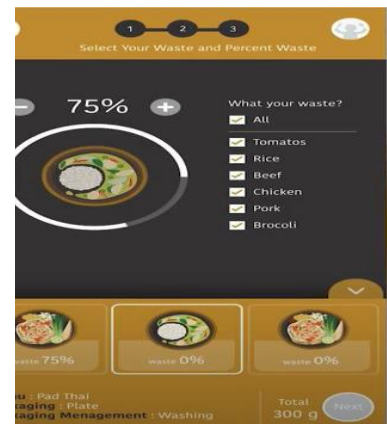
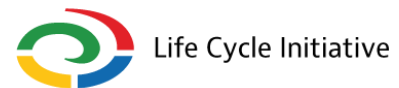


# Terminal Evaluation of UNEP/EC Project “Resource Efficiency through Application of Lifecycle thinking” (REAL) - PIMS 1991





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Front cover: Images from videos uploaded to YouTube of REAL-supported pilot projects in: Guatemala (Análisis de Ciclo de Vida y Huella Deagua en Una Empresa Productora de Aceite de Palma), Thailand (The Lookie Waste App - Reducing Food and Food Packaging Waste), and Nicaragua (Pensamiento de Ciclo de Vida en un Productor de Café).

Image from Pilot Project in India of November 2018 workshop on bio manure and pesticide preparation with migrant farmers provided by Ms. Chubamenla Jamir, TERI School of Advance Studies, New Delhi

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Project Title: GPGC/ENRTP Resource Efficiency through Application of Lifecycle thinking

(Project number: 621.3)

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The Evaluator would like to express her gratitude to all individuals and their organisations who contributed to this evaluation, as listed in **Annex II**.

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Acknowledgement is extended to all project partners and other stakeholders who generously contributed their time and perspectives. All input provided by the project's partners, the executing team, government representatives, beneficiaries, and other stakeholders consulted during the process are gratefully acknowledged.

It is hoped that the findings, conclusions, and recommendations emerging out of this project assessment will provide inspiration, guidance, and be useful for informing the design of a potential next phase and support the continuous improvement of similar projects in other countries and regions.

## BRIEF CONSULTANT BIOGRAPHY

Ms. Joyce Miller is CEO of a Swiss-based consultancy, Capacity Building Resource Exchange (CAPRESE) Sàrl. She has undertaken evaluation work for United Nations' agencies since 2015, leveraging two decades of experience in organisational learning, capacity building, and institutional strengthening in developing and emerging countries in areas related to resource efficiency, green economy, circular economy, entrepreneurship, private sector development, impact monitoring, and evaluation. As well as coaching 1'000 senior corporate staff to tap their talents, build their leadership repertoire, and create high performance teams through programmes of the International Institute for Management Development (IMD, Switzerland), she co-developed a virtual 8-week learning journey in innovation, pioneering the institute's first "global leadership in the cloud" offerings. She is a founder of PREMAnet e.V., a global network of practitioners and development professionals competent in applying Profitable Resource Efficient Management approaches (PREMA®), as part of the toolset of German International Cooperation (GIZ). She is on the Executive Board of the Swiss Knowledge Management Forum (SKMF) and a founder of the LEGO Serious Play Community of Practice.

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## ABOUT THE EVALUATION

**Joint Evaluation:** No

**Report Language:** English

**Evaluation Type:** Terminal Evaluation

**Brief Description:** This report is a Terminal Evaluation of the EC-funded, UNEP project “GPGC/ENRTP Resource Efficiency through Application of Lifecycle thinking (REAL) PIMS 1991” implemented during 2016-2020. The project's overall development goal was to integrate resource efficiency in global value chains by using life cycle data on environmental impacts, which was expected to enable private and public actors to make informed choices, fostering an increase in sustainable consumption and production (SCP) patterns. The evaluation sought to assess the project's design, performance (in terms of relevance, effectiveness, and efficiency), and its outcomes (actual and potential), including sustainability. The evaluation has two key purposes, to: (i) provide evidence of results to meet accountability requirements; (ii) promote learning, feedback, and knowledge sharing regarding project results and lessons learned for UNEP and its Life Cycle Initiative (LCI), the European Commission (EC) as its core donor, and those engaged in various aspects of the project's implementation.

**Key words:** Resource Efficiency, Life Cycle, LC, Life Cycle Analysis, Life Cycle Assessment, LCA, Lifecycle-Based Approaches, Life Cycle Thinking, Database Management Criteria, Interoperable LCA Database, Global Network for interoperable LCA Databases, GLAD, Capacity Development Tools, Green Economy, Circular Economy, Value Chain, Sustainable Consumption and Production, SCP, Climate Change, Project Evaluation, Terminal Evaluation.

**Primary data collection period:** November 2021 to January 2022

**No field mission was undertaken due to limits on travel imposed in relation to the global COVID-19 pandemic.**

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## LIST OF ACRONYMS

10YFP	10 Year Framework of Programs on Sustainable Consumption and Production patterns
COVID-19	Corona Virus Disease 2019, designation by the World Health Organization (WHO) for the disease in 2019 caused by the novel coronavirus SARS-CoV-2
DTIE	(UNEP's Economy) Division of Technology, Industry and Economics
EA	Expected Accomplishment
EC	European Commission
ENRTP	(EC's) Environment and Sustainable Management of Natural Resources including Energy
EOU	Evaluation Office of UNEP
EU	European Union
FMO	Fund Management Officer
GEI	Green Economy Initiative
GHG	Greenhouse gas (emissions)
GPGC	Global Public Goods and Challenges
LC(A)	Life Cycle (Assessment)
LCI	Life Cycle Initiative
LCT	Life Cycle Thinking
M&E	Monitoring and Evaluation
MoU	Memorandum of Understanding
PEF(CR)	Product Environmental Footprint (Category Rules)
POW	Programme of Work
REAL	Resource Efficiency Achieved through Life cycle thinking
RIVU	Responsible Industry and Value Chain Unit (within UNEP-DTIE)
(R)TOC	(Reconstructed) Theory of Change
ROA	UNEP Regional Office for Africa
ROAP	UNEP Regional Office for Asia/Pacific
ROLAC	UNEP Regional Office for Latin America and the Caribbean
SCA	Strategic Cooperation Agreement (between UNEP and the EU)
SCP	Sustainable Consumption and Production
SDG	Sustainable Development Goal
SME	Small- and Medium-Sized Enterprise
SSFA	Small-Scale Funding Agreement
TE	Terminal Evaluation
ToR	Terms of Reference
UNEP	United Nations Environment Programme
US	United States

## PROJECT IDENTIFICATION

Table 1 – Project Identification Table

<b>UNEP PIMS ID 1991:</b>	Initially considered as an EC-funded sub-project of 633.1. Later, it was identified as part of Project Document 621.3		
<b>Name:</b>	Resource Efficiency through Application of Life cycle thinking (REAL)		
<b>Implementing Partners</b>	Life Cycle Initiative (hosted by UNEP in Paris) ecoinvent Association, Switzerland Ecedi, France Culturambiente, Spain TGH Think Space, South Africa Oliver Kusche, Germany Pontificia Universidad Catolica de Peru Beatriz Rivela, Ecuador Osmer Ponce, Latin America and the Caribbean (LAC) Region		
<b>Most relevant SDG targets</b>	Goal 12: Targets 12.2, 12.4, 12.6, 12.7, 12.8.		
<b>Other relevant SDGs:</b>	Goal 6: Target 6.4; Goal 8: Target 8.4; Goals 11, 13, 15, 17 (17.16, 17.17); 4 (4.7); 9; 7		
<b>Sub-programme:</b>	6 - Resource Efficiency	<b>Expected Accomplishment (EA):</b>	EA1 Enabling Policy Environment: Science-based approaches that support the transition to sustainable development through multiple pathways, including inclusive green economy and sustainable trade and adoption of sustainable consumption and production patterns at all levels are enhanced. EA2 Sectors & Supply Chains: Public, private and financial sectors increasingly adopt and implement sustainable management frameworks and practices. EA3 Sustainable Lifestyles & Consumption: Public and private sectors increasingly aware of and support the adoption of sustainable lifestyles and sustainable consumption patterns.
<b>UNEP approval date:</b>	27 March 2014	<b>Programme of Work Output(s):</b>	MTS 2014-2017 POW 633: life cycle based information tools & methodologies (eco-labelling, certification and product sustainability indicators) developed with, and provided to, governments, businesses, and other stakeholders. Specifically, REAL contributes to Output 1 (Criteria for life cycle data are established, applied and supported by international network of interoperable LCI Databases) and Output 4 of POW 633 (Capacity building provided to stakeholders including examples of benefits of using life cycle-based information tools, methods, approaches). Delivery of pilot projects on eco-innovation at national level will be reported in POW 621 Output 4. Those focused on SCP policies will be reported in POW 614.2 Output 3.
<b>Expected start date:</b>	October 2015	<b>Actual start date:</b>	March 2016
<b>Planned completion date:</b>	September 2019	<b>Actual operational completion date:</b>	December 2020
<b>Planned EC project budget at approval:</b>	EUR 1,535,862	<b>Actual total expenditures reported 31 December 2020:</b>	EUR 1,517,515
<b>Planned Environment Fund allocation:</b>	N/A	<b>Actual Environment Fund expenditures reported as of [date]:</b>	N/A
<b>Planned Extra-Budgetary Financing:</b>	N/A	<b>Secured Extra-Budgetary Financing:</b>	N/A
		<b>Actual Extra-Budgetary Financing expenditures reported as of [date]:</b>	N/A
<b>First disbursement:</b>		<b>Financial closure:</b>	31 December 2020
<b># of formal project revisions:</b>	0	<b>Date of last approved project revision:</b>	N/A
<b># of Steering Committee meetings:</b>	2	<b>Steering Committee meeting:</b>	Last: 16.03.2017   Next: N/A; project completed
<b>Mid-term Review planned:</b>	None	<b>Mid-term Review (actual):</b>	None undertaken
<b>Terminal Evaluation planned:</b>	January – September 2021	<b>Terminal Evaluation (actual date):</b>	September 2021 – March 2022
<b>Coverage - Countries:</b>	Global with pilots in India, Thailand Guatemala, Nicaragua	<b>Coverage - Region(s):</b>	Asia Pacific, Africa, Latin America and the Caribbean (LAC)
<b>Previous project phases:</b>	N/A	<b>Status of future project phases:</b>	



## EXECUTIVE SUMMARY

### Project Background

1. The **Resource Efficiency through Application of Life cycle thinking (REAL)** project was part of a portfolio of projects falling under a Strategic Cooperation Agreement (SCA) between the European Commission and United Nations Environment Programme (UNEP). With funding of EUR 1,535,862 from the European Commission (EC), the REAL project was seen as a logical continuation of the previous life cycle project funded by the EC under its thematic programme Environment and Sustainable Management of Natural Resources including Energy (ENRTP). REAL supported UNEP's Life Cycle Initiative (LCI) and reported into the expected achievements of UNEP's Resource Efficiency Sub-Programme (SP6).
2. At the time of REAL's design, the project was justified by the notion that there was a large gap between the demand for life cycle assessment experts and financial resources available for developing further needed tools to support the application of life cycle thinking. In this light, the project's plan to develop further local resources and capacities to apply life cycle thinking and data were framed as vital for integrating resource efficiency into global value chains, which itself was seen as key to the pursuit of SCP to fulfil the world's sustainable development agenda. Hence, REAL's overall expected outcome was for private and public organisations to have increased capacity to make informed choices using life cycle data and apply life cycle assessment tools. The project sought to achieve this objective by tackling two key enabling conditions that responded to specific demands from countries on their needs for life cycle 'data' and 'capacity'. REAL was supported by and delivered key substantive outputs to UNEP's Life Cycle Initiative. In addition to its project funding, REAL tapped in-kind contributions of many volunteers drawn from national life cycle networks to enlarge the resources available for implementation as well as to build ownership of project results. In terms of its governance, REAL implemented its activities under the guidance of a Project Steering Committee, the Technical Management Group of the Global Network of Interoperable LCA Databases (GLAD).
3. The project was implemented during March 2016 to December 2020 (including two 'no-cost' extensions). While this lengthened its duration by 30% (from 48 to 63 months), at the time of project closure, its overall expenditures came in just under the initially budgeted amount.

### Evaluation Objectives and Scope

4. This terminal evaluation of the project was managed by the Evaluation Office of UNEP and undertaken by an independent Evaluation Consultant during September 2021 to April 2022 to: i) meet accountability requirements; ii) promote operational improvement and share knowledge for scaling-up the project's results; and iii) generate lessons and recommendations to inform future project design and execution.
5. The scope of this evaluation covered the project's design and the period of its planned (from October 2015 to September 2019) and actual implementation (March 2016-December 2020).
6. The key audiences for the terminal evaluation's findings include: the donor, UNEP's project staff and line management, Life Cycle Initiative, SP6 Coordinator, and implementing partners.
7. The Evaluator used a participatory approach whereby key stakeholders were kept informed and consulted throughout the process. Primarily qualitative methods of desk review of documents and interviews were used to collect and triangulate data and put

together findings on the project's performance and achievement of its expected outcome. A reconstructed Theory of Change was used as an analytical framework for the assessment of outcome.

## Key Findings

8. In terms of its **strategic relevance**, the project was highly pertinent for addressing the world's most pressing environmental priorities, fully aligned with UNEP's strategic priorities and expected contributions, strongly reflecting donor interest in enabling environmental foot printing globally.
9. Key **project design** strengths were reflected in the robust alignment with UNEP and EC's strategic priorities, coherence of its logical framework, and efficiency. Areas of weakness related to its arrangements for governance/supervision, partnership, and strategy for knowledge management with respect ensuring adequate resourcing and explicit roles.
10. In terms of **effectiveness**, the project successfully delivered its programmed outputs related to training local experts, development of national database roadmaps, integration of datasets into the GLAD platform, development of e-Learning courses. The political conflict in one pilot country (Nicaragua) and the effects of the COVID-19 pandemic had some impact on project operations. **Availability, quality, and timeliness of outputs** were deemed "satisfactory"; however, the achievement of planned outcomes fell short, with just 11 organisations (versus the target of 15) reporting enhanced decisions through use of LC-based approaches – with no governments in emerging and rapidly-growing economies reporting effects that could be directly attributed to the project. The inadequacy of design and resourcing related to the pilots lessened the full potential and **likelihood of impact** of the project's overall investment.
11. The project's **financial management** showed strong adherence to UNEP policies and procedures and EC requirements through the establishment of suitable systems, processes, and relationships between project and financial management, who showed consistent awareness of and interest in enhancing project performance. On December 30, 2020, the total expenditure was EUR 1,517,515. It is expected to fall within the planned budget (EUR 1,535,862), following disbursement of terminal evaluation costs and preparation of final financial report
12. Looking through the lens of **efficiency**, while the guidance concerning a project with two justified 'no cost' extensions of 1 year or less with amendments to the approved results frameworks would usually be rated as "moderately satisfactory", unprecedented impacts stemming from the COVID-19 pandemic were considered as exceptional. In view of the favourable assessment of the project's cost efficiency and synergistic elements, the overall assessment of its efficiency was regarded, on balance, as "satisfactory".
13. **Monitoring and reporting** on the REAL project enabled UNEP management and the donor to get an overall grasp of the project's delivery on a yearly basis. The inclusion of short explanations and accompanying hyperlinks to retrieve supporting documents formed a valuable knowledge repository. Planning, budgeting, and implementation of monitoring showed room for improvement.
14. The project's **socio-political sustainability** was considered "moderately likely" given the growing interest in the notion that life cycle thinking can help operationalize circular economy solutions and promote more sustainable consumption and production. There appears to be growing **institutional sustainability** as existing governance structures, processes, agreements, and frameworks are likely to evolve and sustain the benefits associated with REAL's outcomes. In this light, the project could have benefitted from

ensuring stronger anchoring of socio-political aspects, ongoing linkages to policy-makers, and an exit strategy that could leverage financing for meaningful dissemination and replication. Looking to **financial sustainability**, there was no strategy or resource mobilisation to ensure replication and further dissemination of the results of the pilot projects implemented in four countries, beyond making videos and descriptive materials available for download from UNEP's LCI website. However, the project's work in service to the LCI (the larger parent project to which REAL was assigned in the UNEP world) implied that there would be ongoing resource mobilization to ensure that the e-Learning courses developed under the REAL project would continue to be maintained, as well as further efforts supporting GLAD.

15. Considering the set of **factors affecting project performance and cross-cutting issues**, stakeholder participation and cooperation provided a strong backbone for the project, together with "highly satisfactory" environmental and social safeguards, and a robust public awareness/communications strategy (seen as key for stimulating integration of life cycle thinking and practices to promote SCP). Sufficient preparation and the establishment of GLAD's Technical Management Group and agreement on three main work areas paved the way for building early momentum. There was consistent focus on achieving planned outputs and outcomes; however, project management resources were stretched too thinly across numerous initiatives, driven by overly ambitious expectations to leverage synergies with other projects as well as opportunistic and adaptive management approaches that generated high transaction costs. Human rights and gender equality were considered in project design and implementation but evidence was not specifically tracked and reported. While a high level of country ownership and driven-ness was demonstrated by those directly involved in project implementation and steering, poor uptake of the e-Learning course designed for policy-makers and the limited resourcing, duration, and engagement of national policy-makers in pilot projects' single dissemination event did not provide sufficient anchors to autonomously catapult momentum forward.

### Summary Response to Key Strategic Questions

16. The REAL project was explicitly intended to complement, build on and/or contribute to other projects in the Resource Efficiency Sub-Programme. The **synergies and linkages** with several ENRTP-funded sub-projects outlined at project design were pursued.
17. **Interlinkages with GEI<sup>1</sup>, REEDTE<sup>2</sup>, SPPEL<sup>3</sup> and SEED<sup>4</sup>** expected to function as dissemination vectors and create catalytic effects were taken up. Implemented during 2010-2014, the GEI broadly socialized the concept of 'green economy' and assisted dozens of countries in their initial efforts to transition to more resource efficiency, sustainable consumption and production. Launched in 2016, a key part of the REAL project's justification related to offering a mechanism to operationalize the 'green economy' concept by putting the focus on properly quantification of impacts along the life cycle. With respect to the other three projects of interest, synergistic activities conveyed in REAL's annual reporting exclusively related to REEDTE project. There were no mentions of SPPEL and SEED in project reporting and interviewed stakeholders were not able to recall meaningful linkages. On the other hand, REAL did visibly leverage the 'eco-innovation' notion elaborated under REEDTE through its pilot projects and included

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<sup>1</sup> Green Economy Initiative (GEI) <http://www.unep.org/greeneconomy/>, an umbrella project that covered 16 individual sub-projects, set the foundation for subsequent independent projects such as the Partnership for Action on the Green Economy (PAGE) and the Green Growth Knowledge Platform (GGKP) Source: Terminal Evaluation Report of GEI, January 2017

<sup>2</sup> Resource Efficiency and Eco-Innovation in Developing and Transition Economies (REEDTE), referred to as the Eco-Innovation project

<sup>3</sup> Stimulating the demand and supply of sustainable products through Sustainable Public Procurement and EcoLabelling (SPPEL)

<sup>4</sup> Supporting Entrepreneurs for Sustainable Development (SEED)

the concept in various regional training where life cycle thinking was linked to eco-innovation. REAL's project team also collaborated with the REEDTE team to prepare training materials and exercises.

18. In drawing lessons from REAL's project experience vis-à-vis pursuing such linkages, it was reported that the resulting transaction costs of developing and maintaining such extensive linkages were very high. Furthermore, the many small initiatives driven particularly by Indicator 2.3 (related to promoting SCP strategies and action plans in selected countries promoting life cycle thinking), together with some opportunistic behaviour in the project's final period (related to supporting life cycle network development and data in Ecuador and the development of Product Environmental Footprint (PEF) compliant data and category rules contributed to the EC-funded, UNEP-implemented InTex project launched in September 2020). Such a situation of high transaction costs was not sustainable. In the REAL project, there was growing evidence of potential staff burnout.
19. **UNEP's Regional Offices** engaged and enhanced uptake of project outputs and outcomes with mixed results. The Regional Office for Latin America and the Caribbean (ROLAC) was an active supporter of the two pilot projects implemented in Guatemala and Nicaragua, while linkages for those implemented in Asia and Africa regions were made directly with the Paris-based project team due to reported overload and other priorities in the respective regions. Despite good intentions to engage with the Regional Office for Africa (ROA) and the Regional Office for Asia and the Pacific (ROAP) and acknowledgement that there would be strategic reasons to do so (related to opportunities for building awareness, capacity and potentially replication), REAL's project experience showed that the Regional Office did not have sufficient resources and capacity to actively support the project nor respond to designed-in expectations on an ongoing basis. As ROLAC's active involvement was driven by an individual who had supported execution of related activities in the region since 2017 and acted as Resource Efficiency Coordinator at regional level, an important lesson that can be drawn from this scenario is that active engagement is more likely if the institutional mandate is underpinned by adequate resourcing and/or willingness to make substantial in-kind contributions of staff time.
20. **Adjustments** were made by the project to respond to the COVID-19 global pandemic through the request for a second 'no cost' extension (granted in September 2020). The additional six months' duration allowed the team to carry out activities that had been slowed down due to restrictions on mobility the largescale shift to virtual and home-based work beginning in March 2020 that lasted beyond the project's closure. Reallocation of the travel budget allowed the project to respond positively to new, unenvisaged country-relevant and project-relevant requests (e.g. support of database work in Ecuador). This second extension enabled the project to deal simultaneously with the impacts of the delay in recruiting a replacement Project Manager, which the Evaluator deemed to be the key challenge requiring project adjustment. As part of this extension, further activities were elaborated in relation to its two outputs (e.g. guidance for national database roadmap development, development of additional communication materials, capacity-building related to PEF and a coffee footprint calculator, translation of e-learning courses into Portuguese) but there were no changes to the project's overall results and indicators.

## Main Conclusions

21. There was a shortfall in the achievement of the envisaged project outcome, given that just 11 organisations (versus the target of 15) reported enhanced decisions through the use of life cycle approaches – with no governments in emerging and rapidly-growing economies reporting effects that could be directly attributed to the project. However, it

- must also be understood that achieving such an outcome within the short timeframe of a project's implementation is unrealistic, as durable change needs time.
22. The project's strengths lay in its strategic relevance, the level of stakeholder participation and cooperation, and the efficient conversion of resources and inputs into results, which was underpinned by the highly effective teamwork of its project and financial management sides. UNEP's long-standing work in the area of Green Economy highlighted the importance to not only measure, but properly quantify environmental impacts throughout a product's life cycle so that these could be more effectively managed, based on life cycle assessment. In tackling key enabling conditions related to 'data' and 'capacity', the REAL project offered a timely and concrete response for operationalizing the resource efficiency concept by strengthening the foundation for promoting more informed decision-making by both public and private actors, which was expected to spur more sustainable consumption and production (SCP) practices. REAL's contributions, which have been reported into the expected achievements (EAs) of UNEP's Resource Efficiency Sub-Programme (SP6), are seen, in the Evaluator's view, as allowing other system actors to move forward in integrating resource efficiency thinking into global supply chains.
  23. The timeliness of REAL was also a strength. As the project reached its close in 2020, the urgency to accelerate SCP patterns, together with interest in circular economy solutions and avoiding regrettable substitutions, had dramatically increased interest in life cycle thinking. From UNEP's side, there was a growing perception that life cycle thinking was a key entry point for addressing the drivers of three planetary crises (climate change, biodiversity loss, pollution), with the result that life cycle thinking was included as a cross-cutting feature of the agency's new Mid-Term Strategy (MTS) for 2022-2025. This development further valorised REAL's contributions.
  24. This strategic positioning of life cycle thinking and its function in delivering UNEP's new MTS implied that, moving forward, there would be conceivably more interest, both internally and externally, in the results of the REAL project and the capabilities it had developed. The fact that the life cycle team has been concentrated in UNEP's Economy Division, located in Paris, with some activity in Regional Offices (primarily ROLAC) presents a challenge, in the Evaluator's view, for quickly developing the sensitivity and understanding of how to incorporate life cycle thinking into projects and programming across the wider organisation.
  25. The way in which REAL's contributions have been achieved illustrated another strength of the project. The high level of engagement of relevant stakeholders, who freely spent time in technical working groups, supported the development of GLAD and enlarged the pool of available resources for project implementation through these in-kind contributions. In addition to enhancing the project's efficiency, this approach has also built national ownership to the extent that the GLAD platform was seen to have a life of its own with continuing momentum by December 2020, when the REAL project reached its close. This level of engagement and sense of ownership, stemming from the perceived utility of this part of the project's results, increases the likelihood of impact.
  26. The key area that would have benefited from further attention relates to the project's pilots. These demonstration activities would normally be expected to anchor the socio-political sustainability of the project's results in so far that such endeavours would typically seek to build the ownership, interest, and commitment of government and other system actors to take project achievements forward. While these projects were highly appreciated by their implementers (who had the opportunity to deepen understanding of life cycle thinking applications) and their beneficiaries (whose hopes were undoubtedly raised about forward potential), their limited resourcing (USD 20,000 each, with a 1-year duration) with no inclusion of funding for future monitoring and no secured

resources to support further dissemination and replication, beyond making videos and descriptive materials available for download from UNEP’s website, reflected the absence of a strategic view, particularly as there were no clear forward linkages in place, beyond a single end-of-pilot dissemination. Likelihood of impact and sustainability of project outcomes could have been enhanced through more adequate resourcing of fewer, more targeted, and more directed demonstration activities with a stronger focus on socio-political linkages and aspects to support monitoring, dissemination, uptake, and replication following project closure.

27. REAL was constituted by many different pieces, each seeming to be doing good work but missing a common thread. REAL could have significantly strengthened its impact by being constituted by a few, better resourced activities, which were more closely managed and guided, with purposeful, sustained linkages to the policy-making agenda. Furthermore, the sustainability of pilot project results could have been enhanced through more adequate resourcing and by using more intentional strategies to stimulate replication (reproduction of the demonstrated approaches at a similar scale amongst different beneficiaries) and/or scaling up (leading to substantially increased numbers of new beneficiaries, following project close), together with exit strategies and adequate resourcing to maintain momentum in this direction.
28. REAL’s exit strategy was linked to its inclusion under the larger ‘parent’ umbrella of UNEP’s Life Cycle Initiative (LCI), which had ongoing resource mobilization. Under this setting, the e-Learning courses developed under REAL continued to be available and maintained, with participation tracked and certificates issued. As well, there were reportedly ongoing discussions with educational institutions about the inclusion of these modules in curricula and a new course being developed by UNEP’s unit. UNEP had already mobilized funds from the EC, which had continued to largely fund UNEP’s efforts in the life cycle domain, to carry on efforts supporting GLAD. Furthermore, UNEP staff indicated that REAL’s results were already being leveraged through other channels, like the InTex project. Running from 2020-2023, this reflected an ongoing source of funding for deepening insights related to life cycle thinking.
29. **Table 2** summarizes the evaluation ratings.

**Table 2 – Summarized Rating Table**

Criterion	Rating
A. Strategic Relevance	Highly Satisfactory
B. Quality of Project Design	Satisfactory
C. Nature of External Context	Favourable
D. Effectiveness	Moderately Satisfactory
E. Financial Management	Highly Satisfactory
F. Efficiency	Satisfactory
G. Monitoring and Reporting	Moderately Satisfactory
H. Sustainability	Moderately Likely
I. Factors Affecting Performance	Satisfactory
<b>Overall Project Rating</b>	<b>Satisfactory</b>

30. Based on the findings from this evaluation, the project’s performance has been assessed as “Satisfactory”. **Table 10** in the Conclusions section provides further details regarding the evaluation findings and assessment of the project ratings across the set of all evaluation criteria.

## Lessons Learned

31. **Lesson 1:** Designed-in links and expectations for collaboration that seek to build synergies and leverage a more holistic, systemic approach tend to generate high transaction costs, which needs to be accounted for to avoid offsetting the intended benefits and cause staff burn out.
32. **Lesson 2:** Project monitoring needs to be considered as integral to project delivery and success. When project monitoring is oriented to fulfilling minimum reporting requirements and implementing partners perceive monitoring as a burden and simply in service to that aim, both sides miss out the potential of organisational learning to boost insight, project performance and impact.

### Recommendations

33. **Recommendation 1:** Review the design, implementation, and management of pilots in REAL's successor project, InTex, to enhance their intended impact, paying attention to adequate resourcing of fewer, more targeted and directed demonstration activities with strong focus on socio-political linkages to enhance likelihood of impact.
34. **Recommendation 2:** Review the strategy for enhancing uptake of the e-Learning courses, especially for policy-makers and business decision-makers.
35. **Recommendation 3:** In support of Recommendation 2, design and pilot an approach to developing better traction for the LCT e-Learning course targeted at policy-makers in South Africa.
36. **Recommendation 4:** Review LCI portfolio to ensure that relevant indicators that support the progressive improvement of gender equity/human rights have been formulated and are being tracked and reported as part of the project's annual reporting.

## I. INTRODUCTION

37. The REAL project (hereafter, REAL) set out to tackle improvements in two enabling conditions related to 'data' and 'capacity' that would support public and private actors to make better informed choices, by using life cycle data on environmental impacts. REAL built on UNEP's ongoing Green Economy work, which promotes a pathway to economic development that improves human well-being and social equity, while reducing environmental risks and ecological scarcities. For this, it was argued that information needs to be properly quantified, based on life cycle assessment, to avoid unintended burden shifting, spurring the integration of resource efficiency in global value chains and sustainable production and consumption patterns.
38. This 48-month project had a EUR 1,535,862<sup>5</sup> budget under a Strategic Cooperation Agreement (SCA) between UNEP and the EC, with its Directorate-Generals for Environment (DG ENV) and International Cooperation and Development (DG DEVCO), under the Thematic Programme for Environment and Sustainable Management of Natural Resources, including Energy (ENRTP).
39. The project had a global coverage of Asia Pacific, Latin America and Caribbean (LAC), and Africa with demonstration pilots implemented in India, Thailand, Nicaragua, and Guatemala.
40. REAL was managed by UNEP's Economy Division [formerly, the Division of Technology, Industry and Economics (DTIE)<sup>6</sup>], related to UNEP's 2014-2017, Programme of Work (POW) (Project Document 633) and later related to UNEP's POW for 2018-19 and 2020-21, subsumed under the Life Cycle Initiative (LCI) (Project Document 621.1/621.3), together with a range of elements funded by other actors. Within this setting since 2018, REAL was described in the Project Document as "a component of the life cycle workstream" and "part of a much bigger parent project", linked to UNEP's Resource Efficiency Sub-Programme (SP6) and its set of expected accomplishments (EAs)<sup>7</sup>.
41. Approved by UNEP in March 2014, the project was kicked off in March 2016. It was implemented by UNEP, the Life Cycle Initiative (LCI)<sup>8</sup> it hosted, with contributions from many implementing partners, including but not limited to: ecoinvent Association (Switzerland), Ecedi (France), Culturambiente (Spain), TGH Think Space (South Africa), Oliver Kusche (Germany), Pontificia Universidad Católica del Perú (Peru), Beatriz Rivela (Ecuador), and Osmer Ponce (LAC).
42. Its two 'no-cost' extensions extended its planned completion from September 2019 to December 2020. Its second extension of six months (until the closure of the project) was attributed to effects of the global pandemic COVID-19 that had led to restrictions on mobility and meetings and a largescale shift to virtual and home-based work beginning in March 2019.
43. The REAL project was not previously evaluated. The purpose of this Terminal Evaluation (TE) was to: i) meet accountability requirements; ii) promote operational improvement and share knowledge to scale-up project results; iii) generate lessons and recommendations to inform future project design and execution. The scope of the

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<sup>5</sup> Under their ongoing Strategic Cooperation Agreement (SCA) with a 20-project portfolio, UNEP and the EC agreed on a technical budget revision for REAL from EUR 1,765,000 to EUR 1,535,862, reflected a shift of staff costs to earlier projects to enable their formal closure. This was documented in the project's 2018 Annual Report.

<sup>6</sup> Throughout the remainder of this Report, references to UNEP's Economy Division (rather than the former DTIE which existed throughout the bulk of the project's operation) will be used, for practical purposes

<sup>7</sup> UNEP (2017), Programme Framework for Programme #6 Resource Efficiency 2018-2021 [https://wedocs.unep.org/bitstream/handle/20.500.11822/22721/SP%206%20-%202018-2021\\_Resource%20Efficiency%20Programme%20Framework.pdf?sequence=33&isAllowed=y](https://wedocs.unep.org/bitstream/handle/20.500.11822/22721/SP%206%20-%202018-2021_Resource%20Efficiency%20Programme%20Framework.pdf?sequence=33&isAllowed=y)

<sup>8</sup> Established in 2002, the Life Cycle initiative is a public-private, multi-stakeholder partnership that provides a global forum for a science-based, consensus-building process supporting and enabling the global use of credible life cycle knowledge by private and public actors <https://www.unep.org/explore-topics/resource-efficiency/what-we-do/life-cycle-initiative>



evaluation covered the project's design and the period of its planned (from October 2015) and actual implementation (March 2016-December 2020).

44. The key audiences for the TE's findings include: the EC, UNEP's Project and Line Management, Life Cycle Initiative, SP6 Coordinator, and implementing partners (as listed in ¶41).

## II. EVALUATION METHODS

### Evaluation Approach

45. Following UNEP's Evaluation Policy, this TE was planned into the project's design, and it was carried out following the project's December 2020 closure, guided by a Terms of Reference (ToR) (see **Annex VI**), undertaken by an independent Evaluation Consultant during September 2021 to February 2022, operating under the supervision of the Evaluation Office of UNEP (EOU) in Nairobi, Kenya.
46. As a first step, an Inception Report was prepared to assure mutual understanding between the Evaluation Consultant and UNEP's Evaluation Manager and Project Team regarding: a) the purpose, scope, key evaluation questions to be explored; b) the evaluation's conduct; and c) the TE's format and content.
47. The TE fostered a positive and participatory approach, while maintaining independence. Key stakeholders were regularly informed regarding progress. In this light, the project team and selected implementation partners [i.e. from UNEP's Regional Office for Latin America and the Caribbean (LAC)] were consulted during the evaluation. This uncovered several areas of interest for exploration during the evaluation's main phase. These were added to the four strategic questions elaborated in the evaluation's ToR, questions that arose from the Project Design Quality assessment carried out at the inception phase, and UNEP's standard evaluation criteria.
48. These inputs were used as the basis for developing an Evaluation Matrix, which contained a pool of relevant questions, organised by evaluation criteria, together with indicators and sources of evidence. This instrument was used to guide data collection and analysis.
49. To triangulate the findings, quantitative and qualitative data were collected from varied sources, using different means:
  - **Desk review:** of key documentation supplied by the project team, including the project's Final Report, Project Documents of REAL and the Life Cycle Initiative; annual work plans; pertinent correspondence and publications; monitoring reports (annual progress reports, subcontractor reports); e-Learning modules and traction data; publications; websites of the European Commission (EC), UNEP, Life Cycle Initiative (LCI), and implementing partners engaged through Small-Scale Funding Agreements (SSFAs); pilot project deliverables, reports, and videos. See **Annex III: KEY DOCUMENTS CONSULTED**.
  - **Interviews:** Due to COVID-19 travel restrictions, no field visits or face-to-face meeting were undertaken. Data collection was fully carried out using remote means (i.e. Zoom). From an overall pool of 40 stakeholders identified through desk review and input from the project team, interviews were held with 32 stakeholders (see **Annex II: PEOPLE CONSULTED DURING THE EVALUATION**; 47% female and 53% male) from UNEP Project/Line Management, Regional Offices engaged in supporting the pilot projects; the project's donor (EC); technical consultants engaged in supporting the project, implementing partners; and members of the UNEP-hosted LCI initiative, its Project Steering Committee, and the Technical Management Group of the Global Network for interoperable LCA Databases (GLAD). Representatives of LCA networks, multipliers, and commercial actors were interviewed to provide an external perspective regarding the utility of the project's outputs and outcomes.

Although a maximum of 25 stakeholders were initially targeted for interview, 32 were consulted. The added respondents were identified by the Evaluator through the

use of a 'snowball' technique (by asking interviewees "who else should be contacted").

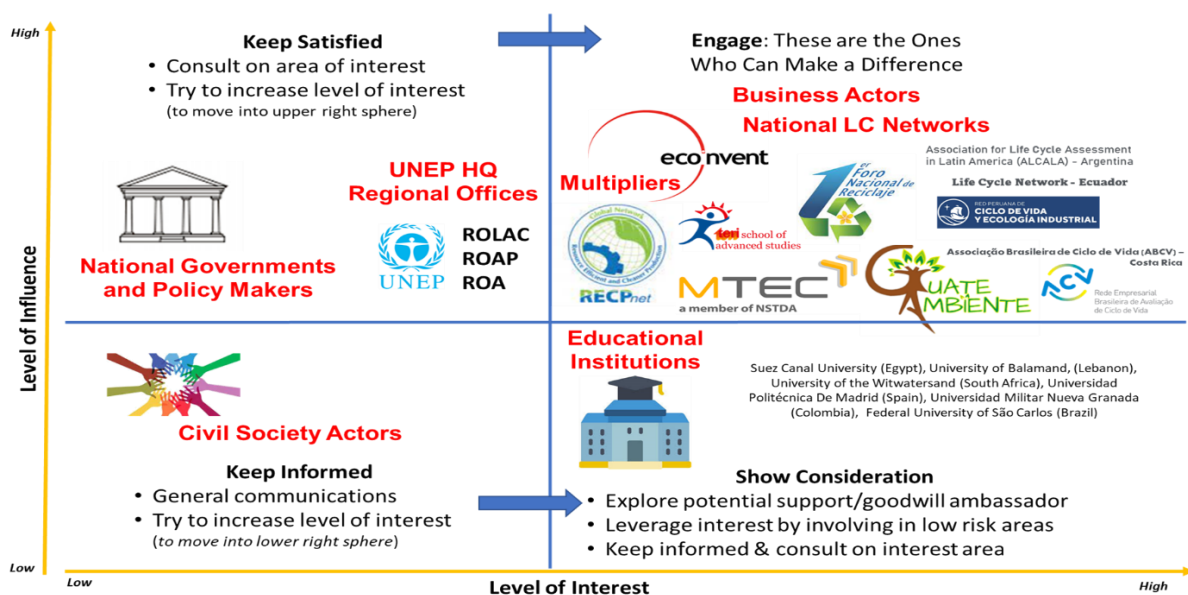
Semi-structured interviews of 45-60 minutes (the maximum amount of time typically granted to such interventions) were carried out using a protocol, which contained a pool of 21 key questions. These questions were mapped to cover the evaluation criteria, strategic questions, and areas of interest highlighted by the project team. Given the time available, a tailored subset of the available questions were explored, delving into areas where project stakeholders were able to provide key evidence and perspectives that contributed to the TE's aims.

- **Consultations:** (by email, Zoom) with the core project team and Fund Management Officer (FMO) to clarify specific points and gather direct feedback on the main issues;
- **Preliminary Findings' presentation:** convened (by Zoom) with members of the Project Team, ROLAC, the FMO, and SP6 Coordinator on 2 February 2022 following the period of formal data collection, the ensuing discussion yielded several points of clarification, further input, and observations, which were included in finalizing the project's assessment.

### Stakeholder Engagement

50. Given the TE's resourcing, direct inquiry could not be undertaken with all project partners and stakeholders. In this light, illustrative stakeholders were identified from key groups uncovered in the stakeholder analysis documented in the Inception Report in terms of their interest in and influence on the project's operation and results. While aiming for inclusiveness, the emphasis was put on interviewing stakeholders with comparatively high level of influence and low to high level of interest. These accounted for 84% of informants (27 of 32). See Error! Reference source not found., which shows informants b by type in each of the four stakeholder cohorts.

Figure 1 – Stakeholder Analysis during Inception that Guided Data Collection



51. To increase engagement in the TE, the Consultant contacted each stakeholder individually (with the REAL Project Manager and UNEP Evaluation Manager in copy to enhance the legitimacy of the outreach). The purpose of the assessment was explained, with a request for input. The Interview Protocol was shared in advance to enable project stakeholders to prepare for this exchange and they were given the option to provide

written input using the protocol. Five written submissions were received, one from a Spanish-only speaking respondent, and others who wanted to further elaborate their perspectives following the interview.

52. To preserve the integrity of the evaluation process and enhance freedom of expression, respondents were assured of the confidentiality of their input. This was maintained throughout the analysis, exchange with project partners, and the reporting process. Data was collected in a manner that respected ethics, human rights issues, and followed UN Standards of Conduct. Prior consent was gained for data collection and use. Anonymity was preserved. Within the report, evidence has been presented without attribution to specific individual stakeholders.
53. Throughout the evaluation process and in developing the TE Report, efforts were made to present the views of both mainstream and less represented views. Such views were made visible through the use of a software tool (QDA Miner<sup>9</sup>), which provided a direct trace to respondent utterances, which were additionally categorized by stakeholder cohort.
54. Input was gathered regarding pilot projects in India, Thailand, Nicaragua, Guatemala (all implemented in 2018) and Ecuador (2020) by interviewing project implementers. Efforts were also made to secure input about marginalised groups (i.e. migrant farmers) that were engaged in the pilot project in India, by asking the project implementer to carry out a further touchpoint (on an in-kind basis) in January 2022 to collect feedback about their evolving situation, even though this pilot project had been formally concluded in November 2018.

#### Data Analysis and Performance Rating

55. For the analysis, an evidence-based approach with robust analytical underpinning was used. A body of codes was developed related to the evaluation criteria and sub-categories. The above-mentioned software tool was then used to systematically code, analyse, cross-reference, and comment data gathered through interviews. To organise the data, numerous reports were generated according to the evaluation categories and then manually reviewed and commented to identify and record themes for further analysis within categories. This effort was complemented by comprehensive review of internal project documentation and external public sources, allowing for triangulation of the findings and development of evidenced-based lessons and recommendations.
56. The project was assessed using nine criteria and their constituent components: (A) Strategic Relevance; (B) Quality of Project Design; (C) Nature of External Context; (D) Effectiveness, including assessment of provision of outputs, achievement of outcomes, and likelihood of impact; (E) Financial Management; (F) Efficiency; (G) Monitoring and Reporting; (H) Sustainability; and (I) Factors Affecting Project Performance. Performance ratings were assigned using UNEP's standard 6-point system<sup>10</sup>, detailed accompanying criteria, and weighting table.

#### Limitations to the evaluation

57. The evaluation took place almost a year after the project's closure. This limited the availability of some key stakeholders who had since moved on to other endeavours and indicated an overload with other responsibilities to participate in the evaluation exercise.

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<sup>9</sup> <https://provalisresearch.com/products/qualitative-data-analysis-software/freeware/>

<sup>10</sup> Most categories used the rating scale: Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MU); Unsatisfactory (U); Highly Unsatisfactory (HU). Nature of External Context was rated from Highly Favourable (HF) to Highly Unfavourable (HU). Likelihood of Impact and aspects related to Sustainability were rated from Highly Likely (HL) to Highly Unlikely (HU)

Moreover, the lapse of time was cited as reducing recall of specific, detailed information.

58. While the project team carried out a focus group to gain insight into the use of one part of the project's results (related to GLAD), the very small sample size with limited representation across three cohorts meant that its results have been deemed statistically weak (¶147).
59. Another limitation related to the need to collect data using remote means (due to COVID-19 restrictions). This approach missed out on the face-to-face contact of a field visit, which would have yielded observations and provided opportunities to capture verbal/non-verbal cues (including body language, which can signal discomfort, enthusiasm, etc.). The limited time granted to these online sessions inclined focus on a few key questions. Opportunistic probes were initiated where possible, privileging action to deepen the line of questioning over covering the breath of the evaluation criteria. The review of monitoring reports and inputs from users of the project's results was also a compensating aspect. The Evaluator believes that with the material that was available, it has been possible to arrive at a balanced assessment of the project's performance and that useful lessons and recommendations have been generated.

### III. THE PROJECT

#### A. Context

60. Since 2002, the Life Cycle Initiative (LCI)<sup>11</sup> hosted by UNEP has been working to enhance capacities and skills on LCA (Life Cycle Assessment) and LCM (Life Cycle Management). The REAL project, which directly supported the LCI, was part of a portfolio of EC-funded projects falling under a SCA with UNEP (¶37). In this light, it was described by some stakeholders as a “logical continuation of the previous ENRTP programme on LCA”<sup>12</sup>.
61. Given the complexity of product value chains stretching beyond national boundaries; fragmented markets; and varying market systems, regulatory frameworks, and consumers, the REAL project was justified by the need for guiding principles and capacities to apply LCA to create a level playing field for emerging/developing economies and avoid LCA-based measures to become trade barriers. It was argued in the Project Document that those countries and companies that were not yet ready to perform LCA or provide LCA data to their customers should not be disadvantaged in the global market. Hence, the REAL project sought concerted international collaboration in basic data, indicators, and tools that could be used to inform policy and thereby enhance enabling conditions for the application of life cycle thinking (LCT).
62. The Project Document contended that a holistic perspective, seen as embodied in LCT, could be used by experts, policy- and decision-makers to optimize the pursuit of sustainable consumption and production (SCP), while avoiding unintended trade-offs in environmental, social, and economic impacts (stemming from inadequate quantification). These trade-offs were perceived to be “shifting problems to other geographic locations, between environmental impacts, or between stakeholders” and by extension, leading to trade-offs between single Sustainable Development Goals (SDGs)<sup>13</sup>.
63. Justifications regarding the pertinence of this project set out in the parent LCI Project Document – under which REAL was wholly subsumed from 2018 – furthermore asserted that isolated decisions that focussed on aspects that were *not* key drivers of change for SCP meant that environmental resources, human and economic capital were not being used in an efficient manner. These unintended effects were seen as decelerating progress towards achieving the world’s overall agenda for sustainable development. Within this setting, REAL set out to tackle improvements in enabling conditions related to ‘data’ and ‘capacity’.
64. National life cycle (LC) networks were seen as the key to successful capacity development. UNEPs’ support of such networks (through the LCI) was credited with stimulating the activities and outreach of such networks in 18 countries as of 2015. At the time of REAL’s design, life cycle thinking was immature, with limited push by policy-makers (¶108), there was still a large gap to meet the demand for LCA experts, and there were insufficient financial resources available at global, regional, and national levels to

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<sup>11</sup> Established in 2002 by UNEP and the Society of Environmental Toxicology and Chemistry (SETAC), with UNEP taking over as host in 2016, the Life Cycle Initiative is a public-private, multi-stakeholder partnership that provides a global forum for a science-based, consensus-building process supporting and enabling the global use of credible life cycle knowledge by private and public actors <https://www.unep.org/explore-topics/resource-efficiency/what-we-do/life-cycle-initiative>

<sup>12</sup> According to REAL’s Project Document (pp9-10), through this project (2012-2015), UNEP developed a comprehensive capacity development package covering the entire product value chain and carried out 35+ training events that developed local technical capacities and experts in using LC approaches in numerous developing and emerging economies (specifically, expertise in the application of environmental footprint, labelling, eco-design, green procurement; carbon and water footprints; LCA database management).

<sup>13</sup> p7, Project Document #621.3, formerly #621.1 (signed 18.01.2018), ‘The Life Cycle Initiative: Enabling Global Use of Life Cycle Knowledge to Support Decision-Making for Sustainable Consumption and Production’

develop needed LCT tools. In this light, the project's plan to develop further local resources and capacities to apply LCT and data were framed as vital for integrating resource efficiency into global value chains as key to the pursuit of SCP to fulfil the world's sustainable development agenda. Accordingly, REAL had global coverage (¶39).

## B. Results Framework

65. The project's overall outcome was for private and public organisations to have increased capacity to make informed choices using LC data and apply LCA tools to their value chains leading to more SCP and resource efficiency in global supply chains.
66. This was to be achieved through two outputs which, in short, related to working on: 1) DATA through national and international deliverables (including global coordination for enhanced interoperability); and 2) CAPACITY through actions at various levels. These outputs were formulated in the result framework as follows:
  - **Output 1 (aligned with Output 1 of UNEP's POW 633<sup>14</sup>):** Criteria for LCA database management are applied in national interoperable LCA databases and increasingly established and supported through Global Network for Interoperable LCA databases.
  - **Output 2 (aligned with Output 4 of UNEP's POW 633<sup>15</sup>):** Capacity development tools (i.e. e-Learning courses on LCT approaches; success stories / examples of the benefits of using LC-based approaches; training of a pool of local technical experts) and capacity developed through pilot projects inducing change of practice in public and private organisations.
67. REAL was linked to UNEP's Resource Efficiency Sub-Programme (SP6), which was constituted by three Expected Accomplishments (EAs), as follows:
  - **EA 1: Enabling Policy Environment:** Science-based approaches that support the transition to sustainable development through multiple pathways, including inclusive green economy and sustainable trade and adoption of sustainable consumption and production patterns at all levels are enhanced.
  - **EA 2: Sectors and Supply Chains:** Public, private and financial sectors increasingly adopt and implement sustainable management frameworks and practices.
  - **EA 3: Sustainable Lifestyles & Consumption:** Public and private sectors increasingly aware of and support the adoption of sustainable lifestyles and sustainable consumption patterns.
68. Within the context of this sub-programme's larger Theory of Change (TOC), REAL's contributions primarily related to EA 2, which supported the SDG agenda: Goal 12: Targets 12.1, 12.2, 12.4, 12.6, 12.8; Goal 6: Target 6.4; Goal 8: Target 8.4; Goals 11, 13, 15, 17 (17.16, 17.17); 4 (4.7); 9; 7 – and reflected UN Environment Assembly (UNEA) resolutions: 2/7 Sound Management of Chemicals and Waste; 2/8 Sustainable Consumption and Production; 2/9 Food Waste; 2/11 Marine Plastic Litter and Microplastics; 2/16 Mainstreaming of Biodiversity for Well-being.
69. Within UNEP's Programme of Work (POW) 633, REAL contributed to its Output 1 (Criteria for LC data are established, applied, supported by an international network of interoperable LCI databases) and Output 4 (Capacity building to stakeholders including benefits of using LC-based approaches). REAL's pilot projects were to be reported in

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<sup>14</sup> Formulated as: Criteria for Life-cycle data are established, applied and supported by an international network of interoperable LCI Databases

<sup>15</sup> Formulated as: Capacity building provided to stakeholders including examples of benefits of using life-cycle based information tools, methods and approaches

POW 621 Output 4 (national-level eco-innovation). Still other aspects related to POW 614.2 Output 3 (pilot SCP policy activities).

70. In setting up an approach to manage, monitor, assess progress and recalibrate where and when needed, these key project outputs were mapped against indicators and cascaded into components, which were broken down and underpinned by activities, deliverables, milestones, and expected delivery dates. Within the approved Project Document, this Logical Framework was broken down into a monitoring plan and project work plan spanning the four-year period.

### C. Stakeholders

71. Reflecting the project's cross-cutting nature, its stakeholders spanned policy-makers, business including small- and medium-sized enterprises (SMEs), educational institutions, and LCA expert networks and other multipliers. These cohorts had varying roles and contributions and differing levels of interest in and influence on the project's results, as illustrated in Error! Reference source not found. (on page 16).
72. Given that the project's outcome related to tackling enabling conditions, National Governments and Policy Makers were expected to be necessarily implicated in leveraging the project's results. The Project Document's<sup>16</sup> narrative regarding these actors (e.g. advocacy efforts on benefits of using LCA "should be performed towards public authorities"; project success depends largely on "cooperation and political will of national governments"; "communication efforts towards governments on potential economic benefits of an LCA-based policy measure...should be done to assure them that economy and ecology are compatible") was interpreted by the Evaluator as this stakeholder group was seen as having a comparatively higher level of interest and influence. The extent to which project stakeholders sought their interest and influence during the project's operation, in order to strengthen national ownership and the utility of the project's outputs and outcomes was explored through the evaluation.
73. RECPnet<sup>17</sup> representatives and members of the LCI's steering mechanism and local networks. were expected to play a key role in building global capability on LC approaches. These actors constituted a core lever of the project's regional strategy, leveraging their knowledge of the local context to ensure that socio-economic features (including gender issues, SME competitiveness) were taken into account and assisting UNEP in identifying key sustainability challenges of private and public actors. Based on this description and given their on-the-ground involvement, pertinence to their professional endeavours, and ability to engage in feedback loops with the project team, this stakeholder category was expected to have a comparatively high level of interest and influence on the project. During the TE, such stakeholders were consulted by the Evaluator regarding their engagement as active partners in training, coaching, and awareness-raising activities, their consultation on materials integrated into learning curricula, and the utility and sustainability of REAL's results.
74. The project also engaged with Business actors to develop and distribute training materials, train consultants, and implement pilot projects. Those substantively involved in the project as implementers of pilot projects were deemed to be highly relevant by the Evaluator to consult regarding the extent to which business practices and decision-making have been or have the future potential to change towards optimisation of resources and provision of eco-friendly products/services.

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<sup>16</sup> p19, REAL Project Document

<sup>17</sup> RECPnet refers to the Global Network for Resource Efficient and Cleaner Production (RECP), with over 70 providers of RECP services in 2021, whose creation was jointly supported by UNEP and UNIDO. See <https://www.recenet.org/>

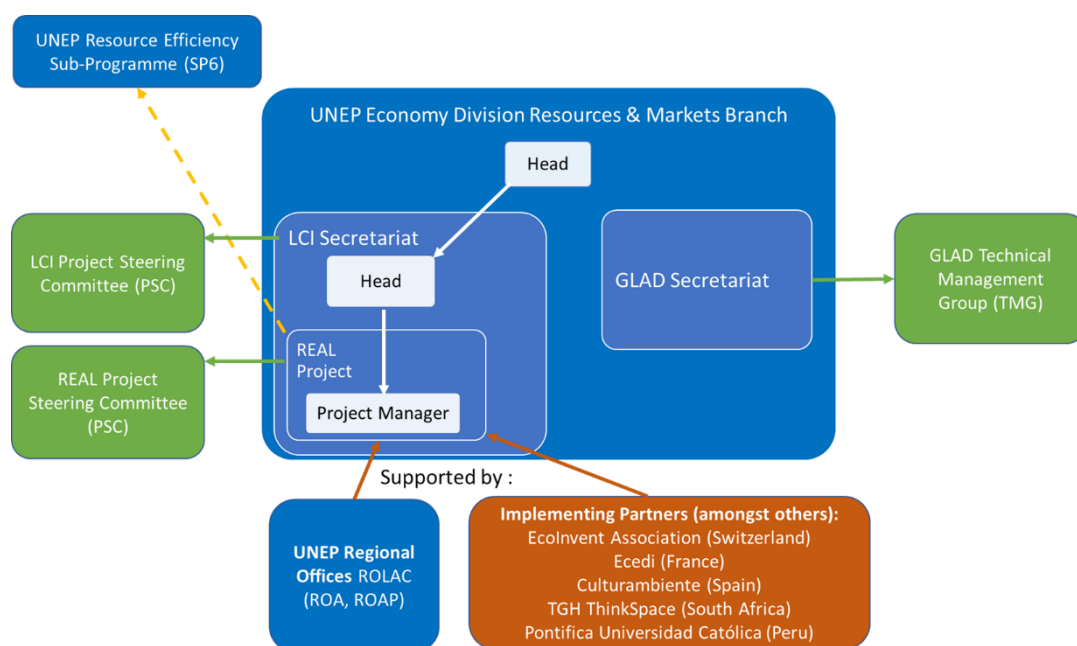


75. As well, the project engaged with Educational Institutions and used e-Learning platforms to disseminate the online courses developed under its auspices. Input from representative stakeholders was gathered by the Evaluator concerning Memoranda of Understanding (MoU) signed with various institutions and their inclusion and long-term use of e-Learning LCA material developed under REAL within physical training and/or facilitation of online courses.
76. UNEP's Regional Offices for Latin America and the Caribbean (ROLAC), Asia and the Pacific (ROAP), and Africa (ROA) were project stakeholders with varying interest in the project and moderate influence. They were to be engaged in activities related to pilot projects for capacity-building, regional/national consultations, and piloting and validation of tools and recommendations in the respective countries. As well, these offices were expected to ensure coordination with and leverage of related regional programmes (e.g. SWITCH-Asia, SWITCH-Med, 10YFP). The extent to which the Regional Offices were actively engaged in the anticipated roles and the extent to which they facilitated the expected synergies was explored through the evaluation. Due attention was given to gender and under-represented/marginalised groups, including those living with disabilities.

#### **D. Project implementation structure and partners**

77. In terms of the structure to deliver the project, REAL reportedly incorporated the learning from the previous ENRTP project (where implementation was described as relying “too heavily on consultants” and the “impossibility of permanent contracts”, which was attributed with causing “delays and delivery issues” according to UNEP project staff) by having the project’s overall management led by the Responsible Industry and Value Chain Unit (RIVU) in UNEP’s then Economy Division of Technology, Industry and Economics (DTIE), where the Secretariats for the Life Cycle Initiative (LCI) and the Global Network of Interoperable LCA Databases (GLAD) were also hosted. The latter was directly implicated in the realisation of REAL’s Output 1 on data and the former was seen by UNEP staff as a “natural partner” to provide expertise and implement some aspects of technical support of LCA databases (Component 1.1) and e-Learning material elaboration (Component 2.1).
78. During the project’s implementation, UNEP’s internal structure of the Economy Division evolved, with RIVU/DTIE subsumed into the Resources and Markets Branch, as reflected in the implementation and supervisory structure for REAL visualised in **Figure 2**. On a day-to-day basis, internally, REAL was staffed by a Project Manager, who was supervised by the Head of the LCI Secretariat, who was supervised by the Head of the Resources and Markets Branch.

**Figure 2 – Management, Supervision, and Implementation Structure**



79. Turning to its external governance, the REAL project initially benefitted from the input and supervision of its own Project Steering Committee (PSC). When this ceased to function in 2018 with the departure of the initial Project Manager, and 1-year lapse during which the project was managed on an interim basis, project supervision was mainly taken over as an internal UNEP function, with some consultation and activation activities undertaken with LCI’s PSC.
80. Coming to the level of implementation, UNEP’s Regional Offices were to be tapped for support in areas where pilot projects were carried out (¶76). Numerous actors were involved in the project’s implementation. **Table 3** lists those with a key role in project delivery.

**Table 3 – Roles of Implementing Partners in Project Delivery and Performance**

Implementing Partners	Role in Project Delivery and Performance	Timeframe of Involvement
LCI Secretariat	Contributed to format and contents of e-Learning modules	Throughout project implementation
LCI PSC members	Input/supervision; Activated demand for e-Learning modules	Throughout project implementation
UNEP ROLAC	Capacity building, supported 2 pilot projects in Latin America; trained stakeholders (mainly government) in use of LCA tools	Throughout project implementation
Ecedi (France)	UNEP’s IT coding partner who delivered the first GLAD platform	2016
Culturambiente (Spain)	Engaged for design and delivery of the first e-Learning module (Introduction to Life Cycle Thinking)	2016-2017
TGH Think Space (South Africa)	Engaged for development of 2 further e-Learning modules (application of LCT in policy decision-making, in business decision-making)	2019-2020
Ecolnvent Association (Switzerland)	Engaged to support selected countries in developing globally interoperable life cycle databases, roadmaps for such purposes, and implementation of first roadmap activities	Throughout project implementation

Foro Nacional de Reciclaje (FONARE, Nicaragua)	Engaged to implement pilot project in Nicaragua (implementation of LCT in Coffee Processing)	2018
Guateambienta (Guatemala)	Engaged to implement pilot project in Guatemala (engaging the private sector on LCT using a pilot case study on palm oil production)	2018
National Metal and Materials Technology Centre (MTEC, Thailand)	Engaged to implement pilot project in Thailand (food waste and food packaging monitoring application via life cycle concept)	2018
TERI University School of Advanced Studies (India)	Engaged to implement pilot project in India (enhancing efficiency of the fruits and vegetables supply chain in Nagaland)	2018
Osmer Ponce (Latin America region)	Consultancy contract managed by UNEP ROLAC vis-à-vis regional coffee network; created regional proposal for category rules through consolidation of proposals from Colombia, Costa Rica, and Peru	2020

## E. Changes in design during implementation

81. UNEP cleared the concept and drafted the Project Document in March 2014. The EC Task Manager approved the project on 22 September 2015, for a 48-month duration, starting on 1 October 2015, ending on 30 September 2019.
82. The project was granted two no-cost extensions: the first was approved on 11 November 2019, extending the project's termination by nine months, to 30 June 2020. It was requested due to the departure of the REAL Project Manager in April 2019. An interim solution was put in place whereby the REAL project was managed by LCI staff until the arrival of a replacement manager in January 2020. A second extension was approved on 18 August 2020, extending the project's close by a further six months, to 30 December 2020. This measure was attributed to delays incurred due to COVID-19 effects.
83. While this represented a 30% extension in the project's duration (63 versus the planned 48 months), there was no formal revision to the project's results and indicators nor additional funding provided.

## F. Project financing

84. The project was designed with full funding provided by the EC. However, as REAL was nested within UNEP's POW 633, and later to the Life Cycle Initiative (¶40) it was also linked to other initiatives where synergies could be leveraged, and their accompanying funding sources, following the strategy of the previously ENRTP-funded project (2012-2015). In this light, REAL was complemented with EUR 40,000 in funds from the LCI as well as an EUR 122,824 from the International Climate Initiative (IKI). The sources of project funding are outlined in **Table 4**.
85. In-kind contributions were included and recognized within the project's sources of support. Refer to **Annex IV: PROJECT CO-FINANCING**. Specified portions of ten UNEP staff members<sup>18</sup> were allocated to the project throughout its years of operation (EUR 199,131), verified by the FMO, and reported to the donor, together with cash contributions from five sources, which summed to EUR 214,925. Informants indicated that it required "a lot of resources to report on the co-financing and what counts, what

<sup>18</sup> LCI Staff P3 (30%), LCI Staff P4 (15%), Economy Division Staff P4 (10%), Economy Division Staff P3 (10%), Economy Division Staff P3 (5%), Economy Division Staff D1 (5%), ROAP Staff P4 (5%), ROLAC Staff P4 (5%), ROA Staff P4 (5%)

does not". Other in-kind contributions (mainly staff time) from the many involved actors were not quantified (¶156, ¶157). These arguably enlarged the actual support available for implementation.

**Table 4 – Planned versus Actual Sources of Project Funding (in EUR), Dec 2020**

Funding source		Planned funding/EUR	% of planned funding	Actual funding/EUR
Funds from the Environment Fund		-	0	-
Funds from the Regular Budget		-	0	-
Extra-budgetary funding:	Donor funding secured (EC)	1,940,627	56.6	1,535,862
	Programme Support Costs (PSC), EC	135,844	3.9	
	Donor Funding secured (IKI)	122,824	3.6	
	Donor funding secured (LCI)	40,000	1.2	
	PSC, other donors	23,553	.7	
<i>Sub-total: Cash contributions</i>		<b>2,262,848</b>	<b>66.1</b>	
<i>In-kind contributions</i>				
Environment Fund staff-post costs		343,700	10	
Regular Budget staff-post costs		198,800	5.8	
<i>Sub-total: In-kind contributions</i>		<b>542,500</b>	<b>15.8</b>	
Co-financing cash contribution		?	?	326,210
Co-financing in-kind contribution		?	?	320,997
<i>Sub-total: Co-financing contributions</i>		<b>619,545</b>	<b>18.1</b>	<b>647,207</b>
<b>Total</b>		<b>3,424,893</b>	<b>100</b>	

86. The REAL project's expenditures were spread across two components, as shown in **Table 5**, which corresponded to its two planned outputs and associated outcomes, respectively. The project's actual spending has remained within the planned envelope, with limited variation on the budgeted amounts. This shows discipline and strength in financial management (¶149).

**Table 5 – Expenditure by Component (in EUR), Dec 2020**

Component/sub-component/output <i>In EUR</i>	Estimated cost at design	Actual Cost/ expenditure at project close	Variance as of December 2020	Expenditure ratio (actual/planned) at project close
Component 1 - Life Cycle Assessment Data Accessibility	678,358 (44.2%)	720,286 (47.5%)	41,928	1.06%
Component 2 – Life Cycle Capacity Development	757,027 (49.3%)	697,952 (46%)	-59,075	-.92%
Indirect costs (7% of total direct costs)	100,477 (6.5%)	99,277 (6.5%)	-1,200	-.99%
Grand total	1,535,862 (100%)	1,517,515	-18,347	-.99%

Source: REAL's Annual Financial Report for 2020 (at project close)

#### IV. THEORY OF CHANGE AT EVALUATION

87. Designed in 2013-2014, the approved Project Document contained a Theory of Change (TOC) in which the contributions of the REAL project were portrayed as additional to the TOC of UNEP's POW 633, including outputs of POW 633 that were not directly relevant to REAL. As this TOC adopted a higher level emphasis, it did not drill down into the ways in which the REAL project was expected to lead to its results – thereby providing a guide for project implementers.
88. For this TE, a TOC of the REAL project was reconstructed based on its logical framework, intervention logic, and accompanying narrative description. This version was documented in the Inception Report, as a starting point for discussion with project stakeholders.
89. There was agreement on the **barriers** that the project set out to address, which were identified and/or deduced to be as follows:
- Data gaps in product information along supply chains inhibit actors from applying a holistic approach (life cycle thinking) and making informed choices for efficient resource use;
  - Limited LCA capacities in developing and emerging countries due to insufficient volume of qualified and prepared professionals impede widespread application of life cycle thinking;
  - Inadequate financial resources are available in developing and emerging countries to develop LCA tools and prepare experts;
  - Insufficient existence and/or acceptance of agreed criteria have been applied for national interoperable LCA databases gathered under the Global LCA Data Access (GLAD) network;
  - Insufficient evidence of changed practice within organisations stemming from the benefits of using life cycle based approaches is available to trigger largescale adoption of LCT.
90. Attention was drawn to several aspects<sup>19</sup>, which have been maintained in the TOC at Evaluation:
- Mention of the direct outcomes supported by REAL's outputs, which had been omitted in the TOC related to the POW 633, were formulated with an action orientation (given the intention to spur change in attitude and/or behaviour);
  - The project's single direct outcome was separated out: 1) for policy-makers (public organisations) and 2) businesses (private organisations) to distinguish which outputs are expected to be used by which stakeholders and leading to the one project outcome for onward linkage to intermediate states;
  - Output formulations were tightened, in line with UNEP's definition protocols, to put the emphasis on the delivery (realisation) of tools and capacities of a particular desired nature (i.e. that will induce change in the targets: public and private organisations). The way in which these tools and capacities were to be generated was through the delivery/uptake of the e-Learning modules and learning from the pilot projects;
  - The changes beyond the project's direct outcomes seen as required in order to facilitate achievement of the project's intended impact (i.e. the intermediate states) were formulated, including ways that additionally reflect the leverage of the private sector as an engine to increase SCP and resource efficiency globally;

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<sup>19</sup> Refer to Table 3 – Justification for Reformulation of Results Statements in the TE's inception Report

- Reflecting argumentation in the Project Document that REAL “has an important role to play in highlighting market failures in terms of SCP and green economy measures in relation to gender equity issues”<sup>20</sup>, a further intermediate state is foreseen whereby the inclusion and empowerment of women accelerates adoption of LC thinking/data/assessment and enhances LC linkages with SCP and resource efficiency.
91. The TOC at Evaluation visualised in **Figure 3** is the result of ongoing refinement and iteration by the Evaluation Consultant, drawing on the description and justifications contained in the REAL Project Document, the ‘parent’ LCI Project Document and triangulation with monitoring reports and interview material. The TOC was shared with several project stakeholders during data collection. Feedback gathered through this process was used to strengthen the formulation of some intermediate states and particularly, the underpinning assumptions, together with making clear links regarding their subject. These external factors, while highly relevant for realising the benefits of the intervention, were seen as largely beyond the control of the project and its implementing partners:

#### Assumptions related to Project Support

- Political willingness to evolve and mainstream LC thinking in the policy context will be generated through the perceived relevance, utility, and insights of life cycle work;
- Focussing on key drivers of change for SCP can optimise use of environmental resources, human and economic capital, thereby accelerating progress towards achieving the world’s overall agenda for sustainable development;
- Private actors who are able to save money, reduce costs, and/or increase market share from the adoption of LC approaches – and public actors who can facilitate these results – have sufficient absorptive capacity and relevant support (which has also been created and can be sustained) to continuously apply pertinent concepts;
- Concerted efforts towards SCP policies + international collaboration anchored in a UN organisation’s normative and convening power will be accepted by decision-makers whereby basic LC data, indicators, and tools are used to inform relevant policies;
- Actors throughout global value chains operate symbiotically in stimulating demand for application of life cycle thinking and data, while generating sufficient employment and income opportunities across socio-economic levels.

#### Assumptions related to Intermediate States

- Political, economic, social stability will continue and coalesce support for sustainable development, channelling adequate investment into promoting life cycle thinking;
- A level playing field with guiding principles and capacities – all of which have been created – to apply LCA in developing/emerging economies will prevent LCA-based measures from being technical barriers to trade and prevent those not yet ready to perform LCA or provide required LCA data to their customers from being disadvantaged in the global market;
- Consideration of gender equity respects international human rights law adopted by the UN General Assembly as well as ensuring sustainable development;
- Facilitative market conditions and incentives have been put in place;
- Growing consumer demand and consumption of more sustainable goods and services;

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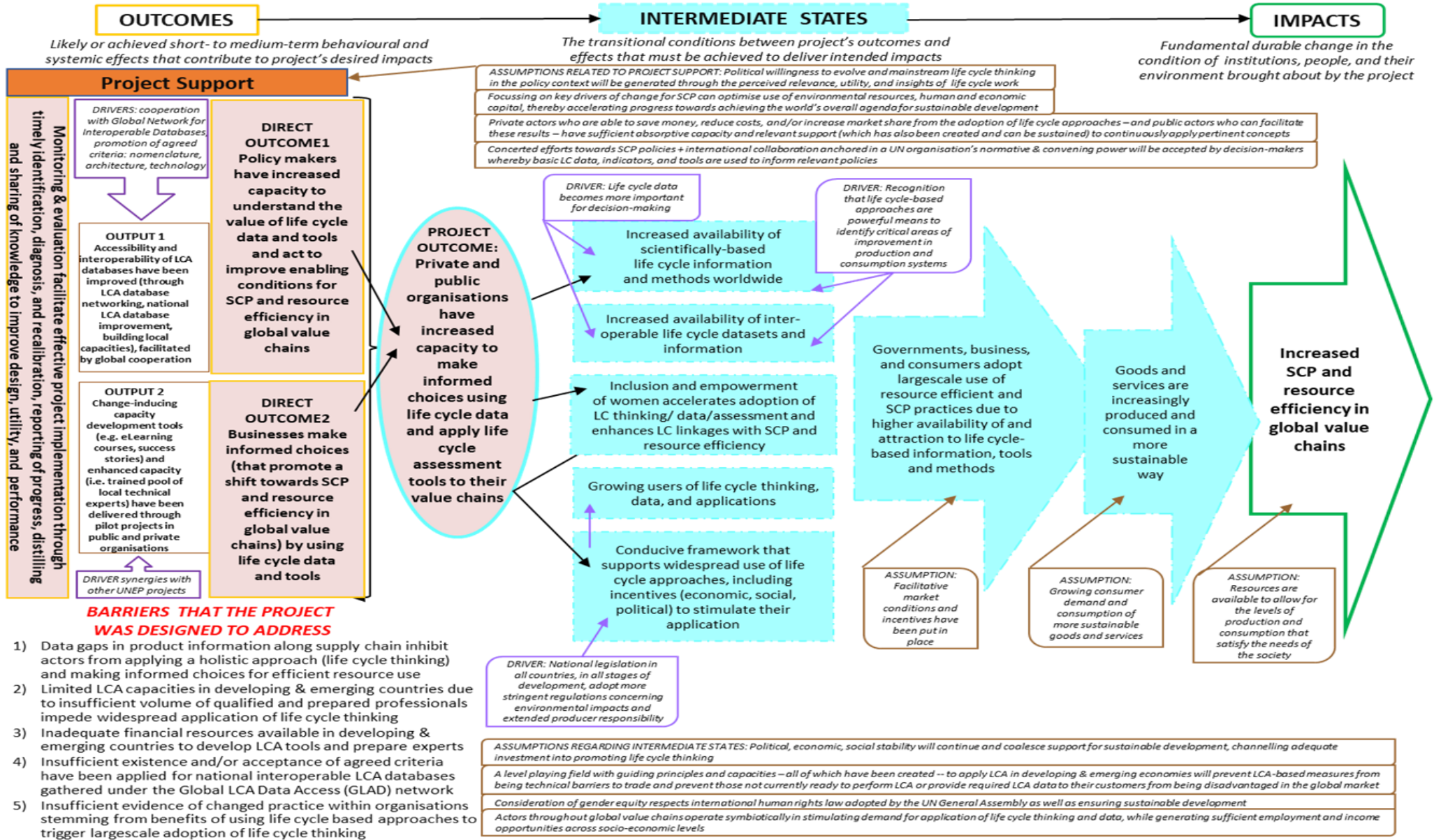
<sup>20</sup> p24, Project Document

- Resources are available to allow for the levels of production and consumption that satisfy the needs of society.
92. Looking to the causal pathways from output to long-term impact, firstly, it was expected that REAL's support (through LCA database networking, national LCA database improvement, building of local capacities – all facilitated by global cooperation and consensus on principles and standards enabling information exchange “for the common good” through GLAD) would succeed in enhancing accessibility and interoperability of LCA databases – which would have the direct outcome of increasing the capacity of policy-makers (i.e. those officials in national governments, for example, who have the ability to formulate and implement legislation, incentives, etc.) to understand the value of LCI data and tools and thereby motivate them to improve the enabling conditions for SCP and resource efficiency practices of other actors to flourish throughout global value chains. Together with the improved enabling conditions, the enhanced access to credible LCA data was also expected to enable business actors to make informed choices, thereby promoting a shift towards resource efficiency and more sustainable patterns of consumption and production.
93. Secondly, it was expected that REAL's support (through development of e-Learning tools and capacities through implementation of pilot projects in public and private organisations) would have the direct outcome of enhancing the capacity of key change levers to understand the value of LC data and tools. On the one hand, policy-makers would therefore be motivated to make more informed decisions about policy frameworks and conditions to promote their use. On the other hand, business actors would be equipped and motivated to make choices oriented towards resource efficiency, thereby promoting a shift towards SCP practices.
94. The success of the project's TOC rests on the acceptance, credibility, accessibility, and largescale uptake of life cycle thinking/data/tools to power informed decision-making by both public and private actors. As a prerequisite for this to unfold in the envisaged direction, the conditions that would enable and promote the use of life cycle assessment data need to be put in place and/or improved. This is where the project's support is aimed.
95. The project's support was expected to be catalyzed and enhanced through key **drivers**, which are seen to be within the influence of the project and its implementing partners, as follows:
- Cooperation with GLAD;
  - Promotion of agreed criteria, nomenclature, architecture, technology, etc.;
  - Synergies with other UNEP-implemented projects.
96. REAL's support is seen as feeding into a set of intermediate states that must take place for the desired final impact (increased SCP and resource efficiency in global supply chains) to be achieved. These include:
- Increased availability of scientifically-based life cycle information and methods worldwide;
  - Increased availability of inter-operable life cycle datasets and information;
  - Inclusion and empowerment of women accelerates adoption of LC thinking/data/tools, which serves to enhance linkages between life cycle thinking, resource efficiency and the promotion of more sustainable consumption and production practices;
  - Growing users of life cycle thinking, data, and applications;

- Conducive framework that supports widespread use of life cycle approaches, including incentives (economic, social, political) to stimulate their application;
97. Together, these intermediate states are seen as operating symbiotically in stimulating demand for the application of LC thinking/data/tools – with the result that relevant delivered products, services, and technologies are brought to market – while generating sufficient employment and income opportunities across socio-economic levels. Drivers of intermediate stages include:
- Life cycle data becomes more important for decision-making;
  - Recognition that life cycle-based approaches are powerful means to identify critical areas of improvement in production and consumption systems;
  - National legislation in all countries, in all stages of development, adopt more stringent regulations concerning environmental impacts and extended producer responsibility;



Figure 3 – Theory of Change at Evaluation



## V. EVALUATION FINDINGS

The findings presented in this section provide a summative analysis of all gathered and triangulated information relevant to the parameters of the evaluation criteria. Evaluation findings are objective and evidence-based and directly relate to the Evaluation Questions under each criterion.

### A. Strategic Relevance

#### Alignment to UNEP's MTS, POW and Strategic Priorities

Rating: Highly Satisfactory

98. UNEP's medium-term strategy (MTS) for 2014-2017 addressed the most pressing global environmental challenges, considering regional priorities and those emanating from multilateral environmental agreements. In this light, the MTS assisted interested countries and partners in leveraging 'Green Economy'<sup>21</sup> for sustainable development and poverty eradication, aiming to integrate environmental considerations into all economic and social agendas<sup>22</sup>. Green Economy emphasizes the importance of measuring and managing environmental impacts throughout the product life cycle, which requires proper quantification based on life cycle assessment.
99. The project was fully aligned with UNEP's POW 633: Life cycle-based information tools & methodologies developed with/provided to governments, businesses, and other stakeholders. REAL contributed to its Output 1 (Criteria for LC data are established/applied/supported by an international network of interoperable LC databases) and its Output 4 (Capacity building provided to stakeholders including benefits of using LC-based tools/methods/approaches). REAL's pilot projects on eco-innovation supported POW 621's Output 4. Those focused on SCP policies were linked to POW 614.2's Output 3.
100. REAL's contributions have been reported into the Resource Efficiency Sub-Programme (SP6) EA indicators. Its two main activity areas (database management/interoperability, LCT capacity development) contribute to enabling conditions for adoption of sustainable management practices by public and private actors. Its e-Learning modules have increased available training opportunities. Enhanced availability and accessibility of life cycle data through GLAD are key enabling conditions for improved decision making in the context of sustainable management frameworks and practices. With high uptake, these aspects would presumably translate into increased understanding and knowledge of life cycle thinking approaches, seen as needed to stimulate informed decision making by actors across sectors.
101. REAL was consistent with UNEP's mandate and thematic priorities at the time of its design. Its relevance has endured. As REAL reached its close in 2020, the urgency to enhance SCP patterns, together with interest in circular economy solutions and avoiding regrettable substitutions, had dramatically increased interest in life cycle thinking. An implementing partner asserted, "people need guidance. It's a growing market. There's enormous demand. Companies want to become more sustainable; their customers demand it". UNEP's new MTS (2022-2025) identifies transformative shifts that target

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<sup>21</sup> UNEP's Green Economy Initiative (GEI), one of nine UN-wide Joint Crisis initiatives launched by the UN system's Chief Executives Board in early 2009, has actively promoted the transition to economies that are 'low carbon', 'resource efficient', and 'socially inclusive', which are expected to enhance human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. See <https://www.unep.org/explore-topics/green-economy>

<sup>22</sup> p4, UNEP Medium Term Strategy (MTS), 2014-2017 <https://www.unep.org/resources/report/unep-medium-term-strategy-2014-2017>

drivers of climate change, biodiversity loss, and pollution, expected to leverage an LC perspective<sup>23</sup>. UNEP's senior leadership indicated "...there is agreement that life cycle is a key entry point for UNEP across the 3 planetary crises". In this setting, it was expected that life cycle thinking will "become the core of what everyone in UNEP should be thinking of in framing their interventions", according to a UNEP staff member.

### Alignment to Donor's Strategic Priorities

Rating: Highly Satisfactory

102. Life cycle assessment has become an increasingly pivotal method included in European policies to support sustainable transitions, playing a relevant role in decision support and identification of hotspots, possible trade-offs and burden shifting amongst life cycle stages or impact categories<sup>24</sup>. In its Communication on Integrated Product Policy (COM (2003)302), the EC concluded that LCAs currently provide the best available framework for assessing products' potential environmental impacts and underlined the need "...for more consistent data and consensus on LCA methodologies". Over the past decades, the EU has shown determination to focus on ensuring the underlying data and methodological needs to promote life cycle thinking in business and policy-making<sup>25</sup>. In mirroring precisely this same content and emphasis, the REAL project is consequently deemed to have been highly aligned with the donor's interest and strategic priorities.
103. The work of the project was described by the donor as "crucial and important" in strengthening the use of LCA-based methodologies, and specifically environmental footprinting, in countries outside the EU, which is understood to be of high interest to the donor. Operating under UNEP's international umbrella ensured that project results extend beyond EU borders to the entire global sphere. In this light, according to a UNEP staff, REAL plays a role in "creating appetite for the LCA concept" to the extent that those countries "become an advocate of the concept".
104. The REAL project was designed with full funding from the EC, following on the heels of a previously fully funded ENRTP project (see **Footnote 12**), and it has been recently followed up by another project, Innovative Business Practices and Economic Models in the Textile Value Chain (InTex)<sup>26</sup>, fully funded by the EC. This is taken by the Evaluator as an indication of alignment with the donor's strategic priorities and joint interest in sustaining the results of project work in this domain.

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

Rating: Highly Satisfactory

105. The project was a timely response to global/regional/national environmental priorities being expressed at the time of its design. At the time, for instance, the US Environmental Protection Agency (EPA) underlined in 2016 the urgency to "transform resource efficiency from a concept into a reality and infuse life cycle thinking in the way we view the use of materials"<sup>27</sup>. Scientific research had already tightened the bond between LCT

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<sup>23</sup> pp30-32, UNEP MTS, 2022-2025 <https://www.unep.org/resources/policy-and-strategy/people-and-planet-unep-strategy-2022-2025>

<sup>24</sup> EU (2021), "The Evolution of Life Cycle Assessment in European Policies over Three Decades"

<sup>25</sup> European Platform on Life Cycle Assessment (LCA) <https://ec.europa.eu/environment/ipp/lca.htm>

<sup>26</sup> Implemented by UNEP during September 2020-August 2023, managed by the former REAL Project Manager, brings together capacity building on life cycle approaches, circularity, and eco-innovation/product environmental footprint (PEF) to increase the capacities of governments and SMEs that are part of multinational value chains <https://www.unep.org/intex>

<sup>27</sup> US EPA (2016), 'Advancing Resource Efficiency in the Supply Chain: Observations and Opportunities for Action' <https://www.oecd.org/environment/ministerial/whatsnew/2016-ENV-Ministerial-United-States-Report-Resource-Efficiency-G7-US-Workshop.pdf>

and sustainable development in 2020<sup>28</sup> and the use of LC impact frameworks to achieve the world's SDGs, which was characterized as "the new trend" in 2019<sup>29</sup>.

106. However, since the first LCA studies emerged in the late 1980s, challenges around database standards, nomenclature, and interoperability had plagued the LCA community<sup>30</sup>. Improving the accessibility of LC data and building the capacity of policy-makers and business actors to make informed choices have been key pillars for the transition towards more sustainable consumption and production patterns, enshrined in SDG 12. REAL's pertinence was heightened by the identification of LCT as integral to support the transition towards a sustainable economy<sup>31</sup>.
107. While there was no explicit mention of the Bali Strategic Plan in the Project Document, the Evaluator deemed that REAL's outcomes could be seen as indirectly supporting this inter-governmentally agreed framework to strengthen government capacity in developing and emerging countries to coherently address their needs, priorities, and obligations in the environmental field. The project also supported South-South cooperation, for example, through collaboration between life cycle networks in Peru and Ecuador).
108. After spending many years building awareness, both UNEP staff and external stakeholders asserted that REAL's work is "needed now more than ever", pointing to the value of UNEP's facilitation of global consensus on principles and standards enabling information exchange "for the common good" through GLAD, launched in June 2020, and the project's support for developing roadmaps to bring existing national and/or public LC databases to international standards, facilitating interoperability and the desired embrace of LCT in decision-making and supply chains. Life cycle network stakeholders indicated that in target countries (Guatemala, Nicaragua, Ecuador, Sri Lanka, Brazil, Uganda, India), life cycle thinking was "immature" with only a few actors applying this approach, with the exception of South Africa, where life cycle work was described by an involved multiplier as "mostly industry focussed", with "limited push by policy-makers".

### **Complementarity with Existing Interventions/ Coherence**

Rating: Highly Satisfactory

109. REAL was explicitly intended to complement, build on and/or contribute to other projects within the Resource Efficiency Sub-Programme (SP6). Synergies with several ENRTP-funded sub-projects were outlined at project design. Interlinkages were foreseen with REEDTE<sup>32</sup>, GEI<sup>33</sup>, SPPEL<sup>34</sup> and SEED<sup>35</sup> to function as dissemination vectors and leverage catalytic effects. These collaborations were identified at the project's outset, with progress and achievements realized through this outreach conveyed in its annual reporting.
110. As an example, REAL leveraged UNEP's Eco-Innovation project (REEDTE) in POW 621, which builds on the Resource Efficient and Cleaner Production (RECP) programme

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<sup>28</sup> Life Cycle Sustainability Assessment for Decision-Making (2020) <https://www.sciencedirect.com/book/9780128183557/life-cycle-sustainability-assessment-for-decision-making>

<sup>29</sup> Switzerland's Graduate Institute of Geneva (2019) <https://www.graduateinstitute.ch/communications/news/applying-benefits-lifecycle-impact-frameworks-sdgs-new-trend>

<sup>30</sup> Goedkoop, M. (2016) <https://pre-sustainability.com/articles/about-the-global-lac-access-to-data-initiative-sustainable-data-alignment/>

<sup>31</sup> Stucki, M., Jattke, M., Berr, M. et al. "How life cycle-based science and practice support the transition towards a sustainable economy". International Journal of Life Cycle Assessment, 26,1062–1069 (2021). <https://doi.org/10.1007/s11367-021-01894-1>

<sup>32</sup> Resource Efficiency and Eco-Innovation in Developing and Transition Economies (REEDTE), referred to as the Eco-Innovation project

<sup>33</sup> Green Economy Initiative (GEI) <http://www.unep.org/greeneconomy/>

<sup>34</sup> Stimulating the demand and supply of sustainable products through Sustainable Public Procurement and EcoLabelling (SPPEL)

<sup>35</sup> Supporting Entrepreneurs for Sustainable Development (SEED)

implemented by UNEP and the United Nations Industrial Development Organisation (UNIDO), delivered through RECPnet<sup>36</sup>. Multipliers like NCPC South Africa were tapped and REAL's pilot projects in Guatemala and Nicaragua contributed to scaling up private actors' use of RECP and eco-innovation. In addition to working jointly on developing a glossary of terms, the REAL and Eco-Innovation project teams co-organised a 2-day workshop in October 2016 in which 30 Asia Pacific region participants were trained on life cycle-based solutions for sustainable value chain management and eco-innovation was covered in e-Learning courses developed by REAL<sup>37</sup>.

111. The project's outputs were also aligned with 10YFP<sup>38</sup> (related to REAL's facilitation of international collaboration towards GLAD, which was a deliverable of the 10YFP Consumer Information Programme) and POW 614.2 vis-à-vis SWITCH (promotion of public policy packages to scale up SCP approaches in several sectors, including consumer information) and the SPEEL project. In this respect, REAL was expected to contribute to POW 614.2's Output 3 on Regional and National Policy Advocacy, Demonstration, Awareness-Raising Activities and Communications Tools Delivered for Visibility of SCP and Green Economy.
112. The project did indeed collaborate with regional SCP implementation platforms (i.e. Switch Asia, Switch Med, Switch Africa Green and relevant projects in the LAC region). This led to SwitchMed co-financing production of French and Arabic versions of the e-Learning module 'Introduction to Life Cycle Thinking', whose uptake is expected to develop LCT thinking in the SwitchMed region. As well, the project contributed activities in SwitchMed events to develop LCT capacity. As a Switch Asia participant, TERI was contacted about undertaking a pilot project in India.
113. At the project's close, it was reported that insights developed under REAL related to Product Environmental Footprint (PEF) requirements and category rules for apparel (PEFCR) were integral to building up approaches to be further applied in the InTex project (¶104).

**Rating for Strategic Relevance: Highly Satisfactory**

## B. Quality of Project Design

114. The project's design quality (PDQ) was assessed during the inception phase. This exercise generated questions that were discussed with project stakeholders during the main evaluation phase, with the result that ratings on three dimensions were revised (see below). This did not affect the project's overall PDQ rating as 'Satisfactory' (its PDQ was scored at 5.12 out of 6):
  - 'Operating Context' was shifted from Highly Favourable to Favourable (see ¶123);
  - 'Partnerships' was assessed more positively in view of 'letters of commitment' received from a handful of educational institutions, although this falls short of the Memorandum of Understanding (MoU) agreements that were envisaged to sign with relevant partners for the long-term use of the e-Learning materials<sup>39</sup>;
  - 'Financial Planning/Budgeting' was shifted from 'Highly Satisfactory' to 'Satisfactory' in view of almost universal agreement that the resourcing of the pilot

<sup>36</sup> RECPnet refers to the Global Network for Resource Efficient and Cleaner Production (RECP), with over 70 providers of RECP services in 2021, whose creation was jointly supported by UNEP and UNIDO. See <https://www.recpnet.org/>

<sup>37</sup> p65, ¶139, Terminal Evaluation of Resource Efficiency and Eco-Innovation in Developing and Transition Economies", October 2017

<sup>38</sup> 10 Year Framework of Programmes on Sustainable Development, consisting of 6 programmes, is a global framework for action to enhance international cooperation and accelerate the shift towards SCP patterns in both developed and development countries

<sup>39</sup> p23, Project Document

- projects was insufficient. Overall, the project's culture was characterized by external stakeholders as well as UNEP staff members as "doing it on a shoestring".
115. A key design strength was the project's robust alignment to UNEP's MTS, POW, and strategic priorities (¶100), its direct support for the donor's interest in promoting LCT in business and policy-making and enabling environmental foot printing worldwide (¶102), high relevance to global/regional/national priority to transform the resource efficiency notion into practice, supporting SDG 12's push for responsible consumption and production (¶108); and the extent of complementarity with and synergies sought with ongoing interventions (¶109).
  116. Further design strength was found in the project's logical framework, which focussed outputs on the delivery of tangible activities and an appropriately formulated outcome in relation to changing attitude and behaviour, with quantified targets set and their means of verification outlined. This was complemented by a work plan with continuous monitoring. From evidence reviewed, there was regular checking with implementing partners, with progress reported on an annual basis against output indicators mapped to the logical framework, which enabled the project's supervisors to be kept informed of achievements, risks, and proposed mitigation strategies.
  117. The notion of partnership for implementation and dissemination permeates the design document; however, no mention was made of consultations during inception or assessment of selected organisations' capacity to absorb and implement, nor were expectations discussed, documented, and resourced for dissemination of results beyond a closing event, in the case of the pilots, and future monitoring of impact.
  118. For the e-Learning courses, the description was at an overly high level (e.g. "partnerships with educational institutions in target countries and around the world will be sought to get training incorporated/utilised in regular university programs"; "partnerships with private sector will be sought...where whole chunks of value chains will be approached". This high-level, rather generic description gave no indication of which actors were to be engaged with which roles and responsibilities that would be appropriate to their interest and capacities.
  119. While the importance of using and sharing project knowledge was highlighted (e.g. "team will encourage local experts to appropriate knowledge/skills/tools generated by the project in such a way that they will become the leading sustainability consultants/service providers in their respective regions", the selection of partners was based on "a remit to share knowledge"), the Project Document did not articulate a coherent strategy for knowledge management, with suitable resourcing and responsibilities, which, in the view of the Evaluator, would have emphasized the importance of organisational learning as well as information storage and retrieval. These aspects typically enhance the sustainability of project results.

**Rating for Project Design: Satisfactory**

### **C. Nature of the External Context**

120. As REAL had a global reach and focussed on 'data' and 'capacity-building' (¶37), natural disaster risk in specific geographies was not assessed and not seen as a constraint on project results. While instances of regional, even national, epidemic were known in the era in which this project was designed, there was no experience with a global pandemic like COVID-19. Understandably, this natural disaster risk was not identified, although it was subsequently credited with delays requiring the project's second extension (of six months, to December 2020).

121. For the most part, conditions were favourable, allowing for efficient project operations – apart from the political instability that emerged in April 2018 in Nicaragua, documented in implementing partner FONARE’s final project report. The political repression that ensued led to economic collapse and a lack of finance support for agricultural activities, including the coffee sector, which had a dampening effect on the envisaged benefits of REAL’s pilot project in Nicaragua, which was costed at USD 20,000 (this represented about 1% of the overall project budget).
122. Key vulnerabilities in the operating context were identified in a risk log, which also elaborated pertinent mitigation strategies at an appropriate level. During preparation, a medium likelihood risk was perceived regarding the prospect of achieving adequate consensus through international collaboration on key aspects of LCA database interoperability, seen to have a medium severity of impact on project results. This risk was to be mitigated by sustaining key stakeholders’ engagement through articulating the benefits that could be achieved through collaboration and presenting LC approaches as an opportunity (not a constraint) for developing policy measures promoting resource efficiency and SCP, in the context of pursuing inclusive Green Economy, linked with achieving the world’s SDGs.
123. Overall, the external context facilitated project operations (apart from the political effect in Nicaragua, together with the unanticipated global impacts of the COVID-19 pandemic, which was seen by the Evaluator as having comparatively minor effects, in terms of postponing some face-to-face meetings in the project’s final period). The project’s external operating context as favourable, as opposed to highly favourable, which would have required positive conditions on all dimensions.

**Rating for Nature of the External Context: Favourable**

#### D. Effectiveness

124. The project’s effectiveness was assessed by looking at the extent to which its planned outputs, two direct outcomes and one project outcome were delivered in the envisaged quantity and quality, or could be expected to be achieved in the near future, together with their likelihood of reaching the desired impact. The Evaluator also looked for evidence regarding their ownership by, and usefulness to, intended beneficiaries and the timeliness of their provision.

#### Availability of Outputs

Rating: Satisfactory

125. **Table 6** and **Table 7** provide an overview of the project’s two outputs and their related indicators, targets compared to actual performance, and an assessment of their achievement.
126. Regarding Output 1/Indicator 1.1 The project surpassed its target (129 versus 50) for training local experts to develop interoperable datasets and the associated documentation, already with its very first initiative in 2017 (where 51 people were trained). This was attributed to interest of stakeholders that was evident right from the beginning. The donor observed that “UNEP managed to create this interest from stakeholders”. In spite of COVID-imposed restrictions and the shift to virtual training, the project was able to train an additional 39 local experts in 2020.

**Table 6 – Performance Assessment by Indicator for Output 1**

<p><b>Output 1:</b> Criteria for LCA database management are applied in national interoperable LCA databases and increasingly established and supported through GLAD</p>
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Indicator	Target versus Actual	Performance Assessment
<b>Indicator 1.1</b> # of local experts trained for interoperable dataset generation and documentation	Target: 50 Actual: 129	<b><i>Significantly Over-Achieved</i></b> Training occurred in two periods: November 2017: 51 people trained through 2 workshops (held in Sri Lanka, Peru, surpassing the initial target of 30); in 2020: two workshops (held in Colombia) plus 1 virtual event with participants from 8 Latin American countries) through which another 39 local experts were trained.
<b>Indicator 1.2</b> # of local (national) LCA database Roadmaps delivered	Target: 5 Actual: 6	<b><i>Slightly Over-Achieved</i></b> The target included 2 existing roadmaps (baseline) that were improved (including significantly upgrading South Africa's 2015 version). A further 4 were fully developed with project funding. In total, 6 national roadmaps were finalized in August 2019 with technical support provided by ecoinvent (Brazil, Ecuador, India, Sri Lanka, South Africa, Uganda). This activity also included relaunching a Technical Help Desk with step-by-step guidance to set up a national or sector-level LCA database.
<b>Indicator 1.3</b> # of datasets that are easily accessible in an open, seamless way globally (i.e. interoperable)	Target: 5000 Actual: 93,471 (post-project in Jan 2021)	<b><i>Significantly Over-Achieved</i></b> By Dec 2017, a GLAD platform beta version with 2 nodes (dataset providers) were connected for testing purposes. By Dec 2020, a total of 80,032 datasets were available on the GLAD platform. Following the project's close, by Jan 2021, 93,471 datasets had connected – with additional nodes in the pipeline, showing continued uptake of the GLAD platform amongst data providers.

127. Regarding Output 1/Indicator 1.2 Leveraging these enhanced capacities in selected countries, the project succeeded in finalizing 6 national database roadmaps (surpassing the target of 5), “with a relatively small budget” that was enlarged by in-kind contributions from life cycle network actors in the respective countries – seen as an indication of their ownership and interest (according to an implementing partner: “there was so much interest”), as well as high perceived utility. These activities also fed into the relaunch of a “Technical Help Desk”, which provides step-by-step guidance to set up national or sector-level LCA databases – laying the ground for further impact beyond the project's close, if taken up by further countries.
128. Regarding Output 1/Indicator 1.3 REAL's investment in the GLAD platform to facilitate the availability and accessibility of LC data (described by a life cycle network stakeholder as “a 1-stop shop”) achieved significantly beyond the initial target. Informants pointed to the importance of UNEP's convening power as well as ecoinvent's involvement, which heightened GLAD's credibility and content by connecting its entire dataset to GLAD), providing technical support and ongoing in-kind contributions. An implementing partner described this as “actively taking things forward”.
129. The in-kind contributions of LC networks and LCI's PSC (e.g. inputs, feedback, outreach; according to UNEP project staff: “a group of LCA experts volunteered their time to support its technical development”) throughout the project's lifetime is evidence of ownership in this output and enhanced its utility. Tested in 2017, refined, and launched in June 2020, GLAD had connected 93,471 datasets and 12 nodes by January 2021, with additional nodes in the pipeline expected to increase the participation in and its value even further, post-project.
130. GLAD was described by the donor as “an essential element” and by GLAD users as “an excellent entry point to find what you need” and “a global directory for LCA practitioners to go to find all the needed data”. Described by a national government representative as “an amplifier and aggregator magnifier”, GLAD is seen as providing needed access to needed datasets to calculate environmental footprint of products. This was attributed



to its facilitation of global consensus and collaboration through the creation of a Technical Management Group (TMG) and working groups for the nomenclature system and metadata. Informants explained “people chip in; they work for free and spend their time in these working groups” (¶85). In sum, GLAD appears to be a valuable, gap-filling feature on the landscape, with regional dimensions (referring to developing countries) that “did not crowd out commercial providers”, according to a life cycle expert. This notion was triangulated through consultation of those informants who were interviewed who work with commercial providers in the United States and South Africa.

**Table 7 – Performance Assessment by Indicator for Output 2**

Output 2: Capacity development tools (e-Learning courses on LCT approaches; success stories/benefits of using LC-based approaches; training pool of local technical experts), capacity developed through pilot projects in public and private organisations inducing change of practices within organisations		
Indicator	Target versus Actual	Performance Assessment
Indicator 2.1 # of LCT e-Learning modules	Target: 3 <sup>40</sup>  Actual: 3	<b>Achieved</b>  One e-Learning course on ‘Introduction to Life Cycle Thinking’ with 4 modules is available in English, Spanish, French, Arabic, Portuguese. In 2019, two more courses were available in English and Spanish: ‘Life Cycle Thinking in Policy Making’ and ‘Life Cycle Thinking in Business Decision Making’
Indicator 2.2 # that completed e-Learning modules with minimum self-assessment	Target: 2,000 per course <sup>41</sup> (=6,000 for 3 courses)  Actual: 2,679	<b>Not achieved at present, but with more future potential</b>  While enrolment was on track (8,800 since launch, across three courses), by year end 2021, only 2,679 had fully completed the courses, which represents a 30% completion rate. Looking at the traction statistics, the project achieved just 44.7% of its target with the 2,679 successful completions.
Indicator 2.3 SCP strategies and action plans in selected countries promoting LCT	Target: 5  Actual: 5	<b>Achieved</b>  Pilots in four countries (India, Thailand, Nicaragua, Guatemala) demonstrated LCT applications to generate success stories and disseminate benefits.  In its final months, REAL supported governments in four countries (Jamaica, Peru, Guatemala, Honduras) to develop/adapt Product Environmental Footprint (PEF) category rules for green coffee in LAC region, as part of the Coffee Network.  The project also assisted Sri Lanka and Peru to build LCA data. Sri Lanka’s LCA data was subsequently used in a national eco-labelling scheme as part of an IKI ‘Advance SCP’ project.

131. Regarding Output 2/Indicator 2.1 The envisaged e-Learning courses have been developed in the quality and quantity envisaged and are perceived by the bulk of stakeholders consulted to be useful. The fact that they were (and remain) available online, free, and were self-paced were mentioned as assets, together with the translations into several languages, which have facilitated larger use. These project results were described by a life cycle database provider as “a huge resource” and “very impressive what has been put together”, and seen by an implementing partner as “helping to keep the LCI network alive”.
132. Regarding Output 2/Indicator 2.2 Enrolment across the e-Learning courses was positive, reaching 8,800 by year end 2021; however, the 30% completion rate fell substantially below expectation. Having learned through a survey conducted to gain insights into such a result that the delivery of a certificate of completion was crucial to encourage

<sup>40</sup> In 2018, to finance GLAD’s beta launch, UNEP and EC agreed to divert funding from the 4th e-Learning module, to deliver only 3 courses

<sup>41</sup> The SSFA signed by THG Think Space indicates that there was a target of 2,000 users to complete each one of the e-Learning modules within their first four months of launch” (p8). The Monitoring Plan in REAL’s Project Document (p38) set successful completion targets as 300 (by year end 2016), 700 (by year end 2017), 1,300 (by year end 2018), 2,000 (by year end 2019)

more users to complete the modules, the webpage of the e-Learning modules on the LCI's website was revamped to increase visibility of the modules and to enable certificates of completion. The ensuing effects of these changes were not visible at the time of the TE. While there was a low level of completion overall when aggregating participation in the three e-Learning courses, digging into the details, full completion of the Introductory Course was much more likely (67.9%) than those who engaged in the course targeted for business decision-makers (21.8% completion) and policy-makers (10.3% completion).

133. Regarding Output 2/Indicator 2.3 The project delivered on its quantitative target through a potpourri of activities, including pilot projects supported in four countries (India, Thailand, Nicaragua, Guatemala) aimed at demonstrating and disseminating the benefits of various applications of LCT; building LCA data in two countries (Sri Lanka, Peru); and in its final months, supporting four countries (Peru, Honduras, Guatemala, Jamaica) with developing and adapting Product Environmental Footprint (PEF) category rules for green coffee in the LAC region.

### Achievement of Project Outcomes

Rating: Moderately Satisfactory

134. The assessment of project outcomes relates to what was intended to be achieved by the end of the project timeframe, within the project's resource envelope, with particular focus on the two direct outcomes leading to the project outcome that contributes to attaining key intermediate states. Accordingly, it was expected that REAL's support (through Outputs 1 and 2) would have the direct outcomes of increasing the capacity of policy-makers (¶92) and business actors (¶93) to understand the value of LC thinking/data/tools, which would motivate them to, respectively, improve the enabling conditions for resource efficiency practices to flourish – and make informed choices, thereby promoting a shift towards more sustainable patterns of consumption and production.
135. Looking at the results achieved (see **Table 8**) through this lens, by the project's end, the planned project outcome falls short, with just 11 organisations (versus the target of 15) reporting enhanced decisions through use of LC-based approaches – with no governments in emerging and rapidly-growing economies reporting effects that could be directly attributed to the project ("policy-makers are not using these tools enough", according to UNEP staff). This result is supported by the comparatively low level of government users of the GLAD platform (refer to **Figure 4**) and poor uptake of the e-Learning course targeted for policy-makers (¶132).

**Table 8 – Achievement of Planned Outcomes**

Outcome: Private & public organizations have increased capacity to make informed choices using LC data and apply LCA tools leading to more SCP and resource efficiency in global value chains		
Indicator	Target versus Actual	Performance Assessment
# of governments & organizations in emerging and rapidly growing economies reporting enhanced decisions through use of LC-based approaches	Target: 15  Actual: 11	<b><i>Not achieved at present, but with more future potential</i></b>  <b>India:</b> Nine actors reached through TERI SAS pilot reported enhanced decision-making, including vulnerable populations in Burma Camp Farmers Group; Bade Village Farmers Group; Farmers Producers Organization's farmers market. <b>Guatemala:</b> the palm oil company engaged in the pilot project applied LCA in its production processes. Local experts were trained. Guatemala's national LCA network was established, with initial activities delivered during 2019. <b>Nicaragua:</b> through the pilot project implemented in Santa Rita, a coffee production company identified and implemented resource efficiency measures, in conjunction with carrying out capacity building in the producers' community.

		<p><u>Thailand</u>: through the pilot project, an application was developed to measure and monitor the generation of food waste, which was used for activities under SWITCH Asia targeting the ‘footprinting’ of menu items in hospitals and events. Its implementing partner, MTEC, saw this <i>Lookie Waste</i> app as a tool for changing consumer behaviour but no data had been collected to ascertain its effectiveness in this respect. At the time of the TE, this application had not been maintained and was no longer functioning.</p>
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## Likelihood of Impact

Rating: Moderately Likely

136. The project under-achieved on its target to spur governments, as well as organisations, in emerging and rapidly growing economies to already actively use LC-based approaches to enhance decision-making. The poor uptake of the e-Learning course designed specifically for policy-makers is a worrying sign (¶135). Furthermore, the pilot projects were key for anchoring the socio-political sustainability of the project’s results in so far as such endeavours would seek to build ownership, interest, and commitment on the part of government as well as other system actors to take the project’s achievements forward (¶179). However, UNEP project staff indicated that “the projects were really very local” and that “the idea was to draw something out of the pilots that could be disseminated, like advice to policy-makers. That never happened”, which was attributed to the low level of resourcing, limited mandate of the pilots, and insufficient links to the policy-making agenda at national level.
137. The project team’s Final Report rightfully noted, in the Evaluator’s view, that a durable shift in behaviour requires a time horizon (arguably far) beyond the project’s (3-5 year) activity cycle. The Evaluator found the team’s argumentation to be valid: REAL has strongly anchored GLAD; it has built the capacity of LCA experts to develop national databases that can be connected to this backbone in future; it has made e-Learning courses available and developed an-easy to-use calculator for the Product Environmental Footprint (PEF) of green coffee, amongst numerous other results. It is conceivable that these efforts will contribute to leveraging and valorising the project’s results in the longer term, provided that sufficient elements have been put in place to enhance likelihood of their sustainability (see **Section H.**)
138. Examining the experience of the four pilots in greater detail, the Evaluator finds that these were under-budgeted (reflecting the project’s overall characterisation as operating “on a shoestring”, ¶114) at USD20,000 each, with a 1-year duration, each representing less than 1% of the project’s overall budget, with no follow-up resourcing for monitoring or extension. Designed to demonstrate different applications of LCT and LC-based approaches, interviews revealed that the pilots were highly valued by their implementers one of whom mentioned: “it was a big learning experience for our team”; others reported using the experience as a case study – now being used in two universities in Guatemala to teach environmental engineers about life cycle and included in a Master of Agricultural Studies and as the basis for an upcoming research paper in India). The pilots were also highly valued by their direct recipients (in one country, this was seen by the implementing partner “as a good opportunity, as the assessment was done for free”; in another, the implementing partner reported that it helped the company owners to “become aware of the social and environmental impacts of their economic activity and get acquainted with techniques to improve their performance”; in another setting, the implementing partner indicated that the company was worried about its reputation: “that was the main driver – to prove that not all companies are causing environmental damage through palm oil production”).
139. Amongst UNEP’s Regional Offices, ROLAC was an active supporter of the two pilot projects implemented in Guatemala and Nicaragua, while linkages for those

implemented in Asia and Africa region were made directly with the Paris-based project team due to reported overload and other priorities in the respective regions.

140. As part of the contracting for each pilot, a single dissemination event was held to raise awareness and showcase the value of LCA, with key business/industry associations invited as well as Ministry of Environment officials and Rainforest Alliance members (in Guatemala); coffee sector stakeholders including the Union of Agriculture Cooperatives and UNCA-San Ramon, which gathered several coffee cooperatives (in Nicaragua); actors from the fruit/vegetable supply chain (in India); and 27 participants were trained to use the *Lookie Waste* app through a final workshop (in Thailand). However, there was little evidence of application beyond these late 2018/early 2019 activities.
141. By the time of the TE in late 2021, the food waste application in Thailand was not even working, in the absence of a budget for maintenance and further development. While positive results were achieved by the Santa Rita coffee company that implemented processing plant improvement measures (i.e. improvement of its treatment system, implementation of recycling and reuse of water), those requiring more investment had not yet been pursued due to the liquidity crisis experienced in Nicaragua following political instability (¶121), worsened by the COVID-19 pandemic, which led to “very little opportunity for funding for crop production, even less opportunities for financing technical improvements of infrastructure and processing” according to a key project stakeholder, who also indicated that while the pilot company and many other coffee producers are still willing to make the same improvements, “the main limitation is financing”.
142. In India, the pilot was highly appreciated by the implementing partner. Nevertheless, from the outset, it was largely evident that had the pilot been designed on a larger scale with more resourcing and a longer duration, there could have been an opportunity for relevant state-level policy-makers to be engaged in a rigorous way. This would have provided a valuable platform to leverage insights of LCT to ward against the growth of synthetic fertilizers now being promoted in this region characterised as “organic with many informal markets”, with “farmers starting to see other farmers using fertilizers and pesticides”.
143. The India pilot made important inroads in showcasing the benefits of organic fertilisers to the local farmers as well as a community of illiterate, poor migrants not eligible for social benefits who played a critical role in growing/selling fruit & vegetables in the local district. While this district was rather undeveloped and hence selected as the location for the pilot, by early 2022, significant building, construction, and local development by private landowners had dampened the farmers’ activities. Furthermore, effects of the global pandemic reduced the ability of the pilot’s beneficiary population to sell their produce in local markets (“during COVID times, people are afraid that vegetable sellers would become a carrier”; the migrant farmers were reportedly afraid of being targeted by the very community they were serving).
144. The dissemination strategy for the e-Learning courses included translation into additional languages, targeting members of national LC networks the world over, in-country and regional stakeholder groups, as well as targeted mailings, articles in newsletters, use of social media (LinkedIn, Twitter, Facebook) and direct approach of UNEP and LCI networks. Activation through direct approach appears to have yielded short-term (“pockets of uptake” and “pools in certain locations”), according to the implementing partner, but not sustained results. Promotional efforts were undertaken on an opportunistic, in-kind basis. Thanks to its in-kind translation into Portuguese (¶157), an example of one such result was found in Brazil, with a business association’s

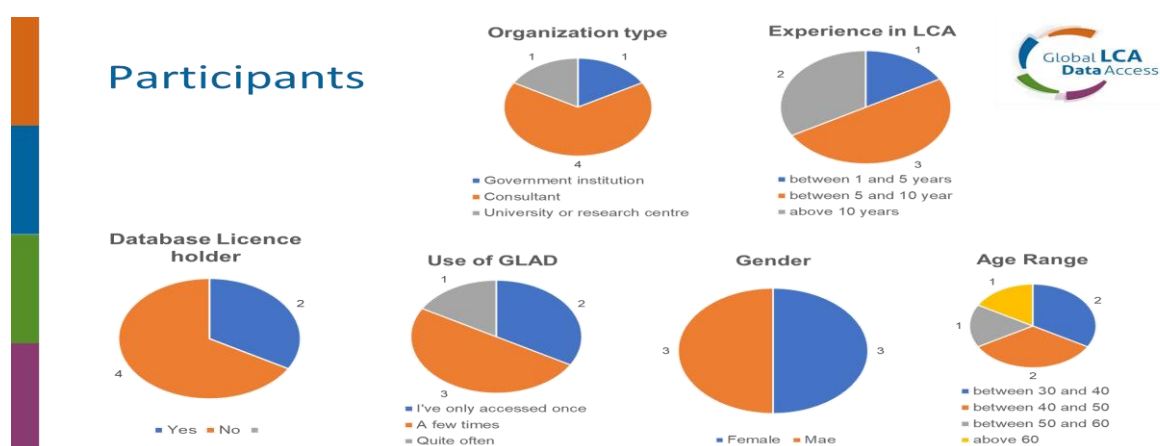
proactive promotion of the introductory LCA course to new members<sup>42</sup>. While participating individuals were described in interviews with implementing partners and organisations using the e-learning courses as “highly motivated”, “driving interest”, and “contributing well beyond the call of duty”, a coordinated, adequately resourced strategy underpinning dissemination and encouraging not only course completion but also application of life cycle-based concepts was not visible.

145. Letters of commitment solicited by the REAL team and involvement of an implementing partner from three educational institutions were received showing evidence that individual professors in touch with the REAL project and LCI have confirmed the inclusion of these e-Learning courses in their curricula (according to related correspondence between these faculty and the REAL project, which was reviewed: “a good number of students have already, or are planning to get registered in the course”). However, the number of such beneficiaries remains quite low, compared to the potential that could be reached: “We have 16,000 students in the university. I work in 1 course and use it for a small group of 50 students in Brazil”; in Ecuador “at least a couple of universities are using this e-Learning module for self-paced learning activities in Master programmes”.
146. UNEP project staff mentioned that REAL achieved meaningful impact by supporting ongoing initiatives, pointing to the support provided to Peru in the project’s final months to assist in an ongoing initiative to develop the LCI calculator for coffee, indicating “we really made a difference. In this setting, we could even go farther and start training coffee producers in the use of the tool, instead of just training on LCA in general”.
147. Characterized by its developers and users as “one of the project’s biggest successes”, the GLAD platform was also described by them as “having a life of its own”, “is very much alive, continuing, and gaining momentum”, anchored by the contributions of those engaged in its development (“its sustainability comes from these people being the backbone of the local community. They will be able to pick up and drive it forward”. With its credibility enhanced through the association with UNEP’s normative power and contributions ofecoinvent and others (¶128), the GLAD platform can be expected to reach the envisaged impact. This was fully attributed to REAL’s support: “GLAD would not be where it is if it wasn’t for REAL, and it wouldn’t be where it is if not for the contribution of all the partners that have been brought together under this project umbrella”. In September 2021, a focus group with six participants seen as illustrative of GLAD users was carried out representing government institutions (1), consultants (4) and university/research centres (1) in order to collect user expectations regarding GLAD, understand how users look for data on this platform, and how they decide if it is useful for their intended application. These participants are profiled in **Figure 4**. Given this very small sample size with limited representation across the three cohorts, the confirmatory power of this exercise to verify GLAD’s fitness for purpose is statistically weak.

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<sup>42</sup> Referring to Empresarial Brasileira de Avaliacao de Circolo de Vida (Rede ACV) which sought to mobilize and educate companies, government, and consumers – and incorporate LCA as a tool to determine sustainability of products in Brazil. <https://redeacv.org.br/en>

Figure 4 – Profiles of GLAD Users



Source: Results of First User Focus Group conducted by LCI, September 2021

Rating for Effectiveness: **Moderately Satisfactory**

## E. Financial Management

148. The project's financial management was assessed in terms of three dimensions: 1) adherence to UNEP's policies and procedures; 2) completeness of financial information, and 3) quality of communication between financial and project management staff. This assessment was carried out by the Evaluator with the support of the summary assessment template in **Table 9**.

Table 9 – Summary Assessment of REAL's Financial Management

Financial Management Components		Rating	Evidence / Comments
<b>1. Adherence to UNEP's policies and procedures:</b>		<b>HS</b>	<b>Suitable systems, processes, and relationships between project's financial &amp; project management sides have been established and actively supported this alignment</b>
Any evidence that indicates shortcomings in the project's adherence <sup>43</sup> to UNEP or donor policies, procedures or rules		No	Consistency with UN Financial and Administrative Framework and conditions for financial reporting for EC-funded activities. At project level, evidence of timely approval and disbursement (most transactions were completed within 3 days or less), regular analysis of expenditure vs budget/workplan. Total expenditure as at 30.12.2020 was EUR 1,517,515 is expected to fall within the planned budget (EUR 1,535,862), following disbursement of TE costs and preparation of final financial report.
<b>2. Completeness of project financial information<sup>44</sup></b>		<b>HS</b>	<b>All applicable items were complete and made available to the TE. REAL was fully secured by EC; annual reporting fulfilled met standards for completeness. There was close attention by FMO and PM to the project's financial management.</b>
Provision of key documents to the evaluator (based on the responses to A-H below)			
A.	Co-financing and Project Cost tables at design (by budget line)	Yes	[Information provided in Project Document Table 3A Budget Summary in EUR]. Creation and maintenance of co-financing table that is regularly cross-referenced with financial records as they are updated. Using Project Document and co-financing percentage of staff, actual staff costs are calculated to extract activity co-financing with other projects, then consolidated
B.	Revisions to the budget	Yes	FMO provided clear explanation concerning change in project budget from EUR 1,765,000 secured at beginning of project down to EUR 1,535,862, described as a technical budget revision. This action was agreed between the UNEP and EC and documented in REAL's 2018 Annual Report to enable

<sup>43</sup> If the evaluation raises concerns over adherence with policies or standard procedures, a recommendation maybe given to cover the topic in an upcoming audit, or similar financial oversight exercise.

<sup>44</sup> See also document 'Criterion Rating Description' for reference

			UNEP to transfer staff costs to close older previous projects in the SCA's portfolio. Details concerning staff cost movement were provided.
C.	All relevant project legal agreements (e.g. SSFA, PCA, ICA)	Yes	Relevant SSFAs, budgets, expenditure reports, and final reports of contracted entities were provided for review
D.	Proof of fund transfers	Yes	Proof of cash advances and payment requests were provided for review
E.	Proof of co-financing (cash and in-kind)	Yes	Extensive documentation was provided concerning in-kind contributions, by nature. Evidence of dedicated FMO efforts to source and quantify reported in-kind contributions to being these up to international public sector accounting standards (e.g. insertion of details to cross-reference, yearly review/discussion between FMO and PM)
F.	A summary report on project's expenditures during project's life (by budget lines, project components or annual)	Yes	[Annual Expenditure reports provided for 2016, 2017, 2018, 2019 and allotment reports provided for 2020]
G.	Copies of completed audits / management responses	N/A	
H.	Any other financial information that was required for this project	N/A	
<b>3.</b>	<b>Communication between finance and project management staff</b>	<b>HS</b>	<b>There was a high level of awareness of, interest in, exchange and contact between the financial and project management sides of the project, who appeared united in using these dimensions to enhance project performance</b>
	PM's level of awareness of the project's financial status	HS	PM understood regular analysis of actual expenditure against budget/workplan.
	FMO's knowledge of project progress/status when disbursements are done	HS	Monthly expenditure reports produced by FMO for PM's review of planned budget, commitments, disbursements, remaining balance
	Level of addressing/resolving financial management issues between FMO and PM	HS	Provision of guidance reflecting EC requirements to be included in all legal agreements with implementing partners
	FMO and PM communication & contact during preparation of financial / progress reports	HS	Regular exchange between FMO and PM regarding special conditions for EC-funded projects
	PM, FMO, and Task Manager responsiveness to financial requests during evaluation	HS	FMO provided comprehensive information to address requests proactively provided additional evidence, following interview. PM also highly responsive and helpful.
	<b>Overall rating</b>		<b>Highly Satisfactory</b>

149. As indicated in **Table 9**, the project's management showed strong adherence to UNEP financial policies and procedures, together with an orientation towards fulfilling donor requirements, through establishment of suitable systems, processes, and relationships between project and financial management. Together with the evident discipline and strength in financial management (¶86), the continuous awareness of and interest in enhancing project performance demonstrated by the project team has led to a "highly satisfactory" assessment.

**Rating for Financial Management: Highly Satisfactory**

## F. Efficiency

150. The assessment of REAL's efficiency considers three main dimensions (time, cost, synergies) in determining the extent to which the maximum results were delivered from the given resources.

### Concerning Time Efficiency

151. This 48-month project was approved by UNEP in March 2014 with a planned start of October 2015. The project kicked off five months later in March 2016, after the internal financial and administrative mechanisms were established to allow for the project to operate, together with undertaking planning activities, as documented in its first Annual Report. In this initial period, the project was managed and guided by the LCI unit's head, until a dedicated Project Manager could be recruited and installed in March 2017, a year after the project's formal start.
152. REAL requested a 'no cost' extension (granted in November 2019), which extended the project from September 2019 by a further nine months to June 2020 (see **Figure 5**). While such an extension did not involve the provision of additional resources and thus represents an increase in unstated costs to implementing parties, in light of the Project Manager's departure in April 2019, the Evaluator finds this extension was deemed justified and not seen as avoidable through stronger project management in a context where staff resources were already overstretched (¶153).
153. As an interim solution, REAL was managed by a LCI staff member who kept activities afloat ("while supporting 4-5 other projects"). This stretched to a 21-month period to allow for the identification, contracting, and onboarding of a new Project Manager, who arrived in January 2020, took a firmer grasp of the reins and steered remaining delivery of REAL's outputs/outcomes. In this period, some funding held by the project was opportunistically leveraged to deliver value (¶113, ¶146) to what was described by some as its successor, the EC-funded InTex project (¶104), which also came under the Project Manager's management responsibility with its September 2020 launch.

**Figure 5 – REAL's Planned versus Actual Implementation**



154. In light of delays due to ongoing COVID-19 effects, in April 2020, REAL requested (based on a fully-fledged proposal, budget, narrative, and visibility plan) and was granted a further 6-month 'no cost' extension, bringing the project to a formal close in December 2020. This second extension was also deemed justified by the Evaluator. REAL was by far from alone in suffering pandemic-related effects. This situation affected most projects undertaken in the international community, and beyond. While many of REAL's remaining activities could be carried out online, those that required face-to-face contact were postponed at the request of LAC-based partners involved in the Coffee Network and PEF pilot phase, whose success was of strong interest to the funder (as evidenced in correspondence exchanged between the UNEP Project Manager and EC Task Manager).

### Concerning Cost Efficiency

155. While REAL experienced a 30% overall extension in time, no further resources were added, which meant that the originally allocated resources (cash funding and in-kind contributions) were stretched over 63 months versus the planned 48 months. At project close, its expenditures remained within budget (EUR 1,517,515 spent versus EUR 1,535,862 budgeted) which is taken by the Evaluator as an indication of efficiency.



156. The conversion of resources/input (funds, expertise, in-kind contributions) into results was very favourable. Resources were stretched over numerous activities; for example, while funds had been budgeted for knowledge transfer to three countries for development of national database roadmaps, finally, “because there was so much interest”, this was extended to the involvement of six countries spanning three regions (two in Latin America, two in Africa, two in Southeast Asia), by leveraging in-kind contributions from partners (academics and NCPCs who indicated that they “wanted to be the frontrunners in their countries”) as well as implementing partners, attributing this to strong alignment of the activity with their mission.
157. The project drew positively on voluntary inputs and consultation from life cycle network actors in various countries, the LCI’s PSC members, as well as other stakeholders (e.g. translation of e-Learning modules into Spanish and Portuguese by a Brazilian professor who did this in his free time, estimated to be about 30 hours’ of work. In Guatemala, it was mentioned that the Ministry of Environment provided materials for the dissemination workshop on an in-kind basis. In India, the farmers’ communities that hosted team visits provided meeting venues and refreshments for free, which “helped a lot in cutting the costs”, according to the implementing partner. This co-financing enlarged the pool of available support (¶85), while also building national ownership. Such local contributions were also identified by partners involved in implementing the pilots as highly pertinent, given their scant resourcing of the pilot projects. Further emphasizing this point, an implementing partner indicated that “despite such constraints in resources and time, we could manage”.
158. For the entities chosen to implement pilot projects, it was understood from those interviewed that a key criterion for being selected was related to the provision of in-kind contributions (mainly staff time), although this was not explicitly mentioned in the contracting documents (“it was written in the Call for Proposals that in-kind was expected”). Stakeholders indicated that the contributions were at least equal, although in one case, in-kind contribution was on the order of 2.5 times the contracted payment amount. Such contributions certainly enlarged the pool of available support, enhancing the project’s cost efficiency. One implementing partner confirmed: “we provided a lot of time and effort for free”. Another mentioned an unintended result of such high expectations of in-kind contribution: that REAL’s project management appeared to have “insufficient consciousness of finite resources, budgets, and projects”.
159. According to project documentation and triangulated by interviews with project stakeholders, all activities subcontracted to implementing partners were completed according to the SSFAs and corresponding ToRs, with no indications of wasted resources. A pilot project implementer remarked, “we don’t believe that with the given resources and time we could have achieved more”. This situation is taken as evidence of adequate cost management during project implementation.

#### Concerning Synergies

160. As already mentioned (¶109), REAL was designed with synergies to other UNEP-implemented projects under the ERTNP portfolio, using these as dissemination vectors and benefitting from catalytic effects, specifically vis-à-vis UNEP’s eco- innovation project (¶110), 10YFP, SPPEL, GEI, and cooperation with regional SCP implementation platforms, which led to co-financing the production of two additional language versions of the e-Learning courses (¶112). The project team actively sought to make use of and build on pre-existing projects and complementarity with other initiatives and projects, following its design principles. The resulting transaction costs of such extensive linkages was not explicitly acknowledged, nor budgeted.
161. The project’s nesting within the larger ‘parent’ LCI Project Document meant that it could leverage complementary funding (EUR 162,824 as documented in ¶84), as well as

source interim management capacities from the LCI unit for a 21-month period of operation (¶152) and benefit from the guidance of the LCI team and its governance structure when REAL's own PSC ceased to function (¶179).

162. The project's Final Report indicated that resources developed by the REAL project (specifically, PEF-compliant LCA data, development of category rules) have been essential to build up understanding and approaches to be further applied within InTex, particularly the learning developed through capacity development in LAC region with respect to PEF requirements. These have already been incorporated into approaches to contribute to the development of textile data in Africa and they have attributed with enriching apparel PEFCR discussions (¶113).
163. While UNEP's guidance concerning a project with two justified 'no cost' extensions of one year or less and with justified amendments to the formally approved results frameworks would normally be rated as "moderately satisfactory", the unprecedented impacts of the COVID-19 pandemic are considered an exceptional case. In view of the favourable assessment of the project's cost efficiency and synergistic elements, the overall assessment of its efficiency is regarded as "satisfactory".

**Rating for Efficiency: Satisfactory**

## **G. Monitoring and Reporting**

164. The assessment of REAL's performance on this dimension considers three main dimensions: design of and budget for monitoring, implementation of monitoring, and project reporting.

### **Monitoring Design and Budgeting**

Rating: Moderately Unsatisfactory

165. REAL's monitoring and budgeting systems were set up with an overall objective to assure a successful and quality implementation. The Project Document set out a suitable Monitoring Plan that elaborated outputs and indicators that mapped to the project's logical framework, together with noting baseline and yearly targets, pointing to general sources of verification (e-Learning platform, review of policy situation, pool of workshop participants).
166. There was no provisioning for disaggregation by relevant stakeholder groups, including gender and minority/disadvantaged groups. No gender indicators were included at design, although the Project Document stated that gender "...will be a key criterion applied in intervention design"<sup>45</sup> and indicated that the pilot projects would strive to achieve improved consideration of women's needs and preferences in terms of information and/or policy frameworks that address consumer information. It was foreseen that training and workshops would strive to ensure gender balance, requiring a minimum of 30% participation per gender; however, such targets were not mentioned in the monitoring plan, nor consequently, in project reporting.
167. Individual responsibility for monitoring progress against each indicator was not identified. Instead, division-level responsibility for monitoring with contributions from relevant Regional Offices and complementary programmes (SWITCH, GEI) was indicated.
168. The plan to undertake bi-annual monitoring, with information collected from partners to then be analysed by the Project Manager and submitted to the governance mechanism

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<sup>45</sup> p.21, Project Document

was deemed appropriate. The project did not have a dedicated budget by monitoring activity; rather, annual provision of USD20,000 for monitoring tasks was included in the budget within the personnel component. A mid-term review was not planned or budgeted. However, suitable provisioning was made for the project's terminal evaluation (included in the project budget of POW 633) to be conducted independently, covering a desk study, online data collection, and a representative number of missions to conduct face-to-face interviews.

### **Monitoring of Project Implementation**

Rating: Moderately Satisfactory

169. Monitoring was carried out with the aim of determining whether activities were carried out on time and within budget. For the most part, monitoring appeared to be mainly related to identifying what had been done, what still had to be done, and delivering material to fulfil annual reporting requirements. Such an approach misses out on vital opportunities to reflect back and distil learning that could result in recalibration and leverage adaptive management.
170. While planned to be done on a 6-monthly basis, in the project's initial period of implementation, these tasks were carried out on a yearly basis, wholly by REAL's Project Manager. More recently, it is understood by the Evaluator that monitoring was done to fulfil the minimum requirement of the quarterly (traffic light system) as well as for bi-annual reports. Due to COVID-19 restrictions on travelling, UNEP ROLAC staff were not able to undertake planned visits to Nicaragua and Guatemala. Monitoring reports were shared with the project's supervisor (LCI's Head), who held ultimate responsibility. This quality assurance step is viewed positively.
171. While the monitoring plan did not elaborate on specific indicators to track the representation and participation of disaggregated groups, sensitivity to these aspects was detected in the project's management and culture, leading to relevant aspects being noted in the narrative form within project reporting.
172. As only one of the project's key indicators had an associated baseline (i.e. two national LCA database roadmaps existed at the project's outset), tracking of the project's delivery against numerical targets (e.g. number of datasets connected to GLAD, number of e-Learning courses developed, number of trainees, number of SCAP strategies and action plans formulated) was relatively easy to monitor. Progress vis-à-vis achievement of the established targets was annually documented and reported.
173. Given the relatively short duration of the pilot projects (typically 1 year) and their limited resourcing (USD 20,000), their monitoring requirements were very minimal. There was no provision of longer-term resourcing for monitoring, which has made it difficult for the Evaluator to ascertain and attribute impact to such projects. Although there was regular "checking with partners" regarding their envisaged activities and the delivery of planned outputs, monitoring from the UNEP side was described by project stakeholders as "not a very strategic approach". From the partner side, there was a perception that monitoring "simply added to the workload for delivering" and "something to put on hold until it is really required".

### **Project Reporting**

Rating: Satisfactory

174. A standard template was deployed to enable annual progress reporting to UNEP management, which was included as an annex, as one of 20 projects in the GPGC/ENRTP's yearly reporting to the donor under the SCA with the EC. REAL's progress in achieving its objectives was summarized in relation to its outcome, constituent outputs, targets, and milestones – with explanatory details. The project's

status of implementation was set within the context of operating challenges, risk analysis, and corresponding mitigation measures, which enabled the project's supervisors to get an overall grasp of the project's situation on a yearly basis, together with present and planned management actions to address these challenges.

175. As part of the reporting, inter-linkages and synergies with other projects from UNEP's Resource Efficiency Sub-Programme funded under DG EVN and DG DEVCO ENRTP SCAs/DG ENV GPGC PCA were progressively highlighted. This type of reporting was deemed to be very useful as it served to reassure UNEP and the donor that the design principles to leverage synergies and complementarity across the portfolio (¶109) were being respected and presumably generated a value-add.
176. SSFA holders were required to provide REAL's management teams with a progress and final report, as well as financial statements on use of provided funds, respecting the guidance provided by UNEP to ensure that records were maintained in case of random audit by the donor. Given that the EC's requirements were more rigorous in this respect than those of UNEP, such communication would be an important risk management strategy.
177. Within the annual progress reports, short explanation and hyperlinks were included that could be used to retrieve relevant supporting documents. This approach was deemed useful in terms of creating a knowledge repository, which was particularly important in view of the relatively high turnover of staff on this project (three Project Managers on the UNEP side, three Task Managers on the EC side, and "many interns").

<b>Rating for Monitoring and Reporting:</b>	<b>Moderately Satisfactory</b>
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## H. Sustainability

178. This dimension reviews the key conditions seen as likely to undermine or contribute to the persistence of benefits achieved at the project's outcome level. In this light, three aspects were considered: socio-political factors that support the continuation and further development of the project's outcomes; the extent to which further financial inputs may still be needed; and the sustainability of the institutional framework (including issues of partnerships).

### Socio-Political Sustainability

Rating: Moderately likely

179. This assessment considers the level of ownership, interest, and commitment on the part of government and other stakeholders to take the project achievements forward. The prospect for sustaining results related to GLAD appears to be very favourable, looking to its strong anchoring (¶147), which benefitted from significant involvement and in-kind contributions of national stakeholders across geographies (¶215). The Evaluator made a positive assessment of supportive socio-political factors to sustain project benefits on the basis of evidence regarding the development of national life cycle database roadmaps (¶216) and Product Environmental Footprint Category Rules (PEFCR) anticipated to flow into the EC-funded InTex project (¶113).
180. While the pilot projects launched in three regions were valued by their implementers and direct beneficiaries, and there was demonstrable interest and ownership on their part to continue, financing has not been secured to anchor and sustain their benefits nor replicate them elsewhere (¶183). While government actors and other stakeholders were engaged in the dissemination events associated with each pilot (¶139), no governments in emerging and rapidly-growing economies have thus far reported effects that could be directly attributed to the project (¶135). This may be related to insufficient links made

to the national policy-making agenda in the respective countries. This may also stem from the situation that the pilots were “very local”, as described by UNEP project staff (¶136).

## Financial Sustainability

Rating: Moderately Likely

181. Although the project did not prepare an actual exit strategy, in having produced outputs and direct outcomes that were nested under UNEP’s LCI Project Document and ongoing POW (¶63), there was reportedly ongoing resource mobilization to sustain REAL’s results under this context. Accordingly, the e-Learning courses will continue to be available and maintained, with participation tracked and certificates issued, and there are ongoing discussions with educational institutions about the inclusion of modules in curricula and a new UNEP course being developed by the SCP unit. UNEP has also managed to mobilize funds from the EC to carry on efforts around GLAD, which would be a clear channel for sustaining the results of the REAL project. Furthermore, it was indicated that REAL’s results were already being leveraged through other channels, like the InTex project (¶104, ¶113), which had continued to largely fund UNEP’s efforts in the life cycle domain. Running from 2020-2023, this reflected an ongoing source of funding.
182. The national database roadmaps produced under REAL, which were driven by the interest of the six participating countries (to be frontrunners) and supported by their in-kind contributions (¶156), would presumably continue to be used and drive the envisaged outcomes. The extent to which further financial resources would be required to support the eventual connection to GLAD was not apparent to the Evaluator, but the momentum was there, supported by strong country driven-ness (¶216).
183. The pilot projects represented a weak spot in terms of their benefits being sustained. Their resourcing was limited (¶138), the communication of their results was financed through a single dissemination event (¶139), and the follow-up was described by their implementers as “weak”. While the intention of the pilot projects was for their benefits to be replicated, at this stage, this prospect at the time of the evaluation seemed weak:
  - In Thailand, the food waste app is currently not operational (¶141). At the time of the evaluation, no funding had been secured for its maintenance;
  - In Nicaragua, the direct beneficiary (Santa Rita coffee company) covered most of the expenses related to implementing improvements to its processing plant (¶142). More challenging measures related to investments in technology, equipment, and infrastructure were to be borne by this producer (as well as others expected to replicate the project’s benefits), but constrained by the liquidity crisis affecting all actors in the sector related to the political and economic instability in the country that have been there since 2018 and worsened by the effects of the ongoing global pandemic (¶141);
  - In Guatemala, the fact that officials from the Ministry of Environment, Rainforest Alliance, Union of Agriculture Cooperatives and UNCA-San Ramon (which gathered several coffee cooperatives) participated in the end-of-pilot dissemination event is promising (¶139). With Guatemala holding the world record in palm oil yield, in a context where the high value of palm oil in the food industry is pushing the expansion of palm cultivation in the world’s tropic regions, REAL managed to show the benefit of life cycle assessment and water foot printing in a palm oil company. The extent to which the project’s results would actually be replicated within and beyond Guatemala was not evident;

- In India, the project made important inroads in showcasing the positive results of organic fertilisers, but the radical urban development within the location of the pilot appears to have wiped out the gains for this particular beneficiary population (¶143). No financing has been secured to establish a larger-scale initiative that could engage relevant state-level policy-makers in leveraging life cycle thinking insights to promote organic approaches and prevent the current growth of synthetic fertilisers (¶142).
184. Each implementing partner has produced a final report and materials that describe these initiatives and highlight the benefits have been made available on UNEP's website. There is, however, little likelihood that the benefits from these investments will be meaningfully sustained. Theoretically, other countries or organisations would be able to replicate these activities without further support, but this has yet to happen – and some measure of doubt was expressed as to whether this could actually happen. In drawing the learning from REAL's pilots, UNEP project staff reflected that “we learned that we cannot do these pilots with so little resources”, “we left them too open; they needed to be more guided and directed”, “we need to put enough resources into them so that they can be maintained”.

### **Sustainability of the Institutional Framework**

Rating: Likely

185. This assessment considered the extent of project outcomes' dependence on aspects related to institutional frameworks and governance<sup>46</sup>. The REAL project itself did not set out to establish governance structures, processes, policies, sub-regional agreements, legal or accountability frameworks, although some institutional capacity development efforts were carried out, primarily by UNEP's ROLAC office, although these were limited due to COVID-19 restrictions on mobility. Hence the sustainability of its outcomes primarily depended on whether existing structures were sufficiently robust to continue delivering the benefits associated with the project's outcomes following its closure. UNEP project staff indicated that the type of work that happened in the REAL context “has captured attention from other governments”. With ongoing efforts to promote life cycle thinking in business and policy-making (¶102), UNEP's explicit positioning of life cycle thinking to drive SCP and UNEP's normative and convening power with respect to supporting national governments, the Evaluator found that it is reasonable to expect that beneficiary governments will evolve more supportive framework conditions over time.
186. Leveraging this interest and acting on a shared perception that life cycle thinking has an important role to play, UNEP has heightened its prioritization and placed life cycle thinking as a cross-cutting force at the heart of its new MTS (2022-2025), inclining all staff to incorporate a life cycle approach in framing their interventions (¶101). This could be expected to further valorise REAL's contributions, moving forward. At the time of the evaluation, UNEP staff indicated that they were already using its experience of working with countries to guide them, using a life cycle lens, towards more business models. This had reportedly generated a new set of projects that were currently in the pipeline for GEF approval.

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<sup>46</sup> In this respect, the extent to which sustainability of project outcomes (especially those relating to policies and laws) is depending on issues relating to institutional frameworks and governance is assessed. It considers where 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 closure. Whether institutional capacity development efforts are likely to be sustained is also considered under this dimension. Source: UNEP Guidance on Detailed Evaluation Criteria

187. In light of the interest in circular economy solutions, sustainable consumption and production, and a shared perception in UNEP's senior management that life cycle was a key entry point (¶101) for addressing the drivers of the three planetary crises (climate change, biodiversity loss, pollution), the existing and evolving governance structures, processes, policies, agreements, and frameworks were seen to be sufficiently robust to continue delivering the benefits associated with the project's outcomes, following its closure.

**Rating for Sustainability: Moderately Likely**

## I. Factors Affecting Performance and Cross-Cutting Issues

188. Seven constituent factors were individually assessed below. Combined, they were deemed to have supported the project's performance in a satisfactory manner.

### Preparation and Readiness

Rating: Satisfactory

189. This criterion focused on the inception or mobilisation stage of the project, i.e. the time between project approval and first disbursement. As the REAL project was considered to be a sub-project of the umbrella project that contained REAL (633.1 and subsequently 621.3), it did not itself undergo a full Project Review Committee (PRC) process. However, correspondence between PRC colleagues, the SP6 coordinator, and the REAL project team shows that their feedback was taken into account in improving the Logical Framework.
190. Although original evidence from discussions was not available to the Evaluator (due to difficulties of retrieval from Lotus Notes), given the extent to which feedback was utilized, including feedback from the evaluation of the previous ENRTP-funded project (considered to be the predecessor of REAL), presumably, critical issues were indeed flagged. There was evidence of lessons learned from the previous implementation phase under LCI/ENRTP had been used to enrich the design of REAL. Presumably, this was a reflection of the continuity of the project's overall leadership under UNEP and the legacy carried by project team members.
191. The Project Document contained a stakeholder analysis, although this appeared to be rather theoretical and high level. While all key groups were mentioned, there was no clear indication that any of the identified institutions or stakeholder groups were actually consulted during the project's design.
192. A budget was not provided for the preparation phase. The 2015 Annual Progress Report indicated that the bulk of initial activities focused on the preparation of project work plans (according to UNEP staff: "you try to get as much information on paper and plan as much as can. In implementation, unforeseen requests always emerge"). With the identification of three working areas (to define the network architecture and technology, a common nomenclature, and a common list of "meta-data" indicators) and the establishment of a Technical Management Group for GLAD consisting of 13 governments and/or institutes at this very early stage, the project was able to build early momentum and credibility.
193. While efforts to mobilize staff were launched at an early stage, the process of contracting and onboarding the Project Manager was only realised a year after the project's March 2016 kick-off. Nevertheless, the project was managed under LCI's auspices in the interim (¶82).

### Quality of Project Management and Supervision

Rating: Moderately Satisfactory

194. In reviewing the project management's approach, there was a consistent focus vis-à-vis the achievement of planned outputs and outcomes, supported by regular monitoring (¶169). SSFAs with accompanying ToRs were drawn up and properly administered, including a quality check on the final reporting. The solid teamwork and good communication between the Project Manager and FMO were seen as a very important positive factor on the project's performance (see **Table 9**). For the most part, implementing partners indicated that they were given a high level of autonomy and "a fair amount of flexibility" to shape and deliver their services, which suggests high trust and confidence in the chosen actors.
195. However, this approach was also a reflection of over-stretched project resources. Informants observed that REAL/LCI team members were "completely collapsed with work; too much to do" and "everybody was doing everything". While time was dedicated for staff salary, this was characterised as "definitely not enough for what is actually required"; "staff are expected to work, there's no corporate solution for this. Composed of "all these teeny tiny projects" (as described by UNEP staff) and the expectations for extensive linkages and synergies with other activities (¶109), with the corresponding transaction costs generated (¶160), meant that REAL's resources were spread very thin. This approach is deemed unsustainable by the Evaluator: the time investment to administer contracts is not justifiable, even if the results are positive. UNEP staff asserted, "from a project management perspective, this is not a feasible way to proceed; there is not enough resourcing".
196. REAL's staff (and that of the LCI, which project stakeholders sometimes found challenging to distinguish) were highly appreciated by implementing partners, UNEP colleagues, and other involved actors, who commented favourably on their degree of engagement, commitment, and collegiality. There was also positive feedback regarding the sheer volume of delivery, which was partially attributed to the reliance on interns. According to UNEP staff: "we would not be able to deliver as much as do without the interns; they bring a lot of energy and support". One challenge noted by an implementing partner is that interns were engaged in tasks that they expected would be done by project staff, consultants, or implementing partners. An implementing partner said, "we lost significant time due to excessive feedback cycles: 1-2 is acceptable, but sometimes, we were subjected to 5-6 cycles".
197. One of the challenges that the REAL project faced related to the relatively high turnover of staff ("it's always tricky to manage a project when there's not continuity", according to UNEP staff): there were 3 different Project Managers on the UNEP side, 3 different Task Managers on the EC side, and "many interns". Although a knowledge repository had been built up through the reporting practice (¶177), there was nonetheless a perceived loss of institutional memory due to the changes in staffing.
198. While REAL initially benefitted from high-level inputs from its own PSC set up in the project's early stage, this structure was disbanded after two meetings (¶79). Minutes were available for only one of these meetings, then it appeared to fade out after the Project Manager's departure in April 2018. In the following period, the project's supervision was mainly taken over as an internal UNEP function, with some consultation and activities shifted to the LCI's PSC. There was a perception that REAL's pilot projects did not need to be steered by the PSC. The Evaluator posited that this perception was due to their comparatively small budgets (¶138) and highly local nature (¶136)]. On the other hand, REAL's GLAD-related activities were supported by its dedicated Technical Management Group (TMG). The project's higher-level supervision exercised through UNEP's head office in Nairobi and the EC in Brussels functioned appropriately in terms of reviewing regular progress reporting.



199. The project management and supervision responsibilities that were taken over by UNEP's already overstretched LCI staff on an interim basis and endured for 20 months until a new Project Manager was onboarded in January 2020. While some aspects regarding REAL were brought forward to LCI's supervisory structure, its PSC members appeared to be mainly utilized to contribute to planned activities and to activate demand for REAL's outputs, rather than provide an external higher-level view that could be used to guide and recalibrate project activities.

### **Stakeholders Participation and Cooperation**

Rating: Highly Satisfactory

200. This dimension broadly considered all project partners, duty bearers with a role in delivering project outputs, and envisaged users of project outputs and other collaborators external to UNEP. In this light, the quality and effectiveness of communication and consultation with stakeholders throughout the project's life was considered, as well as the support provided to maximize collaboration and coherence between various stakeholders, including sharing plans, pooling resources and exchanging learning and expertise.
201. The project adopted a strategic approach to the engagement and participation of stakeholders, which was viewed by the Evaluator in a very positive light. REAL's Project Document contained a solid analysis of stakeholder groups, outlining their respective roles and contributions. This strategy was reflected in the project's implementation. Informants indicated that "stakeholder engagement was in place from the beginning of the project", there were "differing types of engagement, depending on their power to influence and benefit from the project's results" and in the "frequency of communication and type of information shared".
202. The extent to which stakeholder involvement was promoted, together with in-kind contributions that formed a backbone of the project, was viewed by the Evaluator to reflect efforts to promote stakeholder ownership of project outputs and outcomes. There was regular consultation and communication with stakeholders throughout the project's implementation.
203. The design and implementation of the pilot projects reflected a philosophy of stakeholder engagement, within the provided means. Linkage to impact on livelihoods was in evidence especially through the pilot in India (¶142). Positive effects on equity were demonstrated through the pilot in Nicaragua (¶209).

### **Responsiveness to Human Rights and Gender Equality**

Rating: Satisfactory

204. The UN has a mandate to promote social justice through gender equality<sup>47</sup>. Gender mainstreaming involves necessary temporary gender-specific measures to combat direct and indirect consequences of past discrimination that have left women or men in a particularly disadvantageous position. In terms of global goals, SDG 5 seeks gender equality and to empower women and girls through a set of specific targets. Accordingly, UNEP published its Gender Equality and the Environment Policy, resolving to "unlock the potential of women as drivers of sustainable development" (8) with nine principles to guide its implementation, as an adjunct to its MTS for 2014-2107<sup>48</sup>, the umbrella strategy under which REAL's implementation falls.

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<sup>47</sup> Guidance Document: Integrating Human Rights and Gender Equality in Evaluations, UN Evaluation Group, Aug 2014, p19

<sup>48</sup> [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](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)

205. Reflecting this guidance, the Project Document contained a brief, high-level gender analysis. The design narrative<sup>49</sup> mentioned the importance of being responsive to gender issues/human rights (e.g. RECPnet representatives, LC network actors, implementing partners were expected to leverage their local knowledge to take these aspects into account<sup>50</sup>. Furthermore, it was argued that the project would be inherently sensitive to social impacts on minority/ disadvantaged groups (including respect of indigenous rights) as LC approaches encompass Social Life Cycle Assessment (S-LCA)<sup>51</sup>. In this light, it was foreseen that relevant e-Learning modules would build awareness of this powerful dimension of the life cycle approach.
206. While the design narrative also contended that REAL had an important role to play in highlighting market failures in terms of SCP and green economy measures related to gender equity issues, this lofty aim was mismatched with the limited resourcing and duration accorded to the pilots. A life cycle network stakeholder observed that the gender/human rights dimension is “not so well-developed for life cycle work in general”. Others indicated “this is something that needs a longer-term horizon, like 20 years” and “it’s something that should be addressed”.
207. Project team members pointed out that the life cycle field is currently dominated by men, which was naturally reflected in related parts of the project’s implementation (project staff indicated that “we always tried to partner with women in organisations, but they were not much available”; “the GLAD part in Europe and US is very male-driven”; “the project’s technical side has a lot of male experts”, “the PSC and Working Groups are populated by mostly men”).
208. The Project Document’s Gender Analysis section positioned REAL as striving “to achieve improved consideration of women’s needs and preferences in terms of information, particularly for pilot projects and/or policy frameworks that address consumer information”. In national settings where REAL provided funding, there were intentional efforts by the project team to engage women (project staff indicated that “we always tried to keep the gender aspect in mind in putting together workshops, identifying speakers and participants to be funded”). Acknowledging that “there’s always room for improvement”, there was a feeling that “REAL fundamentally took these ideas on board”.
209. While the Project Document intended for gender (and country) of people attending workshops and accessing e-Learning material to be monitored and the project was to assist with “identifying, quantifying, and reporting on gender equity issues”<sup>52</sup>, the Monitoring Plan fell short on tracking these aspects (¶166). Nonetheless, the Evaluator found evidence that dedicated efforts were made to attract female-owned business (e.g. in Nicaragua, the coffee plant was owned/run by a woman and her daughters. The pilot was executed mostly by women: “we considered this a first positive impact”. These women then developed close relationships with other community stakeholders (coffee plantation owners’ wives and daughters): “we considered their empowerment and technical training as a second positive impact.
210. Sensitivity to gender/human rights was particularly evident in the India pilot, which targeted local farmers and a migrant community. The implementing partner made clear efforts to ensure that women’s voices were heard. Noting that women in the migrant

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<sup>49</sup> Referring to the Gender Marker Score introduced by UNEP for projects approved from 2017, the treatment of gender in REAL’s Project Document scored “1 – gender partially mainstreamed” in the PDQ assessment contained in the Inception Report, on the basis that gender equity is mentioned, together with evidence of promoting gender balance in training, workshops, pilot project selection in implementation

<sup>50</sup> p19, Project Document

<sup>51</sup> According to UNEP/SETAC’s Life Cycle Initiative, S-LCA enables assessment of local community impacts, including respect of indigenous rights, local employment, safe & healthy local conditions. It also has a focus on workers, especially on gender equality and child labour

<sup>52</sup> p21, Project Document

community were quiet and not all attending, a separate consultation was established to build trust, followed by three workshops and two on-site trainings for organic farmers, and a large dissemination workshop in which “most of the people who expressed their experiences were women”).

### **Environmental and Social Safeguards**

Rating: Highly Satisfactory

211. The assessment of the project’s Environmental and Social Safeguards was carried out and documented in the Inception Report and concluded that no risks were generated by the project in the four safeguard standards (SS) deemed relevant to REAL’s planning and management; to the contrary, its outputs and outcomes were expected to have a positive effect. In fact, the Evaluator found that the project had a net positive (social) impact on Indigenous Communities, which was unfolded through the pilot project implemented in India, which benefitted migrant farmer communities in Nagaland (¶142).
212. UNEP requirements were met in terms of reviewing risk ratings on a regular basis, evidenced in the annual progress reports through a risk log. This log outlined risks, categorized them as economic, political, organisational, etc., assessed their potential severity of impact on the project as well as their likelihood of realisation, together with formulating risk management strategies and safeguard. Inclusion of responsibility and timelines for action would have further enhanced accountability. No safeguarding issues actually arose.
213. The project’s core activities related to reducing the negative environmental impact of a product/service. Tool development was to be undertaken in ways were fully sound from an environmental point of view<sup>53</sup>. The extent to which project management and implementing partners made explicit efforts to reduce their negative environmental footprint in project implementation was not easily visible in the documentation and was not a prioritized question in the interviewing process. Given that the project was based on promoting life cycle thinking, it would be logical to conclude that all involved actors were contributing to advancing this notion, which, by its nature, orients towards reducing environmental impact. The shift to home-based and virtual meetings due to COVID-19 related restrictions (¶42) surely played a role in reducing the environmental impact of the project’s operations.

### **Country Ownership and Driven-ness**

Rating: Moderately Satisfactory

214. This dimension involved reviewing the quality and degree of engagement of those directly involved in project execution, technical and project steering groups, and those representing government/public sector agencies/other official institutions whose cooperation was needed for change to be embedded within their respective institutions and offices to secure the forward momentum of the intended project results and for envisaged long-term impact to be realised.
215. In this light, REAL successfully leveraged LCI’s network of established experts and entities, which had global coverage and significant national standing. Their ongoing involvement and in-kind contributions are interpreted by the Evaluator as a reflection of strong ownership, interest (¶129) and contain the potential for driving results forward. This was particularly evident in the co-development and ongoing momentum of GLAD, seen to now have “a life of its own” (¶147). This evolution went beyond country driven-ness; it has reflected a collective ownership, with a global nature. The approach to developing GLAD also reflected REAL’s success in enlarging the overall pool of

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<sup>53</sup> p.28, Project Document

- resources through in-kind contribution, which is seen by the Evaluator as an important strategic lever to enhance national ownership and generate forward momentum (¶157).
216. Further evidence of country ownership was seen in the response regarding the development of national LC database roadmaps. While the project had budgeted for the development of three such outputs, there was so much interest from other countries to join in that this stimulated a knowledge transfer to six countries in three regions (¶156).
  217. The voluntary uptake of the e-Learning modules by a Brazilian business association, proactively promoting these materials to members in a genuine bid to develop their capacities (¶144), indicated the, as of yet not fully tapped, potential for strengthening country ownership through partnership strategies. However, poor uptake of the e-Learning course targeting policy-makers (¶134) represented an opportunity to rethink the dissemination strategy to enhance traction, particularly in a country like South Africa, which was reportedly ripe for such capacity-building and there is “an opportunity for a concerted, focussed, policy drive on this”.
  218. The pilot projects implemented in India, Thailand, Guatemala, and Nicaragua were highly valued by their implementers and direct recipients (¶138) whose involvement was related to a drive to become front-runners in their respective geographies (¶156). In dissemination events associated with these pilots, representatives of relevant ministries, business associations, cooperatives, and other key stakeholders with catalytic reach were invited and actually participated – which could also be taken as an indication of ownership and interest, while also putting some stakes in place for carrying forward project results. Informants mentioned that there was still huge scope for upscaling the benefits demonstrated by the pilot project in Nagaland (India), as in this region, farmers had only started recently to use synthetic fertilizers. There was clear interest from the implementing partner for resources to be made available to “take it forward on a larger scale instead of a pilot study” so that its team “could engage with policy-makers in a more rigorous manner”.
  219. High ownership and driven-ness was demonstrated by those directly involved in project implementation and steering, which created a strong legacy vis-à-vis the GLAD platform seen as very much “alive, continuing and gaining momentum” (¶147). However, there was poor traction on the e-Learning courses for policy-makers and the limited resourcing, duration, and engagement of policy-makers in pilot projects’ single dissemination event did not provide sufficient anchors to fully catapult momentum forward. Nonetheless, the Evaluator found there was goodwill on which to build further.

## **Communication and Public Awareness**

Rating: Satisfactory

220. This dimension assessed the effectiveness of the communication regarding the learning and experience-sharing between project partners and other interested groups, as well as public awareness activities undertaken during the project’s implementation to influence attitudes and/or shape behaviour within the wider community, at large.
221. As part of its design, the project elaborated a public awareness and communications strategy, acknowledging that robust communications would be a key element to realise the sustainable consumption and production practices expected to be stimulated through the promotion of life cycle thinking amongst existing initiatives, projects and programmes.
222. Annual progress reporting implemented this notion by including a section on “visibility” which shows the progression of communication, visibility, and outreach activities undertaken during REAL’s implementation. In this light, numerous communication

materials were developed and actively used to communicate the project's ongoing work and its outcomes (e.g. through LCI's website, its bi-monthly newsletter and social media channels, like LinkedIn).

223. The project's Final Report documented the videos and information concerning the pilot projects, success stories of organisations using LCT (mostly trained through EC funding), the e-Learning modules and their link to the host platform Thinkific. In the project's final stage, guidelines to calculate the environmental footprint of coffee in LAC region were also produced, together with communication materials to raise awareness in the sector.
224. While substantial materials were produced and made available for download, there appeared to be further opportunity to disseminate the outcomes to enhance project benefit. Informants observed: "how can we make them more self-sustaining? There's been little room to think about or plan for that", "this should be more explicit resourcing for this part during project implementation", mentioning that while the project's main vehicle for knowledge management and communication was through the LCI website, where the project's lessons learned and success stories have been gathered. However, the Evaluator found that there was further room to enhance accessibility and use by relevant stakeholders.

<b>Rating for Factors Affecting Performance and Cross-Cutting Issues:</b>	<b>Satisfactory</b>
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## VI. CONCLUSIONS, LESSONS, AND RECOMMENDATIONS

### A. Conclusions

225. REAL's key strength was in its **strategic relevance** and **concrete steps** taken responding to the call highlighted by UNEP's Green Economy work about the importance to not only measure, but properly quantify environmental impacts throughout the product life cycle, so that these could be more effectively managed, based on life cycle assessment (¶98). REAL's response to the increasing urgency for how to transform resource efficiency from a concept into reality (¶105) appropriately **focused on tackling two key enabling conditions** related to 'data' and 'capacity' (¶63), thereby "creating appetite for the LCA concept" (¶103). Translating this into layman's terms, REAL's focus was on ensuring that underlying data and methodological needs were being addressed, which would actively support and promote life cycle thinking in policy-making and business decision-making (¶102). In this light, its channelling of resources (representing 44.2% of the overall budget; see **Table 5**) was a valid investment in addressing clear challenges that had reportedly plagued the LCA community to date (regarding database standards, nomenclature, interoperability, ¶106). This has allowed **other system actors to move forward**. This valuable and tangible contribution has been reported into the SP6 EA indicators (¶100).
226. The way in which this contribution has been achieved illustrated another strength of the project. In addition to ensuring REAL's **strong alignment with UNEP's MTS, POW and strategic priorities** (¶99) and **actively supporting the donor's area of interest** (¶102) – particularly in leveraging UNEP's ability to promote life cycle thinking beyond the European Union's borders as a critical method to support sustainable transitions and play a relevant role in decision support and identification of hotspots, possible trade-offs and burden shifting amongst life cycle stages or impact categories – the high level of **engagement of relevant stakeholders** (¶202) chipping in and working for free, spending their free time in technical working groups that supported GLAD has enlarged the pool of available support for the project's implementation. While **gaining efficiency** (¶157), this approach has also **built national ownership** (¶1290). The fact that at project close, the GLAD platform [described as the project's biggest success, ¶147], with 93,471 datasets connected and more in the pipeline (¶128), was seen as having a life of its own with continuing momentum (¶182) and was indicative of a level of country driven-ness (¶2150) that could be reasonably expected to power this initiative forward to realise the envisaged impact. This was fully attributed to REAL's support (¶147).
227. The **timeliness** of REAL was also a strength. As the project reached its close in 2020, the urgency to enhance SCP patterns, together with interest in circular economy solutions and avoiding regrettable substitutions, had indeed **dramatically increased Interest in life cycle thinking** (¶101). In light of the perception that life cycle thinking was a key entry point for addressing the drivers of the three planetary crises (climate change, biodiversity loss, pollution, ¶187) and the **inclusion of life cycle thinking as a cross-cutting feature of the agency's new MTS** (2022-2025), moving forward, there will be conceivably more interest, internally and externally, in the results of the REAL project and the capabilities it has developed.
228. Considering the actual **transformation of inputs (expertise, funds, in-kind contributions) into results**, designed-in complementarity with other initiatives, leveraging of existing multipliers to disseminate results, integration of e-Learning modules into existing training programmes and curricula, and expectations for in-kind contributions from all actors, which enlarged the overall pool of available support, the **project's efficiency was also identified as a strength** (¶156), representing good value for money for both UNEP and the donor. While the project was granted a 30% extension

of time, expenditure came in just under budget (¶155), with satisfactory delivery of outputs and outcomes. Such a situation underscores the **highly effective teamwork of its project and financial management** (¶149).

229. REAL was explicitly intended to complement, build on and/or contribute to other projects in the Resource Efficiency Sub-Programme. The synergies and linkages with several ENRTP-funded sub-projects outlined at project design (¶109) were indeed pursued. However, the **resulting transaction costs of such extensive linkages** (¶195) and the **many small initiatives driven particularly by Indicator 2.3**, together with some opportunistic behaviour in the project's final period (¶146), were **not sufficiently acknowledged, nor budgeted in the design concept**. Such a situation was not sustainable. In the REAL project, there was growing evidence of potential burnout, with staff described as 'over-stretched' and 'completely collapsed with work' (¶199).
230. It would be natural to assume that REAL's pilots would be **key to anchoring the socio-political sustainability of its results**, in so far as such endeavours would seek to build ownership, interest, and commitment of government and other system actors to take achievements forward (¶179). Allocated USD 20,000 each, together, the four represented 4% of the overall budget. Intended to demonstrate different LCT/LC-based approaches, the pilots were highly appreciated by both their implementers and direct recipients (¶138), whose hopes were undoubtedly raised about forward potential. However, their **resourcing with no inclusion of resourcing for future monitoring** (¶138) and **no secured resources to support further dissemination and replication** (¶183), beyond making videos and descriptive materials available for download from the LCI website (¶224), suggested the **absence of a strategic view**, particularly as there were no clear forward linkages in place, beyond a single end-of-pilot dissemination (¶139).
231. REAL was constituted by many different pieces, each seeming to be doing good work. However, the project appeared to **lack a common thread to tie together the disparate parts**. REAL could have significantly strengthened its impact with a consolidating narrative – and with fewer, better resourced constituent activities (¶142), more closely managed and guided, with **purposeful, sustained linkages to the policy-making agenda** (¶180) and **more intentional strategies built into pilot activities** (¶184) that stimulated replication (reproduction of the demonstrated approaches at a similar scale amongst different beneficiaries) and/or scaling up (leading to substantially increased numbers of new beneficiaries, following project close), together with exit strategies and adequate resourcing to maintain momentum in this direction (¶184).
232. The delivery of the e-Learning courses met their target. Their uptake has been rather disappointing, particularly those designed for policy-makers and business decision-makers (¶132). These were actors whose enhanced understanding of the value of LC thinking/data/tools, was expected to motivate them to, respectively, improve the enabling conditions for resource efficiency practices to flourish – and make informed choices, thereby promoting a shift to more sustainable consumption and production patterns. The over-reliance on personal relationships and opportunistic settings, while engaging highly motivated individuals willing to contribute beyond the call of duty (¶144) has not been sufficient to drive and sustained the needed level of uptake. While direct activation spurs action, this tended to deliver short-term results (¶144). There was need for a coordinated, adequately resourced strategy underpinning dissemination and encouraging not only course completion but also the application of life cycle-based concepts.
233. The notion of **partnership for implementation and dissemination** permeated the project's design (¶117). This concept, however, seems to have remained at a theoretical level, with little discussion of expectations around the level of in-kind contributions nor

assessment of absorption capacity. While stakeholder engagement related to GLAD (which reflects a highly coherent set-up and intention) has worked well (¶226), in other parts of the project (pilots, small initiatives), the **notion of partnership was weakened through more instrumental engagement**, responsible for deliverables scrutinized and compensated under the terms of an SSFA. This was **at odds with the notion of wielding influence, having ownership, and embracing expectations of major in-kind contributions** (¶158). Moreover, in **perceiving monitoring as simply adding to their workload for delivering** (¶173), this was another indication of the need to buttress the way in which partnership notions were operationalised.

## B. Summary of project findings and ratings

234. **Table 10** elaborates the key findings used as the basis for establishing the project ratings, drawing on the detailed guidance per criterion and sub-component provided by UNEP's Evaluation Office.

**Table 10 – Summary of Project Findings and Ratings**

Criterion	Summary assessment	Rating
<b>A. Strategic Relevance</b>	<b>Highly relevant to addressing the world's most pressing environmental priorities, fully aligned with UNEP's strategic priorities and expected contributions, strongly reflecting donor interest in enabling environmental foot printing globally.</b>	<b>HS</b>
1. Alignment to UNEP MTS, POW and strategic priorities	Highly aligned with UNEP's MTS for 2014-17 and its related POW, and thematic priorities that supported pursuit of Green Economy, REAL enabled access to relevant data to measure and manage environmental impacts throughout product life cycle and equip policymakers & business to make informed choices to promote shift towards SCP. In UNEP's MTS 2022-2025, transformative shifts targeting drivers of the three planetary crises rely on leveraging a life cycle perspective.	HS
2. Alignment to UNEP / donor strategic priorities	Directly supported EC's interest in focussing on the underlying data and methodological needs to promote LCT in business & policy-making and enable environmental foot printing globally.	HS
3. Relevance to global, regional, national environmental priorities	Timely response to transform resource efficiency notion into practice (LCA + interoperable national databases), addressing gap in capacities to stimulate informed choices, supporting SDG12's push for responsible consumption and production.	HS
4. Complementarity	Comprehensive interlinkages with other projects in SP6 and synergies with ENRTP-funded sub-projects were outlined at project design and realised in implementation	HS
<b>B. Quality of Project Design</b>	<b>Key design strengths were reflected in project's robust alignment with UNEP and EC's strategic priorities, coherence of its logical framework, and efficiency. Areas of slight weakness related to its arrangements for governance/supervision, partnership, and strategy for knowledge management with adequate resourcing and roles.</b>	<b>S</b>
<b>C. Nature of External Context</b>	<b>While the overall context was favourable, political conflict in a pilot country (Nicaragua) and the unimagined effects of the COVID-19 pandemic had some impact on project operations.</b>	<b>F</b>
<b>D. Effectiveness</b>	<b>Availability, quality, and timeliness of outputs were deemed satisfactory; however, the shortfall in achieving envisaged outcomes within project's duration (rather unrealistic as durable change need time) and inadequacy of design and resourcing related to the pilots lessened the full potential impact of the project's overall investment.</b>	<b>MS</b>
1. Availability of outputs	Most, but not all, planned outputs were delivered with some over-achieved, particularly the GLAD platform, training of local experts, and Technical Help Desk that lays ground for further database connection. Four pilot projects demonstrating LCT applications were executed in three regions, with project support also channelled to support two countries (Sri Lanka, Peru) in building LCA data and four countries (Jamaica, Peru, Guatemala, Honduras) on Product Environmental Footprint category rules for green coffee. While three e-Learning courses on LCA were delivered, uptake by business decision-makers (21.8% completion) and policy-makers (10.3% completion) was poor, although the introductory course was better received (67.9% completion).	S



Criterion	Summary assessment	Rating
2. Achievement of project outcomes	The pilots engaged some organisations and individuals in demonstrating key benefits of life cycle applications and enhanced their capacity to make informed choices by applying life cycle thinking and tools. The limited resourcing provided for implementation and dissemination did not extend to triggering SCP strategies and action plans. The comparatively low level of government users of the GLAD platform and e-Learning module targeted at policy-makers pointed to unrealised potential.	MS
3. Likelihood of impact	Admittedly, the project under-achieved on its target to spur governments and organisations in emerging/rapidly growing economies to already actively use LC-based approaches to enhance decision-making. Spurring durable behaviour change understandably requires a time horizon beyond the project's activity cycle. However, more intentional strategies built into the pilot projects and e-Learning courses to trigger replication and/or scaling up, together with exit strategies and resourcing to maintain momentum in this direction would have strengthened impact.	ML
<b>E. Financial Management</b>	<b>Strong adherence to UNEP financial policies and procedures and fulfilment of EC requirements through establishment of suitable systems, processes, and relationships between project and financial management, who showed consistent awareness of and interest in enhancing project performance.</b>	<b>HS</b>
1. Adherence to UNEP's financial policies/ procedures	Suitable systems, processes, and relationships between project's financial & project management were established and actively supported this alignment with UNEP's financial policies and procedures and fulfilment of donor requirements.	HS
2. Completeness of project financial information	All applicable items were complete and made available to the TE. REAL was fully secured by EC; annual reporting fulfilled met standards for completeness. There was close attention by FMO and PM to the project's financial management.	HS
3. Communication between finance and project management	There was a high level of awareness of, interest in, exchange and contact between the financial and project management sides of the project, who appeared united in using these dimensions to enhance project performance.	HS
<b>F. Efficiency</b>	<b>While the guidance concerning a project with two justified 'no cost' extensions of 1 year or less with amendments to the approved results frameworks would usually be rated as "moderately satisfactory", unprecedented impacts stemming from the COVID-19 pandemic were considered as exceptional. In view of the favourable assessment of the project's cost efficiency and synergistic elements, the overall assessment of its efficiency was regarded, on balance, as satisfactory.</b>	<b>S</b>
<b>G. Monitoring and Reporting</b>	<b>REAL's reporting enabled UNEP management and the EC as donor to get an overall grasp of the project's situation on a yearly basis. The inclusion of short explanations and accompanying hyperlinks to retrieve supporting documents formed a valuable knowledge repository. Planning, budgeting, and implementation of monitoring showed room for improvement.</b>	<b>MS</b>
1. Monitoring design and budgeting	Set up to assure successful project implementation at the desired quality, the Monitoring Plan indeed reflected project outputs and indicators, with general sources of verification. However, no individual responsibilities were allocated for monitoring progress against each indicator and there was no provision for disaggregation by relevant stakeholder groups, even though aspects related to promoting gender parity were included at design. The monitoring budget was not dedicated but rather integrated into staff time. While a mid-term review was not planned/budgeted, there was suitable provisioning for an independent terminal evaluation within POW 633.	MU
2. Monitoring of project implementation	Monitoring was carried out fully by the Project Manager to meet reporting requirements with a focus on identifying what was missing and still had to be done, and report the extent to which the project was on time and within budget. This culture seemed to have also been transmitted to implementing partners, given the perception that monitoring simply added to their workload for delivery. The important aspect of reflection, exchange, and learning that monitoring deliver seemed to have been overlooked.	MS
3. Project reporting	Progress in achieving outputs, outcomes, targets, milestones were reported using the same template, which facilitated project management supervisors, and the donor to get an overall grasp of the project's situation on a yearly basis, together with expected linkages to other projects in the EC-funded portfolio, a risk analysis, mitigation measures, planned management actions to address emergent challenges. The inclusion of hyperlinks to retrieve relevant supporting documents served as a useful knowledge repository.	S

Criterion	Summary assessment	Rating
<b>H. Sustainability</b>	<b>With growing interest in the notion that life cycle thinking can help operationalize circular economy solutions and promote more sustainable consumption and production, there is growing likelihood that existing governance structures, processes, agreements, and frameworks will evolve and sustain the benefits associated with REAL's outcomes. In this light, the project could have benefitted from ensuring stronger anchoring of socio-political aspects, ongoing linkages to policy-makers, and an exit strategy that could leverage financing for meaningful dissemination and replication.</b>	<b>ML</b>
1. Socio-political sustainability	While there were favourable socio-political aspects in place (strong anchoring and in-kind contributions of national stakeholders across geographies that have powered its development and continuation) that could be expected to sustain results related to GLAD and national LC database roadmaps, insufficient links were made to the policy-making agenda in the countries where pilot projects were implemented and no resources were secured for further support and monitoring, although the implementing partners and direct beneficiaries highly appreciated the opportunity to deepen their understanding and application of LCT. The poor uptake of the e-Learning life cycle course directed to policy-makers could improve with a more strategic approach to dissemination and engagement.	ML
2. Financial sustainability	Nested under UNEP's LCI Project Document and ongoing POW, which implied ongoing resource mobilization, meant the e-Learning courses would continue to be maintained. UNEP's mobilization of funds from the EC will support further efforts around GLAD (although the extent to which this will drive envisaged outcomes of the national database roadmaps was not clear), together with leveraging of results through the InTex project. At the time of the evaluation, there was no strategy or resource mobilisation to ensure replication and further dissemination of the results of the pilot projects implemented in the four countries, beyond making videos and descriptive materials available for download from the LCI website.	ML
3. Sustainability of the Institutional Framework	The increasing interest in circular economy solutions, more sustainable consumption and production, meant a shared perception that life cycle was a key entry point for addressing the drivers of the three planetary crises (climate change, biodiversity loss, pollution). The existing and evolving governance structures, processes, policies, agreements, and frameworks were seen to be sufficiently robust to continue delivering the benefits associated with the project's outcomes following its closure.	L
<b>I. Factors Affecting Performance</b>	<b>Stakeholder participation and cooperation provided a strong backbone for the project, together with highly satisfactory environmental and social safeguards, a robust public awareness/communications strategy (seen as key for stimulating integration of LC thinking and practices to promote SCP), sufficient preparation and early momentum gained from the establishment of GLAD's Technical Management Group and agreement on three main work areas.</b>	<b>S</b>
1. Preparation and readiness	The project did not benefit from a full PRC review, due to the project's nesting within the larger 'parent' LCI Project Document. Nonetheless, there was evidence that feedback was taken into account from PRC colleagues and the SP6 coordinator to strengthen the logical framework. Initial activities appropriately focussed on the preparation of work plans, with early momentum built around the GLAD platform through identification of three working areas and constitution of its Technical Management Group.	S
2. Quality of project management and supervision	There was consistent focus on achieving planned outputs/outcomes, with high autonomy granted to implementing partners to shape and deliver their services (reflecting trust and competence). However, project management resources were stretched too thinly across numerous initiatives, driven by designed-in expectations to leverage synergies, as well as opportunistic and adaptive management and an ambition to deliver a significant volume. Relatively high staff turnover on the side of both UNEP, as implementer, and EC, as donor, generated some loss of institutional memory, moderated by the knowledge repository built up through annual reporting practices. Project supervision was carried out mainly as an internal UNEP function.	MS
3. Stakeholders' participation and cooperation	Building on a strong analysis of stakeholder groups, the project adopted a strategic approach regarding their roles and contributions, leveraging these to build content and ownership of project outputs and outcomes, supported through regular consultation and communication. Positive effects on equity and livelihoods were demonstrated through pilot projects in Nicaragua and India, respectively.	HS

Criterion	Summary assessment	Rating
4. Responsiveness to human rights and gender equality	Brief, high-level analysis of these considerations and theoretical or superficial notions of how such a project would delve to demonstrate progress. While intentions were tracking data were set at design, these were not translated into monitoring; however, there is evidence of gender/human rights considerations in project design and implementation.	MS
5. Environmental and social economic safeguards	No risks were generated by the project in the four safeguard standards deemed relevant to REAL's planning and management. In fact, its outputs/ outcome (in facilitating resource efficiency and more sustainable consumption and production) were assessed to have had a net positive impact. UNEP requirements were fully met for reviewing risk, monitoring and reporting on safeguarding issues. No safeguarding issues arose. The implementation of pilot projects showed particular consideration for engaging with women and a vulnerable group (migrant farmers) was especially included in India.	HS
6. Country ownership and driven-ness	While high ownership and driven-ness was demonstrated by those directly involved in project implementation and steering (creating strong legacy vis-à-vis the GLAD platform), poor uptake of the e-Learning course for policy-makers and the limited resourcing, duration, and engagement of policy-makers in pilot projects' single dissemination event did not provide sufficient anchors to autonomously catapult momentum forward.	MS
7. Communication and public awareness	The project operationalised the design stage notion that a robust public awareness/communications strategy would be key to transferring and stimulating the integration of life cycle thinking and practices to promote more sustainable consumption and production practices. A wealth of materials were produced, shared with relevant actors during project execution, now stored and available for download from the LCI website. There would be further room to enhance their accessibility and use by relevant stakeholders.	S
<b>Overall Project Performance Rating</b>	<b>The project's strengths lay in its strategic relevance, level of stakeholder participation and cooperation, and efficient conversion of resources and inputs into results, underpinned by the highly effective teamwork of its project and financial management. Likelihood of impact and sustainability of project outcomes could have been enhanced through more adequate resourcing of fewer, more targeted, and more directed demonstration activities with a stronger focus on socio-political linkages and aspects to support monitoring, dissemination, uptake, and replication following project closure.</b>	<b>S</b>

235. Based on a weighted assessment (see **Figure 6**), the project's performance is deemed to be **'Satisfactory'**.

Figure 6 – Weighted Assessment of REAL’s Performance

Evaluation criteria	Rating	Score	Weight	Weighted Score
<b>Strategic Relevance</b>	<b>Highly Satisfactory</b>	<b>6.00</b>	<b>6</b>	<b>0.4</b>
<i>Alignment to UNEP’s MTS, PDW and strategic priorities</i>	Highly Satisfactory	6	0.5	
<i>Alignment to Donor/Partner strategic priorities</i>	Highly Satisfactory	6	0.5	
<i>Relevance to regional, sub-regional and national issues and needs</i>	Highly Satisfactory	6	2.5	
<i>Complementarity with existing interventions</i>	Highly Satisfactory	6	2.5	
<b>Quality of Project Design</b>	Satisfactory	5	4	0.2
<b>Nature of External Context</b>	Favourable	2		
<b>Effectiveness</b>	<b>Moderately Satisfactory</b>	<b>4.11</b>	<b>45</b>	<b>1.9</b>
<i>Availability of outputs</i>	Satisfactory	5	5	
<i>Achievement of direct outcomes</i>	Moderately Satisfactory	4	30	
<i>Likelihood of impact</i>	Moderately Likely	4	10	
<b>Financial Management</b>	<b>Highly Satisfactory</b>	<b>5.50</b>	<b>5</b>	<b>0.3</b>
<i>Adherence to UNEP’s policies and procedures</i>	Satisfactory	5		
<i>Completeness of project financial information</i>	Satisfactory	5		
<i>Communication between finance and project management staff</i>	Highly Satisfactory	6		
<b>Efficiency</b>	Satisfactory	5	10	0.5
<b>Monitoring and Reporting</b>	<b>Moderately Satisfactory</b>	<b>4.00</b>	<b>5</b>	<b>0.2</b>
<i>Monitoring design and budgeting</i>	Moderately Unsatisfactory	3		
<i>Monitoring of project implementation</i>	Moderately Satisfactory	4		
<i>Project reporting</i>	Satisfactory	5		
<b>Sustainability</b>	<b>Moderately Likely</b>	<b>4.00</b>	<b>20</b>	<b>0.8</b>
<i>Socio-political sustainability</i>	Moderately Likely	4		
<i>Financial sustainability</i>	Moderately Likely	4		
<i>Institutional sustainability</i>	Likely	5		
<b>Factors Affecting Performance</b>	<b>Satisfactory</b>	<b>4.75</b>	<b>5</b>	<b>0.2</b>
<i>Preparation and readiness</i>	Satisfactory	5		
<i>Quality of project management and supervision</i>	<b>Moderately Satisfactory</b>	<b>4.00</b>		
<i>UNEP Implementing Agency</i>	Moderately Satisfactory	4		
<i>Stakeholder participation and cooperation</i>	Highly Satisfactory	6		
<i>Responsiveness to human rights and gender equity</i>	Moderately Satisfactory	4		
<i>Environmental and social safeguards</i>	Highly Satisfactory	6		
<i>Country ownership and driven-ness</i>	Moderately Satisfactory	4		
<i>Communication and public awareness</i>	Satisfactory	5		
	<b>Satisfactory</b>		<b>100</b>	<b>4.42</b>

### C. Lessons learned

Lessons learned that emerged from the evaluation were anchored in the conclusions of the evaluation, with cross-referencing to relevant paragraphs within the evaluation report.

The lessons learned illustrate good practices and successes that could be replicated in similar contexts. These have been derived from challenges encountered during project design and implementation, which should be avoided in the future.

<b>Lesson Learned #1:</b>	<b>Designed-in links and expectations for collaboration that seek to build synergies and leverage a more holistic, systemic approach tend to generate high transaction costs, which may offset the intended benefits and burn out staff.</b>
<b>Context/comment:</b>	Part of REAL’s justification at design was its intended complementarity, building of synergies with and contributions to other projects within UNEP’s resource efficiency sub-programme and the UNEP-implemented portfolio of projects funded by the EC under the GCGP/ENRTP (¶229). Not only were REAL’s pilot projects budgeted on a shoestring (¶230), the resourcing of the overall project was characterized in a similar way (¶114). This perception shared by project stakeholders was an unwitting effect of such high built-in expectations for synergizing, or the absence of a red thread that tied together and consolidated the different parts. In any case, collaboration has a cost, which is best recognized as part of planning and resourcing. Otherwise, it can lead to the weakened effects on impact and staff overload seen in REAL (¶230).

<b>Lesson Learned #2:</b>	<b>When project monitoring is oriented to fulfilling minimum reporting requirements and implementing partners perceive monitoring as a burden and simply in service to that aim, both sides miss out the potential of organisational learning to boost insight, project performance and impact.</b>
<b>Context/comment:</b>	<p>While the notion of partnership was mentioned extensively throughout REAL’s design narrative, the transformation of partners into contractors/instruments for implementation risks weakening the very aspects valued in the partnership (i.e. its operationalisation appears to be somewhat instrumental, “for implementation and dissemination” (¶233).</p> <p>Given the tremendous value that has been proven to derive from the organisational learning aspects of monitoring, which add another layer of value beyond identifying what is missing and what still has to be done (¶169), more efforts towards building an organisational learning, which can also be reflected in strengthening partnership strategy can be expected to deepen and drive impact, as well as serve more short-term functions of recalibration (¶169).</p>

## D. Recommendations

<b>Recommendation #1:</b>	<b>Review the design, implementation, and management of pilots in REAL’s successor project, InTex, to enhance their intended impact, paying attention to adequate resourcing of fewer, more targeted and directed demonstration activities with strong focus on socio-political linkages to enhance likelihood of impact.</b>
<b>Challenge/problem to be addressed by the recommendation:</b>	<p>This recommendation reflects the conclusion that the REAL project was while well-intentioned and followed good practice in terms of including demonstration activities. However, the intention of pilots is to provide evidence for and motivate change in attitude and/or behaviour. The absence of strong linkages to the national policy agenda in these pilots, which would address key enabling condition, reduced their coherence. Consequently, REAL’s pilots were designed, contracted, monitored, and implemented with more of a focus on delivering outputs than outcomes related to ensuring replication and wider change. Where projects are intended to address enabling conditions, it is important to ensure that the design of demonstration activities has clear intentionality, firm links to the policy agency, closer management and guidance, with adequate resourcing for implementation, management, and monitoring (including post project), and with an exit strategy that secures relevant resources to consolidate effects on policy agenda and further dissemination and replication.</p>
<b>Priority Level:</b>	Opportunity for Improvement
<b>Responsibility:</b>	InTex Project Manager
<b>Proposed implementation timeframe, measurable performance target</b>	<p>April to July 2022</p> <p>Reviewed design, implementation plan, and resourcing of InTex demonstration activities, considering above-mentioned aspects</p>
<b>Cross-references to rationale and supporting documents</b>	<p>¶230 in Conclusion. Supporting evidence in: ¶136 (leveraging pilots to draw out advice for policy-makers did not happen); ¶180 (pilots characterized as “very local”, with insufficient links to policy agenda in the respective countries); ¶183 (despite intentionality for replication, prospects are weak); ¶140 (single end-of-pilot dissemination event</p>

	<p>which contained government actors but little evidence of connection and application beyond these late 2018/early 2019 activities); ¶142 (better resourcing of pilots, together with longer duration, would have allowed for engaging relevant policy-makers in a more rigorous way and provided a platform to leverage pilot insights into formulation and/or strengthening needed policy initiatives); ¶180 and ¶218 (despite being involved in dissemination events, no government actors have thus far reported effects that could be directly attributed to the project); ¶173 (short duration and limited resourcing linked with limited monitoring requirements – this may have also weakened focus on organisational learning functions of monitoring); ¶184 (recognition by project management that the REAL pilots had been inadequately resourced, insufficiently guided and directed, with insufficient resources secured to sustain their results and benefits.</p>
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<b>Recommendation #2:</b>	<b>Review the strategy for enhancing uptake of the e-Learning courses, especially for policy-makers and business decision-makers</b>
<b>Challenge/problem to be addressed by the recommendation:</b>	<p>This recommendation reflects the conclusion that uptake of e-Learning courses for policy-makers and business decision-makers was comparatively poor, even though this investment was designed to enhance their capacity. Their enhanced understanding of the value of life cycle thinking/data/tools was expected to motivate them to, respectively, improve the enabling conditions for resource efficiency practices to flourish – and make informed choices, thereby promoting a shift to more sustainable consumption and production patterns. As part of this review, opportunities to strengthen resolve to apply life cycle thinking as part of the certification could be explored (shift focus to application with a certificate of application rather than a certificate of completion). In this light, there could be linkages made to UNEP’s Digital Transformation (DT) sub-programme which relates to accelerating and scaling environmental sustainability by applying data, digital technologies and solutions in UNEP’s key activities, products, services.</p>
<b>Priority Level:</b>	Opportunity for Improvement
<b>Responsibility:</b>	LCI Project Manager
<b>Proposed implementation timeframe, measurable performance target</b>	<p>April to July 2022</p> <p>More intentional strategy, within existing resourcing, that would enhance likelihood of uptake of LCT e-Learning courses, considering above-mentioned aspects.</p> <p>Discussion with DT Sub-Programme Coordinator (or other relevant UNEP staff member) to identify meaningful contribution to its EAs; in case there would not be meaningful contributions, that it is also acceptable.</p>
<b>Cross-references to rationale and supporting documents</b>	<p>¶232 in Conclusion. Supporting evidence in: ¶66 and ¶93 (investment in developing e-Learning courses was intended to develop capacity to induce change of practice); ¶75 (the project fell short on the intention to sign MoUs with various institutions regarding long-term use of e-Learning material, although a handful of letters of commitment have been received ¶145); ¶132 (21.8% completion rate for business decision-makers, 10.3% completion rate for policy-makers); ¶100 (higher uptake is associated with increased understanding and knowledge of LCT approaches, seen as needed to stimulate informed decision-making by system actors); ¶144 (dissemination strategy deployed has not driven</p>

	<p>high uptake; direct activation yields short-lived results – pockets of uptake). Refer to traction statistics in <b>Table 7</b>.</p> <p>The justification for working on this recommendation is that there are resources for maintaining the e-Learning courses and ongoing discussion with education institutions, and occasional activation through LCI's PSC (¶181)</p>
<b>Recommendation #3:</b>	<b>In support of Recommendation #2, design and pilot an approach to developing better traction for the LCT e-Learning course targeted at policy-makers in South Africa</b>
<b>Challenge/problem to be addressed by the recommendation:</b>	<p>Related to ¶232 in Conclusion. The poor uptake of the e-Learning course targeting policy-makers represents an opportunity to rethink the dissemination strategy to enhance traction. During data collection for the TE, respondents mentioned that the situation in South Africa is particularly ripe for such capacity-building. To date, life cycle work in South Africa has been mostly industry-focussed. According to REAL project stakeholders interviewed, there has not been a push for life cycle thinking towards policy-makers in South Africa. Now that the country's extended producer responsibility framework has been put firmly in place, there is an opportunity to deepen understanding of life cycle thinking and applications on the part of key government ministries, which could be expected to support them in bringing life cycle thinking into the policy framework. Piloting such an initiative in South Africa would provide UNEP and other project stakeholders with important design and implementation experience as well as ideally generate useful lessons for replication and scaling up in other regions at a similar level of development and readiness, where such capacity building could act as a spur for triggering more favourable framework conditions to accelerate the integration of resource efficiency thinking and sustainable consumption and production patterns into supply chains.</p>
<b>Priority Level:</b>	Opportunity for Improvement
<b>Responsibility:</b>	LCI Project Manager, in liaison with NCPC-SA Director and interviewed representative (Lee Hendor Ruiters)
<b>Proposed implementation timeframe, measurable performance target</b>	<p>April to July 2022</p> <p>Discussion has taken place between LCI Project Manager (or relevant UN staff member) and relevant NCPC-SA leadership to explore potential interest and utility of such a pilot that would benefit South Africa as well as have lessons learned for replication and scaling up</p>
<b>Cross-references to rationale and supporting documents</b>	<p>¶217 in Conclusion (identifies this opportunity). Further material from interviews mentioned three government ministries [Department of Trade and Industry (the dti), Department of Science &amp; Innovation, Department of Agriculture, Forestry and Fisheries] that are critical when it comes to leveraging life cycle thinking. It was reported that there is an opportunity for a concerted, focussed policy drive on this in South Africa.</p>
<b>Recommendation #4:</b>	<b>Review LCI portfolio to ensure that relevant indicators that support the progressive improvement of gender equity/human rights have been</b>

	<b>formulated and are being tracked and reported as part of the project's annual reporting.</b>
<b>Challenge/problem to be addressed by the recommendation:</b>	This recommendation considers the significance of the perception that monitoring is, overall, perceived to simply add a burden to the workload for delivering and the orientation demonstrated in this project for monitoring to be aimed at fulfilling minimum reporting requirements (this may be related to over-stretched project management resources, driven by high transactional costs related to the launch of such a diversity of activities, particularly in relation to fulfilment of Indicator 2.3, irrespective of the insufficient resourcing provided in the design to do so). The fact that the project intended to identify, quantify and report on gender equity issues; yet the Monitoring Plan did not actually track these aspects is a shortfall that can be easily rectified, through reporting on sex-disaggregated indicators and setting of targets, as well as transmitting the importance of promoting gender equity and human rights as part of the project's general culture.
<b>Priority Level:</b>	Opportunity for Improvement
<b>Responsibility:</b>	LCI Project Manager, InTex project Manager
<b>Proposed implementation timeframe, measurable performance target</b>	April to July 2022 Reviewed design, implementation plan, and resourcing of LCI projects, and particularly InTex as REAL's successor, to verify inclusion of appropriate gender equity/human rights indicators in the Monitoring Plan, Reporting Template
<b>Cross-references to rationale and supporting documents</b>	¶233 in Conclusion. Supporting evidence in: ¶116 (project was designed for progress to be reported on annually against output indicators mapped to the logical framework, enabling project's managers/supervisors to be kept informed of achievements, risks, and proposed mitigation strategies); ¶205 (the project's design narrative mentions importance of being responsive to gender issues/human rights); ¶207 (stakeholders indicated that gender equity issues are not well-developed in life cycle work in general and it is something that should be addressed more intentionally)  ¶166 (Monitoring Plan was established but it did not provision for disaggregation by relevant stakeholder groups, including gender; no gender indicators included in design even though gender was to be a key criterion applied in intervention design (see p21, Product Document), with 30% participation per gender set in the design document but targets were not mentioned in the Monitoring Plan and consequently, did not flow through to project reporting



## ANNEX I. RESPONSE TO STAKEHOLDER COMMENTS

**Table 11 – Response to Stakeholder Comments received but not (fully) accepted by Reviewers**

Page Ref	Stakeholder comment	Evaluator(s) Response	UNEP Evaluation Office Response
Page 13 – section 24	<p>In reference to the findings:</p> <p>“The fact that the life cycle team has been concentrated in UNEP’s Economy Division, located in Paris, with some activity in Regional Offices (primarily ROLAC) presents a challenge, in the Evaluator’s view, for quickly developing the sensitivity and understanding of how to incorporate life cycle thinking into projects and programming across the wider organisation.”</p> <p>Comment: Interesting finding - would you have a recommendation to add in the report related to this point?</p>	<p>This is an observation about the scale of challenge of building up understanding of life cycle thinking and how to integrate it across all programming, given that this notion is highly relevant to UNEP’s new MTS. I understand that UNEP is developing guidance for developing Programmes (but I have not seen it) which requires all new programmes to address particular themes and aspects. I do not know enough about UNEP’s internal workings and the dynamics currently in play to develop a recommendation</p>	<p>Mechanisms need to be in place in UNEP to effectively apply the 3-pronged delivery approach for the integrated implementation of the 3 principal thematic areas of action, underpinned by 2 foundational subprogrammes and facilitated by 2 enabling subprogrammes of the MTS 2022-2025. The findings and scope of the REAL project evaluation do not prescribe an UNEP-wide recommendation.</p>
Page 13 – section 26	<p>In reference to the project’s pilot:</p> <p>“Likelihood of impact and sustainability of project outcomes could have been enhanced through more adequate resourcing of fewer, more targeted, and more directed demonstration activities with a stronger focus on socio-political linkages and aspects to support monitoring, dissemination, uptake, and replication following project closure.”</p> <p>Comment: I agree - I wonder how to deal with the sensitivities related to geographical balance and distribution of pilots for a global project? I am interested in suggestions for future projects consideration. ADD Recommendation?</p>	<p>Reformulated Recommendation 1 to foreground this idea:</p> <p>Review the design, implementation, and management of pilots in REAL’s successor project, InTex, to enhance their intended impact, <i>paying attention to adequate resourcing of fewer, more targeted and directed demonstration activities with strong focus on socio-political linkages to enhance likelihood of impact</i></p>	<p>The addition made to the recommendation by the Evaluator is sufficient. The emphasis is on enabling sustainability to enhance likelihood of impact.</p>
Page 14 – Recommendations:	<p><b>Recommendation 3:</b> Design and pilot an approach to developing better traction for the LCT e-Learning course targeted at policy-makers in South Africa.</p>	<p>According to UNEP guidance, related recommendations should still be separated. I</p>	<p>Reformulation highlights the connection between recommendation 2 and 3. Recommendation 3 refers specifically to</p>

Page Ref	Stakeholder comment	Evaluator(s) Response	UNEP Evaluation Office Response
<p>Recommendation 3</p>	<p>Comment: How does R3 differs from R2?</p>	<p>have added the phrase to link the two recommendations</p> <p>Also, by separating this idea out into another recommendation, this allowed for recording to the justification and pointing out information gathered through interviewing that could be used to follow-up the idea in South Africa, as it was a very specific opportunity that emerged through the evaluation</p> <p>Recommendation 3 reformulated as: <i>In support of Recommendation 2, design and pilot an approach to developing better traction for the LCT e-Learning course targeted at policy-makers in South Africa.</i></p>	<p>the LCT e-Learning course targeted at policy-makers in South Africa.</p>
<p>Page 61 - Table 10 Summary of Projects findings and ratings</p>	<p>1. Sustainability of the Institutional Framework</p> <p>Comment: I would like to better understand what is the expectation under 'sustainability of the institutional framework and how a project could do better. Can a short explanation/clarification on this be added to the report</p>	<p>Accepted. Added clarification under the Sustainability of Institutional Framework section (earlier in the text) within an added Footnote 46 as follows: <i>In this respect, the extent to which sustainability of project outcomes (especially those relating to policies and laws) is depending on issues relating to institutional frameworks and governance is assessed. It considers where 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 closure. Whether institutional capacity development efforts are likely to be sustained is also considered under this dimension. Source: UNEP Guidance on Detailed Evaluation Criteria</i></p>	<p>The criterion was rated Likely. According to the UNEP Evaluation Criteria Ratings Matrix, for a rating of Highly Likely, the sustainability of project outcomes would be moderate-to-not dependent on institutional support; have presence of a strong/ robust/ fully institutionalized mechanism; enhanced capacity of individuals; and an exit strategy with institutional component initiated.</p>

<b>ANNEX II. PEOPLE CONSULTED DURING THE EVALUATION</b>
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Table 12 – People Consulted during the Evaluation

Organisation	Name	Position	Gender
European Commission	Raluca Ionescu	Programme Manager	Female
UNEP	Llorenç Mila I Canals	UNEP, Head of Life Cycle Initiative (LCI) Secretariat – REAL Project Manager (March 2016-March 2017)	Male
UNEP	Claudia Giacobelli	REAL Project Manager (January-2020 to project close in December 2020)	Female
GIZ	Kristina Bowers	REAL Project Manager (March 2017 – until April 2018)	Female
UNEP	Janet Kabatha	Programme Management Associate	Female
UNEP	Fuaad Alkizim	Fund Management Officer	Male
UNEP	Adriana Zacarias Farah	(formerly) Regional Office Latin America and the Caribbean	Female
UNEP	Ignacio Sanchez Diaz	Regional Office Latin America and the Caribbean	Male
UNEP	Djaheezah Subratty	Sub-Programme Resource Efficiency (SP6) Coordinator	Female
UNEP	Steven Stone	Chief of Resources and Markets Branch	Male
UNEP	Elisa Tonda	Head, Consumption and Production Unit	Female
UNEP	Fulai Sheng	Head, Economic and Trade Policy Unit	Male
UNEP	Liazzat Rabbiosi	(formerly) Project Manager, Eco-Innovation (REEDTE)	Female
World Resources Forum (Scientific Director)	Sonia Valdivia	LCI Project Steering Committee	Female
USDA-ARS-NAL (United States National Department of Agriculture National Agricultural Library)	Peter Arbuckle	Branch Chief, Scientific Data Management LCI Project Steering Committee and GLAD's Technical Management Group (TMG)	Male
EPD-America Latina Hub EPF LATAM (Hub Latin America)	Claudia Pena Urrutia	LCI Project Steering Committee	Female
Anthesis (Executive Director), United States	Jim Fava	LCI Co-founder	Male
Peruvian LCA Network (PELCAN) at Pontificia Universidad Católica del Perú (Peru)	Ian Vazquez Rowe	Director of PELCAN	Male
National Cleaner Production Centre (NCP) South Africa	Lee-Hendor Ruiters	Regional Manager	Male
Federal University of São Carlos (Brazil)	Diogo Aparecido Lopes Silva	Adjunct Professor	Male
ecoinvent (Switzerland)	Carl Vadenbo	Project Manager	Male
TGH ThinkSpace (South Africa)	Brett Cohen	Professor	Male

<b>Organisation</b>	<b>Name</b>	<b>Position</b>	<b>Gender</b>
Culturambiente (Ecuador)	Beatriz Rivela	Co-founder	Female
National Metal and Materials Technology Centre (MTEC, Thailand)	Nongnuch Poolsawad	Professor	Female
National Science and Technology Development Agency (NSTDA, Thailand)	Jitti Mungkalasiri	Senior Researcher	Male
University School of Advanced Studies (TERI, India)	Chubamenla Jamir	Professor	Female
Indian Institute of Technology Tirupati (IITTP, India)	Suresh Jain	Professor	Male
Guateambienta (Guatemala)	Edgar Sacayon	Resource Efficiency Officer	Male
Rede Empresarial Brasileira de Avaliacao de Circulo de Vida (Brazil)	Sonia Karin Chapman	Executive Secretary	Female
Foro Nacional de Reciclaje (FONARE, Nicaragua)	Merliz Mendoza	Consultant	Female
Communications Consultant	Thad Mermer	Consultant for LCI	Male
Information Technology Consultant	Oliver Kusche	Consultant for GLAD	Male

## ANNEX III. KEY DOCUMENTS CONSULTED

### Project planning and reporting documents

- Project Document for the EC GPGC project: 'REAL: Resource Efficiency through Application of Life cycle thinking'
- Project Document #621.3, formerly #621.1 (signed 18.01.2018), 'The Life Cycle Initiative: Enabling Global Use of Life Cycle Knowledge to Support Decision-Making for Sustainable Consumption and Production'
- Annual Project Progress Report (reporting Period 01/01/2019 to 31/12/2019)
- Life Cycle Initiative Progress Report 2020 [Life Cycle Initiative Progress Report 2020 – Life Cycle Initiative](#)
- REAL Activities Extension Proposal
- EC Extension of REAL until December 2020
- Budget GPGC REAL\_extension to December 2020\_COVID-19
- Quarterly financial reports (selected) for 2019 and 2021
- Annual Project Reports, 2019 and 2020

### Project outputs – Overall

- Final Project Report, covering 01.01.2020-31.12.2020 and looking back since beginning of project implementation
- Annual Project Progress Reports for 2015, 2016, 2017, 2018, 2019
- UNEP website project achievements: <https://www.unep.org/es/node/20854>
- UNEP LCI website description of the Life Cycle Initiative <https://www.unep.org/explore-topics/resource-efficiency/what-we-do/life-cycle-initiative> and <https://www.lifecycleinitiative.org/>
- Overview of Life Cycle Initiative available from <https://open.unep.org/project/PIMS-01991>
- Mission Report (Project Team led by Kristina Bowers) to India for Circular Economy and Sustainable Public Procurement, New Delhi, 6-7 September 2018
- Mission Report (Project Team led by Llorenç Mila I Canals) Fourth Session of the UN Environment Assembly to Nairobi, Kenya, (6-15 March 2019)

### Project Outputs Work Package 1: Criteria for LCA database management are applied in national interoperable LCA databases and increasingly established and supported through Global Network for Interoperable LCA databases (GLAD)

- Minutes of Technical Management Group (TMG) for Global LCA Data Access Network (GLAD) for 29 January 2020 11 March 2020 27 March 2020, 22 April 2020, 26 August 2020, 7 Oct 2020, 18 Nov 2020
- Presentations on GLAD: October 2017 and February 2019
- Numerous Mission Reports related to LC networks and GLAD from 2015 to 2019
- Results of first user Focus Group, September 2021 regarding GLAD

**Project Outputs Work Package 2: Capacity development tools (eLearning courses on LCT approaches; success stories / examples of benefits of using life cycle based approaches; training of a pool of local technical experts) and capacity developed through pilot projects within public and private organisations inducing change of practices within organisations**

- UNEP's E-learning courses on Life Cycle Thinking webinar registration <https://www.unep.org/events/webinar/e-learning-courses-life-cycle-thinking>
- Letter of Commitment from University of the Witwatersrand Johannesburg's School of Chemical and Metallurgical Engineering, 19 October 2020
- Promotion Letter from University of Balamand, 9 November 2020
- Letter from Universidad Politécnica de Madrid Escuela Técnica Superior de Ingenieros Industriales, Departamento de Ingeniería Química Industrial y Medio Ambiente, 11 November 2020
- Institutional Presentation of Rede Empresarial Brasileira de Avaliação de Ciclo de Vida (Rede ACV), which promotes the Introductory course on LCA to its members
- Channels Used to Disseminate Courses, Provided by ThinkSpace
- SSFA withecoinvent, 2018; SSSFA with FONARE, 2017; SSFA with Guatemambiente, 2017; SSFA with MTEC, 2017
- Minutes of Inception Calls for pilot projects with MTEC, TERI, Guatemambiente
- Deliverables related to E-Learning module kit on "Introduction to Life Cycle Thinking", produced by Culturambiente (June 2017)
- Deliverables produced by Guatemambiente and their Final Report (November 2018)
- Description of Dissemination Workshop (26 November 2018) conducted by TERI and their Final Report (November 2018)
- Deliverables produced by MTEC and their Final Report (December 2018)
- Deliverables produced by FONARE and their Final Report (March 2019)

**Previous evaluations**

- UNEP Evaluation Office (May 2016), Karla Van Eynde, "Evaluation of the EC-UNEP Strategic Cooperation Agreements under the EU Thematic Programme for Environment and Sustainable Management of Natural Resources including Energy (ENRTP) <https://wedocs.unep.org/rest/bitstreams/65922/retrieve>
- UNEP Evaluation Office (23 Jan 2020), Michael Spilsbury/Janet Wildish, "Resource Efficiency Sub-Programme Evaluation Summary", adapted from presentation of Dr. Marcel Crul (Team Lead), November 2018 <https://wedocs.unep.org/bitstream/handle/20.500.11822/31123/UNEP%20RESP%20Evaluation%20summary%20CPR%20%20JW%20FOR%20CIRCULATION%20v.23.01.20%20%20%20Read-Only.pdf?sequence=5&isAllowed=y>
- UNEP Evaluation Office (October 2017) Terminal Evaluation of "Resource Efficiency and Eco-Innovation in Developing and Transition Economies" [https://wedocs.unep.org/bitstream/handle/20.500.11822/25446/01686\\_2017\\_te\\_unenvironment\\_regional\\_spre\\_spscpc\\_eco-innovation.pdf?sequence=1&isAllowed=y](https://wedocs.unep.org/bitstream/handle/20.500.11822/25446/01686_2017_te_unenvironment_regional_spre_spscpc_eco-innovation.pdf?sequence=1&isAllowed=y)
- UNEP Evaluation Office (January 2017) Terminal Evaluation of "Policy, macro-economic assessments and instruments to empower governments and business to advance resource efficiency and move towards a Green Economy", commonly known as the Green Economy Initiative (GEI), [https://wedocs.unep.org/bitstream/handle/20.500.11822/20801/688\\_2017\\_te\\_spre\\_move\\_towards\\_a\\_green\\_economy.pdf?sequence=1&isAllowed=y](https://wedocs.unep.org/bitstream/handle/20.500.11822/20801/688_2017_te_spre_move_towards_a_green_economy.pdf?sequence=1&isAllowed=y)

## Reference documents

- UNEP Programme Framework for Programme #6 Resource Efficiency 2018-2021 [https://wedocs.unep.org/bitstream/handle/20.500.11822/22721/SP%206%20-%202018-2021\\_Resource%20Efficiency%20Programme%20Framework.pdf?sequence=33&isAllowed=y](https://wedocs.unep.org/bitstream/handle/20.500.11822/22721/SP%206%20-%202018-2021_Resource%20Efficiency%20Programme%20Framework.pdf?sequence=33&isAllowed=y)
- UNEP Medium Term Strategy (MTS), 2014-2017 <https://www.unep.org/resources/report/unep-medium-term-strategy-2014-2017>
- UNEP Gender Equality and the Environment Policy and Strategy, described as an adjunct to MTS 2014-2107 [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](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)
- UNEP Medium Term Strategy (MTS), 2022-2025 <https://www.unep.org/resources/policy-and-strategy/people-and-planet-unep-strategy-2022-2025>
- UNEP Programme of Work (POW), 2018-2019 [https://wedocs.unep.org/bitstream/handle/20.500.11822/7707/-Proposed\\_programme\\_of\\_work\\_and\\_budget\\_for\\_the\\_biennium\\_2018%e2%80%922019\\_Report\\_of\\_the\\_Executive\\_Director-2016POW\\_2018-2019\\_as\\_approved\\_by\\_UNEA\\_.pdf?sequence=1&isAllowed=y](https://wedocs.unep.org/bitstream/handle/20.500.11822/7707/-Proposed_programme_of_work_and_budget_for_the_biennium_2018%e2%80%922019_Report_of_the_Executive_Director-2016POW_2018-2019_as_approved_by_UNEA_.pdf?sequence=1&isAllowed=y)
- UNEP LCI (2016) Opportunities for National Life Cycle Network Creation and Expansion Around the World <https://www.lifecycleinitiative.org/wp-content/uploads/2016/10/mapping-publication-9.10.16-web.pdf>
- US Environmental Protection Agency (2016), 'Advancing Resource Efficiency in the Supply Chain: Observations and Opportunities for Action' <https://www.oecd.org/environment/ministerial/whatsnew/2016-ENV-Ministerial-United-States-Report-Resource-Efficiency-G7-US-Workshop.pdf>
- Life Cycle Sustainability Assessment for Decision-Making (2020) <https://www.sciencedirect.com/book/9780128183557/life-cycle-sustainability-assessment-for-decision-making>
- Switzerland's Graduate Institute of Geneva (2019) <https://www.graduateinstitute.ch/communications/news/applying-benefits-lifecycle-impact-frameworks-sdgs-new-trend>
- Goedkoop, M. (2016) <https://pre-sustainability.com/articles/about-the-global-lac-access-to-data-initiative-sustainable-data-alignment/>
- Stucki, M., Jattke, M., Berr, M. et al. "How life cycle-based science and practice support the transition towards a sustainable economy". International Journal of Life Cycle Assessment, 26,1062–1069 (2021) <https://doi.org/10.1007/s11367-021-01894-1>

## ANNEX IV. PROJECT CO-FINANCING

### Table 13 - Co-Financing Summary

A	<u>In-kind contributions (staff time)</u>					
	2016	2017	2018	2019	Grand Total	
<b>Staff</b>						
P4, ROLAC		10,069	4,155	4,071	<b>18,294</b>	
P5, Economy Division	3,103	3,356			<b>6,459</b>	
P3, Life Cycle Initiative		9,454	14,512		<b>23,966</b>	
P4, Economy Division	34,349	26,607	27,485	55,609	<b>144,050</b>	
P4, ROA	4,595				<b>4,595</b>	
D1, Economy Division	6,755	7,157	6,578	6,614	<b>27,105</b>	
	<b>48,802</b>	<b>56,643</b>	<b>52,729</b>	<b>66,294</b>	<b>224,469</b>	
\$ to EUR rate:	0.942	0.837	0.879	0.896		
EUR	<b>45,972</b>	<b>47,410</b>	<b>46,349</b>	<b>59,400</b>	<b>199,131</b>	
<b>B</b>	<u>Cash contributions</u>					
NPC Sri-Lanka		74,970			<b>74,970</b>	
Pontificia Universidad		123,359			<b>123,359</b>	
Culturambiente SwitchMed			35,550		<b>35,550</b>	
Oliver Kusche Contract				19,727	<b>19,727</b>	
	-	<b>198,329</b>	<b>35,550</b>	<b>19,727</b>	<b>253,606</b>	
\$ to EUR rate:	0.942	0.837	0.879	0.896		
EUR		<b>166,001</b>	<b>31,248</b>	<b>17,675</b>	<b>214,925</b>	
Total	<b>48,802</b>	<b>254,972</b>	<b>88,279</b>	<b>86,021</b>	<b>478,075</b>	
\$ to EUR rate:	0.942	0.837	0.879	0.896		
EUR						
<b>Total in EUR</b>	<b>45,972</b>	<b>213,412</b>	<b>77,598</b>	<b>77,075</b>	<b>414,056</b>	

Source: FMO for REAL Project

YEAR	TOTAL CO-FIN USD	CASH	IN-KIND
2015		-	-
2016	148,564	50,000	98,564
2017	273,812	210,660	63,152
2018	88,995	35,550	53,445
2019	135,837	30,000	105,837
2020	-	-	-
	<b>647,207</b>	<b>326,210</b>	<b>320,997</b>
	Co-financing in ProDoc (Euro)		
	<b>619,545</b>		



## ANNEX V. BRIEF CV OF THE EVALUATOR

### Dr. Joyce Miller

<b>Profession</b>	Organisational Development Consultant, Resource Efficiency Programme Designer and Trainer, and Executive Leadership Coach
<b>Nationality</b>	Swiss and Canadian
<b>Country experience</b>	<ul style="list-style-type: none"> <li>• Europe: Denmark, Germany, Montenegro, The Netherlands, Spain, Sweden, Switzerland, Turkey, United Kingdom</li> <li>• Mashrek / Maghreb: Algeria, Egypt, Jordan, Lebanon, Morocco, Syria, Tunisia</li> <li>• Africa: Ghana, Kenya, Liberia, Nigeria, Rwanda, South Africa, South Sudan, Tanzania, Uganda</li> <li>• Americas: Canada, Colombia, Ecuador, Mexico, Peru, United States</li> <li>• Asia: Bangladesh, China, India, Indonesia, Japan, Malaysia, Pakistan, Sri Lanka, Thailand, Viet Nam</li> </ul>
<b>Education</b>	<ul style="list-style-type: none"> <li>• PhD in Economic Science (Organisational Learning, Stakeholder Dialogue, Innovation), Université de Lausanne/HEC, Switzerland (2008)</li> <li>• Master Coach in Leadership and Communication, IDC Institute Genève, Switzerland (2010)</li> <li>• Master of Business Administration (MBA), University of Western Ontario, Canada (1989)</li> <li>• Intensive Training Course in Environmental Assessment and Management, University of Aberdeen, Scotland (1994)</li> <li>• Honours Bachelor of Arts (Political Science and Administrative Studies), University of Waterloo, Canada (1986)</li> </ul>

### Short biography

Ms. Miller is an independent consultant and Founder/Director of the Swiss-based Capacity-Building Resource Exchange (CAPRESE) Sàrl, which supports the development of individual, team, and organisational capacities to create vision, mission, and strategy – and to implement change.

Key specialties and capabilities cover:

- Building capacities in individuals and organisations on Resource and Energy Efficiency, Circularity/Life Cycle, Chemical Management, Innovation; Program Design, Pedagogy, Training
- Strategy Consultancy; Leadership Development, Vocational Education; Organisational Assessment, Entrepreneurship, Business Development, Stakeholder Engagement

### Selected assignments and experiences

- Developed Technical Paper for UNFCCC's Technology Executive Committee (TEC) and Policy Brief with recommendations to COP to improve approach and operation of Financial Mechanism (GCF-Green Climate Fund; GEF-Global Environment Facility) in accelerating vulnerable countries' action to address their climate change challenges (2021-2022)
- Supported GIZ's Pro-poor Growth and Promotion of Employment/Green Innovation Centre for Agriculture/Food Sector through design of Organisational Development training to equip Nigeria facilitators with content, skills, and process to carry out institutional strengthening (governance, management, team-building) of local cooperation groups (2021-2022)

### Selected Independent evaluations:

- Mid-Term Reviews for UNIDO/UN Habitat of GEF-funded Integrated Impact Approach to support Sustainable City Development in Malaysia (2020) and India (2021)
- Strategy Review for UNEP/ESCAP of international governmental cooperation platform hosting 6 Member States (China, Japan, Mongolia, South Korea, North Korea, Russian Federation) to give input to 2021-2025 strategy for their North-East Asian Subregional Programme of Environmental Cooperation (NEASPEC)
- Overall Effectiveness Evaluation of C&A Foundation (2019)
- Terminal Evaluations for UNIDO of GEF-funded Global Cleantech Innovation Programme projects in Turkey, Pakistan, South Africa (2018-2019)
- Terminal Evaluation for UNEP of Eco-Innovation Project (2017)
- Mid-Term Review of UNIDO/UNEP Resource Efficient Cleaner Production programme (2015)

## ANNEX VI. EVALUATION TORS (WITHOUT ANNEXES)

### TERMS OF REFERENCE

#### Terminal Evaluation of the UNEP project

#### “GPGC/ENRTP Resource Efficiency through Application of Lifecycle thinking PIMS 1991”

#### Section 1: PROJECT BACKGROUND AND OVERVIEW

#### 1. Project General Information

Table 14: Project Summary

<b>UNEP PIMS ID:</b>	1991		
<b>Implementing Partners</b>	UNEP/SETAC Life Cycle Initiative Ecoinvent Association, Switzerland Ecedi, France Culturambiente, Spain TGH Think Space, South Africa Oliver Kusche, Germany Pontificia Universidad Catolica de Peru Beatriz Rivela, Ecuador Osmer Ponce, LAC Region		
<b>Relevant SDG(s) and indicator(s):</b>	<b>Resource Efficiency through Application of Life cycle thinking (REAL)</b>		
<b>Sub-programme:</b>	Resource Efficiency	<b>Expected Accomplishment(s):</b>	C: Enabling conditions for promoting more sustainable consumption choices and lifestyles are enhanced
<b>UNEP approval date:</b>	27 <sup>th</sup> March 2014	<b>Programme of Work Output(s):</b>	PoW 633 PoW 2018-2019 and PoW 2020-2021 (PoW 621.1)
<b>Expected start date:</b>	October 2015	<b>Actual start date:</b>	March 2016
<b>Planned completion date:</b>	September 2020	<b>Actual operational completion date:</b>	Dec 2020
<b>Planned EC project budget at approval:</b>	EUR 1,535,862	<b>Actual total expenditures reported as of 31<sup>st</sup> Dec 2020:</b>	EUR 1,517,515
<b>Planned Environment Fund allocation:</b>	N/A	<b>Actual Environment Fund expenditures reported as of [date]:</b>	N/A
<b>Planned Extra-Budgetary Financing:</b>	N/A	<b>Secured Extra-Budgetary Financing:</b>	N/A
		<b>Actual Extra-Budgetary Financing expenditures reported as of [date]:</b>	N/A
<b>First disbursement:</b>		<b>Planned date of financial closure:</b>	31 <sup>st</sup> Dec 2020
<b>No. of formal project revisions:</b>	2	<b>Date of last approved project revision:</b>	
<b>No. of Steering Committee meetings:</b>		<b>Date of last/next Steering Committee meeting:</b>	Last:                      Next:
<b>Mid-term Review (planned date):</b>	None	<b>Mid-term Review (actual date):</b>	none
<b>Terminal Evaluation (planned date):</b>	January – Sept 2021	<b>Terminal Evaluation (actual date):</b>	
<b>Coverage - Countries:</b>	Global with pilots in India, Thailand, Guatemala,	<b>Coverage - Region(s):</b>	Asia Pacific, Latin America and Caribbean, and Africa

	Nicaragua, Ecuador, Brazil, South Africa		
<b>Dates of previous project phases:</b>	n.a	<b>Status of future project phases:</b>	

## 2. Project Rationale

1. Given the complexities of increasingly globalised products' value chains which stretch beyond national boundaries, connecting fragmented markets, different market systems, regulatory frameworks and consumers, the Green Economy<sup>54</sup> approach highlighted the importance of measuring and managing environmental impacts throughout the life cycle of products. Life Cycle Thinking allows for more efficient production and consumption systems.

2. A level playing field, with guiding principles and capacities to apply LCA in emerging and developing economies, is needed so that LCA based measures do not become barriers to trade and those countries and companies that are currently not ready to perform LCA or provide required LCA data to their customers are not disadvantaged in the global market. This requires concerted efforts towards SCP policies, and international collaboration in the basic data, indicators and tools used to inform such policies.

3. Since 2002, the UNEP/SETAC Life Cycle Initiative has contributed to enhance the capacities and skills on LCA/LCM worldwide. In 2002, there were no developing countries with a LC network (with the exception of Thailand) or a LCA database (UNEP/SETAC, 2015)<sup>55</sup> and in 2015 LC networks existed in 18 such countries and LCA databases in 4 (Mexico, Malaysia, Thailand and China). LC networks were key to successful capacity-development programs and to form a cohesive group of LCA professionals, and UNEP's support of the networks (usually through the Life Cycle Initiative) helped stimulate their activities and outreach in many cases. For example, in Thailand there were 22 LCA professionals per 10 million people, while Mexico had 11, China had 7, South Africa had 6 and Brazil had 4 professionals per 10 million people, respectively.

4. However, despite the progress, there was still a large gap to meet the internal demands of experts in developing countries due to insufficient LCA professionals and a lack of financial resources for more LCA tools and better prepared experts.

5. In addition, businesses around the world have recognized the importance of sustainability consideration for their market viability. Unfortunately, this does still not apply to the large base of SMEs especially in countries with emerging and developing economies. Given their role in employment and business generation (up to 95% in some countries), SMEs are important market players in increasingly globalized value chains. However, their output to GDP is low due to a number of practical challenges to integrate and benefit from sustainability<sup>56</sup>.

6. UNEP has been called by a number of countries and organizations to play a convening role and help multiplying the efforts and disseminating the lessons and results especially in developing countries and the emerging economies. There is no other organization active in the field of "product sustainability" and "internationally recognized information tools" with the convening power needed and relevant trajectory and achievements. UNEP has identified a critical mass of key partners and stakeholders and with some of them well established long-term partnerships and had designed this project to scale up the dissemination of Life Cycle Thinking through the implementation of online courses, accessible remotely and self-standing for on-line individual learning, combined with experiential training through longer-term pilots guided by an enhanced network of local experts.

<sup>54</sup> "Green economy is one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. In its simplest expression, a green economy can be thought of as one which is low carbon, resource efficient and socially inclusive." See UNEP's Green Economy Initiative (GEI) in <http://www.unep.org/greeneconomy/>

<sup>55</sup> UNEP/SETAC (2015). Opportunities for national life cycle networks creation and expansion around the world. Life-Cycle Initiative, United Nations Environment Programme and Society for Environmental Toxicology and Chemistry, Paris, France. Forthcoming.

<sup>56</sup>OECD/ADB 2014 <http://www.oecd.org/cfe/smes/adb-oecd-study-enhancing-financial-accessibility-smes.pdf>

### 3. Project Results Framework

7. The project's goal was to integrate resource efficiency in global value chains by using life cycle data on environmental impacts, thus enabling private and public organisations to make informed choices leading to increased sustainable consumption and production patterns.

8. The project's outcome was for *"private and public organisations to have increased capacity to make informed choices using Life Cycle data and apply Life Cycle Assessment tools to their value chains leading to more sustainable consumption and production and resource efficiency in global value chains"*. This was to be achieved through the delivery of two outputs, viz:

**Output 1:** Criteria for LCA database management are applied in national interoperable LCA databases and increasingly established and supported through Global Network for Interoperable LCA databases; and

**Output 2:** Capacity development tools (eLearning courses on LCT approaches; success stories / examples of benefits of using lifecycle based approaches; training of a pool of local technical experts) and capacity developed through pilot projects within public and private organisations inducing change of practices within organisations.

### 4. Executing Arrangements

9. The UNEP Life Cycle Initiative Unit, in the Economy Division (previously Responsible Industry and Value Chain Unit (RIVU), under Division of Technology, Industry and Economics (DTIE)) was to provide co-ordination, management, monitoring, supervision and evaluation of the implementation of the project, with a dedicated project manager recruited specifically for the project implementation.

10. The UNEP/SETAC Life Cycle Initiative was identified as a partner for the implementation of / provision of expertise to some of the project components, in particular the elaboration of eLearning materials (component 2.1) and the technical support of LCA Databases (component 1.1).

11. The Regional Offices of Latin America and the Caribbean and Asia and the Pacific were to provide key roles in the design of sub activities related to capacity development, regional and national consultations and validations and piloting of tools and recommendations the countries that fell under their regions. They were to also assist with the identification of potential sources of funding and key stakeholders in the countries so as strengthen the south-south co-operation as well as regional and local capacities.

12. An extended advisory board was also to be set up to provide strategic guidance to the overall management and implementation of the project and made up of an European Commission project focal point; project co-ordinators of UNEP SWITCH, Green Economy Initiative (GEI), 10-Year Framework on Programmes of Sustainable Consumption and Production Patterns (10 YFP); a member of the International Life Cycle Board and the Chair of the Global LCA Data network (GLAD).

13. The figure below shows the executing arrangements for the implementation of this project (taken from the ProDoc, 2014).

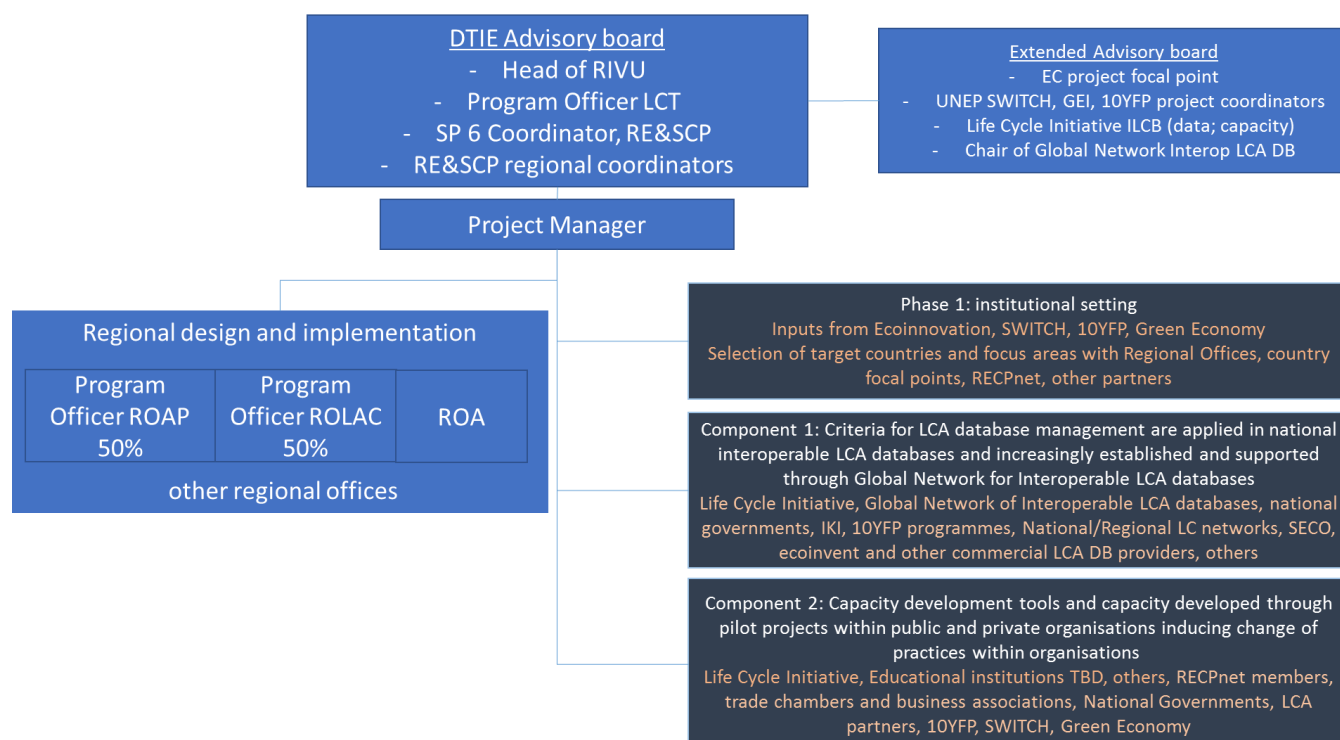


Figure 7: REAL project executing arrangements (taken from the ProDoc, 2014)

## 5. Project Cost and Financing

14. The total estimated project cost at design was EUR 1,535,862 from the EC. The table below, taken from the annual financial report, shows the funding sources in EUROS (budget and expenditures for 2016 – 2020). The budget for component 1 was EUR 678,358 while for component 2 it was EUR 757,027. The budget for Programme support costs (7%) was EUR 100,477.

Table 15: Annual Financial Report at 31<sup>st</sup> Dec 2020 (EUR)

Project title: REAL: Resource Efficiency through Application of Life cycle thinking  
 UNEP Ref. (M/S-grant, cost center and WBSE and BAC) M1-32ECL-000008, 11266, SB-000939; SB-009104  
 Project Duration: 01/10/2015 31/12/2020

Activities (insert as many components as needed)	Total Budget (all Years) EUR.	Total Expenditures as of Dec'20	Variance as of Dec'20	Staff and Other Personnel Costs (FT30_010)					Contractual Services (FT30_120)					Operating and Other Direct Costs (FT30_125)				
				2016 Exp	2017 Exp	2018 Exp	2019 Exp	2020 Exp	2016 Exp	2017 Exp	2018 Exp	2019 Exp	2020 Exp	2016 Exp	2017 Exp	2018 Exp	2019 Exp	2020 Exp
Component 1: Life Cycle Assessment Data Accessibility	678,358	720,286	-41,928	98,939	117,009	-28,221	66,256	93,945	91	14,538	1,111			169	2,679	42		
Component 2: Life Cycle Capacity Development	757,027	697,952	59,075	98,939	118,536	-28,221	66,256	93,945	91	14,538	1,111	3,172	35,568	169	2,679	42	5,740	8,763
<b>SUB-TOTAL: DIRECT ELIGIBLE COSTS</b>	<b>1,435,385</b>	<b>1,418,239</b>	<b>17,146</b>	<b>197,878</b>	<b>235,545</b>	<b>-56,442</b>	<b>132,512</b>	<b>187,889</b>	<b>182</b>	<b>29,076</b>	<b>2,223</b>	<b>3,172</b>	<b>35,568</b>	<b>339</b>	<b>5,357</b>	<b>83</b>	<b>5,740</b>	<b>8,763</b>
Indirect costs (7% of total direct eligible costs)	100,477	99,277	1,200	13,851	16,488	-3,951	9,276	13,152	13	2,035	156	222	2,490	24	375	6	402	613
<b>GRAND TOTAL: ELIGIBLE COSTS</b>	<b>1,535,862</b>	<b>1,517,515</b>	<b>18,347</b>	<b>211,730</b>	<b>252,033</b>	<b>-60,393</b>	<b>141,788</b>	<b>201,041</b>	<b>195</b>	<b>31,112</b>	<b>2,378</b>	<b>3,394</b>	<b>38,058</b>	<b>363</b>	<b>5,732</b>	<b>89</b>	<b>6,142</b>	<b>9,376</b>

UNEP/MEA and other donor co-financing to ENRTP-GPGC project (EUR):  
 (lumpsum amount)

## 6. Implementation Issues

15. The tables below highlight various risks identified during project implementation and mitigation measures taken.

**Table 16: Risks and challenges identified at project design and mitigation measures**

Challenges and risks as outlined in the project document as well as corresponding mitigation measures if the challenges have been faced during the project implementation (taken from the Final Project Report (2021)).					
Risk Description	Category	Impact Severity	Likelihood	Strategy used to mitigate or overcome risk	Update/ Comment
1 Inability to raise additional funds / in-kind contributions for translation of capacity building materials	Economic	Medium	Low	<b>This risk has been successfully mitigated and overcome</b> through the establishment of partnerships with relevant local educational partners to ensure their co-ownership of training materials and thus their willingness to invest	An opportunity to translate the first e-learning module into further languages (French, Arabic) has been realized through the SwitchMed project. Additionally in 2020, one of the Life Cycle Initiative partners translated, in-kind, the introductory course into Portuguese

2	Low degree of cooperation and political will of national governments	Political	Medium	Medium	<p><b>This risk has been successfully mitigated.</b> LCT and LC approaches have been presented and finally recognized as an opportunity (not a constraint) for the development of policy measures promoting Resource Efficiency and SCP, and in the context of an Inclusive Green Economy and the SDGs.</p>	<p>Implementation of UNEA4 resolutions is strengthening the message that LCT contributes positively to more impactful policies for SCP; however, there is still significant capacity to be developed, and additional resources to be channelled, in order to bring this awareness into actual incorporation into policy.</p>
3	Delays in recruitment of staff	Organization	Medium	Low	<p><b>This risk has been mostly mitigated.</b> The project team has adopted a proactive approach with UNEP HR, largely mitigating the risk of hiring delays; however staff turnover (project coordinator left in early 2019 and the new incumbent was able to join only in early 2020), lead the project team to request for the first no-cost extension, until June 2020. (second no-cost extension was due to COVID-19 related delays).</p>	<p>Staff has been recruited on time.</p>

4	Lack of international collaboration to achieve consensus on key aspects of LCA Database interoperability	Stakeholder (external)	Medium	Medium	<b>This risk has been successfully mitigated and overcome.</b> The project maintained open channels of communications with the key actors, providing vision of the benefits that could be achieved through collaboration	The Technical Management Group (TMG) that has been created during the project has been meeting every six weeks and will continue to have regular engagements after the end of the project – ensuring sustainability of the GLAD platform as part of the Life Cycle Initiative and strategic collaboration to achieve LCA interoperability and increased accessibility to data.
5	Perception of the work as reflecting merely a developed world agenda, and activities related to data, methods, standards, and reporting introducing trade barriers with additional, technical requirements that developing countries and small producers struggle to meet.	Political	High	Medium	<b>This risk has been successfully mitigated and overcome,</b> by ensuring geographical balance in the governance of the activities of this project (e.g. Global Network of LCA DB), and outreach to and direct involvement of developing and emerging economies in capacity strengthening activities.	Developing countries and emerging economies have been the main focus of most of the project activities (capacity building, GLAD, pilot projects, road-mapping exercises, distribution of e-learning module).



6	Perception of the data, methods and tools being too cumbersome and costly for businesses to implement, or of green washing or weak instruments/standards.  Businesses not taking up LCT approaches	Stakeholder	Medium	Medium	<b>This risk has been mitigated to the best of the project's abilities.</b> This is common risk with LCA and one that will need continuous attention. The project strived to simplify the tools and communication through partnerships with key providers of tools, services and data. This was done while ensuring that the approach and methodologies remain robust and the process transparent.	The increased availability of data and their interoperability through GLAD alleviates some of the concerns of data being too costly and difficult to source.
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Table 17: Risks and challenges observed during project implementation and mitigation measures

Risks observed and addressed during project implementation (taken from the Final Project Report (2021)).:					
Risk	Description	Category	Impact severity	Mitigation measure	
1	Delay in pilot project implementation due political instability in Nicaragua (social unrest in April 2018)	Potentially unsuccessful pilot projects e.g. due to inability of implementing partner to carry out project activities adequately (due to unsafe situation in the country)	Political	Medium	The implementing period for the pilot project was extended, allowing partners to undertake activities under safe conditions. Life Cycle Thinking was applied in a coffee processing plant, successfully leading to identification and implementation of resource efficiency opportunities, and significant capacity building in the producers communities, in spite of the challenges posed by social unrest in April 2018 as well as the lack of data and information.
2	COVID-19 Pandemic	State of emergency in most countries around the globe for most of 2020, completely	Cross cutting all categories	High	The project team requested for a second no-cost extension until Dec 2020 to be able to reschedule and adapt the modality (virtual) of all the activities planned for

		changing the mode of delivery and implementation of activities, from face-to-face interactions to virtual			2020. Despite the challenging circumstances the project achieved impactful results in 2020 in terms of the creation of additional LCA expertise and tools.
3	Partial achievement of Outcome indicator	Time is required to obtain a durable shift in behaviour and most likely the outcome will be achieved well after the project lifespan,	Project focus	Medium	The project has built the capacity of LCA experts to develop national databases, has made available e-learning courses, developed an easy-to-use calculator for the product environmental footprint of green coffee – all of these will most likely contribute to governments and organizations using life-cycle approaches in their decision making processes; which will translate in the project surpassing its outcome indicator, but at the end of the project, we can simply state that progress is on-going as more time is needed to make a substantive impact in this field.

16. No mid term review or evaluation was carried out as it was not part of the project design.

17. The project had two no cost extensions. The first approved on 11<sup>th</sup> November 2019 to extend the project from September 2019 to July 2020; while the second was approved on 18 August 2020 from July 2020 to December 2020 given the complexities of the global COVID-19 pandemic.

## Section 2. OBJECTIVE AND SCOPE OF THE EVALUATION

### 7. Objective of the Evaluation

18. In line with the UNEP Evaluation Policy<sup>57</sup> and the UNEP Programme Manual<sup>58</sup>, the Terminal Evaluation is undertaken at 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 evaluation 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; UNEP/SETAC Life Cycle Initiative; Ecoinvent Association, Switzerland; Ecedi, France; Culturambiente,

<sup>57</sup> <https://www.unenvironment.org/about-un-environment/evaluation-office/policies-and-strategies>

<sup>58</sup> <https://wecollaborate.unep.org>

Spain; TGH Think Space, South Africa; Oliver Kusche, Germany; Pontificia Universidad Catolica de Peru; Beatriz Rivela, Ecuador; Osmer Ponce, LAC Region. Therefore, the evaluation will identify lessons of operational relevance for future project formulation and implementation, especially where a second phase of the project is being considered. Recommendations relevant to the whole house may also be identified during the evaluation process.

## 8. Key Evaluation Principles

19. Evaluation findings and judgements will be based on **sound evidence and analysis**, clearly documented in the evaluation report. Information will be triangulated (i.e. verified from different sources) as far as possible, and when verification is not possible, the single source will be mentioned (whilst anonymity is still protected). Analysis leading to evaluative judgements should always be clearly spelled out.

20. **The “Why?” Question.** As this is a terminal evaluation and a follow-up project is likely [or similar interventions are envisaged for the future], particular attention will be given to learning from the experience. Therefore, the “Why?” question should be at the front of the consultants’ minds all through the evaluation exercise and is supported by the use of a theory of change approach. This means that the consultants need to go beyond the assessment of “what” the project performance was and make a serious effort to provide a deeper understanding of “why” the performance was as it was (i.e. what contributed to the achievement of the project’s results). This should provide the basis for the lessons that can be drawn from the project.

21. **Attribution, Contribution and Credible Association:** In order to *attribute* any outcomes and impacts to a project intervention, one needs to consider the difference between what has happened with, and what would have happened without, the project (i.e. take account of changes over time and between contexts in order to isolate the effects of an intervention). This requires appropriate baseline data and the identification of a relevant counterfactual, both of which are frequently not available for evaluations. Establishing the *contribution* made by a project in a complex change process relies heavily on prior intentionality (e.g. approved project design documentation, logical framework) and the articulation of causality (e.g. narrative and/or illustration of the Theory of Change). Robust evidence that a project was delivered as designed and that the expected causal pathways developed supports claims of contribution and this is strengthened where an alternative theory of change can be excluded. A *credible association* between the implementation of a project and observed positive effects can be made where a strong causal narrative, although not explicitly articulated, can be inferred by the chronological sequence of events, active involvement of key actors and engagement in critical processes.

22. **Communicating evaluation results.** A key aim of the evaluation is to encourage reflection and learning by UNEP staff and key project stakeholders. The consultant should consider how reflection and learning can be promoted, both through the evaluation process and in the communication of evaluation findings and key lessons. Clear and concise writing is required on all evaluation deliverables. Draft and final versions of the main evaluation report will be shared with key stakeholders by the Evaluation Manager. There may, however, be several intended audiences, each with different interests and needs regarding the report. The consultant(s) will plan with the Evaluation Manager which audiences to target and the easiest and clearest way to communicate the key evaluation findings and lessons to them. This may include some, or all, of the following; a webinar, conference calls with relevant stakeholders, the preparation of an evaluation brief or interactive presentation.

## 9. Key Strategic Questions

23. In addition to the evaluation criteria outlined in Section 10 below, the evaluation will address the **strategic questions** listed below. These are questions of interest to UNEP and to which the project is believed to be able to make a substantive contribution:

- (a) To what extent did the Regional Offices enhance the uptake of project outputs and outcomes? What challenges, if any, were faced and how were they resolved? What advantages, if any, were realised and how were these lessons shared within the organisation?

- (b) To what extent was synergy between this project and REEDTE (eco-innovation project)<sup>59</sup>, SPPEL<sup>60</sup>, SEED<sup>61</sup>, and the Green Economy Initiative realised? What lessons learned can be shared with the rest of the organisation on joint use of networks, policies and collaboration of capacity development events?
- (c) To what extent were partnerships with Green Economy activities successful in building LCT into sector prioritisation within the Green Economy Initiative (GEI), and implementation projects in target countries? What challenges were faced, if any, and how could these be improved in future phases of similar initiatives?
- (d) To what extent did any adjustments allow the project to effectively respond to the new priorities that emerged in relation to key challenges/COVID-19? How did any adjustments affect the achievement of the project's expected results, as stated in the approved results framework?

## 10. Evaluation Criteria

24. All evaluation criteria will be rated on a six-point scale. Sections A-I below, outline the scope of the criteria and a link to a table for recording the ratings is provided in Annex 1. A weightings table will be provided in excel format (link provided in Annex 1) to support the determination of an overall project rating. The set of evaluation criteria are grouped in nine categories: (A) Strategic Relevance; (B) Quality of Project Design; (C) Nature of External Context; (D) Effectiveness, which comprises assessments of the provision of outputs, achievement of outcomes and likelihood of impact; (E) Financial Management; (F) Efficiency; (G) Monitoring and Reporting; (H) Sustainability; and (I) Factors Affecting Project Performance. The evaluation consultants can propose other evaluation criteria as deemed appropriate.

### A. Strategic Relevance

25. The evaluation will assess the extent to which the activity is suited to the priorities and policies of the donors, implementing regions/countries and the target beneficiaries. The evaluation will include 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 will be made. This criterion comprises four elements:

#### *i. Alignment to the UNEP Medium Term Strategy<sup>62</sup> (MTS), Programme of Work (POW) and Strategic Priorities*

26. The evaluation should assess 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<sup>63</sup> (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*

27. Donor strategic priorities will vary across interventions. The Evaluation will assess the extent to which the project is suited to, or responding to, donor priorities. In some cases, alignment with donor priorities may be a fundamental part of project design and grant approval processes while in others, for

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<sup>59</sup> Resource Efficiency and Eco-Innovation in Developing and Transition Economies (REEDTE).

<sup>60</sup> Stimulating the demand and supply of sustainable products through Sustainable Public Procurement and EcoLabelling

<sup>61</sup> Supporting Entrepreneurs for Sustainable Development in Africa

<sup>62</sup> 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>

<sup>63</sup> <http://www.unep.fr/ozonaction/about/bsp.htm>

example, instances of 'softly-earmarked' funding, such alignment may be more of an assumption that should be assessed.

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

28. The evaluation will assess 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 be considered. Examples may include: 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 Existing Interventions/Coherence<sup>64</sup>**

29. An assessment will be made of how well the project, either at design stage or during the project inception or mobilization<sup>65</sup>, 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 evaluation will consider 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 UN Development Assistance Frameworks (UNDAFs) or One UN programming. Linkages with other interventions should be described and instances where UNEP's comparative advantage has been particularly well applied should be highlighted.

Factors affecting this criterion may include:

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

**B. Quality of Project Design**

30. The quality of project design is assessed using an agreed template during the evaluation inception phase, ratings are attributed to identified criteria and an overall Project Design Quality rating is established ([www.unenvironment.org/about-un-environment/evaluation-office/our-evaluation-approach/templates-and-tools](http://www.unenvironment.org/about-un-environment/evaluation-office/our-evaluation-approach/templates-and-tools)). This overall Project Design Quality rating is entered in the final evaluation ratings table as item B. In the Main Evaluation Report a summary of the project's strengths and weaknesses at design stage is included, while the complete Project Design Quality template is annexed in the Inception Report.

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

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

**C. Nature of External Context**

At evaluation inception stage a rating is established for the project's external operating context (considering the prevalence of conflict, natural disasters and political upheaval<sup>66</sup>). This rating is entered in the final evaluation 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 Evaluation Consultant and Evaluation Manager together. A justification for such an increase must be given.

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<sup>64</sup> This sub-category is consistent with the new criterion of 'Coherence' introduced by the OECD-DAC in 2019.

<sup>65</sup> 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.

<sup>66</sup> 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.

## **D. Effectiveness**

### **i. Availability of Outputs<sup>67</sup>**

31. The evaluation will assess 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 project design document (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 may be necessary in the reconstruction of the TOC. In such cases a table should be provided showing the original formulation and the reformulation of the outputs for transparency. The availability of outputs will be assessed in terms of both quantity and quality, and the assessment will consider their ownership by, and usefulness to, intended beneficiaries and the timeliness of their provision. It is noted that emphasis is placed on the performance of those outputs that are most important to achieve outcomes. The evaluation 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
- Quality of project management and supervision<sup>68</sup>

### **ii. Achievement of Project Outcomes<sup>69</sup>**

32. The achievement of project outcomes is assessed as performance against the project outcomes as defined in the reconstructed<sup>70</sup> Theory of Change. These are outcomes that are intended to be achieved by the end of the project timeframe and within the project's resource envelope. Emphasis is placed on the achievement of project outcomes that are most important for attaining intermediate states. As with outputs, a table can be used where substantive amendments to the formulation of project outcomes is necessary. The evaluation should report evidence of attribution between UNEP's intervention and the project outcomes. In cases of normative work or where several actors are collaborating to achieve common outcomes, evidence of the nature and magnitude of UNEP's 'substantive contribution' should be included and/or 'credible association' established between project efforts and the project outcomes realised.

Factors affecting this criterion may include:

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

### **iii. Likelihood of Impact**

33. Based on the articulation of long-lasting effects in the reconstructed TOC (*i.e. from project outcomes, via intermediate states, to impact*), the evaluation will assess 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-term impacts. The Evaluation Office's approach to the use of TOC in project evaluations is outlined in a guidance note available on the Evaluation Office website, <https://www.unenvironment.org/about-un-environment/evaluation>, 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

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<sup>67</sup> 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)

<sup>68</sup> 'Project management and supervision' refers to the supervision and guidance provided by UNEP to implementing partners and national governments.

<sup>69</sup> 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)

<sup>70</sup> All submitted UNEP project documents are required to present a Theory of Change. The level of 'reconstruction' needed during an evaluation 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 formal changes made to the project design.

drivers identified in the reconstructed TOC held. Any unintended positive effects should also be identified and their causal linkages to the intended impact described.

34. The evaluation will also consider 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 disproportionately 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.

35. The evaluation will consider the extent to which the project has played a catalytic<sup>71</sup> role or has promoted scaling up and/or replication as part of its Theory of Change and as factors that are likely to contribute to longer term impact.

36. 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-term or broad-based changes. However, the evaluation will assess 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 partner(s).

Factors affecting this criterion may include:

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

## **E. Financial Management**

37. Financial management will be 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 evaluation 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 evaluation 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 evaluation will record where standard financial documentation is missing, inaccurate, incomplete or unavailable in a timely manner. The evaluation 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
- Quality of project management and supervision

## **F. Efficiency**

38. Under the efficiency criterion, the Evaluation will assess 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.

39. Focussing 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

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<sup>71</sup> A catalytic effect is one in which desired changes take place beyond the initial scope of a project (i.e. the take up of change is faster than initially expected or change is taken up in areas/sectors or by groups, outside the project's initial design). Scaling up refers to an initiative, or one of its components, being adopted on a much larger scale, but in a very similar context (e.g a small scale, localized, pilot being adopted at a larger, perhaps national, scale). Replication refers more to approaches being repeated or lessons being explicitly applied in new/different contexts e.g. other geographic areas, different target groups etc. Effective replication typically requires some form of revision or adaptation to the new context. It is possible to replicate at either the same or a different scale.

well as whether events were sequenced efficiently. The Evaluation will also assess 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 Evaluation will describe 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.

40. The evaluation will give 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<sup>72</sup> with other initiatives, programmes and projects etc. to increase project efficiency.

41. The factors underpinning the need for any project extensions will also be 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 implementing parties.

Factors affecting this criterion may include:

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

## **G. Monitoring and Reporting**

42. The evaluation will assess monitoring and reporting across three sub-categories: monitoring design and budgeting, monitoring implementation and project reporting.

### **i. Monitoring Design and Budgeting**

43. Each project should be supported by a sound monitoring plan that is designed to track progress against SMART<sup>73</sup> results towards the provision of the project's outputs and achievement of project outcomes, including at a level disaggregated by gender, marginalisation or vulnerability, including those living with disabilities. In particular, the evaluation 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 evaluation 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 if applicable.

### **ii. Monitoring of Project Implementation**

44. The evaluation 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, marginalised 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 evaluation should confirm that funds allocated for monitoring were used to support this activity.

### **iii. Project Reporting**

45. UNEP has a centralised 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 Evaluation Consultant(s) by the Evaluation Manager. Some projects have additional requirements to report regularly to funding partners, which will be supplied by the project team. The evaluation will assess the extent to which both UNEP and donor reporting commitments have been

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<sup>72</sup> Complementarity with other interventions during project design, inception or mobilization is considered under Strategic Relevance above.

<sup>73</sup> SMART refers to results that are specific, measurable, achievable, relevant and time-oriented. Indicators help to make results measurable.



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
- Responsiveness to human rights and gender equity (e.g., disaggregated indicators and data)

## **H. Sustainability**

46. Sustainability<sup>74</sup> is understood as the probability of project outcomes being maintained and developed after the close of the intervention. The evaluation will identify and assess 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 project outcomes may also be included.

### **i. Socio-political Sustainability**

47. The evaluation will assess the extent to which social or political factors support the continuation and further development of project outcomes. It will consider the level of ownership, interest and commitment among government and other stakeholders to take the project achievements forwards. In particular, the evaluation will consider whether individual capacity development efforts are likely to be sustained.

### **ii. Financial Sustainability**

48. 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 resource management approach. The evaluation 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 a project's 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.

### **iii. Institutional Sustainability**

49. The evaluation will assess 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. In particular, the evaluation 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
- Country ownership and driven-ness

## **I. Factors Affecting Project Performance and Cross-Cutting Issues**

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<sup>74</sup> 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)

(These factors are rated in the ratings table but are discussed within the Main Evaluation Report as cross-cutting themes as appropriate under the other evaluation criteria, above. Where the issues have not been addressed under other evaluation criteria, the consultant(s) will provide summary sections under the following headings)

***i. Preparation and Readiness***

50. This criterion focuses on the inception or mobilisation stage of the project (i.e. the time between project approval and first disbursement). The evaluation will assess 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 mobilisation. In particular, the evaluation will consider 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).

***ii. Quality of Project Management and Supervision***

51. 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, it will refer to the project management performance of the executing agency 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.

52. The evaluation will assess 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.

***iii. Stakeholder Participation and Cooperation***

53. Here the term 'stakeholder' should be considered in a broad sense, encompassing all project partners, duty bearers with a role in delivering project outputs and target users of project outputs and any other collaborating agents external to UNEP and the implementing partner(s). The assessment will consider the quality and effectiveness of all forms of communication and consultation with stakeholders throughout the project life and the support given to maximise 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 should be considered.

***iv. Responsiveness to Human Rights and Gender Equity***

54. The evaluation will ascertain 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 evaluation will assess to what extent the intervention adheres to UNEP's Policy and Strategy for Gender Equality and the Environment<sup>75</sup>.

55. In particular the evaluation will consider to what extent project 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;

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<sup>75</sup> The Evaluation Office notes that Gender Equality was first introduced in the 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](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)

and (iii) the role of disadvantaged groups (especially those related to gender) in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation.

**v. 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, minimization, mitigation or, in exceptional cases, offsetting) of potential environmental and social risks and impacts associated with project and programme activities. The evaluation will confirm whether UNEP requirements<sup>76</sup> 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 evaluated above under Quality of Project Design).

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

**vi. Country Ownership and Driven-ness**

56. The evaluation will assess 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 project results, i.e., either a) moving forwards from outputs to project outcomes or b) moving forward from project outcomes towards intermediate states. The evaluation will consider the engagement 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 realised. Ownership should extend to all gender and marginalised groups.

**vii. Communication and Public Awareness**

57. The evaluation will assess 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 behaviour among wider communities and civil society at large. The evaluation should consider whether existing communication channels and networks were used effectively, including meeting the differentiated needs of gendered or marginalised groups, and whether any feedback channels were established. Where knowledge sharing platforms have been established under a project, the evaluation will comment on the sustainability of the communication channel under either socio-political, institutional or financial sustainability, as appropriate.

### **Section 3. EVALUATION APPROACH, METHODS AND DELIVERABLES**

58. The Terminal Evaluation will be an in-depth evaluation using a participatory approach whereby key stakeholders are kept informed and consulted throughout the evaluation process. Both quantitative and qualitative evaluation methods will be used as appropriate to determine project achievements against the expected outputs, outcomes and impacts. It is highly recommended that the consultant(s) maintains close communication with the project team and promotes information exchange throughout the evaluation implementation phase in order to increase their (and other stakeholders') ownership of the evaluation findings. Where applicable, the consultant(s) will provide a geo-referenced map that demarcates the area covered by the project and, where possible, provide geo-referenced photographs

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<sup>76</sup> 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 design since 2011.

of key intervention sites (e.g. sites of habitat rehabilitation and protection, pollution treatment infrastructure, etc.)

59. The findings of the evaluation will be based on the following:

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

- Relevant background documentation, inter alia UNEP MTS 2014 – 2017 and 2018 – 2021 and POWs 2014-15, 2016-17, 2018-19 and 2020-21, Green Economy Initiative, SWITCH Asia, 10 YFP;
- 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 etc;
- Project outputs: including but not limited to LCA datasets, GLAD database, e-learning courses, publications and reports, capacity development tools and outreach channels, training and activities on LCA, GLAD LCT, conferences and seminars;
- Evaluations/reviews of similar projects.

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

- UNEP Project Manager (PM);
- Project management team, where appropriate;
- UNEP Fund Management Officer (FMO);
- Project partners, including [\[list\]](#);
- Sub-Programme Coordinator;
- Relevant resource persons;
- Representatives from civil society and specialist groups (such as women's, farmers and trade associations etc).

(c) **Surveys** as deemed necessary, and designed and outlined during the Inception phase of the terminal evaluation.

(d) **Field visits** – due to travel restrictions due to the global COVID-19 pandemic, there will be no field visits.

(e) **Other data collection tools** as deemed necessary, and designed during the inception phase of the terminal evaluation to collect data in the absence of field visits, including use of virtual platforms.

## 11. Evaluation Deliverables and Review Procedures

60. The evaluation team will prepare:

61. **Inception Report:** (see Annex 1 for links to all templates, tables and guidance notes) containing an assessment of project design quality, a draft reconstructed Theory of Change of the project, project stakeholder analysis, evaluation framework and a tentative evaluation schedule.

62. **Preliminary Findings:** typically, in the form of a PowerPoint presentation, the sharing of preliminary findings is intended to support the participation of the project team, act as a means to ensure all information sources have been accessed and provide an opportunity to verify emerging findings. In the case of highly strategic project/portfolio evaluations or evaluations with an Evaluation Reference Group, the preliminary findings may be presented as a word document for review and comment.

63. **Draft and Final Evaluation Report:** (see links in Annex 1) containing an executive summary that can act as a stand-alone document; detailed analysis of the evaluation findings organised by evaluation criteria and supported with evidence; lessons learned and recommendations and an annotated ratings table.

64. An **Evaluation Brief** (a 2-page overview of the evaluand and evaluation findings) for wider dissemination through the UNEP website may be required. This will be discussed with the Evaluation Manager no later than during the finalization of the Inception Report.

65. **Review of the draft evaluation report.** The consultant(s) will submit a draft report to the Evaluation Manager and revise the draft in response to their comments and suggestions. Once a draft of adequate quality has been peer-reviewed and accepted, the Evaluation Manager will share the cleared draft report with the Project Manager/Implementing Partner, who will alert the Evaluation Manager in case the report contains any blatant factual errors. The Evaluation Manager will then forward the revised draft report (corrected by the evaluation consultant(s) where necessary) to other project stakeholders, for their review and comments. Stakeholders may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions as well as providing feedback on the proposed recommendations and lessons. Any comments or responses to draft reports will be sent to the Evaluation Manager for consolidation. The Evaluation Manager will provide all comments to the evaluation consultant(s) for consideration in preparing the final report, along with guidance on areas of contradiction or issues requiring an institutional response.

66. Based on a careful review of the evidence collated by the evaluation consultants and the internal consistency of the report, the Evaluation Manager will provide an assessment of the ratings in the final evaluation report. Where there are differences of opinion between the evaluator and the Evaluation Manager on project ratings, both viewpoints will be clearly presented in the final report. The Evaluation Office ratings will be considered the final ratings for the project.

67. The Evaluation Manager will prepare a **quality assessment** of the first draft of the main evaluation report, which acts as a tool for providing structured feedback to the evaluation consultants. The quality of the final report will be assessed and rated against the criteria specified in template listed in Annex 1 and this assessment will be appended to the Final Evaluation Report.

68. At the end of the evaluation process, the Evaluation Office will prepare a **Recommendations Implementation Plan** in the format of a table, to be completed and updated at regular intervals by the Project Manager. The Evaluation Office will track compliance against this plan on a six-monthly basis.

## 12. The Evaluation Consultant

69. For this evaluation, the Evaluation Consultant will work under the overall responsibility of the Evaluation Office represented by an Evaluation Manager (Neeral Shah), in consultation with the UNEP Project Manager (Claudia Giacobelli), Fund Management Officer (Fuad Alkisim) and the Sub-programme Coordinator of the Resource Efficiency (Djaheezah Subratty). The consultant will liaise with the Evaluation Manager on any procedural and methodological matters related to the evaluation, including travel. It is, however, each consultants' individual responsibility to arrange for their visas and immunizations as well as to plan meetings with stakeholders, organize online surveys, obtain documentary evidence and any other logistical matters related to the assignment. The UNEP Project Manager and project team will, where possible, provide logistical support (introductions, meetings etc.) allowing the consultants to conduct the evaluation as efficiently and independently as possible.

70. The Evaluation Consultant will be hired over a period of 9 months from 15<sup>th</sup> September 2021 to 14<sup>th</sup> June 2022 and should have the following: a university degree in environmental sciences, international development or other relevant political or social sciences area is required and an advanced degree in the same areas is desirable; a minimum of 10 years of technical / 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 green economies, life cycle thinking and/or sustainable consumption and production policies is desired. English and French are the working languages of the United Nations Secretariat. For this consultancy, fluency in oral and written English is a requirement. Working knowledge of the UN system and specifically the work of UNEP is an added advantage. The work will be home-based with possible field visits.

71. In close consultation with the Evaluation Manager, the Evaluation Consultant will be responsible for the overall management of the evaluation and timely provision of its outputs, data collection and analysis and report-writing. 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);
- develop and present criteria for country and/or site selection for the evaluation mission;
- plan the evaluation schedule;
- prepare the Inception Report, incorporating comments until approved by the Evaluation 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;
- (where appropriate and agreed) conduct an evaluation mission(s) to selected countries, visit the project locations, interview project partners and stakeholders, including a good representation of local communities. Ensure independence of the evaluation and confidentiality of evaluation interviews.
- regularly report back to the Evaluation Manager on progress and inform of any possible problems or issues encountered and;
- keep the Project 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 Evaluation Manager guidelines both in substance and style;
- liaise with the Evaluation Manager on comments received and finalize the Main Evaluation Report, ensuring that comments are taken into account until approved by the Evaluation 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 Evaluation Manager) prepare an Evaluation Brief (2-page summary of the evaluation 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 Evaluation Manager on any issues requiring its attention and intervention.

### 13. Schedule of the Evaluation

72. The table below presents the tentative schedule for the evaluation.

**Table 3. Tentative schedule for the evaluation**

Milestone	Tentative Dates
Evaluation Initiation Meeting	September 2021
Inception Report	October 2021
Evaluation Mission	No mission due to COVID-19 pandemic
E-based interviews, surveys etc.	November 2021 – February 2022
PowerPoint/presentation on preliminary findings and recommendations	March 2022
Draft report to Evaluation Manager (and Peer Reviewer)	April 2022
Draft Report shared with UNEP Project Manager and team	May 2022
Draft Report shared with wider group of stakeholders	June 2022
Final Report	July 2022
Final Report shared with all respondents	July 2022

### 14. Contractual Arrangements

73. Evaluation consultant will be selected and recruited by the Evaluation Office of UNEP under an individual Special Service Agreement (SSA) on a “fees only” basis (see below). By signing the service contract with UNEP/UNON, the consultant(s) certify that they have not been associated with the design and implementation of the project in any way which may jeopardize their independence and impartiality towards project achievements and project partner performance. In addition, they will not have any future interests (within six months after completion of the contract) with the project’s executing or implementing units. All consultants are required to sign the Code of Conduct Agreement Form.

74. Fees will be paid on an instalment basis, paid on acceptance by the Evaluation Manager of expected key deliverables. The schedule of payment is as follows:

**Schedule of Payment for the Evaluation Consultant:**

<b>Deliverable</b>	<b>Percentage Payment</b>
Approved Inception Report (as per annex document 7)	30%
Approved Draft Main Evaluation Report (as per annex document 13)	40%
Approved Final Main Evaluation Report	30%

75. Fees only contracts: Air tickets will be purchased by UNEP and 75% of the Daily Subsistence Allowance for each authorised travel mission will be paid up front. Local in-country travel will only be reimbursed where agreed in advance with the Evaluation Manager and on the production of acceptable receipts. Terminal expenses and residual DSA entitlements (25%) will be paid after mission completion.

76. The consultants may be provided with access to UNEP’s Programme Information Management System (PIMS) and if such access is granted, the consultants agree not to disclose information from that system to third parties beyond information required for, and included in, the evaluation report.

77. In case the consultants are not able to provide the deliverables in accordance with these guidelines, and in line with the expected quality standards by the UNEP Evaluation Office, payment may be withheld at the discretion of the Director of the Evaluation Office until the consultants have improved the deliverables to meet UNEP’s quality standards.

78. If the consultant(s) fail to submit a satisfactory final product to UNEP in a timely manner, i.e., before the end date of their contract, the Evaluation Office reserves the right to employ additional human resources to finalize the report, and to reduce the consultants’ fees by an amount equal to the additional costs borne by the Evaluation Office to bring the report up to standard.

## ANNEX VII. QUALITY ASSESSMENT OF THE EVALUATION REPORT

### Quality Assessment of the Evaluation Report

Evaluand Title:

**Terminal Evaluation of UNEP/EC Project "GPGC/ENRTP Resource Efficiency through Application of Lifecycle thinking" (REAL) - PIMS 1991 (2016-2020)**

All UNEP evaluations are subject to a quality assessment by the Evaluation Office. This is an assessment of the quality of the evaluation product (i.e. evaluation report) and is dependent on more than just the consultant's efforts and skills.

	UNEP Evaluation Office Comments	Final Report Rating
<b>Substantive Report Quality Criteria</b>		
<p><b>Quality of the Executive Summary:</b></p> <p>The Summary should be able to stand alone as an accurate summary of the main evaluation product. It should include a concise overview of the evaluation object; clear summary of the evaluation objectives and scope; overall evaluation rating of the project and key features of performance (strengths and weaknesses) against exceptional criteria (plus reference to where the evaluation ratings table can be found within the report); summary of the main findings of the exercise, including a synthesis of main conclusions (which include a summary response to key strategic evaluation questions), lessons learned and recommendations.</p>	<p><b>Final report:</b></p> <p>Well-written and concise executive summary, covering evaluand and aspects as required. Detailed key findings by evaluation criteria and consistency of key findings, summary response to key evaluation questions, main conclusions, lessons and recommendations.</p>	<b>6</b>
<p><b>I. Introduction</b></p> <p>A brief introduction should be given identifying, where possible and relevant, the following: institutional context of the project (sub-programme, Division, regions/countries where implemented) and coverage of the evaluation; date of PRC approval and project document signature); results frameworks to which it contributes (e.g. Expected Accomplishment in POW); project duration and start/end dates; number of project phases (where appropriate); implementing partners; total secured budget and whether the project has been evaluated in the past (e.g. mid-term, part of a synthesis evaluation, evaluated by another agency etc.)</p> <p>Consider the extent to which the introduction includes a concise statement of the purpose of the evaluation and the key intended audience for the findings?</p>	<p><b>Final report:</b></p> <p>Concise introduction to the REAL project, its rationale and project history as well as the purpose of the evaluation and key audiences.</p>	<b>5</b>



<p><b>II. Evaluation Methods</b></p> <p>A data collection section should include: a description of evaluation methods and information sources used, including the number and type of respondents; justification for methods used (e.g. qualitative/quantitative; electronic/face-to-face); any selection criteria used to identify respondents, case studies or sites/countries visited; strategies used to increase stakeholder engagement and consultation; details of how data were verified (e.g. triangulation, review by stakeholders etc.).</p> <p>Methods to ensure that potentially excluded groups (excluded by gender, vulnerability or marginalisation) are reached and their experiences captured effectively, should be made explicit in this section.</p> <p>The methods used to analyse data (e.g. scoring; coding; thematic analysis etc.) should be described.</p> <p>It should also address evaluation limitations such as: low or imbalanced response rates across different groups; gaps in documentation; extent to which findings can be either generalised to wider evaluation questions or constraints on aggregation/disaggregation; any potential or apparent biases; language barriers and ways they were overcome.</p> <p>Ethics and human rights issues should be highlighted including: how anonymity and confidentiality were protected and strategies used to include the views of marginalised or potentially disadvantaged groups and/or divergent views. Is there an ethics statement?</p>	<p><b>Final report:</b></p> <p>Evaluation approach and methods used described by consultant as well as limitations. Focus on analysis of stakeholder engagement. Compliance with ethics in data collection.</p>	<p>5</p>
<p><b>III. The Project</b></p> <p>This section should include:</p> <ul style="list-style-type: none"> <li>• <i>Context:</i> 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).</li> <li>• <i>Results framework:</i> Summary of the project's results hierarchy as stated in the ProDoc (or as officially revised)</li> <li>• <i>Stakeholders:</i> Description of groups of targeted stakeholders organised according to relevant common characteristics</li> <li>• <i>Project implementation structure and partners:</i> A description of the implementation structure with diagram and a list of key project partners</li> <li>• <i>Changes in design during implementation:</i> Any key events that affected the project's scope or parameters should be described in brief in chronological order</li> <li>• <i>Project financing:</i> Completed tables of: (a) budget at design and expenditure by components (b) planned and actual sources of funding/co-financing</li> </ul>	<p><b>Final report:</b></p> <p>Succinct overview giving the reader a good understanding of the evaluand.</p>	<p>6</p>
<p><b>IV. Theory of Change</b></p> <p>The <i>TOC at Evaluation</i> should be presented clearly in both diagrammatic and narrative forms. Clear articulation of each major causal pathway is expected, (starting from outputs to long term impact), including explanations of all drivers and assumptions as well as the expected roles of key actors.</p> <p>This section should include a description of how the <i>TOC at Evaluation</i><sup>77</sup> was designed (who was involved etc.) and applied to the context of the project? Where the project results as stated in the project design documents (or formal revisions of the project design) are not an accurate reflection of the project's intentions or do</p>	<p><b>Final report:</b></p> <p>Succinct presentation and discussion of the theory of change with emphasis on outcomes, intermediate states and impact. Detailed figure of theory of change at evaluation.</p>	<p>5</p>

<sup>77</sup> During the Inception Phase of the evaluation process a *TOC at Evaluation 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 evaluation process this TOC is revised based on changes made during project intervention and becomes the *TOC at Evaluation*.

<p>not follow UNEP's definitions of different results levels, project results may need to be re-phrased or reformulated. In such cases, a summary of the project's results hierarchy should be presented for: a) the results as stated in the approved/ revised Prodoc logframe/TOC and b) as formulated in the <i>TOC at Evaluation</i>. The two results hierarchies 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'.</p>		
<p><b>V. Key Findings</b></p> <p><b>A. Strategic relevance:</b> This section should include 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. An assessment of the complementarity of the project at design (or during inception/mobilisation<sup>78</sup>), with other interventions addressing the needs of the same target groups should be included. Consider the extent to which all four elements have been addressed:</p> <ul style="list-style-type: none"> <li>i. Alignment to the UNEP Medium Term Strategy (MTS) and Programme of Work (POW)</li> <li>ii. Alignment to Donor/GEF Strategic Priorities</li> <li>iii. Relevance to Regional, Sub-regional and National Environmental Priorities</li> <li>iv. Complementarity with Existing Interventions</li> </ul>	<p><b>Final report:</b></p> <p>All four elements well covered in assessment of strategic relevance.</p>	<p><b>5</b></p>
<p><b>B. Quality of Project Design</b></p> <p>To what extent are the strength and weaknesses of the project design effectively <u>summarized</u>?</p>	<p><b>Final report:</b></p> <p>Good summary of project design strengths and weaknesses.</p>	<p><b>5</b></p>
<p><b>C. Nature of the External Context</b></p> <p>For projects where this is appropriate, key <u>external</u> features of the project's implementing context that limited the project's performance (e.g. conflict, natural disaster, political upheaval<sup>79</sup>), and how they affected performance, should be described.</p>	<p><b>Final report:</b></p> <p>Summary of external features provided.</p>	<p><b>5</b></p>
<p><b>D. Effectiveness</b></p> <p><b>(i) Outputs and Project Outcomes:</b> How well does the report present a well-reasoned, complete and evidence-based assessment of the a) availability of outputs, and b) achievement of project outcomes? How convincing is the discussion of attribution and contribution, as well as the constraints to attributing effects to the intervention.</p> <p>The effects of the intervention on differentiated groups, including those with specific needs due to gender, vulnerability or marginalisation, should be discussed explicitly.</p>	<p><b>Final report:</b></p> <p>Detailed performance assessment and overview tables at output and outcome levels.</p>	<p><b>6</b></p>

<sup>78</sup> 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.

<sup>79</sup> 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.

<p><b>(ii) Likelihood of Impact:</b> How well does the report present an integrated analysis, guided by the causal pathways represented by the TOC, of all evidence relating to likelihood of impact?</p> <p>How well are change processes explained and the roles of key actors, as well as drivers and assumptions, explicitly discussed?</p> <p>Any unintended negative effects of the project should be discussed under Effectiveness, especially negative effects on disadvantaged groups.</p>	<p>Final report:</p> <p>Detailed discussion of likelihood of impact supported by various sources of evidence.</p>	<p>5</p>
<p><b>E. Financial Management</b></p> <p>This section should contain an integrated analysis of all dimensions evaluated under financial management and include a completed 'financial management' table.</p> <p>Consider how well the report addresses the following:</p> <ul style="list-style-type: none"> <li>• Adherence to UNEP's financial policies and procedures</li> <li>• completeness of financial information, including the actual project costs (total and per activity) and actual co-financing used</li> <li>• communication between financial and project management staff</li> </ul>	<p>Final report:</p> <p>All elements covered to-the-point with use of table.</p>	<p>5</p>
<p><b>F. Efficiency</b></p> <p>To what extent, and how well, does the report present a well-reasoned, complete and evidence-based assessment of efficiency under the primary categories of cost-effectiveness and timeliness including:</p> <ul style="list-style-type: none"> <li>• Implications of delays and no cost extensions</li> <li>• Time-saving measures put in place to maximise results within the secured budget and agreed project timeframe</li> <li>• 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.</li> <li>• The extent to which the management of the project minimised UNEP's environmental footprint.</li> </ul>	<p>Final report:</p> <p>Detailed assessment of time efficiency, cost efficiency and synergy.</p>	<p>6</p>
<p><b>G. Monitoring and Reporting</b></p> <p>How well does the report assess:</p> <ul style="list-style-type: none"> <li>• Monitoring design and budgeting (<i>including SMART results with measurable indicators, resources for MTE/R etc.</i>)</li> <li>• Monitoring of project implementation (<i>including use of monitoring data for adaptive management</i>)</li> <li>• Project reporting (<i>e.g. PIMS and donor reports</i>)</li> </ul>	<p>Final report:</p> <p>Integrated analysis of all dimensions delivered.</p>	<p>5</p>
<p><b>H. Sustainability</b></p> <p>How well does the evaluation identify and assess the key conditions or factors that are likely to undermine or contribute to the persistence of achieved project outcomes including:</p> <ul style="list-style-type: none"> <li>• Socio-political Sustainability</li> <li>• Financial Sustainability</li> <li>• Institutional Sustainability</li> </ul>	<p>Final report:</p> <p>Adequate discussion of key conditions and factors provided.</p>	<p>5</p>
<p><b>I. Factors Affecting Performance</b></p> <p>These factors are <u>not</u> discussed in stand-alone sections but are <b>integrated in criteria A-H as appropriate</b>. Note that these are described in the Evaluation Criteria Ratings Matrix. To what extent,</p>	<p>Final report:</p>	<p>6</p>

<p>and how well, does the evaluation report cover the following cross-cutting themes:</p> <ul style="list-style-type: none"> <li>• Preparation and readiness</li> <li>• Quality of project management and supervision<sup>80</sup></li> <li>• Stakeholder participation and co-operation</li> <li>• Responsiveness to human rights and gender equity</li> <li>• Environmental and social safeguards</li> <li>• Country ownership and driven-ness</li> <li>• Communication and public awareness</li> </ul>	<p>All factors covered in detail and discussed, including on human rights and gender equality.</p>	
<p><b>VI. Conclusions and Recommendations</b></p> <p><b>i. Quality of the conclusions:</b> The key strategic questions should be clearly and succinctly addressed within the conclusions section. It is expected that the conclusions will highlight the main strengths and weaknesses of the project and connect them in a compelling story line. Human rights and gender dimensions of the intervention (e.g. how these dimensions were considered, addressed or impacted on) should be discussed explicitly. Conclusions, as well as lessons and recommendations, should be consistent with the evidence presented in the main body of the report.</p>	<p><b>Final report:</b></p> <p>Well-written and condensed conclusion summarizing and main conclusions of the evaluation covering evaluation criteria and strategic questions.</p>	<p>6</p>
<p><b>ii) Quality and utility of the lessons:</b> Both positive and negative lessons are expected and duplication with recommendations should be avoided. Based on explicit evaluation findings, lessons should be rooted in real project experiences or derived from problems encountered and mistakes made that should be avoided in the future. Lessons are intended to be adopted any time they are deemed to be relevant in the future and must have the potential for wider application (replication and generalization) and use and should briefly describe the context from which they are derived and those contexts in which they may be useful.</p>	<p><b>Final report:</b></p> <p>Context of lessons well-described with cross-references to findings in the report.</p>	<p>6</p>
<p><b>iii) Quality and utility of the recommendations:</b></p> <p>To what extent are the recommendations 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? They should be feasible to implement within the timeframe and resources available (including local capacities) and specific in terms of who would do what and when.</p> <p>At least one recommendation relating to strengthening the human rights and gender dimensions of UNEP interventions, should be given.</p> <p>Recommendations should represent a measurable performance target in order that the Evaluation Office can monitor and assess compliance with the recommendations.</p> <p>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.</p>	<p><b>Final report:</b></p> <p>Well-described challenges/problems informing prescriptions with cross-reference to findings in the report. One recommendation related to human rights/gender indicators.</p>	<p>6</p>

<sup>80</sup> 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.

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.		
<b>VII. Report Structure and Presentation Quality</b>		
i) <b>Structure and completeness of the report:</b> To what extent does the report follow the Evaluation Office guidelines? Are all requested Annexes included and complete?	Final report:  Follows UNEP Evaluation Office guidance and requirements.	6
ii) <b>Quality of writing and formatting:</b> 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? Does the report follow Evaluation Office formatting guidelines?	Final report:  Writing is clear and concise and formatting in-line with guidelines.	6
<b>OVERALL REPORT QUALITY RATING</b>		<b>5.5</b>

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. The overall quality of the evaluation report is calculated by taking the mean score of all rated quality criteria.

At the end of the evaluation, compliance of the evaluation process against the agreed standard procedures is assessed, based on the table below. *All questions with negative compliance must be explained further in the table below.*

Evaluation Process Quality Criteria	Compliance	
	Yes	No
<b>Independence:</b>		
1. Were the Terms of Reference drafted and finalised by the Evaluation Office?	x	
2. Were possible conflicts of interest of proposed Evaluation Consultant(s) appraised and addressed in the final selection?	x	
3. Was the final selection of the Evaluation Consultant(s) made by the Evaluation Office?	x	
4. Was the evaluator contracted directly by the Evaluation Office?	x	
5. Was the Evaluation Consultant given direct access to identified external stakeholders in order to adequately present and discuss the findings, as appropriate?	x	
6. Did the Evaluation Consultant raise any concerns about being unable to work freely and without interference or undue pressure from project staff or the Evaluation Office?		x
7. If Yes to Q6: Were these concerns resolved to the mutual satisfaction of both the Evaluation Consultant and the Evaluation Manager?		
<b>Financial Management:</b>		
8. Was the evaluation budget approved at project design available for the evaluation?	x	
9. Was the final evaluation budget agreed and approved by the Evaluation Office?	x	
10. Were the agreed evaluation funds readily available to support the payment of the evaluation contract throughout the payment process?	x	
<b>Timeliness:</b>		
11. If a Terminal Evaluation: Was the evaluation initiated within the period of six months before or after project operational completion? Or, if a Mid Term Evaluation: Was the evaluation initiated within a six-month period prior to the project's mid-point?		x
12. Were all deadlines set in the Terms of Reference respected, as far as unforeseen circumstances allowed?	x	
13. Was the inception report delivered and reviewed/approved prior to commencing any travel?	x	
<b>Project's engagement and support:</b>		
14. Did the project team, Sub-Programme Coordinator and identified project stakeholders provide comments on the evaluation Terms of Reference?	x	
15. Did the project make available all required/requested documents?	x	
16. Did the project make all financial information (and audit reports if applicable) available in a timely manner and to an acceptable level of completeness?	x	
17. Was adequate support provided by the project to the evaluator(s) in planning and conducting evaluation missions?	x	
18. Was close communication between the Evaluation Consultant, Evaluation Office and project team maintained throughout the evaluation?	x	
19. Were evaluation findings, lessons and recommendations adequately discussed with the project team for ownership to be established?	x	
20. Did the project team, Sub-Programme Coordinator and any identified project stakeholders provide comments on the draft evaluation report?	x	
<b>Quality assurance:</b>		

21. Were the evaluation Terms of Reference, including the key evaluation questions, peer-reviewed?	<b>x</b>	
22. Was the TOC in the inception report peer-reviewed?	<b>x</b>	
23. Was the quality of the draft/cleared report checked by the Evaluation Manager and Peer Reviewer prior to dissemination to stakeholders for comments?	<b>x</b>	
24. Did the Evaluation Office complete an assessment of the quality of both the draft and final reports?	<b>x</b>	
<b>Transparency:</b>		
25. Was the draft evaluation report sent directly by the Evaluation Consultant to the Evaluation Office?	<b>x</b>	
26. Did the Evaluation Manager disseminate (or authorize dissemination) of the cleared draft report to the project team, Sub-Programme Coordinator and other key internal personnel (including the Reference Group where appropriate) to solicit formal comments?	<b>x</b>	
27. Did the Evaluation Manager disseminate (or authorize dissemination) appropriate drafts of the report to identified external stakeholders, including key partners and funders, to solicit formal comments?	<b>x</b>	
28. Were all stakeholder comments to the draft evaluation report sent directly to the Evaluation Office	<b>x</b>	
29. Did the Evaluation Consultant(s) respond adequately to all factual corrections and comments?	<b>x</b>	
30. Did the Evaluation Office share substantive comments and Evaluation Consultant responses with those who commented, as appropriate?	<b>x</b>	

**Provide comments / explanations / mitigating circumstances below for any non-compliant process issues.**

<b><u>Process Criterion Number</u></b>	<b><u>Evaluation Office Comments</u></b>
11.	The evaluation process was delayed due to change of staff in the Evaluation Office.