2022-07-21 10:44:13

Notes

Figure 20 Budget Revision for the Sustainable Belt and Road Project (2018-2022)[25]

Lowest cost option for the demonstration project solution

181. The cost-effectiveness of the Project has been assessed through the perception of the stakeholders interviewed and is assessed as being good. There were no similar regional projects implemented to enable a comparison.

182. All subcontractors for the outputs 1a, 1b and 2 have delivered beyond their responsibilities in the ToR. The partner organizers of the RCB workshop trainings: UNITAR, ITC-ILO, GIZ, Singapore Cooperation Programme (SCP) of the Government of Singapore, and Infrastructure Asia all had their in-kind contributions to this project with their personnel costs and the costs for experts/lecturers that they could not quantify at the time of the individual interviews or focus-group discussions.

No-cost project extensions due to Covid-19 Pandemics

183. It should be noted that due to the Covid-19 Pandemics, there were two no-cost extensions of the Project, which has extended the project duration for additional two years. However, as the pandemics was a force majeure, and it has affected all the development project throughout the world, this cannot be taken as inefficiency of the Project Management Team. These extensions did not cause additional costs to the project, which is important when efficiency is being assessed and implies that the project was not less efficient due to the non-cost extensions. However, this did not affect the project sustainability. In contrast, because in-person RCB workshops were not possible due to Covid-19 pandemics, they had to be replaced by virtual trainings. Consequently, Output 2: providing the RCB training workshops surpassed its target by two additional sustainable infrastructure trainings organized (they were not planned for in the original project document and work plan): ASEAN 2 and Latin America and the Caribbean. This increase both effectiveness and efficiency of the UNEP Project: "Sharing Experience and Knowledge for a Sustainable Belt and Road."

The Terminal Review has concluded that the efficiency of the Project is **HIGHLY SATISFACTORY (HS)** as it was ensured to produce cost-effectiveness (Efficiency of results delivered) during project implementation. The project was financed by the MEE's Grant of USD 1,000,000, together with the UNEP's in-kind project contribution of USD 237,500 that was made available in August 2018, amounting the total project costs of USD 1,237,500 for this project. The project was generally perceived as cost-effective. All project partners have delivered much more than in their ToR. The project lived through two non-cost extensions of two years due to the Covid-19 pandemics, however they did not affect project efficiency. Final results from project management and financial management at time of the Terminal Review suggest that the **Project Efficiency is rated HIGHLY SATISFACTORY (HS)**.

Rating for Efficiency: HS

G. Monitoring and Reporting

Monitoring Design and Budgeting

184. The monitoring design and plan were detailed in the project document, which can be seen as Annex V of this Terminal Review Report. The indicators were not all SMART, especially in Output 1b, some indicators are not well defined, and therewith not measurable. The indicator variables were geared more towards the output level, as there are three outputs and one outcome in the project. The same were focused more

[25] Source: UNEP Annex 3-614.5 b Project Budget_rev.3_from 21.07.2022

on participation numbers and tools rather than any demonstrated level of capacity or behaviour change.

185. There was no budgeted monitoring plan for this project. The budget is stated as N/A, and only staff time (on UNEP's in-kind contribution) was stated in the bracket. Only in the 7th progress report there was a budget for the terminal evaluation, but no concrete monitoring plan.

186. Monitoring design and budgeting is rated as **MODERATELY UNSATISFACTORY (MU)**, as there was no budgeted monitoring plan for this project.

Monitoring of Project Implementation

187. The monitoring design and plan were detailed in the project document, which can be seen in Annex V of this Terminal Review Report. The indicators were not all SMART, especially in Output 1b, some indicators are not well defined, and therewith not measurable. The indicator variables were geared more towards the output level, as there are three outputs and one outcome in the project. The same were focused more on participation numbers and tools rather than any demonstrated level of capacity or behaviour change.

188. There was no budgeted monitoring plan for this project. The budget is stated as N/A, and only staff time (on UNEP's in-kind contribution) was stated in the bracket. Only in the 7th progress report there was a budget for the terminal evaluation, but no concrete monitoring plan.

189. Monitoring design and budgeting is rated as **MODERATELY UNSATISFACTORY (MU)**, as there was no budgeted monitoring plan for this project.

Project Reporting

190. All main reports were completed with a satisfactory quality, including the annual reports and quarterly reporting.

191. The reporting was very detailed, always with updated LogFrame with current results. It was also containing the challenges faced during implementation and management actions how to overcome the same.

192. Project reporting is rated as **SATISFACTORY (S)**, as the main reports were completed, and the reporting was very detailed.

Monitoring and Reporting is rated **MODERATELY SATISFACTORY (MS)**, as the main reports were completed with great detail. However, there was no budgeted monitoring plan and no evidence to suggest how co-financing as in-kind contribution was used in project monitoring (as was planned with staff time).

Rating for Monitoring and Reporting:	**MS**

H. Sustainability

193. The assessment of sustainability at the time of the Terminal Review should explain how the risks to project outcomes will affect continuation of benefits after the Project ends, including both exogenous and endogenous risks. Based on UNEP's evaluation policies and procedures, the overall rating for sustainability cannot be higher than the lowest rating for any of the individual components.

194. However, it should be mentioned that the Project will likely have significant positive and sustainable impacts on the Climate Change, Adaptation and Mitigation practices in the BRI countries beyond the duration of the Project. The Project was able to show

that if the countries are using sustainable and resilient infrastructure, there are great levels of economical/financial, environmental, and socio-political benefits to be expected out of it, especially creation of green jobs. Therefore, this project can be seen as a primer project enabling replication of the sustainable and resilient infrastructure practices throughout multiple sectors (including roads, buildings, tourism etc.), and institutions in the future.

195. Furthermore, there are additional benefits due to building local capacities on Environmental Leadership on Sustainable and Resilient Infrastructure in the Governments and State Institutions in the BRI countries. The public and private sector could implement sustainable infrastructure project along the supportive legislation to fulfill NDCs under the Paris Agreement.

Socio-political Sustainability

196. The Project made intensive capacity building efforts which are likely to be sustained for those participants on the regional capacity building workshop trainings from the public sector who have stayed in their position (or moved on to similar positions) within the Ministries of Environmental Protection, Ministries of Energy and Infrastructure, local governments etc. in the BRI countries.

197. One of the biggest successes of the project is the building of effective partnerships and professional relationships among the actors working in environment and sustainable infrastructure in the BRI countries, and this will likely continue to function as a network.

198. The country ownership in terms of championship (resulting from this increased capacity) sits mostly within the Ministries of Environmental Protection, Ministries of Energy and Infrastructure and other equivalent ministries. It is likely that the socio-political sustainability for establishing sustainable and resilient infrastructure will be secured in the future, as it is an obligation under the Paris Climate Change Agreement to fulfil NDCs. All 39 BRI countries from this project are signatory parties to the Paris Agreement.

199. Given the reasons above, the Socio-political sustainability is rated as **LIKELY (L)**, as there are no risks to the socio-political sustainability, as it is an obligation under the Paris Climate Change Agreement to fulfil NDCs. All the 39 BRI countries from this project are signatory parties to the Paris Agreement.

Financial Sustainability

200. The Project was able to achieve a lot of outputs with very little financing. This was a product of a resilient-working team with a support structure based on a strong partnership of stakeholders, especially for organizing and conducting the regional capacity building workshop trainings for participants from 39 countries worldwide.

201. There are two moderate financial risks to sustainability:

202. Financial risks associated with the sustainability of the fundraising mechanisms for climate resilient infrastructure development in the BRI countries, i.e., if the countries are not able to finance the Sustainable and Resilient Infrastructure using green and nature-based solutions infrastructure.

203. The Governments of the 39 BRI countries that were part of the Project must be convinced of the effects that the Climate Change will have in the future to be willing to commit resources for using green infrastructure, and therewith to Adapt and Mitigate the devastating consequences of Climate Change.

204. With the above said, there are moderate risks that affect this dimension of sustainability, which leads to **MODERATELY LIKELY (ML)** sustainability of financial risks, if the countries are not able to finance the Sustainable and Resilient Infrastructure using green and nature-based solutions infrastructure.

Institutional Sustainability

205. The Project was a best practice example for how partnerships were created, a good network and good results sharing on various platforms and conference.

206. The institutional framework on CCA in the BRI countries is very strong as they all are parties of the United Nations Framework Convention on Climate Change (UNFCCC), signees of the Paris Agreement.

207. There are no governance risks to Climate Change and Adaptation in the BRI countries, as the National Communications as part of UNFCCC and the Paris Agreement have all shown concrete evidence that the countries in the region are highly exposed and highly sensitive to climate change.

208. Future project ownership by the Governments of the BRI countries would help alleviate some of the institutional framework risks.

209. There are no risks that affecting institutional framework and governance sustainability as all institutional frameworks for Climate Change and Adaptation are put in place in the BRI countries, which causes this sustainability to be **LIKELY (L)**.

Overall, the sustainability rating for the Sustainable Belt and Road Project at the time of the Terminal Review is **MODERATELY LIKELY (ML)**, which means that there are moderate risks affecting the socio-political and financial dimension of sustainability. An assessment is given taken into consideration moderate risks to sustainability after the project ends, namely, the financial risks to sustainability.

Rating for Sustainability:	**ML**

I. Factors Affecting Performance and Cross-Cutting Issues

Preparation and Readiness

210. The Project clearly outlined the baseline situation and articulated the problem statement. It demonstrated a good understanding of the gaps it intended to address. At project started in August 2018, the project was well prepared and ready to be implemented. All financial resources were in place at the start of the project, both the Chinese MEE financing of a grant amounting to USD 1,000,000 and UNEP's in-kind co-financing of USD 237,500.

211. The project management was well in place and working efficiently.

212. Primarily because the project was well prepared and ready to implement at the start of the project in August 2018, financial resources were in place, and project management was fully in place, the Preparation and Readiness for Implementation is rated **HIGLY SATISFACTORY (HS)**.

Quality of Project Management and Supervision

UNEP/Implementing Agency (IA)

213. UNEP Policy and Programme Division, Economy Division (now Industry and Economy Division), and UNEP Science Division (now Early Warning and Assessment Division) were the Implementing Agencies and had the overall lead of the project. The team

consisted of a South-South Cooperation Principal Officer, Senior Economist from the Industry and Economy Division as a Project Manager, Lead of Sustainable Infrastructure from the Industry and Economy Division and a Team Member from the Sustainable Infrastructure from the Industry and Economy Division. Furthermore, there were two team members from the UNEP Science Division: Chief of Country Outreach, Technology and Innovation Branch, Science Division and the Head, Thematic Assessments Unit, Science Division. The Project Manager had a large portfolio of projects and a vast amount of experience and expertise. All project team members had solid overview of the project and understood its importance.

214. The IA supported the project and gave it guidance when needed, but also gave the project room to flow. Particularly, the IA supported the project in terms of adaptive management and project reporting.

215. Project supervision and management by the IA is rated as **HIGHLY SATISFACTORY (HS)**, as the project management of UNEP was excellent.

Executing Agency (EA), Project Management Team (PMT), and Partners

216. The project was initially managed by the South-South Cooperation Principle Officer in the Policy and Programme Division, but midway through the project the Senior Economist from the Resources and Markets Branch in the Industry and Economy Division took over as Project Manager (PM). The project was very well managed through the PM who was a strong facilitator with the Donor and had solid collaboration with the UNEP Science Division, as well as with partners with whom the RCB workshop trainings were organized.

217. The project did very well to move results forward despite the Covid-19 crisis and the challenges, especially logistical ones that arises from it. There was no Steering Committee for this project.

218. Implementing partners were numerous: FECO, UNITAR, ITC-ILO, GIZ, SCP of the Government of Singapore, Infrastructure Asia, CSC of Singapore, Government of Rwanda, Government of Mexico, United National Economic and Social Commission for Asia and the Pacific (UNESCAP), and others. The collaboration between the EA and the implementing partners was smooth at most times, with minor issues concerning late payments and last-minute announcements of collaboration to the subcontractors.

219. Overall, during project implementation the project management has been effective and efficient. UNEP had clear roles and responsibilities for the Geneva Office, the PMT and the subcontractors from UNEP Nairobi Office and the donors, organizers, counterparts, and lecturers for the RCB workshop trainings were adequately resourced for their project management. With this management structure they have started to fulfil their goals in line with those set out in the project logical framework, although experiencing some delays at the beginning of the Covid-19 pandemics. Subcontracts have been used for the implementation of the two project components conducting project activities as needed.

220. Overall, owing to excellent management and adaptive management of project and strong partnerships, the rating for the executing agency and partners is **HIGHLY SATISFACATORY (HS)**, allowing for the Rating for Project management and supervision to be **HIGHLY SATISFACATORY (HS)**.

Stakeholders Participation and Cooperation

221. The project was exemplary in its partnerships, as already noted in the section above. There were numerous planned partnerships since the beginning of this project.

222. Additional partnerships with various stakeholders were established with new ASEAN countries and the Government of Mexico as there was leftover budget from Covid-19 pandemics because the RCB trainings took place online.

223. It was due to partnership and the engagement process in general that the project was able to work so well even in the absence of direction from a steering committee.

224. Partnerships and cooperation are rated as **HIGHLY SATISFACTORY (HS)**, as there were exemplary partnerships made during this project.

Responsiveness to Human Rights and Gender Equality

225. Gender mainstreaming includes an assessment of the extent to which socio-economic benefits delivered by the project include consideration of gender dimensions. This has been assessed through interviews and desk review of reporting of the gender balance in beneficiaries and the perception of gender balance, as well as the extent to which gender was considered during the design and implementation of the project.

226. Gender was considered in the project design so that the project output 2 was to include a gender balanced approach during the RCB workshop trainings. Trainings included information on mainstreaming gender into policies, and other social safeguards. Policy makers were stemming from member states as well as relevant sub-regional intergovernmental forums including ASEAN Secretariat, the Interstate Commission for Sustainable Development, and others. Efforts were made to ensure that project capacity building activities achieve a gender balance, including amongst meeting participants and trainers. The training curricula included information on gender aspects of sustainable development. Gender perspectives were also to be incorporated into project knowledge and data products when applicable.

227. The database work under project Output 1b proceeded with the goal of maximizing the availability of gender-disaggregated data on public databases and platforms (i.e., subject to data availability).

228. The project had almost equitable participation of women and men in RCB trainings, as it can be seen in Figure 21. The male participants dominated with 56% or 70 participants, whereas women were presented with 44% or 56 of total 126 participants on the RCB trainings.

Gender balance					
Regional Capacity Building (RCB) Workshop Training	Male (number of participants)	Female (number of participants)	Total Participants	Male (%)	Female (%)
Y1: Central Asia	10	5	15	67%	33%
Y2: ASEAN	10	15	25	40%	60%
Y3: East Africa	21	8	29	72%	28%
Y4: ASEAN	10	9	19	53%	47%
Y4: LatAm	19	19	38	50%	50%
Total	**70**	**56**	**126**	**56%**	**44%**

Figure 21 Gender Balance at the five Regional Capacity Building training[26]

229. The teams organizing and lecturing at RCB trainings from Organizations, such as UNITAR, ITC-ILO, GIZ, SCP of the Government of Singapore, CSC, and Infrastructure Asia had strong woman-representation.

230. Considering the human rights dimension, women's rights, and human rights, especially for equal labour were considered during the RCB workshop trainings in the seminar:

[26] Information from Project Management received in February 2023, and doublechecked with the Final Reports from RCB trainings

Labour/social considerations; Green Capacity building in local workforce and green jobs creation.

231. During the Latin American and the Caribbean RCB training workshops, there was a special topic on Human Rights and Gender Mainstreaming covering the different groups at risk of exclusion from infrastructure projects and focusing particularly on gender. Since infrastructure is not gender-neutral, a failure to account for the needs of women, girls, and the LGBTQI+ communities leave these groups disproportionally affected by inadequate energy, sanitation, transport and other critical infrastructures. Participants looked at the negative effects of neglecting marginalized groups in the planning of infrastructure projects and how to account for social inclusion and equality in the different stages of infrastructure planning.

232. To conclude, the responsiveness to human rights and gender equality were carefully considered and executed in the Project from the project design, throughout project implementation to its Terminal Review is rated **HIGHLY SATISFACTORY (HS)**. The project manager took responsibility for incorporating gender perspectives and ensuring equal participation of women and men in all areas of the project.

Environmental and Social Safeguards

233. Project outputs and outcomes directly contribute to the implementation of the Paris Agreement adopted by the UNFCCC, as well as to the Sub-programmes of UNEP: Climate Action, Nature Action, Chemicals and Pollution Action, Science-Policy, Environmental Governance, Finance and Economic Transformations, and Digital Transformations.

234. The UNEP Project: “Sharing Experience and Knowledge for a Sustainable Belt and Road” contributed to the following PoW outcomes :

- Decision-makers at all levels adopt decarbonization, dematerialization and resilience pathways.
- An economically and socially sustainable pathway for halting and reversing the loss of biodiversity and ecosystem integrity is established.
- Human health and environmental outcomes are optimized through enhanced capacity and leadership in the sound management of chemicals and waste.
- Countries and stakeholders have increased capacity, finance, and access to technologies to deliver on the adaptation and mitigation goals of the Paris Agreement.
- Sustainable management of nature is adopted and implemented in development frameworks.
- Waste management is improved, including through circular processes, safe recovery of secondary raw materials and progressive reduction of open burning and dump sites.
- State and non-State actors adopt the enhanced transparency framework arrangements under the Paris Agreement.
- Nature conservation and restoration are enhanced.
- Releases of pollutants to air, water, soil and the ocean are reduced.

235. There was no environmental and social safeguards screening done in the project design phase. However, the project aimed to safeguard environment and society directly through its work on environmental leadership in sustainable, resilient, and nature-based infrastructure, as well as in creating green jobs.

236. The project did well in bringing this issue to the forefront in all the 39 BRI countries worldwide from where the where the RCB workshops took place, and into the agenda for sustainable development in the country.

237. Environmental and social safeguards rated as **HIGHLY SATISFACTORY (HS)**, as project outputs and outcomes directly contribute to the implementation of the Paris Agreement adopted by the UNFCCC, and its work aimed to safeguard environment and society directly through its work on environmental leadership in sustainable, resilient, and nature-based infrastructure, as well as in creating green jobs.

Country Ownership and Driven-ness

238. As already stated in previous sections of this report, there was strong government ownership of the project from the countries where the participants at the regional capacity building workshop trainings were coming from. This said, key capacities on environmental leadership in sustainable and resilient infrastructure have been built. It is difficult to discuss country ownership and drive-ness for a project that was encompassing government and private sector officials coming from 39 countries around the globe.

239. Country ownership and drive-ness is rated as **SATISFACTORY (S)**, key capacities on environmental leadership in sustainable and resilient infrastructure have been built.

Communication and Public Awareness

240. Communication strategy and knowledge management strategy was part of the original project document. Consequently, there was a lot of good communications work done and quite a lot of effort in sharing results and findings by many different project partners at their websites, conferences, and events.

241. There were numerous websites that were used as a good platform for different aspects of the project, but there was no project specific website. More details on the websites used for dissemination of information produced by this project were given under D. Effectiveness of V. Review Findings.

242. The project delivered good quality publications:

- BRI Green Development Case Study Report (2020),
- 3 Foresight Briefs issues by the UNEP Science Division on:
- Foresight Brief 014 from September 2019 on Building a digital ecosystem for the planet,
- Foresight Brief 019 from October 2020 on Blockchain Technology and Environmental Sustainability, and
- Foresight Brief 023 from March 2021 on Nature-Based Solutions for Urban Challenges.
- Publication: "Environmental Assessment of Information Technology Highway in the region of West Asia".

243. The case studies collected by the project were published in annual briefs and a final project report. The project also publicized the capacity building activities through the Coalition and other networks, as well as through traditional media in China and internationally, as appropriate. Project activities also received coverage on the UNEP and project partners' websites.

244. The project also utilized existing knowledge platforms and dissemination/communication mechanisms to publicize project activities and

knowledge products, including: GGKP and social media platforms such as Facebook, Twitter, and others. The UNEP Green Forum website was used by participants on the RCB trainings for easy access to information and materials. Beyond simply providing hosting platforms for knowledge products, these initiatives had existing networks and communities of contributors and users that were effective in raising public awareness about the outputs of this project and utilized social media to maximize their profiles.

245. Regional and countries offices played a key role in the design and delivery of this project, particularly in providing lessons learned and best practices when working with specific stakeholders in various countries and regions. They also played a key role in developing the substantive content of this project, in both the RCB workshops and knowledge sharing components and served as an important conduit for engagement with national and regional stakeholders.

246. Communication and public awareness are rated as **HIGHLY SATISFACTORY (HS)** because of the global exposure of this project in 39 countries through its participants in the RCB trainings on Sustainable Infrastructure as a pillar of fulfilling the SDGs and Agenda 2030 of the UN.

The project was well prepared and ready to implement at the start of the project in August 2018 with functioning project management throughout the project implementation through the difficult times of Covid-19 pandemics (during which the project overcame the challenges through overachieving in RCB) until December 2022. Furthermore, the project has well taken into consideration the gender and human rights dimensions, as well as environmental, social and economic safeguards. The Project also had good communications and public awareness and built strong partnerships with diverse organizations within the UN, and with Government and Development Cooperation Organizations worldwide. As a result, Factors Affecting Performance and Cross-Cutting Issues is rated **HIGHLY SATISFACTORY (HS).**

Rating for Factors Affecting Performance and Cross-Cutting Issues:	**HS**

VI. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

247. The overall Satisfactory rating of the project: “Sharing Experience and Knowledge for a Sustainable Belt and Road” results from high Project to Climate Change and Adaptation, which was one of the top priorities of the governments of BRI countries, facing few implementation challenges in monitoring and reporting, financial management and socio-political sustainability. Furthermore, it results from the excellent project implementation despite facing the difficulties in working conditions under the Covid-19 pandemics that delayed project completion for two years. The Project is solidly conceptualized, innovative and ambitious.

248. The project management has displayed flexibility and effectiveness in reaching highly satisfactory results, with strong facilitation particularly in establishing partnerships with the following organizations: BRI International Green Development Coalition, RADI, FECO, UNITAR, ITC-ILO, GIZ, Infrastructure Asia, CSC, Government of Rwanda, Government of Mexico, and UNESCAP. The subcontracting was a necessary step to successful project implementation because of the broad scope and multidisciplinary project, which had participants from 39 countries globally.

249. The country ownership in terms of championship (resulting from this increased capacity) sits mostly within the Ministries of Environmental Protection, Ministries of Energy and Infrastructure and similar. It is likely that the socio-political sustainability for establishing sustainable and resilient infrastructure will be secured in the future, as it is an obligation under the Paris Agreement to fulfil the NDCs. All 39 BRI countries from this project are signatory parties to the Paris Agreement.

250. The Project has good prospects to reach its long-term objective to contribute to the reduction of climate change risks in the BRI countries while raising awareness, strengthening capacities, and creating an enabling environment for investment in sustainable and resilient infrastructure as planned in the Project Document.

251. The project delivered products of excellent quality, which are highly useful for application and for building of knowledge base on sustainable and resilient infrastructure in the BRI countries. The general objectives, outcomes and outputs as prevised in the original Project Document have been met. Overall, the project has been effective, with the main outputs achieved by the time of the Terminal Review, Project Output 1a was fully achieved. The report: “BRI Green Development Case Study Report and its Table of Contents (2020)” was published in December 2020 and included 13 case studies. The report was added to UNEP’s sustainable infrastructure case study database hosted on GGKP : Project Output 1 b was partially achieved. All three foresight briefs: 1) Building a digital ecosystem for the planet, 2) Blockchain Technology and Environmental Sustainability, and 3) Nature-Based Solutions for Urban Challenges, that were that were planned in the project document prepared and published on the UNEP website: World Environment Situation Room Data, Information and Knowledge on the Environment . Full integration of WESR and RADI data platform, and scoping work for integrating WESR with FECO’s BRI Big Data platform was never achieved; however, the planning and documentation support on API and interoperability was completed, and the geospatial components are now interoperable.

252. Project Output 2 was fully achieved, and even overachieved. Instead of organizing the three planned RCB training workshops, by the end of the project, the number of RCB workshop trainings increased to five worldwide: one in Central Asia, two in ASEAN, one in East Africa and one in Latin America and the Caribbean, with 126 participants coming from 39 Belt and Road countries.

253. Throughout project implementation, there were five regional capacity building workshop trainings containing lots of webinars (more than 50), with participation of 126 persons from 39 countries throughout the globe.

254. The project was highly efficient, as it was ensured to produce cost-effectiveness (Efficiency of results delivered) during project implementation. The project was financed by MEE's Grant of USD 1,000,000, together with the UNEP's in-kind project contribution of USD 610,700 that was made available in August 2018, amounting the total project costs of USD 1,237,500 for this project. The perception of cost-effectiveness rather positive. Though having two non-cost extensions of two years due to the Covid-19 pandemics, project efficiency was not affected.

255. The project is fully relevant to local and national climate change adaptation, and energy priorities, policies, and strategies of the Governments of the BRI countries, to China's MEE strategic priorities and objectives and to UNEP's mandate. The Project contributed to the reduction of climate change risks, environmental protection, sustainable infrastructure, and green economy in 39 BRI countries throughout Asia Pacific, Africa and LAC while raising awareness, strengthening capacities, and creating an enabling environment for investment in green and nature-based infrastructure. This project addressed the objective and focal areas of the Chinese MEE of the in the BRI regions, assisting countries to complete the NDCs under the Paris Agreement.

256. Finally, the project has a clear value-added and potential for replicability: the RCB trainings were very successful in gathering diverse public sector officials from diverse ministries of environment, energy, and infrastructure to build capacities in their countries on environmental leadership in sustainable and resilient infrastructure. This model of RCB trainings can be replicated anywhere around the world. In summary, this well-managed project laid a strong foundation of knowledge that the BRI countries can take and further build on effectively.

257. It is evident that the Project is very likely to be sustainable taken that it will be worked further on the financial, socio-political and the sustainability of the institutional framework and governance.

258. The Table 10 below provides a summary of the ratings and findings discussed in Project Assessment / review Findings (Chapter IV). Overall, the project is rated SATISFACTORY (S).

B. Summary of project findings and ratings

259. The reviewer rated the project performance as required by UNEP Evaluation Policies and Guidelines for conducting Terminal Reviews. This subchapter summarizes the ratings according to the evaluation criteria given in the ToR: Attainment of Project Objectives and Results, Sustainability of Project Outcomes, Monitoring and Evaluation, and UNEP specific ratings as specified in Annex III. The table below provides a summary of the ratings and finding discussed in Chapter V, detailing the rating for each of the categories and providing brief justifications for the rating based on the findings of the main analysis. The overall rating for the project is presented in Table 10. The rating system that was applied for each of the criteria is specified in Annex II of this report, as it was already mentioned in the Inception Report for this Terminal Review of the project.

UNEP Evaluation Office Validation of Performance Ratings:

The UNEP Evaluation Office formally quality assesses (see Annex XII) management led Terminal Review reports and validates the performance ratings therein by ensuring that the performance judgments made are consistent with evidence presented in the Review report and in-line with the performance standards set out for independent evaluations.

The Evaluation Office assesses a Terminal Review report in the same way as it assesses the initial draft of a Terminal Evaluation report. It applies the following assumptions in its validation process:

– That what is being assessed is the contents of the report and the extent to which it makes a consistent and justifiable case for the performance ratings it records.

- That the consultant has, within the report, presented all the evidence that was made available to them.

- That the Review has been based on a robust Theory of Change, reconstructed where necessary, which reflects UNEP's definitions at all levels of results.

- That the project team and key stakeholders have already reviewed a draft version of the report and provided substantive comments and made factual corrections to the Review Consultant, who has responded to them. The Evaluation Office assumes, therefore, that it has received the Final (revised) version of the report.

In this instance the Evaluation Office finds that the Report was of 'Moderately Satisfactory' quality. The overall project performance rating is validated at the **'Moderately Satisfactory'** level.

Table 9 Summary of project findings and ratings

Criterion	Summary assessment	Rating	Justification for any ratings' changes due to validation (to be completed by the UNEP Evaluation Office – EOU)	EOU Validated Rating
Strategic Relevance	Project "Sharing Experience and Knowledge for a Sustainable Belt and Road" has contributed to the climate risk reduction, environmental protection, sustainable infrastructure development and green economy in 39 Belt and Road countries throughout Asia Pacific, Africa and LAC while raising awareness, strengthening capacities and creating an enabling environment for investment in green and nature-based infrastructure. This project addressed the objective and focal areas of the Chinese Ministry of Ecology and Environment in the BRI regions, assisting countries to complete the NDCs under the Paris Agreement. Based on the assessment of project relevance to 1) local and national priorities, policies and strategies on climate change adaptation and energy of the Governments of the BRI countries, 2) China's MEE strategic priorities and objectives and 3) UNEP's mandate, overall Project Relevance is **HIGHLY SATISFACTORY (HS).**	**HS**	**The rating is validated.**	**HS**
1. Alignment to UNEP MTS, POW and strategic priorities	The Project is highly relevant with UNEP's mandate, MTS, POW and strategic priorities, and its relevance to them is rated **HIGHLY SATISFACTORY (HS).**	HS	The rating is validated.	HS
2. Alignment to Donor/Partner strategic priorities	The Sustainable Belt and Road Project is highly relevant with China MEE's strategic priorities, and its relevance to them is rated **HIGHLY SATISFACTORY (HS).**	HS	The rating is validated.	HS
3. Relevance to global, regional, sub-regional and national environmental priorities	The Sustainable Belt and Road Project is highly relevant with the national development, energy and environmental priorities and strategies of the Governments of the Belt and Road countries, and it is rated **HIGHLY SATISFACTORY (HS).**	HS	The rating is validated.	HS
4. Complementarity with relevant existing interventions/coherence	The complementarity with other relevant existing interventions is rated **SATISFACTORY (S)**, as there were not similar initiatives on global scale.	S	The rating is validated.	S
Quality of Project Design	Based on the analysis, the project design is rated as **MODERATELY SATISFACTORY (MS)**, because the overall project design is relevant and innovative in risks mitigation and Climate Change and Adaptation (CCA) by using sustainable and resilient infrastructure in the BRI countries. The Project was identified and prepared through cooperation with diverse stakeholders. The Project Results Framework with its outcomes and outputs, as well as target indicators were developed adequately (with measurable elements of the SMART indicator) and allowed for proper adaptive management and monitoring of project results. There was no ToC developed for this project.	**MS**	**The rating is revised. Parts of the results framework, specifically the formulation of the outcome and outcome indicators, are not SMART and are not fit for purpose. The quality of project design does not appear to have been assessed using the required template.**	**MU**

Criterion	Summary assessment	Rating	Justification for any ratings' changes due to validation (to be completed by the UNEP Evaluation Office – EOU)	EOU Validated Rating
Nature of External Context	Rating for Nature of the external context was **MODERATELY FAVOURABLE (MF)** due to lack of detailed risks identification and mitigation in project design and Covid-19 interruptions during project implementation.	**MF**	**The rating is validated.**	**MF**
Effectiveness	Project effectiveness at time of the Terminal Review is rated as **SATISFACTORY (S)** in the light of overall satisfactory project finalization and implementation. Main outputs achieved by the time of the Terminal Review are: ***Project Output 1a*—fully achieved.** The report: "BRI Green Development Case Study Report and its Table of Contents (2020)" was published in December 2020 and included 13 case studies. The report was added to UNEP's sustainable infrastructure case study database hosted on GGKP[27]. ***Project Output 1 b*—partially achieved.** All three foresight briefs: 1. Building a digital ecosystem for the planet, 2. Blockchain Technology and Environmental Sustainability, and 3. Nature-Based Solutions for Urban Challenges planned in the project document were prepared and published on the UNEP website: World Environment Situation Room Data, Information and Knowledge on the Environment[28]. Full integration of the World Environment Situation Room (WESR) and the Chinese Academy of Sciences' (CAS) Institute of Remote Sensing and Digital Earth's (RADI) data platform, and scoping work for integrating WESR with FECO's BRI Big Data platform was not achieved. However, the planning and documentation support on Application Programming Interface (API) and interoperability was completed, and the geospatial components are now interoperable[29]. ***Project Output 2*—fully achieved, and even overachieved.** Instead of organizing the three planned RCB training, five RCB trainings were organized worldwide by the end of the project: one for Central Asia, two for ASEAN, one for East Africa and one for Latin America and the Caribbean, where a total of 126 participants participated from 39 Belt and Road countries. Considering the overperforming of the project in its delivery of outputs is rated, it is rated as **HIGHLY SATISFACTORY (HS).** The Achievement of Project Outcomes is rated as **SATISFACTORY (S)**, as 126 participants from 39 Belt and Road countries on the five RCB training have increased awareness and understanding of the sustainable development opportunities and challenges associated with Belt and Road investments, and policy conditions required to enable and address them, even though it is too early to say to which extent this was the case. The likelihood of the project to make a substantive contribution to the long-lasting changes represented by the Sustainable Development Goals, and/or the intermediate-level results reflected in UNEP's Expected Accomplishments and the strategic priorities of funding partners, i.e., the Likelihood of Impact is considered as **LIKELY (L).**	**S**	**The rating is revised. All ratings of sub-criteria were revised as below.**	**MS**

[27] https://www.greengrowthknowledge.org/case-studies/bri-green-development-case-study-report
[28] https://wesr.unep.org/article/foresight-briefs
[29] https://data.unep.org/article/wesr-resources

Criterion	Summary assessment	Rating	Justification for any ratings' changes due to validation (to be completed by the UNEP Evaluation Office – EOU)	EOU Validated Rating
1. Availability of outputs	Considering the overperforming of the project in its delivery of outputs, especially output 2, it is rated as **HIGHLY SATISFACTORY (HS).**	HS	The rating is revised as not all output indicators were achieved -three indicators (1b.d,1b.e, 2c) were partially achieved.	S
2. Achievement of project outcomes	The Achievement of Project Outcomes is rated as **SATISFACTORY (S)**, as 126 participants from 39 Belt and Road countries on the five Regional Capacity Building workshop have increased awareness and understanding of the sustainable development opportunities and challenges associated with Belt and Road investments, and policy conditions required to enable and address them, even though it is too early to say to which extent this was the case.	S	The rating is revised. The outcome statement does not reflect an outcome level change (i.e. increased awareness and knowledge do not reflect the uptake of any outputs). In addition, the Review Report does not provide evidence of changes in increased awareness and understanding being measured.	MS
3. Likelihood of impact	The likelihood of the project to make a substantive contribution to the long-lasting changes represented by the Sustainable Development Goals, and/or the intermediate-level results reflected in UNEP's Expected Accomplishments and the strategic priorities of funding partners, i.e., the Likelihood of Impact is considered as **LIKELY (L).**	L	The rating is revised. The results progression in the TOC is weak and the likelihood of impact is based on the generalized assumption that changes in knowledge and awareness will (if achieved), unsupported by other factors, lead to impact at the level of the SDGs.	ML
Financial Management	In view of the incomplete financial information and slight delays in the transfer of funds to **subcontractors, the Financial Management is rated MODERATELY SATISFACTORY (MS).**	**MS**	**The rating is validated**	**MS**
1. Adherence to UNEP's financial policies and procedures	The rating given is **MODERATELY SATISFACTORY (MS)**, as there were slight delays in the transfer of funds to the subcontractors for the Regional Capacity Building workshop trainings.	MS	The rating is validated.	MS

Criterion	Summary assessment	Rating	Justification for any ratings' changes due to validation (to be completed by the UNEP Evaluation Office – EOU)	EOU Validated Rating
2. Completeness of project financial information	Financial completeness is rated as **MODERATELY SATISFACTORY (MS)**, as Project financial information is incomplete.	MS	The rating is revised. A total expenditure figures is not shown clearly within the report. Para 178 provides a narrative breakdown that can be summed to USD 1,237,750 (cash and in-kind), but this is inconsistent with the 93% rate of spend entered in the Project Identification Table. Figure 20 is a budget revision and not expenditure. It is not the case that, within UNEP, expenditure figures cannot be completed at the end of operational completion. The EOU assumes that the consultant was not provided with clear expenditure tables/documents, otherwise they would have been included in the report[30].	MU
3. Communication between finance and project management staff	Communication between finance and project management staff is rated as **SATISFACTORY (S)** as their communication was good.	S	The rating is validated.	S
Efficiency	The Terminal Review has concluded that the efficiency of the Project is **HIGHLY SATISFACTORY** (HS) as it was ensured to produce cost-effectiveness (Efficiency of results delivered) during project implementation. The project was financed by the MEE's Grant of USD 1,000,000, together with the UNEP's in-kind project contribution of USD 237,500 that was made available in August 2018, amounting the total project costs of USD 1,237,500 for this project. The project was generally perceived as cost-effective. All project partners have delivered much more than in their ToR. The project lived through two non-cost extensions of two years due to the Covid-19 pandemics, however they did not affect project efficiency. Results from project management and financial management at time of the Terminal Review suggest that the Project Efficiency is rated **HIGHLY SATISFACTORY (HS)**.	**HS**	**The rating is revised. While the project operated in an efficient and effective manner, the efficiency was affected by the extensions of the project duration (opportunity costs).**	**S**
Monitoring and Reporting	Monitoring and Reporting is rated **MODERATELY SATISFACTORY (MS)**, as the main reports were completed with great detail. However, there was no budgeted monitoring plan and no evidence to suggest how co-financing as in-kind contribution was used in project monitoring (as was planned with staff time).	**MS**	**The rating is validated.**	**MS**

[30] Total spend should have been recorded in the Project Identification Table and in the Financial Management section of the report, or be shown in an Annex but none of these sections show a table of expenditure or total spend.

Criterion	Summary assessment	Rating	Justification for any ratings' changes due to validation (to be completed by the UNEP Evaluation Office – EOU)	EOU Validated Rating
1. Monitoring design and budgeting	Monitoring design and budgeting is rated as **MODERATELY UNSATISFACTORY (MU)**, as there was no budgeted monitoring plan for this project.	MS	The rating is validated. The EOU notes that in the text of the report the consultant has assigned a rating of MU, which is consistent with the text.	MU
2. Monitoring of project implementation	Monitoring of Project Implementation was **MODERATELY SATISFACTORY (MS)**, as there was no evidence to suggest or show how co-financing as in-kind contribution was used in project monitoring (as was planned with staff time).	MS	The rating is validated. The EOU notes that in the text of the report the consultant has assigned a rating of MU, which is consistent with the text.	MU
3. Project reporting	Project reporting is rated as **SATISFACTORY (S)**, as the main reports were completed, and the reporting was very detailed	S	The rating is validated.	S
Sustainability	Overall, the sustainability rating for the Sustainable Belt and Road Project at the time of the Terminal Review is **MODERATELY LIKELY (ML)**, which means that there are moderate risks affecting the socio-political and financial dimension of sustainability**.** An assessment is given taken into consideration moderate risks to sustainability after the project ends, namely, the financial risks to sustainability.	**ML**	**The rating is validated.**	**ML**
1. Socio-political sustainability	The Socio-political sustainability is rated as **LIKELY (L),** as there are no risks to the socio-political sustainability, as it is an obligation under the Paris Agreement to fulfill NDCs. All the 39 Belt and Road countries from this project are signatory parties to the Paris Climate Change Agreement.	L	The rating is validated.	L
2. Financial sustainability	There are moderate risks that affect this dimension of sustainability, which leads to **MODERATELY LIKELY (ML)** sustainability of financial risks, if the countries are not able to finance the Sustainable and Resilient Infrastructure using green and nature-based solutions infrastructure.	ML	The rating is validated.	ML
3. Institutional sustainability	There are no risks that affect institutional framework and governance sustainability as all institutional frameworks for Climate Change and Adaptation are put in place in the Belt and Road countries, which causes this sustainability to be **LIKELY (L).**	L	The rating is validated.	L
Factors Affecting Performance	The project was well prepared and ready to implement at the start of the project in August 2018 with functioning project management throughout the project implementation through the difficult times of Covid-19 pandemics (during which the project overcame the challenges through overachieving in RCB) until December 2022. Furthermore, the project has well taken into consideration the gender and human rights dimensions, as well as environmental, social, and economic safeguards. The Project also had good communications and public awareness and built strong partnerships with diverse organizations within the UN, and with Government and Development Cooperation Organizations worldwide. As a result, Factors Affecting Performance and Cross-Cutting Issues is rated **HIGHLY SATISFACTORY (HS).**	**HS**	**The rating is validated.**	**HS**
1. Preparation and readiness	Primarily because of the facts that the project was well prepared and ready to implement at the start of the project in August 2018, some project activities lacked details and consistency, financial resources were in place, and project management was fully in place, the Preparation and Readiness for Implementation is rated **HIGLY SATISFACTORY (HS).**	HS	The rating is validated.	HS

Criterion	Summary assessment	Rating	Justification for any ratings' changes due to validation (to be completed by the UNEP Evaluation Office – EOU)	EOU Validated Rating
2. Quality of project management and supervision	Overall, owing to excellent management and adaptive management of project and strong partnerships, the rating for the executing agency and partners is **HIGHLY SATISFACATORY (HS),** allowing for the Rating for Project management and supervision to be **HIGHLY SATISFACATORY (HS).**	HS	The rating is validated.	HS
2.1 UNEP/Implementing Agency:	Project supervision and management by the IA is rated as **HIGHLY SATISFACTORY (S)**, as the project management of UNEP was excellent.	HS	*The rating is validated.*	*HS*
2.2 Partners/Executing Agency:	Due to excellent management and adaptive management of project and strong partnerships, the rating for the executing agency and partners is **HIGHLY SATISFACATORY (HS).**	HS	*The rating is validated.*	*HS*
3. Stakeholders' participation and cooperation	Partnerships and cooperation is rated as **HIGHLY SATISFACTORY (HS)**, as there were exemplary partnerships made during this project.	HS	The rating is validated.	HS
4. Responsiveness to human rights and gender equality	The responsiveness to human rights and gender equality were carefully considered and executed in the Sustainable Belt and Road project from the project design, throughout project implementation to its Terminal Review is rated **HIGHLY SATISFACTORY (HS).** The project manager took responsibility for incorporating gender perspectives and ensuring equal participation of women and men in all areas of the project.	HS	The rating is revised. The project had moderate human rights/ gender considerations in project implementation. The gender output indicator was partially achieved.	S
5. Environmental and social safeguards	Environmental and social safeguards rated as **HIGHLY SATISFACTORY (HS),** as project outputs and outcomes directly contribute to the implementation of the Paris Agreement adopted by the United Nations Framework Convention on Climate Change (UNFCCC), and its work aimed to safeguard environment and society directly through its work on environmental leadership in sustainable, resilient, and nature-based infrastructure, as well as in creating green jobs.	HS	The rating is revised. The review found that "there was no environmental and social safeguard screening done in the project design phase" (para. 237). However, such screening is a requirement in UNEP.	S
6. Country ownership and driven-ness	Country ownership and drive-ness is rated as **SATISFACTORY (S)**, key capacities on environmental leadership in sustainable and resilient infrastructure have been built but is difficult to talk of country ownership and drive-ness for a project that was encompassing government and private sector officials coming from 39 countries around the globe.	S	The rating is validated.	S
7. Communication and public awareness	Communication and public awareness is rated as **HIGHLY SATISFACTORY (HS),** because of the global exposure of this project in 39 countries through its participants to the regional capacity building workshop trainings on Sustainable Infrastructure as a pillar of fulfilling the SDGs and Agenda 2030 of the UN.	HS	The rating is validated. It is noted that use of different languages and translations does not appear to have been addressed with respect to the 39 project countries.	HS
Overall Project Performance Rating		**S**	**The overall performance rating is validated at the Moderately Satisfactory level.**	**MS**

Table 10 Overall ratings including short summary assessments

The Evaluation Office of UNEP has removed this table as it is potentially confusing for any reader as it aimed to further summarise the table 9, above, which contains the EOU validation.

RATING FOR ATTAINMENT OF PROJECT OBJECTIVES AND RESULTS

(The Evaluation Office of UNEP notes that this is not its standard approach. The EOU provides consultants with a matrix or criteria ratings to support the assignment of ratings against its 6-point scale)

Highly Satisfactory (HS):	The project had no shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
Satisfactory (S):	The project had minor shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
Moderately Satisfactory (MS):	The project had moderate shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
Moderately Unsatisfactory (MU):	The project had significant shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
Unsatisfactory (U):	The project had major shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
Highly Unsatisfactory (HU):	The project had severe shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.

RATINGS ON SUSTAINABILITY

Likely (L)	There are no risks affecting this dimension of sustainability.
Moderately Likely (ML):	There are moderate risks that affect this dimension of sustainability.
Moderately Unlikely (MU):	There are significant risks that affect this dimension of sustainability.
Unlikely (U):	There are severe risks that affect this dimension of sustainability.

ALL OTHER RATINGS

HS	= **Highly Satisfactory**	Excellent
S	= **Satisfactory**	Well above average
MS	= **Moderately Satisfactory**	Average
MU	= **Moderately Unsatisfactory**	Below average
U	= **Unsatisfactory**	Poor
HU	= **Highly Unsatisfactory**	Very poor (Appalling)

C. Lessons learned

260. As lessons learned are used to bring together any insights gained during the project that can be usefully applied in future projects. Capturing lessons learned from the project implementation is of extreme importance, as it may result in more effective and efficient future roll out of project activities and organizational learning. Seizing lessons learned and turning that hindsight into best practices will achieve far greater long-term project success, which can be captured and possibly replicated within UNEP and broader.

Lesson Learned #1:	The "Sharing Experience and Knowledge for a Sustainable Belt and Road" Project was a best practice example of how partnerships are created, a really good network and also good results sharing on various different platforms and conferences.
Lesson Learned #2:	Creating strong partnerships can enhance peer-to-peer capacity, strengthen project resilience, and enhance the quality of project results. It can furthermore facilitate the replication of the project through local trainings done in local institutions by the participants of the RCB trainings.
Lesson Learned #3:	Delays to the start of implementation of this project were caused by the lack of clarity in the approval process between UNEP and the donor, one of the reasons being that there were two mismatched project documents.
Lesson Learned #4:	The level on which the work for the interoperability of the Big Data Platforms was to be performed was not well defined in the project document. The scope of work in the Project document was too broad to execute for the finances available.
Lesson Learned #5:	The funding of the project activities was not planned when creating the baseline. It needed to be realistic, adequate, and feasible. Funding planning should be done more attentive at the beginning of the project.
Lesson Learned #6:	Parts of the project did not have well-defined deliverables and outcomes, as well as the scope of work and the associated funding for it.
Lesson Learned #6:	Parts of the project did not have well-defined deliverables and outcomes, as well as the scope of work and the associated funding for it.
Lesson Learned #7:	There were not enough technical capacities to connect the two existing big data platforms, as the scope was too broad.
Lesson Learned #8:	Online training does not suit the working culture in some BRI countries. However, it was the only way to continue implementation during the Covid-19 pandemic due to the global scale of the project as well.
Lesson Learned #9:	Given the number of partners involved in the training, it was challenging to get all the partners on the same page, particularly in understanding the various roles of each of the partner organizations.

Lesson Learned #10:	The RCB workshops did not have a thorough and detailed enough example of financial guidelines for financing sustainable and resilient infrastructure.
Lesson Learned #11:	The RCB workshops contained only the best practice examples of what kind of sustainable infrastructure exists in developed countries, but not the way how they got there.
Lesson Learned #12:	There were delays in issuing contracts to the implementing partners due to administrative issues.
Lesson Learned #13:	The inclusion of sharing from the private sector was beneficial for the participants as some tend to only see Sustainable Infrastructure as a public business and assume that the private sector's involvement is purely from the revenue perspective, which is not always the case. Inviting the private sector could give participants a different viewpoint on their interest in developing Sustainable Infrastructure and focus more on Public-Private Partnerships.

D. Recommendations

261. Based on the Terminal Review and findings of this report, the reviewer prepared several recommendations that can contribute to the Climate Change Adaptation and Mitigation in the BRI countries by using the approach to sustainable and resilient infrastructure in the future after termination of this project. One of the major general recommendations to UNEP is to clearly define and lay out the process assigning and explaining the roles of the donor and the implementing agency in the approval process for the project.

Recommendation area #1:	**Big data platform integrations**
Challenge/problem #1 to be addressed by the recommendation:	The level on which you are working should be well defined in the project document. Concretely, interoperability of the Big Data Platforms could be more easily achieved if the level was defined at the beginning of the project, taken there was substantial funding for it.

Challenge/problem #2:	The funding of the project activities needs to be planned when creating the baseline. It needs to be realistic, adequate and feasible.
Challenge/problem #3:	The project needs to have well-defined deliverables and outcomes, as well as the scope of work and its associated funding.
Challenge/problem #4:	There should be enough technical capacities for the integration of two platforms.

Recommendation area #2:	**RCB workshop training**
Challenge/problem #1 to be addressed by the recommendation:	Future RCB training would need to confirm the resource personnel in advance to have a detailed trainers manual as well as participants manual readily available prior to the training.
Challenge/problem #2:	If future training is to be conducted online, organizers should provide participants with reliable internet connections.

Challenge/problem #3:	Consider in-person trainings when the Covid-19 situation improves. Preparing for the kind of training held in person will enhance the knowledge of the participants.
Challenge/problem #4:	Clearly define the role of each organization during training design, planning, organization and execution.
Challenge/problem #5:	The contracts for the subcontractors need to be ready on time and delays in the processing of payments should be avoided.
Challenge/problem #6:	The UN–UN Agreements should be finalized with enough planning to allow the contracting of facilitators and engagement with experts for the planning of individual sessions.
Challenge/problem #7:	Engage with the implementing partner during the communication with the experts, showing "one face to the customer" in front of counterparts.
Challenge/problem #8:	Define the narrative coherence of the sessions prior to confirming the participation of the experts.
Challenge/problem #9:	Expand the search for experts beyond institutional strategic partners or allies.
Challenge/problem #10:	Prioritize the development of thematic content and deliver them with sufficient time. More does not always mean effective.
Challenge/problem #11:	Prioritize experts fluent in the language in which the course is taught or make use of the interpretation support.

Recommendation area #3:	**RCB workshop training contents**
Challenge/problem #1 to be addressed by the recommendation:	Practical and field training is very important to adopt and apply. A follow-up and preparing a field studies tour would be beneficial to harmonize the theory with practice.
Challenge/problem #2:	RCB training should give a fair insight into a legal framework and law enforcing agencies' roles for compelling the citizens to adhere to government instructions. How the government achieved this level of commitment from its people should be explained stepwise.
Challenge/problem #3:	Future greater inclusion of private sectors can give participants a different viewpoint on their interest in developing Sustainable Infrastructure and focus more on Public-Private Partnerships.
Challenge/problem #4:	RCB trainings needed better and more thorough examples of financial guidelines for financing sustainable and resilient infrastructure. The existing guidance was too general, where in reality, funds and resources need to be raised for each infrastructural activity and vulnerability assessment individually.
Challenge/problem #5:	RCB training should not only contain the best practice examples of what kind of sustainable infrastructure exists in developed countries but also show how the country can reach this level of development, showcasing the different levels of pathways: legislative, societal change of thinking and acting, funding, level of commitment, etc.
Challenge/problem #6:	The agenda and content for RCB training were too broad and too general. UNEP approach to Infrastructure is cross-sectoral. The partners think that it should be considered on how to do it more in-depth for a specific topic, or to have different modules for different groups of people working on a specific topic.

ANNEX I. GLOSSARY[31]

Assumptions: Assumptions are key events or conditions that must occur for the causal link to happen: they are “factors that, for planning purposes, are considered to be true, real, or certain without proof or demonstration. Assumptions can also be understood as hypothesized conditions that bear on the validity of the evaluation itself, e.g., about the characteristics of the population when designing a sampling procedure for a survey.

Attribution: The ascription of a causal link between observed (or expected to be observed) changes and a specific intervention - represents the extent to which observed development effects can be attributed to a specific intervention or to the performance of one or more partner taking account of other interventions, (anticipated or unanticipated) confounding factors, or external shocks.

Benchmark: Reference point or standard against which performance or achievements can be assessed - refers to the performance that has been achieved in the recent past by other comparable organizations, or what can be reasonably inferred to have been achieved in the circumstances.

Beneficiaries (Reach, Target Group): The individuals, groups, or organizations, whether targeted or not, that benefit, directly or indirectly, from the development intervention.

Coherence: The compatibility of the intervention with other interventions in a country, sector or institution.

Counterfactual: The situation or condition which hypothetically may prevail for individuals, organizations, or groups were there no development intervention.

Data Collection Tools: Methodologies used to identify information sources and collect information during an evaluation (e.g. informal and formal surveys, direct and participatory observation, community interviews, focus groups, expert opinion, case studies, and literature search).

Development Intervention: An instrument for partner (donor and non-donor) support aimed to promote development (e.g. policy advice, projects, and programs).

Development objective: Intended impact contributing to physical, financial, institutional, social, environmental, or other benefits to a society, community, or group of people via one or more development interventions.

Effect: Intended or unintended change due directly or indirectly to an intervention. Related terms: results, outcome.

Effectiveness: The extent to which the development intervention’s objectives were achieved, or are expected to be achieved, considering their relative importance.

Efficiency: A measure of how economically resources/inputs (e.g. funds, expertise, time, etc.) are converted to results.

[31] OECD-DAC and UNEP Evaluation Criteria. Glossary of Key Terms in Evaluation and Results Based Management.

Energy Transition: The global energy sector's shift from fossil-based systems of energy production and consumption — including oil, natural gas and coal — to renewable energy sources like wind and solar, as well as lithium-ion batteries.

Evaluability: Extent to which an activity or a program can be evaluated in a reliable and credible fashion.

Evaluability Assessment: This is the early review of a proposed activity in order to ascertain whether its objectives are adequately defined and its results verifiable.

Evaluation: The systematic and objective assessment of an on-going or completed project, program or policy, its design, implementation and results to determine the relevance and fulfillment of objectives, development efficiency, effectiveness, impact and sustainability.

Evaluation Matrix: Is a matrix of detailed overarching evaluation questions, indicators and sources of verification, data sources, and data collection methods, data analytical tools.

Evaluation Plan: Describes the overall approach or strategy for an evaluation and includes information on the following questions: Why the evaluation is being conducted? What will be done? Who will do it? When will it be done? and How evaluation findings will likely be used?

Ex-ante evaluation: An evaluation that is performed before implementation of a development intervention.

Ex-post evaluation: Evaluation of a development intervention after it has been completed to identify the factors of success or failure, to assess the sustainability of results and impacts, and to draw conclusions that may inform other interventions.

External evaluation: The evaluation of a development intervention conducted by entities and/or individuals outside the donor and implementing organizations.

Feedback: The transmission of findings generated through the evaluation process to parties for whom it is relevant and useful so as to facilitate learning involving the collection and dissemination of findings, conclusions, recommendations and lessons from experience.

Finding: A finding uses evidence from one or more evaluations to allow for a factual statement.

Formative evaluation: Evaluation intended to improve performance, most often conducted during the implementation phase of projects or programs, and may also be conducted for other reasons such as compliance, legal requirements or as part of a larger evaluation initiative. Related term: process evaluation.

Goal: The higher-order objective to which a development intervention is intended to contribute. Related term: development objective.

Impacts: Positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended.

Independent evaluation: An evaluation carried out by entities and persons free of the control of those responsible for the design and implementation of the development intervention.

Indicator: Quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a development actor.

Inputs: The financial, human, and material resources used for the development intervention.

Intermediate outcomes: involve proof or reasonable evidence that the behavior of actors has changed as a result of an intervention, and are measured through post-program surveys after enough time has elapsed to allow individual partners to adequately implement their activities.

Just Transition: Just Transition is a vision-led, unifying and place-based set of principles, processes, and practices that build economic and political power to shift from an extractive economy to a regenerative economy.

Logic analysis: is an evaluation that allows us to test the plausibility of a program's theory using available scientific knowledge—either scientific evidence or expert knowledge.

Logical framework (Logframe): Management tool that facilitates planning, execution and evaluation of a development intervention used to improve the design of interventions, most often at the project level, and involves identifying strategic elements (inputs, outputs, outcomes, impact) and their causal relationships, indicators, and the assumptions or risks that may influence success and failure.

Long-term outcomes (also known as impacts): involve proof or reasonable evidence that a change in condition has occurred.

Monitoring: A continuing function that uses systematic collection of data on specified indicators to provide management and the main stakeholders of an ongoing development intervention with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds. Related term: performance monitoring, indicator.

Outcome: The likely or achieved short-term and medium-term effects of an intervention's outputs. Related terms: result, outputs, impacts, effect.

Outputs: The products, capital goods and services which result from a development intervention; may also include changes resulting from the intervention which are relevant to the achievement of outcomes.

Performance: The degree to which a development intervention or a development partner operates according to specific criteria/standards/guidelines or achieves results in accordance with stated goals or plans.

Partnership or Partners: Collaborative relationships toward mutually agreed objectives, with different degrees of intensity and formality: they are the individuals and/or organizations that collaborate to achieve mutually agreed upon objectives (shared goals, common responsibility for outcomes, distinct accountabilities and reciprocal obligations) and may include governments, civil society, non-governmental organizations, universities, professional and business associations, multilateral organizations, private companies, etc.

Performance measurement: A system for assessing performance of development interventions against stated goals. Related terms: performance monitoring, indicator.

Performance monitoring: A continuous process of collecting and analyzing data to compare how well a project, program, or policy is being implemented against expected results.

Program evaluation or country program/strategy evaluation: Evaluation of a set of interventions, marshaled to attain specific global, regional, country, or sector development objectives, and is a time bound intervention involving multiple activities that may cut across sectors, themes and/or geographic areas.

Project evaluation: Evaluation of an individual development intervention designed to achieve specific objectives within specified resources and implementation schedules, often within the framework of a broader program, with Cost Benefit Analysis (CBA) as a major instrument of project evaluation for projects with measurable benefits: when benefits cannot be quantified, cost effectiveness is a suitable approach.

Project or program objective: The intended physical, financial, institutional, social, environmental, or other development results to which a project or program is expected to contribute.

Purpose: The publicly stated objectives of the development program or project.

Quality Assurance: Quality assurance encompasses any activity that is concerned with assessing and improving the merit or the worth of a development intervention or its compliance with given standards.

Relevance: The extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donors' policies.

Reliability: Consistency or dependability of data and evaluation judgements, with reference to the quality of the instruments, procedures and analyses used to collect and interpret evaluation data.

Results: The output, outcome or impact (intended or unintended, positive and/or negative) of a development intervention.

Results Based Logical framework: The program logic that explains how the development objective is to be achieved, including causal relationships and underlying assumptions. Related terms: results chain, logical framework.

Review: An assessment of the performance of an intervention, periodically or on an ad hoc basis, often tends to emphasize operational aspects, unlike "evaluation" which is used for a more comprehensive and/or more in-depth assessment than "review".

Risks: Risks are influences or events outside the intervention that may inhibit the causal link from happening.

Short-term outcomes: These are short-term results that are easily attributed to an intervention and to which the public can easily relate they are measured at the end of the program or soon after the program has finished.

Stakeholders: Agencies, organisations, groups or individuals who have a direct or indirect interest in the development intervention or its evaluation.

Summative evaluation: A study conducted at the end of an intervention (or a phase of that intervention) to determine the extent to which anticipated outcomes were produced to provide information about the worth of the program.

Sustainability: The continuation of benefits from a development intervention after major development assistance has been completed - measures the probability of continued long-term benefits and the resilience to risk of the net benefit flows over time.

Target group: The specific individuals or organizations for whom the development intervention is undertaken.

Theory-based Evaluation (TBE): TBE that explicitly includes “Theory of Change” helps assess whether underlying theories of change or assumptions of a program are correct by identifying the causal linkages between different variables: from inputs to expected results - broadly, any evaluation uncovering implicit or explicit assumptions, hypotheses or theories can be categorized as theory-based evaluation.

Theory of Change (ToC): An articulation of how and why a given intervention will lead to specific change.

Triangulation: The use of three or more theories, sources or types of information, or types of analysis to verify and substantiate an assessment to overcome the bias that comes from single informants, single- methods, single observer or single theory studies.

Value for Money (VfM): a question about the merit, worth or significance of resource use. The optimum combination of whole-life cost and quality (or fitness for purpose) to meet the user’s requirement. It can be assessed using the criteria of economy, efficiency and effectiveness.

Validity: The extent to which the data collection strategies and instruments measure what they purport to measure.

ANNEX II. REVIEW CRITERIA AND RATINGS TABLE

The Review provides individual ratings for the review criteria described in the table below. A suite of support tools, templates and guidance notes is available from the Evaluation Office to support the assessment of performance against these criteria (contact: cecilia.morales@un.org).

Most criteria are rated on a six-point scale as follows: Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MU); Unsatisfactory (U); Highly Unsatisfactory (HU). *Sustainability* and *Likelihood of Impact* are rated from Highly Likely (HL) down to Highly Unlikely (HU) and *Nature of External Context* is rated from Highly Favourable (HF) to Highly Unfavourable (HU). A Criteria Ratings Matrix is available, within the suite of tools, to support a common interpretation of points on the scale for each review criterion. The ratings against each criterion are 'weighted' to derive the Overall Project Performance Rating.

In the Conclusions section of the Main Review Report, ratings are presented together in a table, with a brief justification for each rating, cross-referenced to findings in the main body of the report (see Table 12 below).

Table 11: Project Performance Ratings Table

Criterion *(Once the ratings have been determined, enter the rating for each sub-category into the Weighted Ratings Table and the aggregated scores will be automatically calculated, as well as the Overall Project Performance Rating. Note that for items B, C and F the rating needs to be entered at the level of the whole category).*	**Summary Assessment**	**Rating**
A. Strategic Relevance		**HS → HU**
1. Alignment to UNEP's MTS, POW and strategic priorities		HS → HU
2. Alignment to Donor/Partner strategic priorities		HS → HU
3. Relevance to regional, sub-regional and national environmental priorities		HS → HU
4. Complementarity with relevant existing interventions		HS → HU
B. Quality of Project Design		**HS → HU**
C. Nature of External Context[32]		**HF → HU**
D. Effectiveness		**HS → HU**
1. Availability of outputs		HS → HU
2. Achievement of project outcomes		HS → HU
3. Likelihood of impact		HL→ HU
E. Financial Management		**HS → HU**
1.Adherence to UNEP's policies and procedures		HS → HU
2.Completeness of project financial information		HS → HU
3.Communication between finance and project management staff		HS → HU
F. Efficiency		**HS → HU**
G. Monitoring and Reporting		**HS → HU**
1. Monitoring design and budgeting		HS → HU
2. Monitoring of project implementation		HS → HU
3.Project reporting		
H. Sustainability *(the overall rating for Sustainability will be the lowest rating among the three sub-categories)*		**HL → HU**
1. Socio-political sustainability		HL → HU
2. Financial sustainability		HL → HU
3. Institutional sustainability		HL → HU

[32] Where a project is rated as facing either an Unfavourable or Highly Unfavourable external operating context, ratings for Effectiveness, Efficiency and/or Sustainability may be increased at the discretion of the Review Consultant and Project Manager together. Any adjustments must be fully justified.

Criterion *(Once the ratings have been determined, enter the rating for each sub-category into the Weighted Ratings Table and the aggregated scores will be automatically calculated, as well as the Overall Project Performance Rating. Note that for items B, C and F the rating needs to be entered at the level of the whole category).*	**Summary Assessment**	**Rating**
I. Factors Affecting Performance and Cross-Cutting Issues[33]		**HS → HU**
1. Preparation and readiness		HS → HU
2. Quality of project management and supervision[34]		HS → HU
2.1 UNEP/Implementing Agency:		HS → HU
2.2 Partners/Executing Agency:		HS → HU
3. Stakeholders participation and cooperation		HS → HU
4. Responsiveness to human rights and gender equality		HS → HU
5. Environmental, social and economic safeguards		HS → HU
6. Country ownership and driven-ness		HS → HU
7. Communication and public awareness		HS → HU
Overall Project Rating		**HS → HU**

[33] While ratings are required for each of these factors individually, they should be discussed within the Main Review Report as cross-cutting issues as they relate to other criteria. Note that catalytic role, replication and scaling up are expected to be discussed under Effectiveness if they are a relevant part of the TOC.

[34] In some cases *'project management and supervision'* will refer to the supervision and guidance provided by UNEP to implementing partners and national governments while in others, specifically for GEF funded projects, it will refer to the project management performance of the Executing Agency and the technical backstopping provided by UNEP, as the Implementing Agency. Comments and a rating should be provided for both types of supervision and the overall rating for this sub-category is calculated as a simple average of the two.

ANNEX III. REVIEW FRAMEWORK FOR THE TERMINAL REVIEW

The EOU notes that this Annex does not contain a Review Framework. Rather, this is the Terms of Reference provided for the Review.

The Analytical Framework for this Terminal Review of the UNEP Project: "Sharing Experience and Knowledge for a Sustainable Belt and Road" defines a set of key issues and criteria that frame this Terminal Review. The Terminal Review of the Project was conducted in accordance with the UNEP Evaluation Policy using the OECD/DAC and UNEP evaluation criteria: relevance and design, coherence, effectiveness, efficiency, and sustainability. It was carried out as an independent in-depth evaluation using a participatory approach whereby all key parties associated with the project are kept informed and regularly consulted throughout the evaluation. The reviewer liaised with the Project Manager and the PMT on the conduct of the evaluation and methodological issues.

As described in the Chapter II, three main analytical tools for this Terminal Review Report include: the Evaluation Matrix (EM) containing all the Evaluation Questions (Eqs), the Logical Framework (LogFrame), and the Monitoring Plan of this Terminal Evaluation Report.

Evaluation Matrix

The Evaluation Matrix (EM) has structured the evaluation process, framing the Evaluation Questions (Eqs) detailed in the ToRs that the Reviewer adapted to the specific context of the Project, the indicators were set for each evaluation question, information sources and data collection methods. The evaluation matrix has been elaborated based on the questions, information and structure proposed in the Terminal Review ToR. Therefore, it is divided into six main sections corresponding to the following criteria:

1. **Design:** To what extent are the project objectives and priorities aligned to the climate change and adaptation strategies, national, regional and global goals and respond to the emerging needs? Is the project design adequate to address the problems at hand? Was a participatory project identification process applied and was it instrumental in selecting problem areas? Does the project have a clear thematically focused objective, the attainment of which can be determined by a set of verifiable indicators? Was the project formulated based on LogFrame approach? Was the project formulated with the participation of project team members, donors, government counterparts, stakeholders and/or target beneficiaries, CSOs etc.?

2. **Relevance, Coherence, and Flexibility of operations/interventions:** To what extent did the Project capture perspectives that were not covered previously in other projects, including partnerships and linkages, and to understand interventions within broader systems?

Coherence is the compatibility of the intervention with other interventions in a country, sector or institution. Specific Evaluation Questions for Coherence are the following:

- How did project activities take applicable regional priorities and respective policies specifically on climate proofing, road infrastructure, and green infrastructure into account?
- How did project activities ensure coherence towards the BRI countries' fulfillment of the SDGs and their NDCs under the Paris Agreement?
- To what extent have national and regional activities in the area of green infrastructure and infrastructure development in the selected BRI countries been considered?

- To what extent has the project considered specific needs and priorities of the target countries?
- How has local and regional knowledge on climate change and climate scenarios been included?
- To what extent have processes and discussions of the Project inform other relevant processes for evidence-based policy development?

3. **Effectiveness**: To what extent has the project delivered on its intended outputs and outcomes, and added value?

Effectiveness is the extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups. Specific Evaluation Questions to be answered on Effectiveness according to the Terminal Review's ToR include:

- To what extent have the objectives and outcomes of the three components been achieved?
- How does the target audience rate and reply to the activities and achievements under the project?
- To what extent did the project intervention work with various stakeholders and help to build or strengthen partnerships and networks
- that contribute to climate proofing road infrastructure, green infrastructure and evidence-based policy making?

4. **Impact**: To what extent does the Project focus on higher-level changes, like the adverse effects on climate change to improve sustainably the road infrastructure into green infrastructure in the BRI countries, in terms of significance, transformative potential, scope, or time scale?

5. **Efficiency**: To which extent the benefits of the Project (achieved or expected to be achieved) exceed costs? Were the benefits of the project achieved at minimum or least cost? How efficiently is the project organized? Are the project deliveries delivered on time?

6. **Sustainability**: How likely is the continuation of benefits for Greening the Belt and Road, green infrastructure investments in the BRI countries' investments to help transform their economies and achieve the SDGs and their NDCs under the Paris Agreement?

Sustainability is the extent to which the net benefits of the intervention continue or are likely to continue. Specific Evaluation Questions to be answered according to the Terminal Review's ToR include:

- Are the outcomes and positive effects likely to continue towards a long-term impact for duly considering climate change in sustainable infrastructure development?
- Based on the evaluation, what would be effective ways to integrate the contributions of other projects and donor/ government activities to maximize the effect?
- To what extent are activities, results and networks expected to continue after the project has ended?

The evaluation matrix was designed to answer questions specific to the needs for the Terminal Review of the project, and the methods used to obtain the necessary evidence were mainly qualitative and inductive. Objectivity and accuracy are presumed to be achieved through the design of the right questions and through triangulation. Quantitative metrics were used where they will add value and where reliable information may not be obtained. To elaborate EM that is presented in Annex VI, the Reviewer first developed the Evaluation Questions (Eqs) for this Terminal Review from the Original Donor approved Project Document, the Rev. 1 of the UNEP approved project design document (ProDoc), ToR for this Terminal Review, the Reconstructed ToC for the Terminal Review of the UNEP Project: "Sharing Experience and Knowledge for a Sustainable Belt and Road" that can be seen in Annex IV in the LogFrame, and the Project Monitoring Plan for this terminal project review.

Review Criteria (Project Evaluation Parameters)

The ratings for the review criteria / parameters described in the following sub-chapters A to I presented in the form of a table with each of the categories rated separately and with brief justifications for the rating based on the findings of the main analysis. An overall rating for the project is also given. The rating system to be applied is specified in Annex II.

A. Strategic Relevance

The Terminal Review assessed the extent to which the activity is suited to the priorities and policies of the donors, implementing regions/countries and the target beneficiaries. The Review included an assessment of the project's relevance in relation to UNEP's mandate and its alignment with UNEP's policies and strategies at the time of project approval. Under strategic relevance an assessment of the complementarity of the project with other interventions addressing the needs of the same target groups was made. This criterion comprises four elements:

i. *Alignment to the UNEP's Medium-Term Strategy[35] (MTS), Programme of Work and Strategic Priorities*

The Review has assessed the project's alignment with the MTS and PoW under which the project was approved and include, in its narrative, reflections on the scale and scope of any contributions made to the planned results reflected in the relevant MTS and PoW. UNEP strategic priorities include the Bali Strategic Plan for Technology Support and Capacity Building[36] (BSP) and South-South Cooperation (S-SC). The BSP relates to the capacity of governments to: comply with international agreements and obligations at the national level; promote, facilitate and finance environmentally sound technologies and to strengthen frameworks for developing coherent international environmental policies. S-SC is regarded as the exchange of resources, technology and knowledge between developing countries.

ii. *Alignment to Donor/Partner Strategic Priorities*

The Review assessed the extent to which the project is suited to, or responding to, the Donor's strategic priorities. In some cases, alignment with donor priorities may be a fundamental part of project design and grant approval processes while in others, for example, instances of 'softly-earmarked' funding, such alignment may be more of an assumption that should be assessed.

[35] UNEP's Medium Term Strategy (MTS) is a document that guides UNEP's programme planning over a four-year period. It identifies UNEP's thematic priorities, known as Sub-programmes (SP), and sets out the desired outcomes, known as Expected Accomplishments (EAs), of the Sub-programmes. https://www.unenvironment.org/about-un-environment/evaluation-office/our-evaluation-approach/un-environment-documents

[36] http://www.unep.fr/ozonaction/about/bsp.htm

iii. *Relevance to Global, Regional, Sub-regional and National Environmental Priorities*

The Review assessed the alignment of the project with global priorities such as the SDGs and Agenda 2030. The extent to which the intervention is suited, or responding to, the stated environmental concerns and needs of the countries, sub-regions or regions where it is being implemented will also be considered. Examples may include: UN Development Assistance Frameworks (UNDAF) or, national or sub-national development plans, poverty reduction strategies or Nationally Appropriate Mitigation Action (NAMA) plans or regional agreements etc. Within this section consideration will be given to whether the needs of all beneficiary groups are being met and reflects the current policy priority to leave no-one behind.

iv. *Complementarity with Relevant Existing Interventions/Coherence*[37]

An assessment was made of how well the project, either at design stage or during the project inception or mobilization38, took account of ongoing and planned initiatives (under the same sub-programme, other UNEP sub-programmes, or being implemented by other agencies within the same country, sector or institution) that address similar needs of the same target groups. The Reviewer considered if the project team, in collaboration with Regional Offices and Sub-Programme Coordinators, made efforts to ensure their own intervention was complementary to other interventions, optimized any synergies and avoided duplication of effort. Examples may include work within UNDAFs or One UN programming. Linkages with other interventions were described and instances where UNEP's comparative advantage has been particularly well applied should be highlighted.

Factors affecting this criterion included:

- Stakeholders' participation and cooperation,
- Responsiveness to human rights and gender equity, and
- Country ownership and driven-ness.

Coherence is the compatibility of the intervention with other interventions in a country, sector or institution.

The evaluation assessed to what extent did the Project capture perspectives that were not covered in previous project, including partnerships and linkages, and to understand interventions within broader systems?

Specific Evaluation Questions for Coherence for the Project include the following:

- How did project activities take applicable regional priorities and respective policies specifically on climate proofing, road infrastructure, and green infrastructure into account?
- How did project activities ensure coherence towards the BRI countries' fulfilment of the SDGs and their NDCs under the Paris Agreement?
- To what extent have national and regional activities in the area of climate-proofing and

[37] This sub-category is consistent with the new criterion of 'Coherence' introduced by the OECD-DAC in 2019.

[38] A project's inception or mobilization period is understood as the time between project approval and first disbursement. Complementarity during project implementation is considered under Efficiency, see below.

infrastructure development in the selected countries been considered?

- To what extent has the project considered specific needs and priorities of the target countries?
- How has local and regional knowledge on climate change and climate scenarios been included?
- To what extent have processes and discussions of the Project into other relevant processes for evidence-based policy development?

For the Strategic Relevance, the evaluation examined the extent to which the project is relevant to the:

- National development and environmental priorities and strategies of the Government and population of China, the countries affected by the RCB Trainings, and regional and international agreements.
- Target groups: relevance of the project's objectives, outcomes and outputs to the different target groups of the interventions (e.g. companies, civil society, beneficiaries of capacity building and training, etc.).
- UNEP's and China's focal areas/operational programme strategies: In retrospect, were the project's outcomes consistent with the focal areas/operational program strategies of UNEP and China?
- UNEP's and China thematic priorities on Sustainable Belt and Road: Were they in line with UNEP's mandate, objectives and core competencies?
- Does the project remain relevant considering the changing environment? Is there a need to reformulate the project design and the project results framework given changes in the country and operational context?

B. Quality of Project Design

The quality of project design is assessed using an agreed template during the review inception phase, and will be included in the Terminal Evaluation Report. Ratings are attributed to identified criteria and an overall Project Design Quality rating is established. The overall Project Design Quality rating will be entered in the final review ratings table (as item B) in the Terminal Review Report and a summary of the project's strengths and weaknesses at design stage should be included within the body of the Main Review Report.

Factors affecting this criterion may include (at the design stage):

- Stakeholders' participation and cooperation, and
- Responsiveness to human rights and gender equity

For the Project Design, the evaluation examined the extent to which:

- The project's design is adequate to address the problems at hand;
- A participatory project identification process was instrumental in selecting problem

areas and national counterparts;

- The project has a clear thematically focused development objective, the attainment of which can be determined by a set of verifiable indicators;
- The project was formulated based on the logical framework (project results framework) approach;
- The project was formulated with the participation of national counterpart and/or target beneficiaries; and
- Relevant country representatives (from government, industries and civil society) have been appropriately involved and were participating in the identification of critical problem areas and the development of technical cooperation strategies.

C. Nature of External Context

At review inception stage a rating is established for the project's external operating context (considering the prevalence of conflict, natural disasters and political upheaval39). This rating is entered in the final review ratings table as item C. Where a project has been rated as facing either an Unfavourable or Highly Unfavourable external operating context, and/or a negative external event has occurred during project implementation, the ratings for Effectiveness, Efficiency and/or Sustainability may be increased at the discretion of the Review Consultant and Project Manager together. A justification for such an increase must be given.

D. Effectiveness: objectives and planned final results at the end of the project

The evaluation assessed to what extent results at various levels, including outcomes, have been achieved. In detail, the following issues was assessed:

- To what extent have the expected outputs, outcomes and long-term objectives been achieved or are likely to be achieved?
- Has the project generated any results that could lead to changes of the assisted institutions?
- Have there been any unplanned effects?
- Are the project outcomes commensurate with the original or modified project objectives?
- If the original or modified expected results are merely outputs/inputs, the reviewers should assess if there were any real outcomes of the project and, if there were, determine whether these are commensurate with realistic expectations from the project.
- How do the stakeholders perceive the quality of outputs?

[39] Note that 'political upheaval' does not include regular national election cycles, but unanticipated unrest or prolonged disruption. The potential delays or changes in political support that are often associated with the regular national election cycle should be part of the project's design and addressed through adaptive management of the project team. From March 2020 this should include the effects of COVID-19.

- ➢ Were the targeted beneficiary groups reached?
- ➢ What outputs and outcomes has the project achieved so far (both qualitative and quantitative results)?
- ➢ Has the project generated any results that could lead to changes of the assisted institutions?
- ➢ Have there been any unplanned effects?
- ➢ Identify actual and/or potential longer-term impacts or at least indicate the steps taken to assess these (see also below “monitoring of long-term changes”). Wherever possible, reviewers should indicate how findings on impacts will be reported in future.
- ➢ Describe any catalytic or replication effects: the evaluation will describe any catalytic or replication effect both within and outside the project. If no effects are identified, the evaluation will describe the catalytic or replication actions that the project carried out. No ratings are requested for the project’s catalytic role.

i. Availability of Outputs[40]

The Review assessed the project’s success in producing the programmed outputs and making them available to the intended beneficiaries as well as its success in achieving milestones as per the ProDoc. Any formal modifications/revisions made during project implementation will be considered part of the project design. Where the project outputs are inappropriately or inaccurately stated in the ProDoc, reformulations will be made in the reconstruction of TOC. The Review will briefly explain the reasons behind the success or shortcomings of the project in delivering its programmed outputs and meeting expected quality standards.

Factors affecting this criterion may include:

- ➢ Preparation and readiness, and
- ➢ Quality of project management and supervision[41]

ii. Achievement of Project Outcomes[42]

The achievement of project outcomes was assessed in the Terminal Review report as performance against the outcomes as defined in the reconstructed[43] ToC. These are outcomes that are intended to be achieved by the end of the project timeframe and within the project’s resource envelope. Emphasis was placed on the achievement of project outcomes that are most important for attaining intermediate states. As with outputs, a table was used to show where substantive amendments to the formulation of project outcomes

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[40] Outputs are the availability (for intended beneficiaries/users) of new products and services and/or gains in knowledge, abilities and awareness of individuals or within institutions (UNEP, 2019)
[41] In some cases ‘project management and supervision’ will refer to the supervision and guidance provided by UNEP to implementing partners and national governments while in others, specifically for GEF funded projects, it will refer to the project management performance of the executing agency and the technical backstopping provided by UNEP.
[42] Outcomes are the use (i.e. uptake, adoption, application) of an output by intended beneficiaries, observed as changes in institutions or behavior, attitude or condition (UNEP, 2019)
[43] UNEP staff are currently required to submit a Theory of Change with all submitted project designs. The level of ‘reconstruction’ needed during an review will depend on the quality of this initial TOC, the time that has lapsed between project design and implementation (which may be related to securing and disbursing funds) and the level of any changes made to the project design. In the case of projects pre-dating 2013 the intervention logic is often represented in a logical framework and a TOC will need to be constructed in the inception stage of the review.

is necessary to allow for an assessment of performance. The Review reported evidence of attribution between UNEP's intervention and the project outcomes.

Factors affecting this criterion may include:

- Quality of project management and supervision,
- Stakeholders' participation and cooperation,
- Responsiveness to human rights and gender equity, and
- Communication and public awareness

iii. Likelihood of Impact

Based on the articulation of long-lasting effects in the reconstructed ToC (i.e. from project outcomes, via intermediate states, to impact), the Review assessed the likelihood of the intended, positive impacts becoming a reality. Project objectives or goals should be incorporated in the ToC, possibly as intermediate states or long-lasting impacts. The Evaluation Office's approach to the use of ToC in project reviews is outlined in a guidance note and is supported by an excel-based flow chart, 'Likelihood of Impact Assessment Decision Tree'. Essentially the approach follows a 'likelihood tree' from project outcomes to impacts, taking account of whether the assumptions and drivers identified in the reconstructed ToC held. Any unintended positive effects should also be identified and their causal linkages to the intended impact.

The Review also considered the likelihood that the intervention may lead, or contribute to, unintended negative effects (e.g. will vulnerable groups such as those living with disabilities and/or women and children, be disproportionally affected by the project?). Some of these potential negative effects may have been identified in the project design as risks or as part of the analysis of Environmental and Social Safeguards.

The Review considered the extent to which the project has played a catalytic role[44] or has promoted scaling up and/or replication as part of its ToC (either explicitly as in a project with a demonstration component or implicitly as expressed in the drivers required to move to outcome levels) and as factors that are likely to contribute to greater or long-lasting impact.

Ultimately, UNEP and all its partners aim to bring about benefits to the environment and human well-being. Few projects are likely to have impact statements that reflect such long-lasting or broad-based changes. However, the Review will assess the likelihood of the project to make a substantive contribution to the long-lasting changes represented by the Sustainable

[44] The terms catalytic effect, scaling up and replication are inter-related and generally refer to extending the coverage or magnitude of the effects of a project. Catalytic effect is associated with triggering additional actions that are not directly funded by the project – these effects can be both concrete or less tangible, can be intentionally caused by the project or implied in the design and reflected in the TOC drivers, or can be unintentional and can rely on funding from another source or have no financial requirements. Scaling up and Replication require more intentionality for projects, or individual components and approaches, to be reproduced in other similar contexts. Scaling up suggests a substantive increase in the number of new beneficiaries reached/involved and may require adapted delivery mechanisms while Replication suggests the repetition of an approach or component at a similar scale but among different beneficiaries. Even with highly technical work, where scaling up or replication involves working with a new community, some consideration of the new context should take place and adjustments made as necessary.

Development Goals, and/or the intermediate-level results reflected in UNEP's Expected Accomplishments and the strategic priorities of funding partner(s).

Factors affecting this criterion may include:

- Quality of Project Management and Supervision (including adaptive management),
- Stakeholders participation and cooperation,
- Responsiveness to human rights and gender equity,
- Country ownership and driven-ness, and
- Communication and public awareness.

The question of project impact will be answered with the assessment to what extent does the Project focus on higher-level changes, like the adverse effects on climate change to improve sustainably the road infrastructure into green infrastructure in the BRI countries, in terms of significance, transformative potential, scope, or time scale?

E. Financial Management

Financial management was assessed under three themes: adherence to UNEP's financial policies and procedures, completeness of financial information and communication between financial and project management staff. The Review will establish the actual spend across the life of the project of funds secured from all donors. This expenditure will be reported, where possible, at output/component level and will be compared with the approved budget. The Review will verify the application of proper financial management standards and adherence to UNEP's financial management policies. Any financial management issues that have affected the timely delivery of the project or the quality of its performance will be highlighted. The Review will record where standard financial documentation is missing, inaccurate, incomplete or unavailable in a timely manner. The Review will assess the level of communication between the Project Manager and the Fund Management Officer as it relates to the effective delivery of the planned project and the needs of a responsive, adaptive management approach.

Factors affecting this criterion may include:

- Preparation and readiness, and
- Quality of project management and supervision.

F. Efficiency

Under the efficiency criterion, the Review assessed the extent to which the project delivered maximum results from the given resources. This will include an assessment of the cost-effectiveness and timeliness of project execution.

Focusing on the translation of inputs into outputs, cost-effectiveness is the extent to which an intervention has achieved, or is expected to achieve, its results at the lowest possible cost. Timeliness refers to whether planned activities were delivered according to expected timeframes as well as whether events were sequenced efficiently. The Review also assessed to what extent any project extension could have been avoided through stronger project management and identify any negative impacts caused by project delays or extensions. The Review described any cost or time-saving measures put in place to maximise results within the secured budget and agreed project timeframe and consider whether the project was implemented in the most efficient way compared to alternative interventions or approaches.

The Review gave special attention to efforts made by the project teams during project implementation to make use of/build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency.

The factors underpinning the need for any project extensions were also explored and discussed. As management or project support costs cannot be increased in cases of 'no cost extensions', such extensions represent an increase in unstated costs to UNEP and implementing parties.

Factors affecting this criterion may include:

- Preparation and readiness (e.g. timeliness),
- Quality of project management and supervision, and
- Stakeholders participation and cooperation.

Efficiency represents the extent to which:

- The project cost was effective?
- Was the project using the least cost options?
- Has the project produced results (outputs and outcomes) within the expected time frame?
- Was project implementation delayed, and, if it was, did that affect cost effectiveness or results?
- Wherever possible, the reviewer should also compare the costs incurred and the time taken to achieve outcomes with that for similar projects.
- Are the project's activities in line with the schedule of activities as defined by the project team and annual work plans?
- Are the disbursements and project expenditures in line with budgets?
- Have the inputs from the donor, UNEP and Governments/counterparts been provided as planned, and were they adequate to meet requirements?
- Was the quality of UNEP inputs and services as planned and timely?
- Was there coordination with other UNEP and other donors' projects, and did possible synergy effects happen?

G. Monitoring and Reporting

The Review assessed monitoring and reporting across three sub-categories: monitoring design and budgeting, monitoring implementation and project reporting. Special attention but also technical, financial and organization sustainability will:

i. Monitoring Design and Budgeting

Each project should be supported by a sound monitoring plan that is designed to track progress against SMART[45] results towards the achievement of the project's outputs and outcomes, including at a level disaggregated by gender, marginalization or vulnerability, including those living with disabilities. In particular, the Review will assess the relevance and appropriateness of the project indicators as well as the methods used for tracking progress against them as part of conscious results-based management. The Review will assess the quality of the design of the monitoring plan as well as the funds allocated for its implementation. The adequacy of resources for Mid-Term and Terminal Evaluation/Review should be discussed, where applicable.

ii. Monitoring and Project Implementation

The Review will assess whether the monitoring system was operational and facilitated the timely tracking of results and progress towards project objectives throughout the project implementation period. This assessment will include consideration of whether the project gathered relevant and good quality baseline data that is accurately and appropriately documented. This should include monitoring the representation and participation of disaggregated groups, including gendered, marginalized or vulnerable groups, such as those living with disabilities, in project activities. It will also consider the quality of the information generated by the monitoring system during project implementation and how it was used to adapt and improve project execution, achievement of outcomes and ensure sustainability. The Review should confirm that funds allocated for monitoring were used to support this activity.

iii. Project Reporting

UNEP has a centralized Project Information Management System (PIMS) in which project managers upload six-monthly progress reports against agreed project milestones. This information will be provided to the Review Consultant(s) by the Project Manager. Some projects have additional requirements to report regularly to funding partners, which will be supplied by the project team. The Review will assess the extent to which both UNEP and donor reporting commitments have been fulfilled. Consideration will be given as to whether reporting has been carried out with respect to the effects of the initiative on disaggregated groups.

Factors affecting this criterion may include:

- Quality of project management and supervision, and
- Responsiveness to human rights and gender equity (e.g. disaggregated indicators and data)

H. Sustainability

Sustainability[46] is understood as the probability of the benefits derived from the achievement of project outcomes being maintained and developed after the close of the intervention. The

[45] SMART refers to results that are specific, measurable, achievable, relevant and time-oriented. Indicators help to make results measurable.

[46] As used here, 'sustainability' means the long-term maintenance of outcomes and consequent impacts, whether environmental or not. This is distinct from the concept of sustainability in the terms 'environmental sustainability' or 'sustainable development', which imply 'not living beyond our means' or 'not diminishing global environmental benefits' (GEF STAP Paper, 2019, Achieving More Enduring Outcomes from GEF Investment)

Review identified and assessed the key conditions or factors that are likely to undermine or contribute to the endurance of achieved project outcomes (i.e. 'assumptions' and 'drivers'). Some factors of sustainability may be embedded in the project design and implementation approaches while others may be contextual circumstances or conditions that evolve over the life of the intervention. Where applicable an assessment of bio-physical factors that may affect the sustainability of direct outcomes may also be included. Assessment of sustainability of outcomes will be given special attention but also technical, financial and organization sustainability will be reviewed. This assessment should explain how the risks to project outcomes will affect continuation of benefits after the project ends. It will include both exogenous and endogenous risks. The following four dimensions or aspects of risks to sustainability will be addressed:

i. Socio-Political Sustainability

This Terminal Review assessed the extent to which social or political factors support the continuation and further development of the benefits derived from project outcomes. It will consider the level of ownership, interest and commitment among government and other stakeholders to take the project achievements forwards. Particularly, the Review will consider whether individual capacity development efforts are likely to be sustained.

The Terminal Review Report entails answering the following questions in order to assess the Socio-political risks:

- Are there any social or political risks that may jeopardize sustainability of project outcomes?
- What is the risk that the level of stakeholder ownership (including ownership by governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained?
- Do the various key stakeholders see that it is in their interest that project benefits continue to flow?
- Is there sufficient public/stakeholder awareness in support of the project's long-term objectives?

ii. Socio-Political Sustainability

Some project outcomes, once achieved, do not require further financial inputs, e.g. the adoption of a revised policy. However, in order to derive a benefit from this outcome further management action may still be needed e.g. to undertake actions to enforce the policy. Other project outcomes may be dependent on a continuous flow of action that needs to be resourced for them to be maintained, e.g. continuation of a new natural resource management approach. The Review will assess the extent to which project outcomes are dependent on future funding for the benefits they bring to be sustained. Secured future funding is only relevant to financial sustainability where the project outcomes have been extended into a future project phase. Even where future funding has been secured, the question still remains as to whether the project outcomes are financially sustainable.

The Terminal Review Report entails answering the following questions in order to assess the financial risks:

- Are there any financial risks that may jeopardize sustainability of project outcomes?

- What is the likelihood of financial and economic resources not being available once development assistance ends? (Such resources can be from multiple sources, such as the public and private sectors or income-generating activities; these can also include trends that indicate the likelihood that, in future, there will be adequate financial resources for sustaining project outcomes.)

- Was the project successful in identifying and leveraging co-financing?

- Has the committed co-financing materialized?

iii. Institutional Sustainability

The Review assessed the extent to which the sustainability of project outcomes (especially those relating to policies and laws) is dependent on issues relating to institutional frameworks and governance. It will consider whether institutional achievements such as governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. are robust enough to continue delivering the benefits associated with the project outcomes after project closure. Particularly, the Review will consider whether institutional capacity development efforts are likely to be sustained.

Factors affecting this criterion may include:

- Stakeholders participation and cooperation,

- Responsiveness to human rights and gender equity (e.g. where interventions are not inclusive, their sustainability may be undermined),

- Communication and public awareness, and

- Country ownership and driven-ness.

The Terminal Review Report entails answering the following questions to assess the Institutional framework and governance risks:

- Do the legal frameworks, policies, and governance structures and processes within which the project operates pose risks that may jeopardize sustainability of project benefits?

- Are requisite systems for accountability and transparency, and required technical know-how, in place?

I. Factors Affecting Project Performance and Cross-Cutting Issues

These factors are rated in the ratings table but will be discussed within the Main Review Report as cross-cutting themes as appropriate under the other review criteria, above. If these issues have not been addressed under the Review Criteria above, then independent summaries of their status within the reviewed project should be given in this section.

Among other factors, when relevant, the evaluation considered several issues affecting project implementation and attainment of project results. The assessment of these issues can be integrated into the analyses of project design, relevance, effectiveness, efficiency, sustainability and management as the reviewers find them fit.

1. Preparation and Readiness

This criterion focuses on the inception or mobilization stage of the project (i.e. the time between project approval and first disbursement). The Review assessed whether appropriate measures were taken to either address weaknesses in the project design or respond to changes that took place between project approval, the securing of funds and project mobilization. The Review considered the nature and quality of engagement with stakeholder groups by the project team, the confirmation of partner capacity and development of partnership agreements as well as initial staffing and financing arrangements (Project preparation is included in the template for the assessment of Project Design Quality).

The Terminal Review Report entails answering the following questions to assess Preparation and Readiness /Quality at entry:

- Were the project's objectives and components clear, practicable, and feasible within its time frame?
- Were counterpart resources (funding, staff, and facilities), and adequate project management arrangements in place at project entry?
- Were the capacities of executing institution and counterparts properly considered when the project was designed?
- Were lessons from other relevant projects properly incorporated in the project design?
- Were the partnership arrangements properly identified and the roles and responsibilities negotiated prior to project approval?

2. *Quality of Project Management and Supervision*

In some cases, 'project management and supervision' may refer to the supervision and guidance provided by UNEP to implementing partners and national governments while in others it may refer to the project management performance of an implementing partner and the technical backstopping and supervision provided by UNEP. The performance of parties playing different roles should be discussed and a rating provided for both types of supervision (UNEP/Implementing Agency; Partner/Executing Agency) and the overall rating for this sub-category established as a simple average of the two.

The Review assessed the effectiveness of project management with regard to: providing leadership towards achieving the planned outcomes; managing team structures; maintaining productive partner relationships (including Steering Groups etc.); maintaining project relevance within changing external and strategic contexts; communication and collaboration with UNEP colleagues; risk management; use of problem-solving; project adaptation and overall project execution. Evidence of adaptive management should be highlighted.

3. *Stakeholder Participation and Cooperation*

Here the term 'stakeholder' was considered in a broad sense, encompassing all project partners, duty bearers with a role in delivering project outputs, target users of project outputs and any other collaborating agents external to UNEP and the implementing partner(s). The assessment considered the quality and effectiveness of all forms of communication and consultation with stakeholders throughout the project life and the support given to maximize collaboration and coherence between various stakeholders, including sharing plans, pooling resources and exchanging learning and expertise. The inclusion and participation of all differentiated groups, including gender groups, was considered.

4. Responsiveness to Human Rights and Gender Equality

The Review ascertained to what extent the project has applied the UN Common Understanding on the Human Rights-Based Approach (HRBA) and the UN Declaration on the Rights of Indigenous People. Within this human rights context the Review will assess to what extent the intervention adheres to UNEP's Policy and Strategy for Gender Equality and the Environment [47].

The report presents the extent to which the intervention, following an adequate gender analysis at design stage, has implemented the identified actions and/or applied adaptive management to ensure that Gender Equality and Human Rights are adequately considered. The Review will consider to what extent project design, implementation and monitoring have taken into consideration:

(i) possible inequalities (especially those related to gender) in access to, and the control over, natural resources;

(ii) specific vulnerabilities of disadvantaged groups (especially women, youth and children and those living with disabilities) to environmental degradation or disasters; and

(iii) the role of disadvantaged groups (especially women, youth and children and those living with disabilities) in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation.

5. Environmental and Social Safeguards

UNEP projects address environmental and social safeguards primarily through the process of environmental and social screening at the project approval stage, risk assessment and management (avoidance, or mitigation of potential environmental and social risks and impacts associated with project and programme activities. The Review confirmed whether UNEP requirements[48] were met to: review risk ratings on a regular basis; monitor project implementation for possible safeguard issues; respond (where relevant) to safeguard issues through risk avoidance, minimization, mitigation or offsetting and report on the implementation of safeguard management measures taken. UNEP requirements for proposed projects to be screened for any safeguarding issues; for sound environmental and social risk assessments to be conducted and initial risk ratings to be assigned, are reviewed above under Quality of Project Design).

The Review will also consider the extent to which the management of the project minimized UNEP's environmental footprint.

6. Country Ownership and Drive-ness

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[47] The Evaluation Office notes that Gender Equality was first introduced in the UNEP Project Review Committee Checklist in 2010 and, therefore, provides a criterion rating on gender for projects approved from 2010 onwards. Equally, it is noted that policy documents, operational guidelines and other capacity building efforts have only been developed since then and have evolved over time. https://wedocs.unep.org/bitstream/handle/20.500.11822/7655/-Gender_equality_and_the_environment_Policy_and_strategy-2015Gender_equality_and_the_environment_policy_and_strategy.pdf.pdf?sequence=3&isAllowed=y

[48] For the review of project concepts and proposals, the Safeguard Risk Identification Form (SRIF) was introduced in 2019 and replaced the Environmental, Social and Economic Review note (ESERN), which had been in place since 2016. In GEF projects safeguards have been considered in project designs since 2011.

The Review assessed the quality and degree of engagement of government / public sector agencies in the project. While there is some overlap between Country Ownership and Institutional Sustainability, this criterion focuses primarily on the forward momentum of the intended projects results, i.e. either: a) moving forwards from outputs to project outcomes or b) moving forward from project outcomes towards intermediate states. The Review considered the involvement not only of those directly involved in project execution and those participating in technical or leadership groups, but also those official representatives whose cooperation is needed for change to be embedded in their respective institutions and offices (e.g. representatives from multiple sectors or relevant ministries beyond Ministry of Environment). This factor is concerned with the level of ownership generated by the project over outputs and outcomes and that is necessary for long term impact to be realized. Ownership should extend to all gender and marginalized groups.

7. Quality of Project Management and Supervision

The Review assessed the effectiveness of: a) communication of learning and experience sharing between project partners and interested groups arising from the project during its life and b) public awareness activities that were undertaken during the implementation of the project to influence attitudes or shape behavior among wider communities and civil society at large. The Review considered whether existing communication channels and networks were used effectively, including meeting the differentiated needs of gendered or marginalized groups, and whether any feedback channels were established. Where knowledge sharing platforms have been established under a project the Review will comment on the sustainability of the communication channel under either socio-political, institutional or financial sustainability, as appropriate.

ANNEX IV. LOGICAL FRAMEWORK

Table 12 Logical Framework of the Sustainable Belt and Road Project

Relevant Expected Accomplishment(s) in the Programme of Work: Subprogramme 6: Resource Efficiency and Sustainable Consumption and Production Expected Accomplishment (a) Science-based approaches that support the transition to sustainable development through multiple pathways, including inclusive green economy and sustainable trade, and the adoption of sustainable consumption and production patterns at all levels. Expected Accomplishment (b) Public, private and financial sectors increasingly adopt and implement

1. Project Outcome	**Indicators**	**Relevant Subprogramme Expected Accomplishment and Indicator**
Public Sector Belt and Road stakeholders in the project countries have increased awareness and understanding of the sustainable development opportunities and challenges associated with Belt and Road	1. Number of public sector stakeholders that are aware of the sustainable development opportunities[16] and challenges associated with the Belt and Road Initiative; [baseline: 0 target: 60]	EA (a) (i) Increase in the number of countries, transitioning to sustainable development through multiple pathways, including through implementing inclusive green economy, sustainable consumption and production, and sustainable trade policies;

Project outcome milestones	**Milestone attainment date**
M1: 20 public sector stakeholders are aware of the sustainable investment/business opportunities associated with the Belt and Road Initiative	December 2018
M2: 20 additional public sector stakeholders are aware of the sustainable investment/business opportunities associated with the Belt and Road Initiative	December 2019
M3: 20 additional public sector stakeholders are aware of the sustainable investment/business opportunities associated with the Belt and Road Initiative	December 2020

2. Project Outputs	**Indicators**
1a) Collection and dissemination of case studies	**a) number of knowledge products published [baseline: 0 target: 3]**

Project output Milestones:	**Milestone attainment date**
M1: 3 case studies identified	December 2018
M2: First case study brief published online	June 2019
M3: 3 additional case studies identified	September 2019
M4: Second case study brief published online	December 2019
M5: Zero draft of the final case study report prepared for review	June 2020
M6: Final case study report published in hard copy and online	December 2020

1b) Environmental data needs assessment, platform integration scoping, and creation and dissemination of environmental data briefs	**a) Number of expert meetings held to assess data needs and availability [baseline:0 target: 1]** **b) Number of data platform integration assessments [baseline 0 target: 1]** **c) Number of Big data platforms interoperable [baseline 0**

M1: stakeholder mapping conducted (as a precursor to indicator a)	October 2018
M2: 1 expert meeting held to assess data needs and availability	December 2018
M3: data platform integration assessment conducted	June 2019
M4: data platform integration between World Environment Situation Room and DBAR Big Data Platform	September 2019
M5: 1 Foresight Data Brief published	December 2019
M6: 1 additional Foresight Data Brief published	June 2020
M7: 1 additional Foresight Data Brief published	December 2020
2) Capacity building for Belt and Road stakeholders	**a) number of capacity building seminars held [baseline: 0 target: 3]** **b) number of stakeholders that attend capacity building seminars [baseline: 0 target: 60]** **c) gender balance of seminar participants [baseline: 0 target: 50% male, 50% female]**
M1: Draft curriculum developed for first capacity building seminar	October 2018
M2: First capacity building seminar is held	December 2018
M3: Draft curriculum developed for first capacity building seminar	June 2019
M4: Second capacity building seminar is held	December 2019
M5: Draft curriculum developed for first capacity building seminar	June 2020
M6: Third capacity building seminar is held	December 2020

ANNEX V. MONITORING PLAN

Table 13 Monitoring Plan for the Sustainable Belt and Road Project

Outcome level	*Indicator-based Evidence & Measurement*								
	Indicator	***Baseline***	***Target***	***Variables***	***Data sources***	***Data collection method***	***Frequency***	***Budget***	***Responsible office(s)***
Outcome	Outcome indicator 1	0	60	Number of public-sector stakeholders	Survey conducted with participating policymakers that tracks awareness of the project research	Survey, communication with government focal points	Annually, following each capacity building seminar, 3 times	N/A (staff time)	Project Manager
Output 1a	Output 1a indicator a	0	3	Number of knowledge products published	UN Environment	Internal	once	N/A (staff time)	Project Manager
Output 1b	Output 1b indicator a	0	1	Number of expert meetings held	UN Environment	Internal	once	N/A (staff time)	Project Manager
	Output 1b indicator b	0	1	Number of data platform integration	UN Environment	Internal	once	N/A (staff time)	Project Manager
	Output 1b indicator c	0	2	Number of Big data platforms interopera	UN Environment/DBAR	Internal	once	N/A (staff time)	Project Manager
	Output 1b indicat	0	3	Number of data briefs published	UN Environment	Internal	once	N/A (staff time)	Project Manager
	Output 1b indicator e	0	1	Number of project proposals formulated	UN Environment	Internal	once	N/A (staff time)	Project Manager
Output 2	Output 2 indicator a	0	3	Number of capacity building seminars held	UN Environment	Internal	once	N/A (staff time)	Project Manager
	Output 2 indicator b	0	60	number of participants in capacity building seminars	UN Environment	Internal	once	N/A (staff time)	Project Manager
	Output 2 indicator c	0	50%male -50% female	Gender balance of seminar participants	Seminar participant lists	Internal	Annually, following each capacity building seminar, 3 times	N/A (staff time)	Project Manager

ANNEX VI. REVIEW MATRIX

Table 14 Evaluation Matrix for Terminal Review of Sustainable Belt and Road Project

Criteria/Issues	Evaluation Questions	Indicators	Data Collection /Analysis Methods	Sources of Information
1.PROJECT RELEVANCE AND DESIGN **To what extent are the project objectives and expected outcomes relevant to global, national and local development and environment strategies and priorities? i.e. Are the project objectives, outputs and outcomes with significance to:**				
(a) UNEP, CHINA-MEE focal area of climate change and adaptation?	What are the project objectives, outputs and outcomes?	• Performance of the project against the planned targets as shown in the logical framework.	Document review	Project Logical Framework
	Are the Project objectives, outputs and outcomes narrating the UNEP, CHINA-MEE climate change and adaptation focal area?	• Existence of clear relationship between the Project objectives and the UNEP, CHINA-MEE climate change and adaptation focal area	Document review	Project documents, UNEP, CHINA-MEE strategies and documents UN-Policies and standards
	How is the market approach in promotion of renewable energy relevant to UNEP, ADA and EU climate change focal area?	• Evidence of values added in the UNEP, CHINA-MEE climate change and adaptation focal areas.	Document Review	Project document
(b) Other donors who co-financed the project	How does the donor support to the project complement each other? Was the CHINA-MEE funding support from the China Trust Fund (CTF) not addressed by other donors until now? / How does it fill the gaps?	• Degree to which Project is coherent and complementary to other donor programming • Is there co-ordination and complementarity between donors	Document review Interviews	Documents from other donors Other donor reps Project documents
(c) UNEP's, CHINA-MEE Thematic priorities	Is the project in-line with UNEP's, CHINA-MEE thematic area?	• Objectives are consistent with UNEP's and CHINA-MEE policies and lessons learned	Document review	UNEP's and CHINA-MEE policies
(d) Address Greening of the Sustainable Belt and Road countries and their Sustainable Infrastructure	• What are the national strategies and priorities in Greening of the Sustainable Belt and Road countries and their Sustainable Infrastructure?	• Existence of clear relationship between the project objectives and outcome and the government policies and priorities	Document review	Project documents and reviews, national climate change and adaptation policies of the countries where regional capacity building training took place

Criteria/Issues	Evaluation Questions	Indicators	Data Collection /Analysis Methods	Sources of Information
	• How is the project contributing to realization of such priorities and strategies?			
(e) Needs of target groups	• Who are the project target beneficiaries? Were all identified? • What are the needs of target beneficiaries? • How is the project meeting the needs of target groups?	• Insights of target beneficiaries, including climate change and adaptation specialists, road infrastructure officials, project developers, government planners	Interview	Project stakeholders
	How is the project involving target beneficiaries?	• Level of participation of target beneficiaries in the project identification, implementation and monitoring	Document review	Project document, Project progress reports
(f) Changing environment i.e. does the project require any amendment to be in line with changes in the country and operational context	• Were there any amendments to project since its design to date? • If so, why and with what consequences? • Is the Project on track to meet its targets? • What lessons have been learned? • Which recommendations, if any, can be made based on the mid-term review to ensure the Project is on track to meet its targets?	• Number of amendments made to project design	Desk review Interviews	Project management documents UNEP staff PMT staff
2. PROJECT COHERENCE **To what extent are the project interventions compatible with other interventions in a country, sector or institution.** **Coherence and flexibility of operations/interventions: To what extent did the Sustainable Belt and Road Project capture perspectives that were not covered previously in the Climate Change and Adaptation Projects in the given Belt and Road Countries? This should include partnerships and linkages, and to understand interventions within broader systems.**				
Are the Sustainable Belt and Road project objectives appropriate to the	1. Do these interventions complement the political agenda in the project implementation	• How is the Greening of the Sustainable Belt and Road countries and their Sustainable	1. Literature review and analyses of government policy	Review and validate the sample project countries' laws on climate

Criteria/Issues	Evaluation Questions	Indicators	Data Collection /Analysis Methods	Sources of Information
political, economic, social and environmental context?	countries? (regional economic communities and national governments)?	Infrastructure handled in the given countries? • Evidence that the Greening of the Sustainable Belt and Road countries and their Sustainable Infrastructure are stated high priorities for governments and regional bodies	2. Interviews with regional economic communities (interacting with member governments)	change and adaptation
	2. Do Governments outside the region politically engage in Greening of the Sustainable Belt and Road countries and their Sustainable Infrastructure?	• Evidence that these strategies form part of the governments' national economic and environmental development strategy	Interviews with government officials in the region	Project documents UN-Policies and standards
Is the Sustainable Belt and Road project working holistically alongside other climate change and adaptation projects in the Belt and Road countries, do they collaborate and complement each other?	1. Is the Sustainable Belt and Road project linking holistically to other alongside other climate change and adaptation projects in the Belt and Road countries, do they collaborate and complement each other? 2. Are there any partnerships built with other projects with similar objectives in climate change and adaptation in the region?	• No duplication of efforts and mandates with other projects with similar objectives in climate change and adaptation in the region	1. Literature review 2. Interviews with other donors (such as the World Bank, the EU, GIZ, USAID and JICA) 3. Comparison of climate change and adaptation projects in the Belt and Road Countries	Document review Interviews Documents from other donors Project documents
2. EFFECTIVENESS To what extent were results at various levels, including outcomes, achieved?				
(a) Attainment of project objectives and outcomes	• Which project milestones have been achieved towards intended objectives? • What have been the positive and negative outcomes in the target area since the beginning of the project? • What have been the positive and negative	• Percentage of achievement of objectives • Project intended and un-intended outputs • Existence of documented lessons and reflection the project	Document review	Project progress report Project monitoring reports

Criteria/Issues	Evaluation Questions	Indicators	Data Collection /Analysis Methods	Sources of Information
	outcomes to the target beneficiaries (men and women) since the beginning of the project? • Which lessons have been learned by the project? • To what extent are the lessons attributed to the project?			
(b) Attainment of Project impacts	• What planned and unplanned impacts of the project? • Were there additional new jobs created? If so, were women/youth the beneficiaries of the new jobs? • How are the impacts tracked? • Was the Project team aware of results based management/ adaptive management processes as originally set out in the Project design during implementation and were the same applied? • Has there been evidence of flexibility in Project management? • Have any changes been made in response to the results based management/ adaptive management processes? • If so, (a) which changes were made, (b) for what purpose, and (c) with what results?	• Evidence of changes been realized by beneficiaries • Existence of results-based management/ adaptive management processes • Examples of modification and changes made in the project implementation	• Document review • Meetings with Project Management Team (PMT) and beneficiaries • Interviews	• Project monitoring plan • PMT • Stakeholders and beneficiaries

Criteria/Issues	Evaluation Questions	Indicators	Data Collection /Analysis Methods	Sources of Information
Stakeholder inclusiveness and collaboration	• Who are the Project stakeholders and partners? • To date, has Project implementation been inclusive of the relevant stakeholders and collaboration between different partners identified in the Project strategy? • What means have been employed to ensure inclusiveness? (give concrete examples) • Are there stakeholders groups that the Project strategy failed to identify? If so, (i) which ones and (ii) why? • What are the opinions of stakeholders and target beneficiaries in relation to project outputs outcomes and impacts	• Extent to which the implementation of the Project has been inclusive of relevant stakeholders and collaboration between partners	Interviews	Stakeholders
	How are the project partners fulfilling their roles and responsibilities?	• Evidence of timely delivery of the roles and responsibilities	Interviews	Project Management Team
Lessons learned	• Are there any reasons behind the extent of performance of the project? What are they?	• Existence of catalysts and bottlenecks to the performance of the project	Review	Project progress reports
3. EFFICIENCY **The extent to which results have been delivered with the least costly resources possible**				
(a) How and did the project outputs and outcomes deliver with least cost possible	To what extent do the project inputs (time, human and financial resources) were adequate and proportional with the realized outputs, outcomes? (i) Were the required funds in place	• Overall investments (funding, time, other resources) • Extent to which level of co-financing has occurred compared to that planned	• Financial document review • Interview with PMT • Contracts and Memorandum of	• Project documents and reviews, other relevant docs • Project management team

Criteria/Issues	Evaluation Questions	Indicators	Data Collection /Analysis Methods	Sources of Information
	when needed for implementation of activities? (ii) Were the non-financial resources (e.g. competent and skilled staff, facilities) available by the time needed for implementation of activities • If (i) and (ii) above were not in places which? And which measures were taken to address the situation? • Are there relevant partnerships for quality outputs?	• Timeline for implementation and completion of activities • Existence of memorandum of understanding for service delivery	understanding	• Partners and stakeholders
(b) Are the project operations cost-effective and relative to the outputs, and achieved results	• Was the quality and quantity of administrative and technical support by UNEP HQs adequate and timely? • Are the project activities in line with the schedule of activities as defined by the project work plan? If not, why? • Were the least cost options sought and applied during project implementation?	• Timely and adequate support from UNEP HQs • Existence of effective communication systems • Percentage of implemented against planned activities • Perceptions as to cost-effectiveness of project	• Interview with the project management team • Document review • Interview with stakeholders	• Project management team • Project Logical Framework (LogFrame) • Project stakeholders
(c) Does the project management structure portray the cost effective and efficiency nature of project execution?	• How appropriate and effective are Project's management structure and staffing profile in realizing a relevant, effective, and efficient Project? What changes, if any, are needed to Project's organizational structure and staffing profile to carry out its mandate?	• Evidence of clear roles and responsibilities for operational and management structure • Degree of fulfillment of goals according to results framework (over evaluation period) • Client/Stakeholder satisfaction with Project staff	• Document review • Review • Interview	• Project documents and reviews, other relevant docs • Project partners, beneficiaries and stakeholders

Criteria/Issues	Evaluation Questions	Indicators	Data Collection /Analysis Methods	Sources of Information
(d) Is the project exercising an appropriate management accountability, monitoring and evaluation system	• How effectively has Project management accountability been exercised, and how well is M&E built into programming and strategy to strengthen accountability?	• Number and type of mechanisms or systems in place for holding Project management accountable for their roles and responsibilities	• Interviews	• Project-selected management
		• Examples of incidents when accountability measures or systems revealed mismanagement	• Interviews	• Project-selected management, staff
		• Percentage of budget spent on M&E systems	• Desk review	• Project documents and reviews, other relevant docs
		• Evidence of use of M&E/reporting information to make management decisions/adaptive management • inform strategy • inform programming or planning • others	• Interviews	• Project-selected management, including former Project program managers
		• Frequency of reporting, updating, or use of M&E systems for accountability purposes	Interviews	Project-selected management, including former Project directors,
4. IMPACT **To what extent does the Sustainable Belt and Road Project focus on higher-level changes, like the adverse effects on climate change to improve sustainably the road infrastructure into green infrastructure in the Belt and Road countries, in terms of significance, transformative potential, scope, or time scale?**				
Long-term impacts	What are the prospects for contributing to long-term changes, benefits and development results – Sustainable Belt and Road Project focus on higher-level changes, like the adverse effects on climate change to improve sustainably the road infrastructure into green infrastructure in the Belt and Road countries, in terms of significance,	• Existence of specific commitments by direct beneficiaries associated with the Sustainable Belt and Road project • Plans and strategies in place to ensure sustainability, maintenance of infrastructure developed and implementation of commitments	1. Interviews with staff in UNEP and CHINA-MEE 2. Interviews with governments and regional economic communities 3. Desk review and interviews 4. Review reports on Sustainable Belt and Road project	• Project progress report • Financial reports • Project management staff, stakeholders and beneficiaries.

Criteria/Issues	Evaluation Questions	Indicators	Data Collection /Analysis Methods	Sources of Information
	transformative potential, scope, or time scale? • Are there measures to ensure sustainability of the actions taken by the UNEP to enable impact of Sustainable Belt and Road projects • Is there a long-term and sustainable impact for the Governments strategies and priorities in the Belt and Road countries from the Sustainable Belt and Road project?			
4. SUSTAINABILITY **How likely is that the project will continue to deliver benefits after the Sustainable Belt and Road project has ended?**				
Financial risks	• Are there financial sustainability risks faced by the project? • If yes, what are they? • Are the mitigation strategies or other financing options identified and implemented? • If not, why and if yes what were the measures?	• Evidence/quality of sustainability strategy • Evidence/quality of steps taken to ensure sustainability • Evidence of likely commitments to support sectors beyond the end of the Project	Review	• Project progress report • Financial reports • Project management staff, stakeholders and beneficiaries .
Main sustainability risks	• What are the main risks to the expected sustainability of the benefits? • What are the mitigation measures to minimize the risks?	• Assumptions and risk assessment adequacy • Mitigation measures identified and effected	• Document review • Discussions/ Meetings	• Project document and logical framework • Government counterparts
6.GENDER MAINSTREAMING **The extent to which socioeconomic benefits delivered by the project at national and local level consider gender dimensions**				
How is gender integrated in the project? (This criterion will be	• Are gender and other social issues integral	• Gender analysis in project documents	Document review	Project documents Monitoring reports

Criteria/Issues	Evaluation Questions	Indicators	Data Collection /Analysis Methods	Sources of Information
assessed throughout the evaluation assignments)	part of the project cycle? • Were gender needs for men and women identified? • Are there adequate resources (funds, methodologies, skills etc.) for mainstreaming gender available? • Is M&E framework gender inclusive?	• Gender disaggregated data available		
	What are the project positive and negative effects on women and men?	Evidence of women and men benefitted or not benefited from access to project opportunities and from project budget allocation	Review and Interview	Project monitoring reports Financial reporting Project staffing Project target beneficiaries

ANNEX VII. PEOPLE CONSULTED DURING THE REVIEW

Table 15 List of stakeholders consulted during the terminal review of the Sustainable Belt and Road Project

Organization	Country of Residence	First Name	Last Name	Position	Date of the Individual Interview or Focus-Group Discussion
UNEP Industry and Economy Division	Switzerland	Rowan	Palmer	Project Manager/Lead, Sustainable Infrastructure Investment Team, Economic and Trade Policy Unit, Industry and Economy Division	2, 22 February, 27 March 2023
UNEP Industry and Economy Division	Switzerland	Shunsuke	Nakai	Associate Programme Officer at the Markets and Resources Branch, Industry and Economy Division	2, 22 February, 27 March 2023
UNEP Industry and Economy Division	Switzerland	Fulai	Sheng	Former head of Economic and Trade Policy Unit (-Sep 2021)	10 March 2023
UNEP Evaluation Office	Kenya	Janet	Wildish	Senior Evaluation Officer	16 February 2023
Foreign Environmental Cooperation Center	China	Ning	Peng	Officer at the Foreign Environmental Cooperation Center at the Chinese Ministry of Ecology and Environment	31 March 2023
UNEP Early Warning and Assessment Division	Kenya	Alexandre	Caldas	Chief of Service, Information Technology Knowledge Management	22 May 2023
UNEP Early Warning and Assessment Division	Switzerland	Pascal	Peduzzi	Lead of The World Environment Situation Room (WESR) - Senior Programme Management Officer	22 March 2023
UNEP Early Warning and Assessment Division	Kenya	Maarten	Kappelle	Head, Thematic Assessments Unit, Science Division - Senior Programme Management Officer	10 March 2023
UNEP Early Warning and Assessment Division	Kenya	Ying	Wang	Science Division - Funds Coordinator	10 March 2023
UNEP Early Warning and Assessment Division	Bahrain	Abdelmenam	Mohamed	Regional Coordinator in UNEP ROWA/Manama Office	10 March 2023

Organization	Country of Residence	First Name	Last Name	Position	Date of the Individual Interview or Focus-Group Discussion
Ministry of Foreign Affairs of Singapore	Singapore	Jaclyn	Tan	International Programmes, Technical Cooperation Directorate	27 April 2023
Ministry of Foreign Affairs of Singapore	Singapore	Bernice	Lee	Assistant Technical Cooperation Executive	27 April 2023
Infrastructure Asia	Singapore	Gayle	Tan	Senior Lead	27 April 2023
DG Environmental Audit	Pakistan	Dalila	Kiran Shakil	Director	11 March 2023
Ministry of Environment of Rwanda	Rwanda	William	Mugabo	Officer at the Ministry of Environment of Rwanda	28 March 2023
UNITAR	Switzerland	Angus	Mackay	Director, Division for Planet, Manager, Green Development and Climate Change Programme	15 March 2023
UNITAR	Switzerland	Josefina	Ashipala	Climate Change project coordination and management	15 March 2023
UNESCAP	Thailand	Omar	Siddique	Urban Planning, Finance and Governance Lead	13 March 2023
Yangon City Development Committee	Myanmar	Moe Thuzar Lwin	Moe Thuzar Lwin	Head of Department Urban. Planning	6 April 2023
GIZ	Germany	Vanessa	Bauer	Officer at the German Development Cooperation	23 March 2023
GIZ	Germany	Mira	Piel	Officer at the German Development Cooperation	23 March 2023
UNITAR	Switzerland	Julia	Villalba	Climate Change Learning	13 March 2023
UNITAR	Switzerland	Josefina	Ashipala	Climate Change project coordination and management	13 March 2023
Ministerio de Economía, Planificación y Desarrollo	Dominican Republic	Darwin	Duran	Officer at the Ministry of Economy, Planning and Development	21 March 2023

ANNEX VIII. KEY DOCUMENTS CONSULTED

- Terms of Reference (ToR) for the Terminal Review
- Project Document, Annexes and its three revisions for he UNEP Project: “Sharing Experience and Knowledge for a Sustainable Belt and Road”
- Quarterly and Annual Project Progress Reports
- All project agreements and amendments thereof
- Quarterly Progress Reports
- Initial Budget Plans, Budget Revision
- Financial Reporting, including co-financing and all expenditure reports
- All component-related outputs, publications and extras
- Outreach and Communications materials
- Websites and information where the project results were presented
- Trainings reporting and evaluations
- No-cost extension requests and approval documentation
- Additional email communications requested for verification and triangulations
- All project publications: Case Study, Foresight Briefs, Brochures for the Regional Capacity Building workshop trainings

ANNEX IX. BRIEF CV OF THE REVIEWER

Iva Bernhardt

Profession	Engineer
Nationality	Macedonian, German
Country experience	• Europe: Germany, Belgium, France, Austria, Russia, Poland, Czech Republic, Hungary, Slovakia, North Macedonia, Bosnia and Herzegovina, Serbia, Montenegro and Albania • Africa: Nigeria, Tanzania, Chad, Gambia, Sierra Leone, Senegal, Libya, Mauritania, Morocco, Tunisia, Sudan, and Liberia • Americas: USA, Jamaica • Asia: Iran, Japan, China, Nepal
Education	• Master's Degree in Master of Business and Engineering (MBE) in Information Technologies • Dipl.-Ing. Engineering Degree in Technical Environmental Protection

Ms. Iva Bernhardt is an independent senior evaluation expert with over two decades of international experience in development cooperation. She has managed and led over fifty high-quality evaluations of complex projects, programmes, countries, thematic, strategic, peer-reviews, etc. for the United Nations System, Multilateral Development Banks, European Union, bilateral cooperation agencies and other international organizations. The evaluations were mainly in the areas of climate change and environment, sustainable energy and industrial energy and resource efficiency, integrated natural resources management, chemical waste management, and youth employment and development. Moreover, she possesses university experience as a scientific researcher, and held different managerial and internal auditor positions in the steel industry and the private sector. She holds a Master's Degree in Master of Business and Engineering (MBE) in Information Technologies, and a Dipl.-Ing. Engineering Degree in Technical Environmental Protection.

Key specialties and capabilities cover:

- Evaluation, environment, energy, climate change, integrated natural resources management, industry energy and resource efficiency, monitoring, capacity development, international relations, building partnerships and resource mobilization.

Independent reviews/evaluations:

- "Chances and risks for a steel enterprise resulting from the implementation of the End-of-Life Vehicles Directive in Europe", Steinbeis University, Berlin, Germany, August 2002
- "Policy reforms in the environmental aspect of sustainable development", University Sv. Kiril i Metodij, Skopje, Macedonia, July 2000
- "Technical Innovation in the Field of Renewable Energy Technologies as a Tool for Policy Making through Subsidizing", Technical University Berlin, German, March 2016
- "Federal Republic of Nigeria: Terminal Evaluation of the Revised Country Programme of Cooperation between the Federal Republic of Nigeria and UNIDO (2012-2016): Economic Transformation through Sustainable and Inclusive Industrial Development and Trade of Value Added Products including a portfolio of 35 projects and programmes", UNIDO, February 2016
- "Renewable Energy Trust Fund Thematic Evaluation", UNIDO, 2015 https://www.unido.org/sites/default/files/2015-03/Independent_Thematic_Evaluation_RETF_FINAL_20150316_0.pdf

- "Cluster Evaluation of the National Implementation Plans Updates and Reviews within the Stockholm Convention", UNIDO, 2015 https://www.unido.org/sites/default/files/2015-04/FINAL_report_NIPS_CLUSTER_EVAL_20150409_0.pdf
- Macedonia: “Phasing out of PCBs and PCB-containing equipment in Macedonia”, UNIDO, 2014 https://www.unido.org/sites/default/files/2014-03/Macedonia_GFMCD08002-PCBs_2013_0.pdf
- Chad: “Promoting Renewable Energy based mini-grids for productive uses in the rural areas in Chad”, Vienna, May 2016 https://www.gefieo.org/sites/default/files/documents/projects/tes/3959-terminal-evaluation.pdf
- Liberia: (USAID / UNIDO Project): “Installation of multi-purpose mini-hydro infrastructure (for energy & irrigation) in Liberia”
- Sierra Leone: “Promoting mini grids based on small hydropower for productive uses in Sierra Leone”
- The Gambia: “Promoting Renewable Energy based mini-grids for productive uses in the rural areas in the Gambia”, UNIDO, 2014 https://www.unido.org/sites/default/files/2015-02/GAMBIA_MTE-GFGAM09_GEF_4_FINAL_REP_20150212_0.pdf
- United Republic of Tanzania: “Mini-grids based on small hydropower sources to augment rural electrification in Tanzania”, Vienna, 2015 https://www.unido.org/sites/default/files/2016-05/MTR_report_GFURT12001-100261_RRE_GEF-4_MTR-2015_150302-F_0.pdf
- Islamic Republic of Iran: “Industrial Energy Efficiency in Iran”, UNIDO, 2015 https://www.unido.org/sites/default/files/2016-11/IRA_GFIRA12001-120506_MTR_report_IEE_161121-Corr-1_RepNo_0.pdf
- Federal Republic of Nigeria: "Updated National Implementation Plan (NIP) for the Stockholm Convention on Persistent Organic Pollutants (POPs)"
- Activity, Monitoring, Evaluation and Learning Plan (AMELP) for USAID for the project: “Mashrou3i: Facilitating youth employment through entrepreneurship and enterprise development in disadvantaged governorates in Tunisia: Beja, Gafsa, Gabès, Jendouba, Kairouan, Kasserine, Kef, Kébili, Medenine, Sidi Bouzid, Siliana, Tataouine, Tozeur, and Zaghouan”, USAID, February 2017
- Monitoring, Evaluation and Learning Plan for the Federal Government of Nigeria /UNIDO Project: “Facilitating job creation through the Entrepreneurship Training Programme Learning Initiative for Entrepreneurs (HP LIFE) and Enterprise Creation in Nigeria”., Government of Nigeria, March 2018
- Evaluation Synthesis Report of the “African Natural Resources Centre Strategy 2015-2020” at the African Development Bank, AfDB, June 2022
- Western Balkans (Serbia, North Macedonia, Albania, Montenegro, Bosnia and Herzegovina): “Enhancing Environmental Performance and Climate Proofing of Infrastructure Investments in the Western Balkan Region from an EU integration perspective (ClimaProof)”, UNEP, October 2022
- Terminal Review Report for UNEP – Government of China project: “Sharing Experience and Knowledge for a Sustainable Belt and Road”, UNEP, June 2023

ANNEX X. REVIEW TOR

Terms of Reference (ToR)

Request for:	Consultant	X	Individual contractor	

Job Title: Evaluation Consultant for Terminal Evaluation of the UNEP Project " Sharing Experience and Knowledge for a Sustainable Belt and Road”

General Expertise: Environmental Affairs

Category: Evaluation

Duration: The assignment will begin in January 2023 – May 2023

(for 3.5 months)

Extension: 1 June – 8 June 2023

Organizational Unit: UN Environment – Economy Division – Resources and Markets Branch

1. Purpose

1.1. Requirement for a consultant

The United Nations Environment Programme (UN Environment) is the United Nations system designated entity for addressing environmental issues at the global, regional and national level. This consultancy is posted in the Economic and Trade Policy Unit of the Resources and Markets Branch of the Economy Division.

Supported by the Government of China, the Economic and Trade Policy Unit has been leading a project on “Sharing Experience and Knowledge for a Sustainable Belt and Road” since 2018. China’s Belt and Road Initiative (BRI) aims to enhance economic development and inter-regional connectivity in over 60 countries by focusing on five areas of cooperation: infrastructure, trade, policy, finance and people. The initiative presents an excellent opportunity for countries to use these investments to help transform their economies and achieve the 2030 Agenda for Sustainable Development. However, in order to maximize the positive impacts of the BRI, countries must avoid investments that lock in carbon-intensive infrastructure and transport networks, and focus on investments in green infrastructure, clean energy, clean technology, and human capital that can take advantage of sustainable development opportunities. Care must also be taken to ensure that social and environmental safeguards are in place, that benefits are equitably shared, and that projects include effective stakeholder engagement.

There are a number of challenges that may prevent the BRI investments from contributing to the sustainable development in recipient countries. These include a failure of governments to adopt and implement sustainable development policies, a lack of institutional capacity and commitment to invest in sustainable management practices, and weak national regulatory frameworks. A number of factors also contribute to the barriers described above, such as the lack of knowledge and data to inform and support sustainable policy, management, investing, and business choices, and a lack of communication and collaboration within and among the key stakeholders who can trigger a shift in investment priorities.

This Project aims to address these issues by increasing the Belt and Road stakeholders' awareness and understanding of the sustainable development opportunities and challenges associated with BRI investments, and policy conditions required to enable and address them. It will do so by collecting and disseminating case studies, making integrated environmental data available, and providing capacity building seminars for Belt and Road stakeholders from participating countries. In addition to delivering training, the seminars will provide a forum for dialogue between Belt and Road stakeholders.

In line with the UNEP Evaluation Policy and the UNEP Programme Manual, the Terminal Review is undertaken at operational completion of the project to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The Review has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote operational improvement, learning and knowledge sharing through results and lessons learned among UNEP and its implementing partners[49]. Therefore, the Review will identify lessons of operational relevance for future project formulation and implementation, especially for future phases of the project, where applicable.

The Evaluation Consultant will be responsible, in close consultation with the Project Manager for overall management of the evaluation and timely provision of its outputs. The Evaluation Consultant will ensure that all evaluation criteria and questions are adequately covered. More specifically:

Inception phase of the evaluation, including:

- preliminary desk review and introductory interviews with project staff;
- draft the reconstructed Theory of Change of the project;
- prepare the evaluation framework;
- develop the desk review and interview protocols;
- draft the survey protocols (if relevant);
- plan the evaluation schedule;
- prepare the Inception Report, incorporating comments until approved by the Project Manager

Data collection and analysis phase of the evaluation, including:

- conduct further desk review and in-depth interviews with project implementing and executing agencies, project partners and project stakeholders;
- interview project partners and stakeholders. Ensure independence of the evaluation and confidentiality of evaluation interviews.
- regularly report back to the Project Manager on progress and inform of any possible problems or issues encountered and;
- keep the Project/Task Manager informed of the evaluation progress.

Reporting phase, including:

- draft the Main Evaluation Report, ensuring that the evaluation report is complete, coherent and consistent with the Project Manager guidelines both in substance and style;

[49] To be discussed and agreed upon by mutual consent

- liaise with the Project Manager on comments received and finalize the Main Evaluation Report, ensuring that comments are taken into account until approved by the Project Manager
- prepare a Response to Comments annex for the main report, listing those comments not accepted by the evaluation consultant and indicating the reason for the rejection; and
- (where agreed with the Project Manager) prepare an Evaluation Brief (2-page summary of the evaluand and the key evaluation findings and lessons)

Managing relations, including:

- maintain a positive relationship with evaluation stakeholders, ensuring that the evaluation process is as participatory as possible but at the same time maintains its independence;
- communicate in a timely manner with the Project Manager on any issues requiring its attention and intervention.

1.2. Ultimate result of services:

The Evaluation Consultant will be responsible, in close consultation with the Project Managet for overall management of the evaluation and timely provision of its outputs. The Evaluation Consultant will ensure that all evaluation criteria and questions are adequately covered.

The consultant will produce an approved inception report; an approved draft main evaluation report (with separate annexes presenting the performance ratings for each of the five (5) MSPs; and an approved final main evaluation report with separate annexes presenting the performance ratings for each of the five (5) MSPs.

1.3. Legislative authority reference:

United Nations Environment Assembly of the United Nations Environment Programme Decision UNEP/EA.4/5: Sustainable Infrastructure; UN Environment Programme of Work 2022-2023, in line with UNEP’s Medium-Term Strategy (MTS) 2022-2025.

2. Qualifications / Special Skills or Knowledge

The consultant must have the following experience and competencies

<u>Education:</u>

Advanced university degree in, economics, natural resources management, political science, international development, engineering, planning or equivalent;

<u>Experience</u>:

A minimum of 5 years of technical or evaluation experience is required, preferably including evaluating large, regional or global programmes and using a Theory of Change approach; and a good/broad understanding of the infrastructure investment/development including its interlinkage to sustainable development is desired.

<u>Languages:</u>

English and French are the working languages of the United Nations Secretariat. For this post, fluency in spoken and written English is essential and fluency in spoken and written Chinese is a plus.

Skills and knowledge:

Working knowledge of the UN system and specifically the work of UNEP and other international organizations is an added advantage.

Location:

The work will be home-based with no field visits.

3. Objectives, output expectations and performance indicators

The consultant is expected to provide the activities and reports in accordance with tentative schedule as shown in the table below. Final dates of activities/reports will be discussed and agreed upon the initiation of the Terminal Review.

Milestone	Tentative Dates
Inception Report	13th February, 2023
E-based interviews, surveys etc.	27th February, 2023
PowerPoint/presentation on preliminary findings and recommendations	6th March, 2023
Draft Review Report to Project Manager	27th March, 2023
Draft Review Report shared with wider group of stakeholders	10th April, 2023
Final Main Review Report	24th April, 2023
Summary of Final Main Review Report	24th April, 2023
Final Main Review Report shared with all respondents	28th April, 2023

Extension:

Milestone	Tentative Dates
Inception Report	13th February, 2023
E-based interviews, surveys etc.	27th February, 2023
PowerPoint/presentation on preliminary findings and recommendations	6th March, 2023
Draft Review Report to Project Manager	27th March, 2023
Draft Review Report shared with wider group of stakeholders	10th April, 2023
Final Main Review Report	24th April, 2023
Summary of Final Main Review Report	24th April, 2023
Final Main Review Report shared with all respondents	28th April, 2023
Summary of lessons learned and recommendations for the future project particularly in the new-normal aftermath of COVID-19.	8th June, 2023

4. Specific tasks and responsibilities

1. The findings of the Review will be based on the following:

(a) A **desk review** of:

- Relevant background documentation, including documents related to the Belt and Road Initiative and International Good Practice Principles for Sustainable Infrastructure published by UNEP in 2021;
- Project design documents (including minutes of the project design review meeting at approval); Annual Work Plans and Budgets or equivalent, revisions to the project (Project Document Supplement), the logical framework and its budget;
- Project reports such as six-monthly progress and financial reports, progress reports from collaborating partners, meeting minutes, relevant correspondence and any other monitoring materials etc.;
- Project deliverables (e.g. publications, assessments etc) including output 1a - case studies developed, output 2a - Foresight Data Briefs published, and project proposals formulated, and output 2b - training completion reports including feedback from participants;
- Evaluations/Reviews of similar projects.

Extension:

- Review lessons learned and summarize key recommendations to maximize the effectiveness of the future project under the new-normal aftermath of COVID-19.

(b) **Interviews** (individual or in group) with:

- UNEP Project Manager (PM) - past and present;
- Project management team;
- UNEP Fund Management Officer (FMO);
- Sub-Programme Coordinator;
- Implementing partners (to be decided)
- Technical partners, including ITC-ILO, Ministry of Foreign Affairs of Singapore, Ministry of Environment of Rwanda , UNITAR, GiZ, etc.;
- Relevant resource persons.
- Representatives from civil society and specialist groups (such as women's, farmers and trade associations etc).

(c) **Surveys:** continued countries effort to sustainable infrastructure

5. Reporting lines

The consultant shall report directly to Mr. Rowan Palmer, Project Manager at the Economic and Trade Policy Unit, under the overall supervision of Ms. Aeree Kim, Head, Economic and Trade Policy Unit.

Final deliverables on both assignments shall also be approved by Ms. Aeree Kim, Head, Economic and Trade Policy Unit.

6. Duration

The contract duration is from 30th January 2023 to 31st May 2023 (3.5 months).

Extension: *1 June - 8 June 2023*

7. Travel involved

The work will be home-based with no field visits expected. If travel will be required, it will be raised outside this specific contract, by the substantive office.

Travel will be organized by	Substantive Office	X	Selected candidate	

ANNEX XI. IMPLEMENTATION PLAN OF RECOMMENDATIONS

Project Title and Reference No.: "Sharing Experience and Knowledge for a Sustainable Belt and Road (PIMS ID 1993)" (2018 – 2022)

Contact Person (TM/PM): Rowan Palmer rowan.palmer@un.org

	PLANS			
RECOMMENDATIONS[50]	**ACCEPTED (YES/NO/PARTIALLY)**	**WHAT WILL BE DONE?**	**EXPECTED COMPLETION DATE**	**REPONSIBLE OFFICER/ UNIT/ DIVISION/ AGENCY**
Recommendations: Big data platform integrations				
1. The level on which you are working should be well defined in the project document. Concretely, interoperability of the Big Data Platforms could be more easily achieved if the level was defined at the beginning of the project, taken there was substantial funding for it.	Yes.	In future projects, the scope of work will be more clearly defined and aligned with available funding.	May 2024	Rowan Palmer/ETPU
2. The funding of the project activities needs to be planned when creating the baseline. It needs to be realistic, adequate and feasible.	Partially.	The original project document included a planned budget for the activities. However, the description of the activity was not as precise as it could have been, and there was a misalignment in expectations about what could be achieved with the available funds.	May 2024	Rowan Palmer/ETPU
3. The project needs to have well-defined deliverables and outcomes, as well as the scope of work and its associated funding.	Yes.	In future projects, the deliverables and scope of work will be more clearly defined and aligned with available funding.	May 2024	Rowan Palmer/ETPU

Lessons Learned	**Management Comments**
Lessons Learned Area # 1: Big Data Platform Integrations	
1. There should be enough technical capacities for the integration of two platforms.	The failure to integrate the two data platforms was not the result of a lack of technical capacity, but rather due to the amount of work required being beyond the available project budget, which did not become evident until after the initial scoping assessments had taken place.
Lessons Learned Area #2: Regional capacity building workshop training	
1. Future RCB training would need to confirm the resource personnel in	Development of trainers' and participants manuals to be included in implementing partners' ToRs in future, as necessary and appropriate.

[50] The Evaluation Office noticed that several recommendations presented in the TR report were not specific, and, as a matter of fact, were formulated as lessons learned (i.e, not actionable). Therefore, the Evaluation Office requested to separate these in the management response from the actual recommendations. Please refer also to the Evaluation Office's comments on the quality of recommendations provided in the Quality Assessment template (Annex XII).

Lessons Learned	Management Comments
advance to have a detailed trainers manual as well as participants manual readily available prior to the training.	
2. If future training is to be conducted online, organizers should provide participants with reliable internet connections.	This will be considered where/when feasible.
3. Consider in-person trainings when the Covid-19 situation improves. Preparing for the kind of training held in person will enhance the knowledge of the participants.	In person trainings and other project meetings will be considered when feasible and necessary.
4. Clearly define the role of each organization during training design, planning, organization and execution.	Roles will be clearly defined and communicated.
5. The contracts for the subcontractors need to be ready on time and delays in the processing of payments should be avoided.	Project personnel and admin support will endeavour to have contracts issued in a timely manner and payments processed according to the payment schedule(s) in contracts and agreements.
6. The UN–UN Agreements should be finalized with enough planning to allow the contracting of facilitators and engagement with experts for the planning of individual sessions.	Project personnel and admin support will endeavour to have contracts issued in a timely manner and payments processed according to the payment schedule(s) in contracts and agreements.
7. Engage with the implementing partner during the communication with the experts, showing “one face to the customer” in front of counterparts.	UNEP personnel will accompany implementing partners in project-related meetings when possible and appropriate.
8. Define the narrative coherence of the sessions prior to confirming the participation of the experts.	This will be done when possible. In some cases, the course narratives were adjusted based on the availability of participating experts.
9. Expand the search for experts beyond institutional strategic partners or allies.	This will be done, when possible, subject to available budget. In some cases, the use of strategic partners and allies was done to increase cost effectiveness because of budget limitations.
10. Prioritize the development of thematic content and deliver them with sufficient time. More does not always mean effective.	Project teams always strive to develop the most effective content possible. The comment on quantity of material and timing is noted.
11. Prioritize experts fluent in the language in which the course is taught or make use of the interpretation support.	While some participants may have struggled to understand some presenters’ accents, all of the experts were proficient in the languages of course delivery. Interpretation will be considered when necessary and as budget allows.
Lessons Learned Area #3: Regional capacity building workshop training content	
1. Practical and field training is very important to adopt and apply. A follow-up and preparing a field studies tour would be beneficial to harmonize the theory with practice.	While there is indeed value in field/site visits, they are not possible for virtual courses.
2. RCB training should give a fair insight into a legal framework and law enforcing agencies’ roles for	Legal frameworks and political economy considerations are topics that were covered to some degree in the course materials. Participants’ interest in more coverage is noted, however, the scope of future courses will selected based on a range of factors.

Lessons Learned	Management Comments
compelling the citizens to adhere to government instructions. How the government achieved this level of commitment from its people should be explained stepwise.	
3. Future greater inclusion of private sectors can give participants a different viewpoint on their interest in developing Sustainable Infrastructure and focus more on Public-Private Partnerships.	This is noted and will be considered in the development of future training materials, subject to the relevance for the training topics and training needs being addressed.
4. RCB trainings needed better and more thorough examples of financial guidelines for financing sustainable and resilient infrastructure. The existing guidance was too general, where in reality, funds and resources need to be raised for each infrastructural activity and vulnerability assessment individually.	The importance of—and participants' interest in—financing considerations is well noted, and future courses will be tailored to the participants' levels of background knowledge as much as possible. However, when delivering courses to diverse groups of stakeholders with different levels of knowledge of different subjects, it can be difficult to find the right level of detail that matches everybody's level of background knowledge on a certain subject.
5. RCB training should not only contain the best practice examples of what kind of sustainable infrastructure exists in developed countries but also show how the country can reach this level of development, showcasing the different levels of pathways: legislative, societal change of thinking and acting, funding, level of commitment, etc.	The course materials clearly explain the contribution and relevance of sustainable and resilient infrastructure for sustainable development in general, and specifically to the SDGs. While the course materials try to frame the discussions of sustainable infrastructure in the broader context of national sustainable development, the topic is very broad and all of the dimensions mentioned in the recommendation would be difficult to fit into the scope of a single training course.
6. The agenda and content for RCB training were too broad and too general. UNEP approach to Infrastructure is cross-sectoral. The partners think that it should be considered on how to do it more in-depth for a specific topic, or to have different modules for different groups of people working on a specific topic.	More specific training (including for specific audiences) will be considered for future projects, as relevant.

ANNEX XII. QUALITY ASSESSMENT OF THE REVIEW REPORT

Quality Assessment of the Terminal Review Report

Review Title: Terminal Review of the UNEP Project "Sharing Experience and Knowledge for a Sustainable Belt and Road (PIMS ID 1993)" (2018 – 2022) Consultant: Ms. Iva Bernhardt

All UNEP Reviews are subject to a quality assessment by the UNEP Evaluation Office. This is an assessment of the quality of the review product (i.e. Main Review Report).

	UNEP Evaluation Office Comments	Final Review Report Rating
Report Quality Criteria		
Quality of the Executive Summary Purpose: acts as a stand alone and accurate summary of the main review product, especially for senior management. To include: • concise overview of the review object • clear summary of the review objectives and scope • overall review rating of the project and key features of performance (strengths and weaknesses) against exceptional criteria • reference to where the review ratings table can be found within the report • summary response to key strategic review questions • summary of the main findings of the exercise/synthesis of main conclusions • summary of lessons learned and recommendations.	Final report *(coverage/omissions):* All required elements of project background, the review, key findings, table with summary assessment, conclusions, lessons learned and recommendations. Final report *(strengths/weaknesses)*: Concise executive summary with a detailed summary assessment table with ratings. The section would have benefited from more details in the Project background and responses to the three key questions of the Terminal Review. The review's objectives and scope are not presented. A total of 13 lessons and 21 recommendations are presented.	4
Quality of the 'Introduction' Section Purpose: introduces/situates the evaluand in its institutional context, establishes its main parameters (time, value, results, geography) and the purpose of the review itself. To include: • institutional context of the project (sub-programme, Division, Branch etc) • date of PRC approval, project duration and start/end dates • number of project phases (where appropriate) • results frameworks to which it contributes (e.g. POW Direct Outcome) • coverage of the review (regions/countries where implemented) • implementing and funding partners • total secured budget • whether the project has been reviewed/evaluated in the past (e.g. mid-term, external agency etc.) • concise statement of the purpose of the review and the key intended audience for the findings.	Final report *(coverage/omissions):* The section covers the historical context of the project and challenges of UN member states. Most of the basic components of the introduction section, however, are not described. Some information (e.g. project period, budget, etc.) is found in sections A and B under the Review Methods section. Final report *(strengths/weaknesses):* The context and overview of the project itself are described in this section and the challenges of the project. Purpose of the review is described in the section "Review Methods".	3

Quality of the 'Review Methods' Section Purpose: provides reader with clear and comprehensive description of review methods, demonstrates the credibility of the findings and performance ratings. To include: • description of review data collection methods and information sources • justification for methods used (e.g. qualitative/ quantitative; electronic/face-to-face) • number and type of respondents *(see table template)* • selection criteria used to identify respondents, case studies or sites/countries visited • strategies used to increase stakeholder engagement and consultation • methods to include the voices/experiences of different and potentially excluded groups (e.g. vulnerable, gender, marginalised etc) • details of how data were verified (e.g. triangulation, review by stakeholders etc.) • methods used to analyse data (scoring, coding, thematic analysis etc) • review limitations (e.g. low/ imbalanced response rates across different groups; gaps in documentation; language barriers etc) • ethics and human rights issues should be highlighted including: how anonymity and confidentiality were protected. Is there an ethics statement? E.g. *'Throughout the review process and in the compilation of the Final Review Report efforts have been made to represent the views of both mainstream and more marginalised groups. All efforts to provide respondents with anonymity have been made.*	Final report *(coverage/omissions):* Main elements of the review methods section were covered, but some elements (e.g. selection criteria used to identify the respondents/participation of interview/focus group discussions and inclusion of voices/experiences of different and potentially excluded groups) are omitted. Ethics and human rights issues are not addressed as well. Final report *(strengths/weaknesses):* Figures are included with the review approach and key methodology elements and main sources of information and tools. A detailed description of data collection, use of primary and secondary data, interviews and focus group discussions is provided. However, the section does not clearly provide the sampling size of respondents/participants and its sampling methods, and a summary of interviewees/FGD participants (e.g. number of male and female participants/respondents, number of focus groups, number of training participants interviewed, etc.).	4
Quality of the 'Project' Section Purpose: describes and verifies key dimensions of the evaluand relevant to assessing its performance. To include: • *Context:* overview of the main issue that the project is trying to address, its root causes and consequences on the environment and human well-being (i.e. synopsis of the problem and situational analyses) • *Results framework*: summary of the project's results hierarchy as stated in the ProDoc (or as officially revised) • *Stakeholders:* description of groups of targeted stakeholders organised according to relevant common characteristics • *Project implementation structure and partners:* description of the implementation structure with diagram and a list of key project partners • *Changes in design during implementation:* any key events that affected the project's scope or parameters should be described in brief in chronological order • *Project financing:* completed tables of: (a) budget at design and expenditure by components (b) planned and actual sources of funding/co-financing	Final report *(coverage/omissions):* All required elements are covered in the section. Final report *(strengths/weaknesses):* The section has a detailed presentation for each element, especially for the project implementation structure and partners, and changes in design during implementation. The results framework is described in detail by project outputs and activities. The log frame is shown in Annex IV. In the stakeholder analysis, the structure of stakeholders and their roles were described, but there is no mention of the beneficiaries/targets.	4

Quality of the Theory of Change Purpose: to set out the TOC at Review in diagrammatic and narrative forms to support consistent project performance; to articulate the causal pathways with drivers and assumptions and justify any reconstruction necessary to assess the project's performance. To include: • description of how the *TOC at Review*[51] was designed (who was involved etc) • confirmation/reconstruction of results in accordance with UNEP definitions • articulation of causal pathways • identification of drivers and assumptions • identification of key actors in the change process • summary of the reconstruction/results re-formulation in tabular form. *The two results hierarchies (original/formal revision and reconstructed) should be presented as a two-column table to show clearly that, although wording and placement may have changed, the results 'goal posts' have not been 'moved'.* This table may have initially been presented in the Inception Report and should appear somewhere in the Main Review report.	Final report *(coverage/omissions):* Key elements are covered in the section and a short description of elements of the causal pathway. Final report *(strengths/weaknesses):* The description of the project's contribution to UNEP's subprogramme and POW is provided. Figures of ToC and reconstructed Toc are included. The report describes the TOC and restructured TOC. However, the articulation of the causal pathways can be strengthened, and identification of the key actors in the change process could have been included. TOC and RTOC are described in the Project Design Quality Section. Although the consultant provided a reconstructed TOC, the consultant did not provide a formulation of the outcome statement that meets the definition of an outcome, which should have underpinned the assessment of the effectiveness of the project.	3
Quality of Key Findings within the Report Presentation of evidence: nature of evidence should be clear (interview, document, survey, observation, online resources etc) and evidence should be explicitly triangulated unless noted as having a single source. Consistency within the report: all parts of the report should form consistent support for findings and performance ratings, which should be in line with UNEP's Criteria Ratings Matrix. Findings Statements (where applicable): The frame of reference for a finding should be an individual review criterion or a strategic question from the TOR. **A finding should go beyond description and uses analysis to provide insights that aid learning specific to the evaluand.** In some cases a findings statement may articulate a key element that has determined the performance rating of a criterion. Findings will frequently provide insight into 'how' and/or 'why' questions.	Final report *(coverage/omissions):* Concise findings are presented. Final report *(strengths/weaknesses):* The report provides evidence and references, especially in the section on effectiveness, strategic relevance, nature of the external context. However, the review does not explicitly demonstrate the evidence related to analytical findings in other sections, such as how changes in awareness or knowledge were assessed. In addition, some of the findings and statements show conflicts, inconsistency (para 225, para 102 vs 189) on use of SMART indicators, and also ambiguity (para 168). Last, certain ratings in the main body and summary assessment tables (Tables 10 and 11) are not consistent.	3
Quality of 'Strategic Relevance' Section Purpose: to present evidence and analysis of project strategic relevance with respect to UNEP, partner and geographic policies and strategies at the time of project approval. To include: Assessment of the evaluand's relevance vis-à-vis:	Final report *(coverage/omissions):* All elements covered in the section and with rating of sub-categories and an overall rating. Final report *(strengths/weaknesses):* The section demonstrated strategic relevance based on findings and	5

[51] During the Inception Phase of the review process a *TOC at Review Inception* is created based on the information contained in the approved project documents (these may include either logical framework or a TOC or narrative descriptions), formal revisions and annual reports etc. During the review process this TOC is revised based on changes made during project intervention and becomes the *TOC at Review*.

- Alignment to the UNEP Medium Term Strategy (MTS), Programme of Work (POW) and Strategic Priorities - Alignment to Donor/GEF/Partners Strategic Priorities - Relevance to Regional, Sub-regional and National Environmental Priorities - Complementarity with Existing Interventions: complementarity of the project at design (or during inception/mobilisation[52]), with other interventions addressing the needs of the same target groups.	analysis in details. It also addressed a lack of similar initiatives on a global scale. Relevance of project with China MME's strategic priorities is assessed. However, the report does not explicitly address the alignment to the partners' strategic priorities. While the project covers 39 belt and road countries, only selected national priorities and strategies are mentioned (Kazakhstan, Tajikistan, Kyrgyzstan, Kenya and Sri Lanka).	
Quality of the 'Quality of Project Design' Section Purpose: to present a summary of the strengths and weaknesses of the project design, on the basis that the detailed assessment was presented in the Inception Report.	Final report *(coverage/omissions):* Some required elements of the section are included, and others are missing. The template for assessment and rating of quality of the project design (at inception) does not appear to have been used. Final report *(strengths/weaknesses):* The section includes a detailed review of the process of reconstructing the Theory of Change and figure of the RTOC. The section does not explicitly address the areas of operating context, project preparation, monitoring, governance and supervision arrangements, partnerships, and learning, communication and outreach, financial planning/budgeting, efficiency, risk identification and social safeguards, and project design weaknesses/gaps.	3
Quality of the 'Nature of the External Context' Section Purpose: to describe and recognise, when appropriate, key external features of the project's implementing context that limited the project's performance (e.g. conflict, natural disaster, political upheaval[53]), and how they affected performance. While additional details of the implementing context may be informative, this section should clearly record whether or not a major and unexpected disrupting event took place during the project's life in the implementing sites.	Final report *(coverage/omissions):* This brief section focuses exclusively on the effects of the COVID-19 pandemic. Final report *(strengths/weaknesses):* General assessment of effects of COVID-19 pandemic was included, however, any possible socio/economic aspects in the project countries are not addressed although the socio-economic aspects could have affected outcome level.	3
Quality of 'Effectiveness' Section **(i) Availability of Outputs:** Purpose: to present a well-reasoned, complete and evidence-based assessment of the outputs made available to the intended beneficiaries.	Final report *(coverage/omissions):* Most of elements of the section are covered in the report except for the identification of positive or negative effects of the project on disadvantaged groups, and assessment of the	3

[52] A project's inception or mobilization period is understood as the time between project approval and first disbursement. Complementarity during project implementation is considered under Efficiency, see below.

[53] Note that 'political upheaval' does not include regular national election cycles, but unanticipated unrest or prolonged disruption. The potential delays or changes in political support that are often associated with the regular national election cycle should be part of the project's design and addressed through adaptive management of the project team.

To include: • a convincing, evidence-supported and clear presentation of the outputs made available by the project compared to its approved plans and budget • assessment of the nature and scale of outputs versus the project indicators and targets • assessment of the timeliness, quality and utility of outputs to intended beneficiaries • identification of positive or negative effects of the project on disadvantaged groups, including those with specific needs due to gender, vulnerability or marginalisation (e.g. through disability).	timeliness and utility of outputs to intended beneficiaries. Final report *(strengths/weaknesses):* This section has assessed the availability of each output and the status of achievements against targets by presenting and referring to evidence in detail. However, the link between the outputs and the overall objective of the project is not clear (e.g. how do the topics of the 3 Foresight Briefs relate to the BRI objective). The section describes not only what has been achieved but how they were achieved. The gender disaggregated output data were provided for specific output indicators (Gender balance of seminar participants) in this section and another section (para 230, figure 21). The quality of outputs – trainings – is not assessed in sufficient detail.	
ii) Achievement of Project Outcomes: Purpose: to present a well-reasoned, complete and evidence-based assessment of the uptake, adoption and/or implementation of outputs by the intended beneficiaries. This may include behaviour changes at an individual or collective level. To include: • a convincing and evidence-supported analysis of the uptake of outputs by intended beneficiaries • assessment of the nature, depth and scale of outcomes versus the project indicators and targets • discussion of the contribution, credible association and/or attribution of outcome level changes to the work of the project itself • any constraints to attributing effects to the projects' work • identification of positive or negative effects of the project on disadvantaged groups, including those with specific needs due to gender, vulnerability or marginalisation (e.g. through disability).	Final report *(coverage/omissions):* The outcome statement does not reflect an outcome state (i.e. it is limited to awareness raising and knowledge sharing). An outcome state should have been determined during the reconstruction of the TOC. Final report *(strengths/weaknesses):* Assessment of achievement of project outcome is based on the results framework and its indicators and targets, although there is no discussion of how these were verified. Evidence should have been provided to attribute the training to the increased awareness. However, the Table 7, the report does not explicitly demonstrate whether 126 refers to the number of participants in the training or whether 126 participants were confirmed to have demonstrated an awareness increase after the participation. **In other words, outcome was not reformulated as part of the reconstruction of the TOC (at inception stage of the review) to be at outcome level and the indicator does not measure change in awareness. Further there is lack of evidence to support changes in awareness and understanding.** No positive or negative effects of the project on disadvantaged groups and others were assessed but it is addressed under likelihood of impact (para. 166).	3

(iii) Likelihood of Impact: Purpose: to present an integrated analysis, guided by the causal pathways represented by the TOC, of all evidence relating to likelihood of impact, including an assessment of the extent to which drivers and assumptions necessary for change to happen, were seen to be holding. To include: • an explanation of how causal pathways emerged and change processes can be shown • an explanation of the roles played by key actors and change agents • explicit discussion of how drivers and assumptions played out • identification of any unintended negative effects of the project, especially on disadvantaged groups, including those with specific needs due to gender, vulnerability or marginalisation (e.g. through disability).	Final report *(coverage/omissions):* The section does not explicitly address how causal pathways emerged and change process from outputs to outcome and impact, how drivers and assumptions played out, and how key actors and change agents played their roles. Final report *(strengths/weaknesses):* Box included with outputs and these outputs would be expected to have contributed to the achievement of the outcome which would further contribute to the likelihood of impact. The assessment is weak in terms of the evidence presented in the assessment e.g. "The project has played a catalytic role and promoted scaling up… (para. 167).	3
Quality of 'Financial Management' Section Purpose: to present an integrated analysis of all dimensions evaluated under financial management and include a completed 'financial management' table (may be annexed). Consider how well the report addresses the following: • *adherence* to UNEP's financial policies and procedures • *completeness* of financial information, including the actual project costs (total and per activity) and actual co-financing used • *communication* between financial and project management staff	Final report *(coverage/omissions):* The report does not provide financial information of actual project costs and co-financing used. Nor is UNEP's table on financial management provided within the report or its annexes. Final report *(strengths/weaknesses):* The assessment shows that key financial documentation was not made available and/or included in the report. The report does not contain a final expenditure figure and the breakdown of spend mentioned in para 169 is not presented. The short assessment of sub-criteria would have benefitted from further triangulation of evidence presented. Regarding communication between financial and project management, no evidence or analytical findings were presented.	3
Quality of 'Efficiency' Section Purpose: to present an integrated analysis of all dimensions evaluated under efficiency (i.e. the primary categories of cost-effectiveness and timeliness). To include: • time-saving measures put in place to maximise results within the secured budget and agreed project timeframe • discussion of making use, during project implementation, of/building on pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. • implications of any delays and no cost extensions • the extent to which the management of the project minimised UNEP's environmental footprint.	Final report *(coverage/omissions):* Key required elements are covered in the section. Environmental footprint is not addressed in the section Final report *(strengths/weaknesses):* The section includes discussions of contributions from the partner organizations, implications of any delays due to COVID-19, and no-cost extensions. An assessment is made of in-kind contributions as contributing to efficiency and no-cost extensions due to delays caused by the COVID-19 pandemic. The section includes table with financial budget of the project and figure with the revised budget, but no total expenditure.	4

Quality of 'Monitoring and Reporting' Section <u>Purpose:</u> to present well-reasoned, complete and evidence-based assessment of the evaluand's monitoring and reporting. Consider how well the report addresses the following: • quality of the monitoring design and budgeting *(including SMART results with measurable indicators, resources for MTE/R etc.)* • quality of monitoring of project implementation *(including use of monitoring data for adaptive management)* • quality of project reporting *(e.g. PIMS and donor reports) *	Final report *(coverage/omissions):* All required elements are included and ratings for sub-categories and criteria are awarded in the section. Final report *(strengths/weaknesses):* The section provides an assessment of the quality of the monitoring design and identifies the weaknesses of some indicators. In addition, the review states that the quality of the reporting was satisfactory. However, the review did not refer to which main reports were assessed for the quality of monitoring and reporting.	5
Quality of 'Sustainability' Section <u>Purpose:</u> to present an integrated analysis of all dimensions evaluated under sustainability (i.e. the endurance of benefits achieved at outcome level). Consider how well the report addresses the following: • socio-political sustainability • financial sustainability • institutional sustainability	Final report *(coverage/omissions):* All required elements included and ratings for sub-categories and criteria awarded in the section. Final report *(strengths/weaknesses):* Although the section has summarized that the project will likely have significant positive and sustainable impacts on climate change, adaptation, and mitigation practices in the BRI countries, the evidence to support this summary is not explicitly demonstrated. It would have been beneficial to the assessment if it had made direct reference to the RToC and the assumptions and drivers in the assessment.	4
Quality of Factors Affecting Performance Section <u>Purpose:</u> These factors are not always discussed in stand-alone sections and may be integrated in the other performance criteria as appropriate. However, if not addressed substantively in this section, a cross reference must be given to where the topic is addressed and that entry must be sufficient to justify the performance rating for these factors. Consider how well the review report, either in this section or in cross-referenced sections, covers the following cross-cutting themes: • preparation and readiness • quality of project management and supervision[54] • stakeholder participation and co-operation • responsiveness to human rights and gender equality • environmental and social safeguards • country ownership and driven-ness • communication and public awareness	Final report *(coverage/omissions):* All required elements included and ratings for sub-categories and criteria awarded in the section. Final report *(strengths/weaknesses):* Concise assessments have been made to each sub-category, however, more evidence could have been presented to support the assessments made. Although the findings are well-articulated, lack of the evidence and references weaken the quality of the section. Country ownership and driven-ness: This subsection does not describe the analysis and findings. The first and third sentences are conflicting. In addition, the evidence of country ownership in participant countries could have been described to support the findings.	3

[54] In some cases 'project management and supervision' will refer to the supervision and guidance provided by UNEP to implementing partners and national governments while in others, specifically for GEF funded projects, it will refer to the project management performance of the executing agency and the technical backstopping provided by UNEP. This includes providing the answers to the questions on Core Indicator Targets, stakeholder engagement, gender responsiveness, safeguards and knowledge management, required for the GEF portal.

Quality of the Conclusions Section **(i) Conclusions Narrative:** Purpose: to present summative statements reflecting on prominent aspects of the performance of the evaluand as a whole, they should be derived from the synthesized analysis of evidence gathered during the review process. To include: • compelling narrative providing an integrated summary of the strengths and weakness in overall performance (achievements and limitations) of the project • clear and succinct response to the key strategic questions • human rights and gender dimensions of the intervention should be discussed explicitly (e.g. how these dimensions were considered, addressed or impacted on)	Final report *(coverage/omissions):* Key required elements are covered in the section with a narrative providing an overview of the project and its performance and a table with an overview of ratings and summary assessments. Final report *(strengths/weaknesses):* This section presents clear and concise conclusions based on the findings and it also responds the key strategic questions. However, the weakness in overall performance is not explicitly described in the conclusion section. Human rights and gender dimensions of the intervention were not addressed in the section. Responses to the three specific questions (which appear to have been selected from questions in Annex III Review Framework for the Terminal Review) listed in the Executive Summary are not directly addressed in this section (stakeholder understanding of infrastructure; country commitment, SDGs and Paris Agreement; content of future UNEP workshop training. It would have been beneficial to discuss the human rights and gender dimensions in the narrative of the conclusion. The 6-point rating scale is not consistent with UNEP's Evaluation Criteria Ratings Matrix.	3
ii) Utility of the Lessons: Purpose: to present both positive and negative lessons that have potential for wider application and use (replication and generalization) Consider how well the lessons achieve the following: • are rooted in real project experiences (i.e. derived from explicit review findings or from problems encountered and mistakes made that should be avoided in the future) • briefly describe the context from which they are derived and those contexts in which they may be useful • do not duplicate recommendations	Final report (coverage/omissions): A total of 13 lessons are presented, however, this is not done in the required standard format Final report *(strengths/weaknesses):* This section presents both positive and negative lessons. However, the lessons learned are specific reflections on the project's performance and are not formulated from the perspective of replication and generalization. Some of the lessons are describing a narrative of findings and not a lesson learned (e.g. Lessons 4, 6, 10, 12).	2
(iii) Utility and Actionability of the Recommendations: Purpose: to present proposals for specific action to be taken by identified people/position-holders to resolve concrete problems affecting the project or the sustainability of its results. Consider how well the lessons achieve the following:	Final report (coverage/omissions): The section presents three recommendation areas with multiple challenges/problems to the addressed by each recommendation area. The approach does not follow UNEP guidance and templates.	2

- are feasible to implement within the timeframe and resources available (including local capacities) and specific in terms of who would do what and when - include at least one recommendation relating to strengthening the human rights and gender dimensions of UNEP interventions - represent a measurable performance target in order that the UNEP Unit/Branch can monitor and assess compliance with the recommendations. NOTES: **(i)** In cases where the recommendation is addressed to a third party, compliance can only be monitored and assessed where a contractual/legal agreement remains in place. Without such an agreement, the recommendation should be formulated to say that UNEP project staff should pass on the recommendation to the relevant third party in an effective or substantive manner. The effective transmission by UNEP of the recommendation will then be monitored for compliance. **(ii)** Where a new project phase is already under discussion or in preparation with the same third party, a recommendation can be made to address the issue in the next phase.	Final report *(strengths/weaknesses):* Detailed challenges and problems are presented together with general advice on improvement; however, the recommendation area does not provide a prescription for addressing the challenges/ problems identified as per review guidelines.	
Quality of Report Structure and Presentation **(i) Structure and completeness of the report:** To what extent does the report follow the UNEP Evaluation Office structure and formatting guidelines? Are all requested Annexes included and complete?	Final report *(coverage/omissions):* Overall, the report follows UNEP Evaluation Office structure and formatting guidelines except for the lessons learned and recommendation sections. Final report *(strengths/weaknesses):* All evaluation criteria and sub-categories are assessed and performance ratings awarded. A complete glossary is included as Annex I. In Annex Ii there is included the Review Criteria and Ratings Table which is overlapping with the legend provided in the Conclusions section. The Annexes includes annexes of Annex III Review framework for the terminal review and Annex X. Review TOR.	4
(ii) Writing and formatting: Consider whether the report is well written (clear English language and grammar) with language that is adequate in quality and tone for an official document? Do visual aids, such as maps and graphs convey key information?	Final report (coverage/omissions): Overall, the report is written in concise English, but would have benefited from a review and editing of sentences completeness and use of required formats for lessons learned and recommendations. Final report *(strengths/weaknesses):* Good use of tables and figures is made in the report. The report presents useful visual aids such as diagrams and figures etc. Regarding the use of screen shots, with due consideration of data protection rights, the inclusion of screen shots from meetings held would assume that participants had	4

	given consent for their pictures to be included the report. It would have been beneficial to the presentation of the report if the required formats for lessons learned and recommendations had been applied in the report.	
OVERALL REPORT QUALITY RATING		**4**

A number rating 1-6 is used for each criterion: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1. <u>The overall quality of the review report is calculated by taking the mean score of all rated quality criteria.</u>