



**Validated Terminal Review of the UNEP Project
'UN Peace Operations Rapid Environment and Climate
Technical Assistance Facility' (REACT Project)**

PIMS ID 01954

2016 – 2021



**UNEP Ecosystems Division
Validation date: November 2024**



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

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This Terminal Review (TR) was prepared for the Conflict Management Branch Office of UN Environment Programme (UNEP) by Mr. Roland Wong, Climate Change Mitigation Specialist as the International Review Consultant.

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

The Review Consultant would also like to thank the “UN Peace Operations Rapid Environment and Climate Technical Assistance Facility” Project team and in particular, Mr. Andrew Morton, Mr. Richard Smith, Mr. Paul Obonyo, and Ms. Nita Venturelli for their contribution and collaboration throughout the review process and for guiding and managing the Review.

The Review Consultant hope that the findings, conclusions and lessons learned will contribute to the successful transformation of all Peacekeeping Missions as well as the UN Secretariat to a minimized environmental footprint.

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The Principal Review Consultant has over 25 years' experience with a recent focus on the development and management of projects in renewable energy and energy efficiency, sustainable transport, and green city development. These projects encompass his experience in environmental management, institutional capacity building, policy and economic analysis, planning, management, monitoring and evaluation for projects in more than 40 countries. His demonstrated abilities and experience include adoption and market transformation of sustainable low carbon technologies; formulation and preparation of low carbon and climate change investment projects; partnership building as a means to achieving adoption of clean technologies and energy efficiency practice; development and mentoring of energy, environmental and water resource professionals; networking, coordinating and negotiating projects in low carbon and climate change in several countries.

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ABOUT THE REVIEW

Joint Review: No

Report Language(s): English.

Review Type: Terminal Review

Brief Description: This report is a terminal review of a UNEP project implemented between June 2016 and December 2022. The Project aimed to provide technical assistance to substantially reduce the environmental impact of the 165,000 UN and African Union Peacekeepers and save tens of millions of dollars in energy costs.

Key words: Climate Change; Ecosystem Management; Energy Efficiency; Governance;; Renewable Energy;; Sustainable Energy; Sustainable Water Consumption; Sustainable Resource Utilization¹.

Primary data collection period: June 2016 and June 2021

Field mission dates: July to August 2023

¹ This data is used to aid the internet search of this report on the Evaluation Office of UNEP Website

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LIST OF ACRONYMS

BSP	Bali Strategic Plan
CEB	United Nations System Chief Executives Board for Coordination
CMB	Conflict Management Branch
COE	Contingent Owned Equipment
DC	Disasters and Conflict
DFS	UN Department of Field Support
DMS	Director of Mission Support
DOS	Department of Operations Support
DPO	UN Department of Peace Operations (formerly DPKO)
DPA	UN Department of Political Affairs (or Department of Peace and Political Affairs)
DPM	UN Department of Management
EA	Expected accomplishment
eAPP	Environment Action Planning and Performance software
ECP	Environmental Cooperation for Peacebuilding
EG	Environmental Governance
EIA	Environmental Impact Assessment
EMG	Environment Management Group
EMS	Environmental Management Systems
ESCAP	United Nations Economic and Social Commission for Asia and the Pacific
ETSU	Environmental Technical Support Unit
FACE	Field Advisory Committee on Environment
GHG	Greenhouse Gas Emissions
GSC	Global Service Centre, Brindisi
HR	Human resources
HQ	Headquarters
HVAC	Heating, Ventilation, and Air Conditioning
ICA	Internal Cooperation Agreement
IRENA	International Renewable Energy Agency
ISO	International Standards Organization
LEAF	Leading Environmental Management in the Field
LIA	Likelihood of impact assessment
LoA	Letter of Administration
LSD	Logistics Support Division
KPI	Key performance indicator
kVA	Kilovolt amps

MEAP	Mission-wide Environmental Action Plan
MINUJUSTH	United Nations Mission for Justice Support in Haiti
MINURSO	United Nations Mission for the Referendum in Western Sahara
MINUSCA	United Nations Multidimensional Integrated Stabilization Mission in the Central African Republic
MINUSMA	United Nations Multidimensional Integrated Stabilization Mission in Mali
MINUSTAH	United Nations Stabilization Mission in Haiti
MONUSCO	United Nations Stabilisation Mission in the Democratic Republic of Congo
MTR	Mid-Term Review
OICT	Office of Information and Communications Technology
OIOS	Office of Internal Oversight Services
OSCM	Office of Supply Chain Management
PCCs	Police Contributing Countries
PCDMB	Post-Conflict and Disaster Management (now Crisis Management Branch)
PIMS	UNEP-internal Project Information Management System
PLF	Project Logical Framework
PoW	Programme of Works
PSC	Project Steering Committee
RBB	Results Based Budgeting
REACT	UN Peace Operations Rapid Environment and Climate Technical Assistance Facility Project
RfP	Request for Proposal
RMPs	Risk Mitigation Plans
RToC	Reconstructed Theory of Change
SCM	Supply chain management
SOPs	Standard Operation Procedures
SORs	Statement of Requirements
SUN	Sustainable UN facility
TA	Technical assistance
TCCs	Troup Contributing Countries
ToC	Theory of Change
ToR	Terms of Reference
TR	Terminal Review
TWGs	Technical Working Groups
UMOJA	Single, global solution that enables efficient and transparent management of United Nation's financial, human and physical resources
UNAMA	United Nations Assistance Mission in Afghanistan
UNAMID	African Union - United Nations Hybrid Operation in Darfur

UNDOF	United Nations Disengagement Observer Force, a peacekeeping mission tasked with maintaining the ceasefire between Israel and Syria
UNEP	United Nations Environment Programme
UNFICYP	United Nations Peacekeeping Force in Cyprus
UNIFIL	United Nations Interim Force in Lebanon
UNIOGBIS	United Nations Integrated Peacebuilding Office in Guinea-Bissau
UNISFA	United Nations Interim Security Force for Abyei
UNMIK	United Nations Interim Administration Mission in Kosovo
UNMISS	United Nations Mission in South Sudan
UNOPS	United Nations Office for Project Services
UNSCAP	UN Secretariat Climate Action Plan
UNVMC	United Nations Verification Mission in Colombia
USG	Under-Secretary General of DOS
UNSOS	United Nations Support Office in Somalia
VTC	Video Teleconference

PROJECT IDENTIFICATION TABLE

Table 1: Project Identification Table

UNEP PIMS ID:	01954	Project Identification:	413.3
Implementing Partners:	<u>UNOPS</u>	Executing Agency:	UNEP
SDG(s) and indicator(s)	13 (Climate Action) and the 12 (Responsible consumption and production) but several other SDGs are relevant such as 7 (Affordable and clean energy) and 9 (industry innovation, infrastructure). As a consumer of goods and services, the UN system, through its management, and behaviour in its field operations, can contribute positively (or negatively) to the fulfilment of these goals in the host countries.		
Sub-programme:	Equally applicable to #2 Resilience to Disasters and Conflicts and #4 Environmental Governance, but will report to EG.	Expected Accomplishment(s):	<p>2016-2017 EG: EA a): The United Nations system and multilateral environmental agreement bodies, respecting the mandate of each entity, demonstrate increasing coherence and synergy of actions on environmental issues.</p> <p>2018-2019 EG: EAa) The international community increasingly converges on common and integrated approaches to achieve environmental objectives and implement the 2030 Agenda for Sustainable Development</p> <p>2020 -2021 EG:</p> <p>2016-2017 DC: EA b) : The capacity of countries to use natural resource and environmental management to support sustainable recovery from natural and man-made disasters is improved.</p> <p>2018-2019 DC EA b: Emergency response and post-crisis recovery plans integrate environmental considerations to increase the sustainability of recovery</p> <p>2020 – 2021 DC EA b) Emergency response and post crisis recovery plans integrate environmental considerations to increase the sustainability of recovery</p>
UNEP approval date:	21 July 2016	Programme of Work Output(s):	EG 2020-2021: Technical assistance provided to humanitarian and military actors to reduce their environmental footprint
Expected start date:	1 April 2016	Actual start date:	July 2016
Planned operational completion date:	30 June 2021	Actual operational completion date:	30 June 2021

Planned total project budget at approval:	US\$ 6,950,000 Rev 2 US\$ 8,485,000	Actual total expenditures reported as of 30 June 2021:	US\$ 8,195,101.33
Expected co-financing:	US\$ 80,000	Secured co-financing:	US\$ 0
First disbursement:	July 2016	Planned date of financial closure:	30 Dec 2022
No. of project revisions:	2	Date of last approved project revision:	18 June 2021
No. of Steering Committee meetings:	4	Date of last/next Steering Committee meeting:	Last: 13 December 2021
Mid-term Review² (planned date):	2018	Mid-term Review (actual date):	December 2019
Terminal Review (planned date):	March 2022	Terminal Review (actual date):	August 2023
Coverage - Country(ies):	Office work: Switzerland, USA, Italy. Fieldwork includes: <ul style="list-style-type: none"> • MINURSO – Western Sahara, • MINUSCA- Central African Republic, • MINUSMA- Mali, • MONUSCO – DR Congo, UNDOF Syria, • UNFICYP - Cyprus, • UNIFIL - Lebanon, • UNISFA-Abeyei Sudan/South Sudan, UNMIK - Kosovo, • UNMISS – South Sudan, UNSOS - Somalia 	Coverage - Region(s):	
Dates of previous project phases:	N/A	Status of future project phases:	N/A

² UNEP policies require projects with planned implementation periods of 4 or more years to have a mid-point assessment of performance. For projects under 4 years, this should be marked as N/A.

Project background

- E-1. The UNEP Project entitled “UN Peace Operations Rapid Environment and Climate Technical Assistance Facility Project” (herein referred to as the “REACT”, or “Project”) is a carry-over from the September 2014 declaration of the Secretary-General that “the United Nations system reaches full compliance with the United Nations Climate Neutral Strategy and becomes effectively climate neutral by 2020 at the latest” and the intention of DFS leadership for far-reaching improved environmental management.
- E-2. This triggered a formal 2015 request that UNEP provide technical support in the form of a time-bound project to build the standards and address the lack of capacity within peacekeeping to address some of the most glaring gaps. This resulted in the Global UN Head represented by the Under-Secretary General (USG) of DFS and UNEP signing off on a Project Document for the REACT Project, outlining a 6-year strategy (2017-2023) for developing and implementing a strategy for significant environmental reform and investment programme for all of UN Peacekeeping Missions, both in the field and at headquarters. The REACT Project was a small part of an overall DFS/DOS movement to implement a DOS Environmental Strategy aimed to both substantially reduce the environmental impact of the 165,000 UN and African Union peacekeepers and save tens of millions of dollars in energy costs. REACT Phase 1 was US\$6.95 million (July 2016 – June 2020) and Phase 2 was US\$1.55 million (Paras 24-26).
- E-3. A key aspect of the baseline scenario during the commencement of REACT (as of mid-2016) was the lack of capacity within Peacekeeping Missions:
- UN Peacekeeping Missions were large and complex operations with an environmental footprint that is ill-defined but broadly considered to be in need of substantial reduction;
 - There were clear indications that DFS/DOS leadership and Mission-level are motivated to lead a change process to achieve that reduction;
 - Given the scale of Peacekeeping resources at the country level (compared to all other peacebuilding, humanitarian and development actors), improvements in Mission environmental performance could catalyze and underwrite improvements from other actors;
 - DFS/DOS and Missions do not have all of the in-house expertise needed to design, plan and implement the change process;
 - UNEP and its technical partners were to fill the expertise gap in DFS/DOS and Missions through the provision of technical assistance. Technical assistance, if well designed and applied on a sufficiently large scale and for a sufficient continuous period, should help DOS and Missions reach a tipping point where after they have sufficient internal organizational momentum to continue to improve without such intensive external support...

This Review

- E-4. This Terminal Review (TR) was undertaken 24 months after the completion of the Project and is guided by the Terms of Reference in Annex IX, and undertaken in line with the UNEP Evaluation Policy, and the UNEP Programme Manual. This TR set out to (i) provide evidence of results to meet accountability requirements, and (ii) promote operational improvement, learning and knowledge sharing through results and lessons learned from UNEP, DOS, the United Nations Office for Project Services (UNOPS) and other executing partners. The TR was intended to identify lessons of operational relevance for future project formulation and implementation.
- E-5. The primary focus for the TR was to assess from key stakeholders its performance (in terms of relevance, effectiveness and efficiency), and to determine outcomes and impacts (actual and potential) stemming from the activities of the Project including sustainability.
- E-6. Data collection came mainly from Project reports related to the Project, and interviews with relevant stakeholders (the Project team, implementing partners and beneficiaries).
- E-7. Limitations to this TE included the absence of travel by the International Review Consultant to Geneva and various peacekeeping Missions to conduct face-to-face meetings with all

stakeholders, and weak recall among respondents due to significant time lapse between operational completion of the Project and the review data collection period. Time lapses were two years before the launch of the Review.

Conclusions and Summary of Project Findings and Ratings

- E-8. The UNEP-implemented portion of the REACT Project has strengthened the capacities of DOS personnel and Peacekeeping Missions to reduce their environmental footprint. UNEP's role on the REACT Project was most valuable in identifying strategic priorities to build systems to access reliable data to support analysis, to measure and drive performance, to roll out of consistent methodologies for site assessments, and to build systems for verified data gathering and sharing. This all provided a sound foundation for improvement of Mission environmental performance (Para 155).
- E-9. UNEP personnel also made a key decision to outsource technical workstreams of energy, water, wastewater and waste, to UNOPS as members of the REACT Technical Team. With many of Team members from the private sector with an industrial background, they were able to provide in-field hands-on experience on technical outputs and specialized areas, as opposed to UNEP personnel who would not have been able to provide that type of assistance. The REACT Technical Team was recognized as a major asset and success factor that was preserved during the transition from UNEP to UNOPS (Para 156).
- E-10. This has led to a deep appreciation by the USG of DOS and UN Member States of the end results of the REACT Project as of July 2023. The General Assembly's continuance of these efforts with the Member State Group of Friends on Leading Environmental Management in the Field (LEAF) through an "Environment Strategy 2030: Responsibility, Ambition, Legacy", will guarantee sustainability of the REACT Project for several more years (Para 157).
- E-11. Phases 1 and 2 of the REACT Project provided numerous achievements including roll out of an extensive data collection and verification system that provides a reliable picture of the environmental footprint of UN peace operations down to the site level, strengthened capacity in HQ and Missions to support progress on environmental management, completed development of multi-year plans for all Missions in energy management, waste management and EIAs, and tangible progress achieved across all technical pillars with mission scores steadily increasing across the board and many examples of concrete steps taken to improve performance. Overall Project performance was *highly satisfactory*.

Lessons Learned

- E-12. Lesson 1: DOS and the UN Secretariat are not capable of rapid or radical change. However, incremental change is fully possible (Para 160).
- E-13. Lesson 2: A process of more stringent EMS internal audit assessment was modelled on ISO14001 that has aided the effectiveness of the EMS (Para 161).
- E-14. Lesson 3: For the REACT Project and projects of this type, there is operational superiority of the UNOPS project staffing system compared to the equivalent UN Secretariat (Para 162).
- E-15. Lesson 4: Resource constraint within Field Missions is real and a significant hurdle. Alternative funding mechanisms involving partnerships with other agencies and donors need to be explored (Para 163).
- E-16. Lesson 5: Key environmental infrastructure, or infrastructure with significant influence on the environment should be procured using a system that results in globally consistent solutions across multiple UN entities (Para 164).
- E-17. Lesson 6: The use of energy management plans is a key to effective management of energy investments. This would include implementation of renewable energy at scale that requires significant levels of co-financing (Para 165 **Error! Reference source not found.**).
- E-18. Lesson 7: The REACT Project has had to socialize within Missions to encourage them to prepare waste management plans for effective waste management investments, and to get Missions to compost recyclable waste and to incinerate non-compostable and non-recyclable solid waste.

However, global solutions for recycling need to be advanced in the next phase of REACT (Para 166).

Recommendations

E-19. No UNEP or branch level recommendations are made in this case, as the host branch for the REACT Project (the Crisis Management Branch or CMB) and UNEP as a whole has fully exited from this work stream (Para 167).

Validation

E-20. The report has been subject to an independent validation exercise performed by UNEP's Evaluation Office. The performance ratings for the REACT project, set out in the Conclusions and Recommendations section for the criteria of Monitoring and Reporting (Monitoring of project implementation and Project reporting) and Preparation and readiness have been adjusted as a result. The overall project performance is validated at the '**Highly Satisfactory**' level. Moreover, the Evaluation Office has found the overall quality of the report to be '**Satisfactory**' (see Annex X).

I. INTRODUCTION

1. The UNEP Project entitled “Rapid Environment and Climate Technical Assistance Facility” (otherwise referred to as REACT, the REACT Project or the Project) was implemented by UN Environment under its Post Conflict and Disaster Management Branch (otherwise known as the Conflict Management Branch or CMB) and executed by the United Nations Department for Operational Support (DOS)³ and the United Nations Office for Project Services (UNOPS). REACT was managed out of UNEP’s CMB office in Geneva. The purpose of REACT was to promote the mainstreaming of environmental sustainability in Peacekeeping operations or Peacekeeping Missions. It did this by supporting DOS (formerly the Department of Field Support or DFS prior to 2018) in its efforts to improve its environmental and energy performance. The Project is governed by an Administrative Arrangement between UNEP and the UN Secretariat, allocating an amount of US\$8.5 million, that was implemented from July 2016 to June 2021.
2. In line with the UNEP Evaluation Policy⁴, this Terminal Review (TR) was conducted 24 months after the date of operational completion. The aim of this Review was to assess the overall REACT Project as described in the May 2016 Project Document for “*UN Peace Operations Rapid Environment and Climate Technical Assistance Facility - REACT*”. This Review consists of an evaluation of Project support for technical assistance and institutional support efforts to improve the environmental and energy performance of UN Peacekeeping Missions. The REACT TR’s primary objectives were to (i) provide evidence of results to meet accountability requirements, and (ii) promote operational improvement, learning and knowledge sharing through results and lessons learned from UNEP, DOS, the United Nations Office for Project Services (UNOPS) and other executing partners. In line with the UN Environment Evaluation Policy, this TR was to assess its performance (in terms of relevance, effectiveness and efficiency), and to determine outcomes and impacts (actual and potential) stemming from the activities of the Project including sustainability.
3. The TR for the REACT Project was conducted by Mr. Roland Wong serving as the independent International Review Consultant.
4. A Mid-Term Review (MTR) of the Project was conducted in December 2019. More details of the MTR are provided in Paras 41 to 43.

³ DOS is a Secretariat service provider for international peace operations, special political missions, as well as a major African Union operation (AMISOM). DOS’s mission is to help such peace operations succeed with support solutions that are rapid, effective, efficient and responsible.

⁴ <http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationPolicy/tabid/3050/language/en-US/Default.aspx>

II. REVIEW METHODS

A. UNEP's review approach

5. The REACT Project challenge for UNEP was how to best help DOS and its governing body to achieve its goal of substantially and permanently improve environmental performance without compromising operational capacity to achieve mission mandates. The conclusion reached by both UNEP and DOS was that there is no environmental challenge within UN Peacekeeping Missions that cannot be fully addressed applying a systemic approach and using mature technology that is widely available in the global commercial marketplace. In technical terms, the challenges are relatively basic and familiar.
6. This TR employed a *Theory of Change* (ToC) approach that was conducted to identify the Project's *intended impacts* through an analysis of the Project's *outputs-outcomes-impact pathways*. These pathways were evaluated against the *Project Logical Framework* (PLF) as a means of assessing the likelihood of impact. The review of the REACT PLF included an evaluation on the clarity of the indicators to be monitored to achieve an intended outcome and impact. The Review approach was to extract from key stakeholders the effectiveness of providing critical technical and political support to a large-scale DOS organizational reform process, resulting in the improved environmental performance of Peacekeeping Missions. Desk reviews and stakeholder consultations under this TR were focused on confirming the actual outcome of the Project, and the surrounding circumstances of the outcome that may lead to intermediate states and the intended impact of improved environmental performance of Peacekeeping Missions within SDG 6, 7 and 12. The intervention logic of the Project flows from baseline conditions outlined in Paras 30 and 31.
7. The TR approach is guided by the Terms of Reference in Annex IX and undertaken in line with the UNEP Evaluation Policy and the UNEP Programme Manual. This TR has been carried out using a set of 9 commonly applied review criteria which include: (1) strategic relevance⁵, (2) quality of Project design, (3) nature of external context, (4) effectiveness (including availability of outputs; achievement of outcomes and likelihood of impact), (5) financial management, (6) efficiency, (7) monitoring and reporting, (8) sustainability and (9) factors affecting Project performance and cross-cutting issues.
8. Most review criteria are rated on a 6-point scale as follows: Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MU); Unsatisfactory (U); Highly Unsatisfactory (HU). Sustainability and Likelihood of Impact are rated from Highly Likely (HL) down to Highly Unlikely (HU) and Nature of External Context is rated from Highly Favourable (HF) to Highly Unfavourable (HU). The ratings against each criterion are "weighted" to derive the Overall Project Performance Rating. The greatest weight is placed on the achievement of outcomes, followed by dimensions of sustainability.
9. For the matrix of ratings levels for each criterion, the UNEP Evaluation Office has developed detailed descriptions of the main elements required to be demonstrated at each level (i.e. Highly Satisfactory to Highly Unsatisfactory) for each review criterion. The Review Consultant has considered all the evidence gathered during the TR in relation to this matrix in order to generate review criteria performance ratings.
10. With regards to strategic review questions and in addition to the 9 review criteria outlined in Para 7, the TR addresses a number of strategic questions that were formulated in the Terms of Reference:
 - how effective was the selected team human resources (HR) model that was based on a limited UNEP team and a larger flexible UNOPS hosted technical team?

⁵ This criterion includes a sub-category on Complementarity, which closely reflects the OECD-DAC criterion of 'Coherence', introduced in 2019. Complementarity with other initiatives is assessed with respect to the project's design. In addition, complementarity with other initiatives during the project's implementation is assessed under the criterion of Efficiency.

- how effective was the overall concept of using supplementary technical assistance, rather than boosting the core DFS-DOS teams (such as in NY and in Brindisi)?
- what role did the remainder of UNEP play in technically or substantially supporting the Project, and what does this indicate for the role of UNEP in future in this field?
- what changes were made to adapt to the effects of COVID-19 and how might any changes affect the Project's performance?

These questions were posed by the UNEP Evaluation Office in conjunction with members of the Project Team.

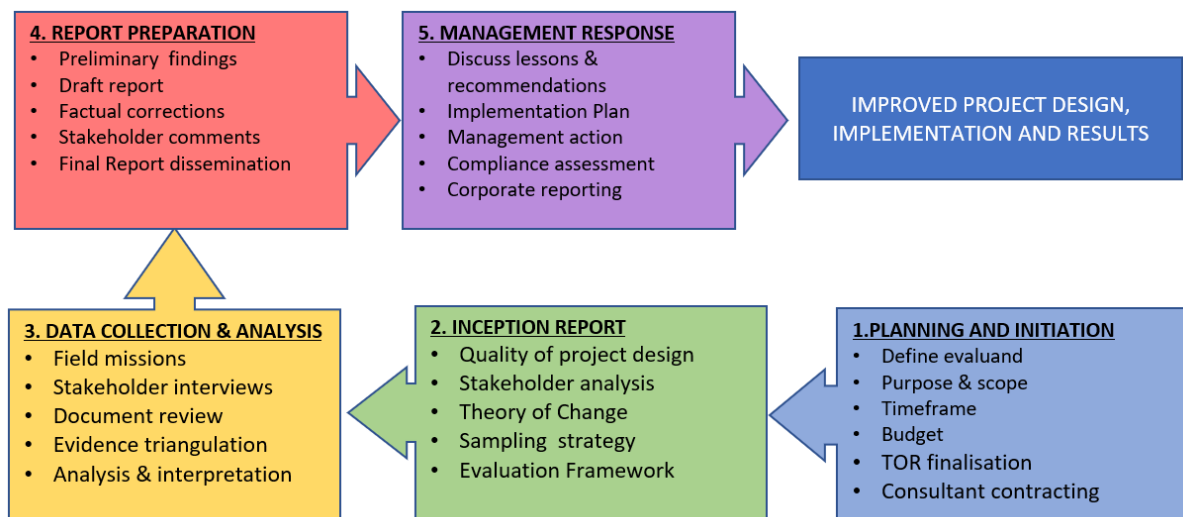
B. Review Process

11. This TR was conducted using a participatory approach with consultations with Project team members, partners and beneficiaries at several stages throughout the process. To deliver evidence-based qualitative and quantitative information, the collection of data and information was sourced from available key project documentation, desk studies, literature reviews, meetings with individuals and focus groups, surveys and direct observations. Documentation was provided by Project personnel in Paris and New York. The review methodology consisted of:

- a review of Project documents;
- re-examination of the PLF against which Project performance is evaluated, followed by the reconstruction of a ToC;
- guidance from UNEP's Project Manager under CMB to identify stakeholders to interview;
- Zoom/Team briefings with stakeholders with the offices of UNEP, DOS, Climate Change Mitigation Unit in Paris, France, and with various Peacekeeping Missions;
- follow-up phone conversations, emails and reporting writing from home base; and
- a period of additional gathering of information, validation of findings and editing of the draft report to reflect factual accuracy of the findings.

The Review process is illustrated on Figure 1.

Figure 1: UNEP Review Process



12. Steps were undertaken to enhance stakeholder engagement and the quality of consultation: i) interviewees were informed about the review's aims and informed of the expectations of the evaluation; ii) open-ended questions were used to promote balanced reflection, generate new insights, and yield higher quality information (as opposed to yes/no questions or an 'audit' approach); and iii) interviewees were assured of the anonymity and confidentiality of their input whenever deemed appropriate. A listing of stakeholders interviewed is provided in Annex II.
13. The TR assesses the Project performance against 9 criteria covered in Para 7. The Review follows the guidance provided by the Evaluation Office of UN Environment in 2017 with review criteria

being adapted as required. Central to the Review was the Project's Theory of Change to arrive at a nuanced understanding of how the Project intended to drive change and what contributing conditions ('drivers') would need to be in place to support such change. This is further discussed in Section IV.

14. The primary focus for the TR was extracting from key stakeholders the effectiveness of technical assistance being provided by REACT in establishing procedures, policies and practices from technical advice being implemented on the ground, resulting in the improved environmental performance of Peacekeeping Missions. Desk reviews and stakeholder consultations under this TR were focused on confirming the actual outcomes of the Project, and the surrounding circumstances of these outcomes that may lead to intermediate states and the intended impact of improved environmental performance of Peacekeeping Missions within SDG 6, 7 and 12.
15. While conducting this TR within an review framework (see Annex I) and in addition to strategic questions brought up in Para 10, the Review Consultant was cognizant of a number of other important strategic issues including:
 - the attitude and receptivity of the individual Missions, in particular senior leadership, to technical assistance and degree of follow-up on advice provided by the REACT team;
 - the acceptability of Mission performance assessments with the highly fluid situations in which peacekeeping Missions are deployed;
 - possible delays in the delivery of efficient procurement and rapid deployment of equipment and devices by the DOS Office of Supply Chain Management and the engineering teams and Finance Officers in the Missions to enable the solutions provided by the REACT team to be implemented⁶.

C. Data Collection Process

16. Data collection came mainly from Project documentation (including all reports related to the Project) and interviews with relevant stakeholders grouped into the following categories:
 - UNEP. This primarily involved CMB in Geneva, Switzerland;
 - DOS. Formerly DFS, they were the primary recipients of technical assistance from UNEP to deliver to peacekeeping missions located in New York and Brindisi, Italy;
 - UNOPS. They were the primary agency delivering technical assistance to DOS and peacekeeping missions under UNEP oversight;
 - Beneficiaries. This would primarily be the Peacekeeping Missions.

Annex II presents a summary of persons consulted during the TR.

17. Throughout this Review process and in the compilation of the TR Report, efforts have been made with all stakeholders to represent the views of both mainstream and more marginalized groups. Data was to be collected with respect to ethics and human rights issues. All discussions remained anonymous, and all information was collected according to relevant UNEG guidelines and UN standards of conduct.

D. Limitations and mitigation strategy

18. This Terminal Review was limited by:
 - the absence of travel by the International Review Consultant to Geneva and various peacekeeping Missions to conduct face-to-face meetings with all stakeholders. This limits the

⁶ This would include issues with DOS-developed Systems Contracts, engineering teams developing their own "workarounds", and conflicts with Secretariat functions (such as procurement moving from the Department of Management in the UN Secretariat) and unclear lines of responsibility with the Environmental Technical Support Unit (ETSU) and the Sourcing and the Supply Unit (SSU) based out of Brindisi GSC.

time period to interview a critical mass of key stakeholders. Though interviews with these key stakeholders were held by Zoom or Teams to provide information on the effectiveness of technical assistance being provided by REACT, this mode of communications represents a lost opportunity for the International Review Consultant to get to know the stakeholders better. Actual visits to the offices of the stakeholders are usually an opportunity for the stakeholders to make a 2–3-hour presentation followed by a question-and-answer period. This has many intangible benefits including the collection of information not documented. With the virtual visits on Zoom or Teams, these opportunities were limited. This limitation to the Review Consultant was somewhat mitigated by Zoom interviews with many of the stakeholders to triangulate information;

- weak recall among respondents due to significant time lapse between operational completion of the Project and the Terminal Review period. Time lapses were two years before the launch of the Review. This limitation to the Review Consultant was somewhat mitigated by Zoom interviews with personnel with longstanding relationships with REACT whose recall was adequate, and with Mission personnel who have access to markets for goods, and Mission personnel located in isolated posts.

III. THE PROJECT

A. Context

19. Peace operations alone contribute to more than 50% of the overall UN Climate footprint as the UN “Moving Towards a Climate Neutral UN” report demonstrates. As quoted in “United Nations Secretariat Climate Action Plan 2020-2030”, September 2019 (ESCAP), the UN Secretariat generated 1.1 million tCO₂ in 2017, over 90% of which was from field missions mandated by the Security Council and General Assembly. These include the carbon impact of civilian and uniformed personnel. Travel and facilities account for approximately 50% of the total emissions respectively.
20. The UN Peace Operations have a climate and environmental footprint commensurate with their size and field orientation. The footprint is an accumulation of impacts from hundreds of locations of power generation, vehicles and local travel. The footprint impact is magnified by:
 - the need for autonomy: the missions are generally located in war-torn developing countries with limited to no operating infrastructure for electricity, water, waste disposal and sewage;
 - geography: the missions are widely dispersed throughout multiple countries, often in very remote, undeveloped and inhospitable regions;
 - security: mission personnel and infrastructure in some countries are actively attacked, influencing what is needed and possible for operational support.
21. Notwithstanding, there remained considerable room for improvement, notably in wastewater management and energy. The UN peacekeeping missions deploy thousands of military and civilian personnel into regions where there is basically no local wastewater treatment capacity. Hence, the Missions need to construct and operate their own independent wastewater treatment systems. Procuring, delivering, installing, powering and servicing such equipment in very remote, water scarce regions such as northern Mali or the Chad-Central African Republic border, is a real and ongoing challenge.
22. UN Peacekeeping Missions also contribute approximately 55% of all UN-sourced greenhouse gas (GHG) emissions. Peacekeeping Missions rely on diesel generators for the provision of electricity in the absence of a functional national electrical grid. A recent inventory of the whole peacekeeping generator fleet noted 4,800 UN owned units with a total generation capacity of 1,200 kVA, which in total is equivalent to one large coal fired power station. The UN also supplies and transports its own diesel fuel to power these generators. The generated electricity is used to support the operation of military and civilian compounds with the single largest source of demand being air-conditioning units cooling portable and temporary facilities. The net result of this approach is reliability and autonomy, but at a very high cost. In the 2015-16 fiscal year, UN Peacekeeping Missions spent more than US\$400 million on fuel (mostly diesel) for transport and generators.
23. Though no detailed figures are available, Peacekeeping Missions are also thought to contribute up to 50% of the total volume of solid waste and wastewater of the UN. In this context, improving the climate and environmental performance of the UN Peace Operations was central to improving the entire UN. During the 2006-2016 period, the Department for Peace Operations (DPO) and DFS took steps to reduce the environmental footprint of Peacekeeping Missions, working in close collaboration with UNEP. Commencing in 2006, significant investments in environmental management were made by Peacekeepers with positive initiatives and performance improvements already noted across the Missions.
24. From 2008-2016, the Environmental Cooperation for Peacebuilding (ECP) programme was one of the four main work streams under UNEP’s Post-Conflict and Disaster Management Branch, now known as the Conflict Management Branch (CMB). The overall aim of the ECP programme was to strengthen the capacity of countries, regional organizations, UN entities and civil society to understand and respond to the conflict risks and peacebuilding opportunities presented by natural resources and environment. Overall, ECP worked as an umbrella programme and internal

incubator to test new ideas and to determine UNEP's future direction in addressing environment, conflict and peacebuilding issues⁷:

- in June 2009, UNEP helped DPKO and DFS to develop and adopt an *Environmental Policy* for UN Field Missions to reduce the environmental footprint of Peace Operations;
 - in 2012, 3 years after the adoption of the Policy, UNEP, DPKO, DFS and the Swedish Defense Research Agency partnered to assess the overall level of policy implementation. Ten peacekeeping missions were interviewed by UNEP to identify the range of positive practices adopted and main barriers, as well as how Peacekeeping operations could help prevent natural resources from contributing to instability and conflict relapse. The findings were published in the ECP report "Greening the Blue Helmets: Environment, Natural Resources and UN Peacekeeping Operations" (2012)⁸. This coincided with UNEP's implementation of the Sustainable UN (SUN) project, which supports all UN agencies in reducing their environmental footprint and implementing the UN Climate Neutral Strategy. The goal of the Strategy was for the UN system as a whole to become climate neutral and more sustainable by 2020;
 - on 3 September 2014, the Secretary-General articulated his expectation that "the United Nations system reaches full compliance with the United Nations Climate Neutral Strategy and becomes effectively climate neutral by 2020 at the latest"⁹ (in a letter to CEB members¹⁰);
 - the intention of DFS leadership was for far-reaching improved environmental management. After UNEP offered the services of a senior environmental engineer to DPKO and DFS during 2012-2014 to help design a plan and institutional partnership with UNEP for the implementation of the DOS Environmental Policy, a 5-year Technical Cooperation Framework between DFS/DPKO and UNEP was conceived as a multi-year Policy for improved environmental management¹¹. This triggered a formal 2015 request that UNEP provide technical support in the form of a time-bound project to build the standards and address the lack of capacity within peacekeeping to address some of the most glaring gaps;
 - in February 2015, DFS initiated the 2020/50 Greening Initiative where Special Representatives of the Secretary-General are now required to discuss environmental performance in their annual Compact report;
 - in October 2015, a Waste Management Policy was adopted under the umbrella of the Environmental Policy.
25. In July 2016, the Under-Secretary of DFS and UNEP signed-off on a Project Document for the REACT Project, outlining a 6-year strategy (2017-2023) for developing and implementing a strategy for significant environmental reform and investment programme for all of UN Peacekeeping Missions, both in the field and at headquarters. The REACT Project was a small part of an overall DFS/DOS movement to implement a DOS Environmental Strategy aimed to both substantially reduce the environmental impact of the 165,000 UN and African Union peacekeepers and save tens of millions of dollars in energy costs. The Peacekeepers are UN and African Union mandated combined military and civilian forces deployed to conflict countries to support the

⁷ Environmental Peacebuilding is "the process of governing and managing natural resources and the environment to support durable peace." Environmental peacebuilding involves renewable natural resources (such as land, water, and fisheries); and non-renewable resources (such as minerals, oil, and gas). It also includes broader environmental considerations, such as ecosystems and ecosystem services, environmental degradation, and climate change. Environmental peacebuilding activities occur at multiple levels, from local to national to regional and international.

⁸ From the ECP report, it was clear that a new and strategic approach was needed to replace fragmented project technical assistance and site-specific solutions by individual agencies, but no agreed approach or mechanism for replication.

⁹ Emphasizing that the environment is one of his priorities, the Secretary-General committed "to ensuring that United Nations Peace Operations are a sustainable presence" as articulated in the report "The Future of UN Peace Operations: Report of the Secretary-General on the Recommendations of the High-Level Independent Panel on Peace Operations" (A/70/357-S/2015/682 of 2 September 2015) in Paragraph 128.

¹⁰ CEB members are the United Nations System Chief Executives Board for Coordination ([Home Page | United Nations - CEB \(unsceb.org\)](http://Home Page | United Nations - CEB (unsceb.org)))

¹¹ Formulated by key actors in the Brindisi UN Global Service Centre (GSC) and the Secretariat

transition from armed conflict to stability¹². The REACT Project was a UNEP-DFS/DOS technical assistance project that:

- was 3.5 years duration and US\$6.95 million for Phase 1;
 - had UNEP project management and technical leadership personnel as existing UNEP staff;
 - had remaining Project personnel operating under UNEP supervision through limited duration contracts of two types:
 - UNOPS individual contract agreements that were fixed term, usually full time 1-year renewable contracts. They are specifically designed for medium term projects and have a fast-track recruitment process;
 - UNOPS consultants where several technical experts were required on a strictly part-time basis for up to 3 years;
 - had an agreement signed on 26 September 2016 between UNOPS and UNEP with respect to services rendered under REACT. Activities under the agreement were to be carried out from 26 September 2016 to a terminal date of 30 June 2021 (or earlier).
26. In April 2020, an additional US\$1.55 million was added to REACT's Project budget for a Phase 2, which was managed, implemented and communicated as a UN inter-agency project with roles and responsibilities of each party as detailed on Para 35.
27. Hence, the goal and purpose of the REACT Project was to "improve the environmental performance of UN Peace Operations". The general objective of the Project was to promote the mainstreaming of environmental sustainability in the UN system. The main **objectives** were to:
- contribute to the effective design and deployment of peace operations through analyses on the intersection of environmental and conflict dynamics in countries where missions are deployed or being considered;
 - considerably reduce the risk of spreading waterborne diseases from peacekeeping personnel to local populations through improved and consistent wastewater and sewage treatment;
 - reduce water use, particularly in water scarce regions;
 - improve solid waste management;
 - reduce the operational cost of UN Peace Operations worldwide through capturing savings in generator/vehicle fuel and electricity consumption;
 - reduce the GHG emissions of UN Peace Operations and work towards the whole UN goal of climate neutrality; and
 - handover good environmental practices and associated technologies to host countries following Mission draw down.
28. The governing documents for the REACT Project were:
- the UNEP-DOS (formerly DFS) Administrative Arrangement for Phase 1 up to 30 June 2020 and Letter of Administration (LoA) for Phase 2 up to 30 June 2021;
 - the Project Document for Phases 1 and 2;
 - the Environment Strategy for Field Missions; and
 - the Environment Strategy pillar work plans.

¹² As of 2016, there were 17 peacekeeping missions in Africa, the Middle East and the Caribbean (Haiti). UN Member states provided peacekeeping operations with the budget needed to operate and also contribute the troops and police to specific missions. The DPKO and DFS/DOS were to establish, lead and support the missions and deploy thousands of civilian staff to the field alongside the troops. Missions operate as long as they are needed and mandated: the average duration of missions is currently in the order of 25 years, whilst all of the larger missions in Africa are less than 15 years old.

29. Starting in January 2017, the REACT Project Phase 1 ramped up in scale and focused its efforts on supporting DFS, then DOS, to implement their strategy. Support for Phase 1 was delivered in parallel to all three tiers of the DFS/DOS civilian organization: DOS (DFS) Headquarters, New York; the Global Support Centre, Brindisi; and Peacekeeping Missions. Phase 2 of the Project was implementing the exit strategy of UNEP which was basically the transfer of UNEP oversight of the technical teams to UNOPS as explained in Para 70.

Baseline Scenario of REACT

30. Environmental impact of impact of United Nations Peace Operations has not received major public attention due to the dispersed nature and location of the field operations. UN deploys thousands of military and civilian personnel to Peacekeeping Missions where there is basically no local wastewater treatment capacity, and a reliance on diesel generators for the provision of electricity in the absence of a functional national electrical grid. DFS/DOS leadership was intent on implementing far-reaching improved environmental management. However, there was a lack of capacity within Peacekeeping Missions:
- UN Peacekeeping Missions are large and complex operations with an environmental footprint that is ill-defined but broadly considered to be in need of substantial reduction;
 - There were clear indications that DFS/DOS leadership and Mission-level are motivated to lead a change process to achieve that reduction;
 - Given the scale of Peacekeeping resources at the country level (compared to all other peacebuilding, humanitarian and development actors), improvements in Mission environmental performance could catalyze and underwrite improvements from other actors;
 - DFS/DOS and Missions do not have all of the in-house expertise needed to design, plan and implement the change process;
 - UNEP and its technical partners were to fill the expertise gap in DFS/DOS and Missions through the provision of technical assistance. Technical assistance, if well designed and applied on a sufficiently large scale and for a sufficient continuous period, should help DOS and Missions reach a tipping point where after they have sufficient internal organizational momentum to continue to improve without such intensive external support.
31. In 2016 at the beginning of REACT, UNEP estimated that DFS/DOS will take 3 to 8 years to deliver and truly anchor substantial improvements in its environmental performance, and that the tipping point for self-supported improvement may be reached in 3-5 years. Hence, UNEP was to deliver through REACT intensive technical assistance to DFS/DOS and Missions, initially for a period of 3 years. In consultation with DFS/DOS, UNEP has attempted to leverage Project outputs where appropriate to also assist other actors, and to use its technical credibility and mandate to support DFS/DOS in securing political and linked financial support from Member States. After 3 years, a detailed joint review was to determine whether DFS/DOS and Missions have passed the tipping point. The exit plan for UNEP was to be determined at that point.

B. Objectives and components

32. On the PLF, the overall objective or outcome of the REACT Project was “procedures, policies and practices are in place, and technical advice has been implemented on the ground, resulting in the improved environmental performance of peace operations”. REACT support was to be delivered in parallel to all three tiers of the DFS/DOS civilian organization: DOS Headquarters (New York), Global Support Centre in Brindisi, and Peacekeeping Missions. UNEP together with DOS were to engage with Member States to build support for reforms and associated investments. The terms “environment, energy and climate” cover an extremely broad array of technical topics covered by the partnership that includes:
- electricity supply (mini-grid design installation and operation, diesel powered electricity generation, renewable electric energy selection and integration, energy storage & demand management, solar photovoltaics, wind power);
 - facility and transport energy (energy efficient structures, efficient energy consumption, vehicle fleet management, air fleet management);

- water, wastewater waste and chemicals (water supply technology, groundwater resource management planning, water conservation, wastewater treatment, solid waste management, chemicals and hazardous substances);
 - environmental management and climate (organizational development and reform, environmental management systems, greenhouse gas emissions, accounting and offsetting);
 - bilateral support.
33. Within the UN, the Sustainable UN community, which included both DFS and DOS (after 2017), worked on this outcome in a harmonized manner through the REACT Project. REACT Phases 1 and 2 were to deliver 2 Outputs as presented on Table 1. The overall PLF for REACT is provided in Annex V.

Table 1: REACT Project Outputs and Activities

Outputs	Activities (Phase I)	Activities (Phase II)
Output 1: Assessments, technical analysis and training provided to UN field missions to support their systemic efforts to improve environmental performance	Input into a 6-year Environmental strategy that was completed with revisions in early 2020 to support REACT Phase 2 commencing 1 July 2020.	Support to Technical Working Groups which meet monthly and involve representatives of field missions and various relevant DOS offices;
	Assistance in implementing a systematic approach to environmental management, largely completed with an environmental performance and risk management framework established, including mission specific environmental scorecards and environmental action plans and management plans for energy infrastructure and waste management being put in place in 2019. On-going support was needed to assess the progression in environmental performance over to Phase 2 to further embed processes within DOS (and ensure environmental action planning and performance evaluation are mainstreamed within existing budgeting, planning and performance reporting processes	Support to the development and enhancement of Operational Guidance including review and update Standard Operation Procedures (SOPs); developing technical guidance to provide easily accessible information on a range of critical topics based on identified and prioritized gaps; developing cost libraries for budgeting and project justification purposes; providing inputs for the development of template scope of requirements of technical specifications; and mainstreaming environmental objectives in relevant DOS guidance documentation
	Close links to environmental management experiences in other UN organizations and in the humanitarian field with UNEP undertaking a broader review of the nature of its support to UN agencies	Support to the development of Management Plans including technical review of plans; support missions in developing environmental Management Plans notably for energy infrastructure and Risk Mitigation Plans (RMPs); support missions in the development of business cases that support funding proposals; and monitoring progress and follow through on agreed actions with missions
	Targeted Assistance for a systemic change that includes several targets for technical assistance: <ul style="list-style-type: none"> i) system preparedness, including information management systems and GHG data collection; ii) support improvements to supply chain management; and iii) support DFS and DOS on the issue of Troop Contributing Countries and Police Contributing Countries (TCCs/PCCs) to improve their environmental performance in field missions, including Contingent Owned Equipment (COE) which is equipment supplied directly by TCCs/PCCs along with the personnel. Two of three recommendations for the COE manual were implemented. Contributions will continue for the 2020 and 2023 Working Groups.	Provision of formal and informal technical training design and develop environmental training under modality agreed with DOS.
		Systemic support for review of actions, indicators, baselines and targets for 2020-2023 and its contribution to the update of the Environment Strategy; assistance with performance evaluation; and assistance to improve internal environmental assessment and compliance processes
		Facilitation of a UNEP exit comprising of an orderly transition of the REACT technical assistance team to UNOPS.

Outputs	Activities (Phase I)	Activities (Phase II)
Output 2: Technical assistance provided to peacekeeping missions in the key areas identified by the environmental policy	Direct hands-on mission assistance in line with project expectations within the Phase 1 PLF with milestone KPIs exceeded. Work on this Output was to continue into Phase II with an emphasis on assessment, feasibility and technical specification for projects and facilitating, supporting and monitoring the status of their implementation within missions.	On-ground technical assistance TA in accordance with the DOS SOP and managed and coordinated by ETSU/GSC; and establishing a schedule of mission visit TA (including in-mission training, and support to liquidating missions) through regular liaison with the missions.
		Remote technical assistance that included dedicated proactive environmental action planning support to missions; Mission-wide Environmental Action Plan (MEAP) submission review and feedback; end-to-end support to missions in implementing risk; and reviewing mission documents, projects and practices and sharing best practice for mainstreaming purposes.

34. While extensive work was initiated in Output 1 of Phase 1, there was further work required in partnership with DOS to adequately address gaps in “systems contracts”. There was also further work anticipated in procurement more generally for items with specific environmental issues (such as hazardous materials) including centralized services for waste and wastewater management. REACT Phase 2 was justified by:

- the Secretary-General of the UN publicly committing the UN to improve its environmental performance and achieve climate neutrality by 2020. Member states have also clearly expressed their expectations that the environmental footprint of the UN system and UN Secretariat, including Peacekeeping Missions, is reduced;
- the United Nations Secretariat Climate Action Plan that includes a target of 45% reduction in emissions by 2030. Peace operations contribute to more than 50% of the overall UN system climate footprint with the Plan’s role in reducing the overall UN GHG emissions footprint being significant;
- DOS intending to realize its vision of deployment of “responsible missions that achieve maximum efficiency in their use of natural resources and operate at minimum risk to people, societies and ecosystems, contributing to a positive impact on these wherever possible”, by June 2023. It would do so through the Environment Strategy for Field Missions which came into effect in January 2017. The Strategy includes REACT technical assistance and external partnerships;
- support for DOS and the Missions in the creation and early implementation of the 2017 Environment Strategy for Field Missions. Whilst substantial progress has been made up to 2020, the overall environmental and energy performance of Peacekeeping operations continued to reflect substantial room for improvement. Hence, there was a continued need for technical assistance delivered on REACT Phase 2¹³.

As such, REACT Phase 2 was designed in June 2020 with revised activities as summarized on Table 1.

¹³ Getting results in terms of outcomes (rather than outputs) still takes a substantial amount of time, due to:

- chronic delays in getting products and services available to Missions in line with the budget cycle such as having the contract and pricing available for Missions to budget;
- the September/October budgeting cycle which budgets for the next fiscal year in July-to June for the following year;
- extensive delays in procurement and logistics;
- accumulation of results post commissioning. For example, an RE project commissioned in June accumulates results in terms of GHG reductions from July to June the following reporting cycle; and
- collection and reporting of data for the fiscal year, up to 6 months after end June.

C. Stakeholders

35. Stakeholders of the REACT Project were all considered to be Project partners, duty bearers and any other collaborating agents external to UNEP with a role in delivering REACT Project outputs. **UNEP** serves as the Project partner for strategic oversight (by a UNEP Senior Representative, in kind), and Project Steering Committee (PSC) meeting participation and strategic advice on progress of the Environmental Strategy. UNEP also has oversight of Project management and fiduciary accountability consisting of annual review of Project documentation and Project agreements (UNEP-DOS LoA, UNEP/UNOPS Implementing Agreement). Stakeholders of the REACT Project includes:

- **UN Field Peacekeeping Missions** who were clients and beneficiaries of technical assistance delivered;
- **DOS (formerly DFS prior to early 2019)** who provided operational support to the entire Secretariat (including Peacekeeping operations), and was a Project partner and client responsible for follow-up on advice and support supplied by UNEP that includes the following groupings:
 - the **Environmental Technical Support Unit (ETSU)** in the Global Service Center (GSC) stationed in Brindisi;
 - the **Environment Strategy “Core” Team** comprising of a broader DOS and REACT team actively involved or dedicated to the implementation of the Environmental Strategy;
 - **Technical Working Groups (TWGs)** comprised of DOS and field mission representatives that have responsibility for, or are beneficiaries of working group activities and outputs;
 - **Field Advisory Committee on Environment (FACE)** constituting the chairs of TWGs including Director-level field mission and HQ staff with formal oversight of the Environment Strategy for Field Missions;
- **UNOPS** who were responsible for operational project management support to ensure REACT is managed according to UNOPS SOPs including recruitment and contract renewals, payroll, travel and minor procurement services; standards and policies; management of HR; travel; back-office support; and financial reporting;
- **REACT Technical Team** who delivered Project outcomes, outputs, activities by a team of primarily home-based, rapidly deployable full-time international consultants:
 - Technical Team Lead and REACT EMS Lead;
 - REACT Waste Lead;
 - REACT Energy Lead;
 - REACT Water and Wastewater Lead;
 - EMS support (GHG inventory/MEAP support);
 - Water and Wastewater Support;
 - Energy Engineering Support.

D. Project implementation structure and partners

36. The REACT Project (Phases 1 and 2) implementation arrangements were managed, implemented and communicated as a UN inter-agency project. The roles and responsibilities of each party are outlined in Para 35. The PSC convened every 6 to 12 months by teleconference, jointly chaired by a UNEP Senior Representative, Geneva and someone from the leadership team in DOS, New York. Their discussions included progress on the Project Agreement, short term plans and agreed actions; review and approval of deviations from the proposed plan; and overseeing progress of the partnership, based on reports supplied by the Project team and recommendations made by a PSC working group:

- the UNEP Project management team based in UNEP Geneva office focused on Project management and oversight of the technical support team; and

- the REACT TA team was hosted in the Geneva UNOPS office with some home-based consultants who frequently visited field missions and worked closely with DOS providing on-demand technical assistance, under UNEP oversight and UNOPS operational support.
37. A **PSC working group** was convened at least every 3 months comprising DOS and REACT team leads (the Chief of Environment Section in the Office of the Under-Secretary-General DOS, Chief of ETSU, the UNOPS Technical Team Lead and the UNOPS project manager). Any significant changes to the REACT scope or direction was to be developed by the TWG for all Pillars prior to approval by the PSC.
38. There were two main mechanisms for work and activity planning:
- For Output 1, workplans were developed annually in August and jointly by UNOPS and DOS-ETSU counterparts to provide planning, assessments, technical analysis and training that was to be provided to UN Peacekeeping Missions to support their systemic efforts to improve environmental performance. These were formally tabled at FACE meetings and seamlessly endorsed by a range of stakeholders including the TWG;
 - For Output 2, the REACT Technical Team provided services in troubleshooting and specialized expertise for Peacekeeping Missions in the key areas identified by the DOS Environment Strategy with ETSU formally implementing an SOP for requests from Missions for direct technical assistance or field visits for technical assistance. This assistance was supposed to be logged and reported quarterly in progress reports.

In reality, the implementation structure for this work involved all DOS and REACT Team leads and TWGs working seamlessly.

39. With the Project having an excess of 500 activities by a team of 6-8 people for up to 20 different clients across DOS and Missions, the scale of activities required a tailored quality assurance and tracking scheme, which in turn was built into the Project design. As Project-specific outputs were mostly in the form of technical advice, tools for Project implementation were in the form of informal meetings and e-mails that were difficult to track with Core Team meetings as oversight mechanisms. However, the right balance was achieved between rapid output tracking and an overly bureaucratic quality assurance and quality control system.

E. Project financing

40. Total Project cost *in the 2016 Project Document* was US\$6,950,000. US\$1,550,000 was added to REACT Phase 2 as detailed in Table 2. The Project cost at the End-of-Project (EOP) was supposed to be US\$8,500,000.

Table 2: Project Budget by Component (as presented in the ProDoc)

Overall Budget	Amount (US\$)
A: Previously approved planned budget for Phase 1	6,950,000
B: Previously secured budget (from IMIS)	0
C: Total change of secured budget for Phase 2	1,550,000
i) Source of newly Secured budget (DOS/Field Missions)	1,550,000
ii) Source of newly secured budget (state donor)	
iii) Source of newly Secured budget (state donor)	
D: Total revised secured budget (B+C)	8,500,000
E: Unsecured budget (F-D)	0
F: New total for planned budget	8,500,000
G: In Kind contributions- Previously Secured	0
H: Revised total in kind secured contributions	0
I: Total revised planned budget: Planned + In Kind (F+H)	8,500,000

F. Project Mid-Term Review and changes in design during implementation

41. The MTR was concluded in December 2019, undertaken by a consultant engaged by the UNEP's CMB. The MTR highlighted the effectiveness of the REACT Project in achieving planned outputs,

the result of sustained and insightful efforts by the REACT TA Team. Progress towards the intended REACT outcome was less easy to discern, both because of the nature of the reporting (focused on outputs and focused on REACT rather than progress within the Missions) but also because the outcomes are situated on the edges of the sphere of influence of the Project. REACT achievements depended to a large extent on buy-in from the Peacekeeping Missions. This was partly due to uncertain Mission motivation, and partly due to procurement difficulties within the Missions.

42. The efficiency of REACT was driven by the commitment of personnel and the ability to tap into significant technical expertise, often drawn from the private sector. This was, however, hampered by staff turnover and contract discontinuities, as well as the absence of a clear accountability framework for REACT in relation to Secretariat bodies. Much effort has gone into a continuous and complex definition of roles. Notwithstanding, sustainability of REACT is due to a very favourable policy environment, high level of interest amongst UN Peacekeeping Missions, and new accountability systems within the Missions with the REACT-created MEAPs.
43. Recommendations included:
 - CMB should define a responsibility and accountability framework within REACT and in relation to other UN units and working groups including lines of accountability that should be drawn from REACT senior consultants through the UNEP Project Manager to FACE, and PSC;
 - REACT staff should relate REACT to the commitments made in the UN Secretariat Climate Action Plan (UNSCAP) by the Secretary General in late 2019 and refine the intended results. This includes REACT mapping its work according to the UNSCAP priorities as relating not only to peacekeeping but to all Secretariat activities;
 - CMB and REACT staff should consolidate the factors of sustainability of REACT including the ensuring of sufficient staffing and budget resources for the complete development of MEAP as a planning and comparative reporting tool.

IV. RE-CONSTRUCTED THEORY OF CHANGE AT REVIEW

44. A Theory of Change (ToC) for a project essentially describes the roadmap of developmental pathways driven by regulatory or market drivers. This is in combination with Project activities to reach Project outcomes as well as intermediate states and impacts that reflect the long-term sustainability of the Project activities. No ToC was prepared for the ProDoc though there was work done in 2016 to prepare a ToC approach which is written up on pg 17 of the ProDoc. The REACT Project did have a PLF as assessed in Paras 32 to 34. As such, a “re-constructed” ToC (RToC) to align with the PLF has been developed to highlight causal pathways and provide sufficient indicators to measure the delivery of intended outputs and Project outcomes of the Project. Table 1 and Annex V provide these improvements to the presentation of the RToC to the PLF’s original language of outcomes, outputs, indicators, and targets, and uses them in the RToC that is linked to outcomes and impacts of the Project.
45. Through activities logged in Table 1, the RToC diagram for the Project was developed as illustrated in Figure 2. The logic of the RToC diagram flows in a horizontal direction (from the baseline on the left to the long-term impact on the right) flowing from activities (green boxes) to Project outputs (yellow boxes) to intermediate states (light blue ellipses) to the Project outcome (dark blue box) to impact (aqua box), namely from technical assistance to DOS and Peacekeeping Missions. The Project outcomes from the PLF for this Review are reflected in the RToC formulation for clearer pathways towards intended Project outcome and impact.
46. The RToC clarifies these development pathways from the baseline and identifies where there are drivers behind the intended Project activities to deliver outputs, the Project outcome, intermediate states and impact. This has been done to:
 - reflect the baseline conditions of the Project;
 - clarify Project outputs that would lead to intermediate states, which would include the “increased system preparedness”, “improve the supply chain” and “uniformed components trained”;
 - illustrate an outcome of “procedures, policies and practices are in place, and technical advice has been implemented on the ground” that would serve as an indicator of initial stages of impact of “improved environmental performance of Peacekeeping Missions within SDG 6, 7 and 12”.

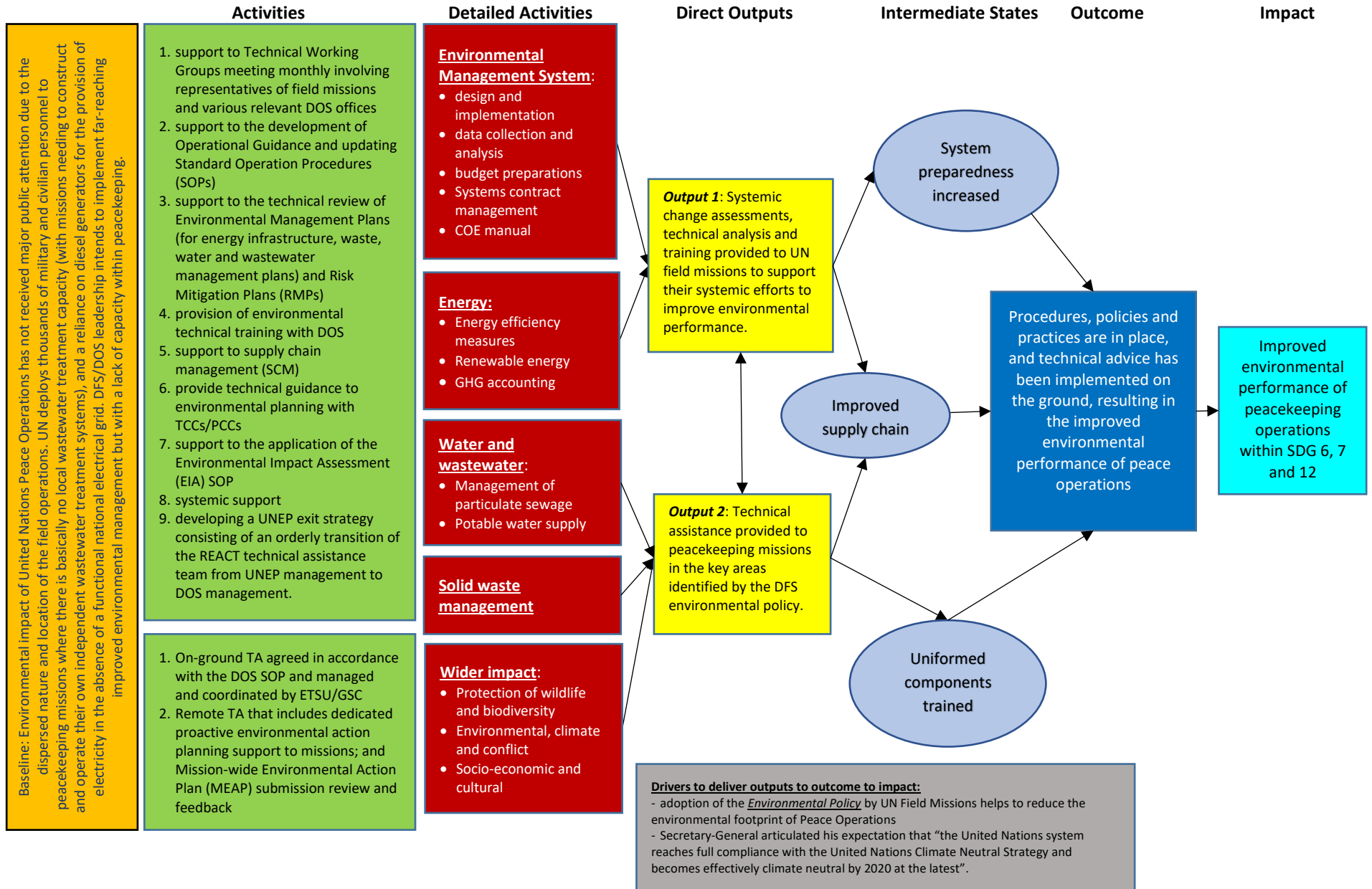
A. Causal pathways from activities to Outputs

47. With regards to the RToC causal pathways from activities to outputs, DOS is crucial:
 - for delivery of all activities and achieving all direct Outputs driven by the adoption of the DOS Environmental Policy by UN Field Missions to reduce the environmental footprint of Peace Operations. This would also be driven by the Secretary-General who expects the United Nations system to reach full compliance with the United Nations Climate Neutral Strategy and effectively becomes climate neutral by 2020 at the latest;
 - to the usage of funds to build capacity of Peacekeeping Missions to reduce their environmental footprint;
 - to setting examples of environmental compliance that sets the stage for replication of best environmental practices in other missions and organizations.

B. Causal pathways from Project Outputs to Project Outcome to impact

48. With regards to the RToC causal pathways from the Project outputs to the Project Outcome to impact, achievement of the 2 Project outputs was expected to lead to intermediate states of:
 - system preparedness increased through increased communication between TWGs, and updating of SOPs and MEAPs;

Figure 2: RToc Diagram



- improved supply chains through support to development of operational guidance to Missions, support to EIA SOPs, and support to supply chain management; and
- uniformed components trained through provision of capacity building for environmental planning with TCCs/PCCs, dedicated proactive environmental action planning support to missions, and submission review of MEAPs.

49. The impact of “improved environmental performance of peacekeeping operations within SDG 6, 7 and 12” can be reached assuming that procedures, policies practices are adopted, and technical advice has been implemented on the ground. This should result in the improved environmental performance of Missions in Peacekeeping operations.

V. REVIEW FINDINGS

A. Strategic Relevance

Alignment to UNEP MTS, PoW and Strategic Priorities

50. The REACT Project is associated with a higher detail than what the UNEP MTS provides, and the MTS is only for assisting Member states¹⁴. Moreover, the REACT Project is a small initiative under the “Greening the Blue Helmets” which is one sub-line inside the Environmental Governance sub-programme.
51. The Programme of Works (PoW) provided the institutional policy anchor for the REACT Project. The relevant Expected Accomplishments were located within Environmental Governance (EG) and Disasters and Conflict (DC):
 - 2016-2017: EG: EAa) The United Nations system and multilateral environmental agreement bodies, respecting the mandate of each entity, demonstrate increasing coherence and synergy of action on environmental issues;
 - 2018-2019: EG EA(a) The international community increasingly converges on common and integrated approaches to achieve environmental objectives and implement the 2030 Agenda for Sustainable Development;
 - 2016-2017 DC: EAb) The capacity of countries to use natural resource and environmental management to support sustainable recovery from natural and man-made disasters is improved;
 - 2018-2019: DC EA b: Emergency response and post-crisis recovery plans integrate environmental considerations to increase the sustainability of recovery;
 - 2020-2021¹⁵ where REACT under UNEP was to promote the coherent implementation of the environmental dimension of sustainable development within the United Nations system. REACT was also to meet the particular needs of Missions in various regions and countries by tailoring work to address their diverse environmental challenges, from addressing their varying vulnerabilities to climate change to improving ecosystem health, and air quality.
52. The PoW reflects the 2018–2021 MTS that considers emerging issues identified through global and regional forums; the UNEP environmental foresight process; and consultations with major groups and stakeholders. The strategy aims to make the most of the comparative advantage of UNEP, which is to provide an environmental lens through which to view, understand and advise on sustainable development.
53. The *Bali Strategic Plan* (BSP)¹⁶ has objectives to “strengthen the capacity of governments of developing countries through targeted capacity building within the mandate of UNEP, using and sustaining the capacity of technology obtained through training or other capacity building efforts, and developing national research, monitoring and assessment capacity that supports national institutions in data collection, analysis and monitoring of environmental trends and in establishing infrastructure for scientific development and environmental management (that will ensure sustainability of capacity building efforts)”.
54. The BSP also has other specific objectives of “promoting, facilitating and financing as appropriate, access to and support of environmentally sound technologies and corresponding know-how, especially for developing countries as well as countries with economies in transition”, and “strengthening cooperation amongst UNEP, multilateral agreement secretariats (that take into

¹⁴ There was the potential for spillover of late REACT work into fragile states into the country level where Peacekeeping Missions work with country ministries (such as the Ministry of Environment or the Ministry of Energy).

¹⁵ https://wedocs.unep.org/bitstream/handle/20.500.11822/28411/UNEP_PoW_Budget_2020-2021_Final.pdf?sequence=1&isAllowed=y

¹⁶ <https://wedocs.unep.org/bitstream/handle/20.500.11822/26642/Annex%20%20to%20the%20briefing%20on%20South-South%20Cooperation.pdf?isAllowed=y&sequence=1>

account their autonomous decision-making processes), and other bodies engaged in environmental capacity building". REACT was aligned to the BSP through its emphasis and efforts to achieve these objectives through local capacity building activities and providing inputs into the Project where appropriate from other developed countries (such as United States). The results of local capacity building are discussed in the Section V D.7 of this report.

55. Rating for Alignment to UNEP's Medium-Term Strategy, Programme of Work and strategic priorities is satisfactory.

Alignment to UNEP/Donor Strategic Priorities

56. The UN-internal REACT Project aligns with donor priorities as a fundamental part of its Project design by following resolutions adopted by the General Assembly on cross-cutting issues:
- A/RES/72/219 (2018)¹⁷: Endorses the action plan for integrating sustainable development practices into Secretariat-wide operations and facilities management submitted by the Secretary-General, and requests the Secretary-General to implement his relevant recommendations within existing resources;
 - A/RES/70/286 (2016)¹⁸: Requests the Secretary-General to continue to review and optimize the composition of mission vehicle fleets and ensure that the vehicles are fit for purpose, and to submit a cost-benefit analysis outlining, inter alia, the type, quality, efficiency, maintenance cost and environmental impact of vehicle adjustments in the context of the next overview report;
 - A/RES/69/307 (2015)¹⁹, A/RES/70/286 (2016)²⁰: Requests the Secretary-General to continue his efforts to reduce the overall environmental footprint of each peacekeeping mission, including by implementing environmentally friendly waste management and power generation systems, in full compliance with the relevant rules and regulations, including, but not limited to, the United Nations environmental and waste management policy and procedures;
 - A/RES/70/1 (2015)²¹: Transforming our world: the 2030 Agenda for Sustainable Development;
 - A/RES/47/37²²: Protection of the Environment in times of Armed Conflict, 1993, and 49/50, United Nations Decade of International Law, 1995;
 - A/CONF.151/26: Rio Declaration on Environment and Development (June 1992);
 - Declaration of the UN conference on the Human Environment (Stockholm Declaration, 1972).
57. There are other normative or superior references that can be found on pgs 19-20 of the Environmental Policy for Peacekeeping Operations²³. Rating for Alignment to UNEP/Donor Strategic Priorities is highly satisfactory.

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

58. Rating for REACT relevance to global, regional, sub-regional and national priorities is not applicable.

Complementarity with Existing Interventions/ Coherence

59. Existing interventions include the UN Environmental Management Group (EMG) (<http://www.unemg.org>), which was established in 2001 and is chaired by UNEP. EMG is a system

¹⁷ <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N17/466/40/PDF/N1746640.pdf?OpenElement>

¹⁸ <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N16/184/28/PDF/N1618428.pdf?OpenElement>

¹⁹ <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N15/199/76/PDF/N1519976.pdf?OpenElement>

²⁰ Ibid 17

²¹ <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N15/291/89/PDF/N1529189.pdf?OpenElement>

²² <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N93/086/92/IMG/N9308692.pdf?OpenElement>

²³

https://operationalsupport.un.org/sites/default/files/dos_2022.01_environmental_policy_for_peacekeeping_operations_and_special_political_missions.pdf

wide coordination body on environment and human settlements overseeing several joint activities including:

- environmental management in the UN and progressing towards a climate neutral UN;
- development of a UN wide environment and sustainability framework and subsequent joint implementation strategy;
- peer reviewing environmental and sustainability performance of individual agencies;
- sound management of chemicals and wastes.

60. UNEP also had a close collaboration with the Sustainable UN (SUN) project that focuses on fostering coordination between agency environmental focal points and providing guidance on greenhouse gas emissions inventories, buildings, procurement, logistics, waste management and staff travel. The SUN team collates data for the annual GHG inventory of the UN system and manages the “Greening the Blue” campaign.

61. Rating for Complementarity with Existing Intervention/Coherence is *highly satisfactory*.

Rating for Strategic Relevance: Highly Satisfactory

B. Quality of Project Design

62. A review of the Project design is crucial towards a comprehensive understanding of Project outcomes and the actual Project outcomes achieved. This review of design strengths and weaknesses of the Project also incorporates the findings in the MTR report. A summary of this review is contained in the following paragraphs.

Project Design Strengths:

63. Achieving climate neutrality in Missions and HQ by 2020 was a stated REACT impact of “improved environmental performance in peace operations” and a general outcome objective of “procedures, policies and practices in place, and technical advice implemented on the ground” to promote mainstreaming of environmental sustainability in the UN system. The strength of the REACT Project design for these achievements was its in-house technical assistance team, deployed into Peacekeeping Missions, to measure, plan, design, cost and implement a range of actions that would cumulatively result in a substantial and permanent reduction in the environmental footprint of Peacekeeping Missions. This was done since EIA and management expertise was not available in Peacekeeping Missions at the time of initiation. REACT consultants were to service over 14 Mission operations, either on a temporary basis or through short term visits.

64. The REACT Project was hosted by UNEP’s CMB out of Geneva, primarily under the Environmental Governance programme. The DFS/DOS Environmental Policy required the UN field missions to appoint an environmental officer to implement the EMS. Though implementation varied widely amongst field Missions, principal Missions recruited environmental officers over the life of REACT, who worked in tandem with the REACT Technical Team and Mission engineering teams, albeit not always harmoniously. The REACT Project also benefitted from UNEP coordination of the UN-wide environmental management effort via EMG and the SUN project initiative, allowing DFS/DOS personnel to network with well-established environmental practitioners, and many specialist working tools.

65. In conclusion, there was no environmental challenge within UN Peacekeeping Missions that could not be fully addressed by applying a systemic approach, and by using mature technology widely available in the global commercial marketplace.

Project Design Weaknesses:

66. The ambition of the RToc leads to issues with respect to the REACT Project design:

- capacity constraints within Missions were an issue considering the financial commitment made by each Mission to wastewater treatment and renewable energy investments was significant. In addition, the long payback period for RE made the capacity constraints more problematic;

67. success was highly dependent on the attitude and receptivity of individual Missions, in particular senior leadership. One such UN personnel described the policy climate in the Missions as being affected by “aspirational fatigue”;

- some reluctance within Peacekeeping Missions to seek external technical assistance. This is due to a complex set of factors which can be described as a combination of feeling sufficiently equipped to address technical challenges, seeking to minimize the vast number of visits from HQ, and a sensitivity to hosting any external parties which would point to technical shortfalls. Performance assessment was problematic especially when dealing with the highly fluid situations in which Peacekeeping Missions are deployed;
- there was also the risk of no rapid procurement and deployment of equipment and devices which would enable the solutions provided by the REACT team to be implemented. For example, waste equipment and new RE systems took more than four years to become available, leading to no wastewater treatment plant contract to be issued after 3 years and turn-key RE contracts not issued or at least 1 year behind schedule. Unfortunately, REACT had no real influence over how DOS addressed these procurement issues even though DOS should have run local procurement support to Missions instead of running this through HQ.

Rating for Project Design: Satisfactory

C. Nature of the External Context

68. Project operations can be affected by externalities beyond the control of the Project. This may include externalities such as severe and unexpected climatic events, high-risk security situations, poor or lack of supporting infrastructure, economic instability, and politics. A review of the factors in assessing the nature of external context for the REACT Project, DOS and the 14 Missions reveals that the Project operations were not affected by externalities as described in the following Para.
69. The COVID-19 pandemic did not have any adverse impacts of slowing down Project implementation. On-ground field work was curtailed during the pandemic due to travel restrictions imposed by COVID-19 (such as the mission to UNAMID and UNISFA which experienced significant logistical issues due to COVID-19). However, due to the extent of prior field work in the 2017-2019 period, the REACT Technical Team established an in-depth understanding of the field conditions already and transitioned seamlessly to remote technical assistance during the pandemic. In addition, the monthly working group meetings for each technical stream resulted in the team having excellent working relationships with key Mission stakeholders. As a result, substantial remote technical assistance activities continued in addition to systemic work, as outlined in Section V.D.

Rating for Nature of the external context: Favourable

D. Effectiveness

70. With effectiveness defined as the ability to match intended outcomes with outcomes delivered, REACT’s effectiveness was dependent on its management of an independent REACT Technical Team of environmental and engineering consultants, who numbered 7 as of July 2020 during Phase 1. The Project was designed, mobilized, and led by UNEP (with operational support from UNOPS) from 2016 to 2020 with a gradual removal of UNEP during a Phase 2 from July 2020 to July 2021, to an effectively self-managing Project unit embedded within DOS functions and processes in terms of substantive delivery. The UNEP role during Phases 1 and 2 was effectively comprised of strategic analysis, Project design, recruitment and management of staff, Project management functions, integration within the UN system as well as general oversight with UNOPS providing full comprehensive operational support starting July 2021 after the UNEP-implemented portion of REACT. DOS developed and implemented a new direct agreement with UNOPS in July 2021 to take on REACT Project implementation accountability in place of UNEP.
71. In late 2017, an Environmental Technical Support Unit (ETSU) was created in the GSC, Brindisi to manage co-ordination of technical workstreams in energy, water, wastewater and waste. In managing the EMS workstream, UNEP personnel made a key decision in early 2017 to outsource

technical workstreams of energy, water, wastewater and waste, to UNOPS as members of the REACT Technical Team. As a result, members of the REACT Technical Team, many of whom were from the private sector, were able to provide industrial expertise and provide in-field hands-on experience on technical outputs and specialized areas. By contrast, assistance from UNEP personnel in the technical workstreams of energy, water, wastewater and waste, would have been difficult to access: they would not have been able to provide field-level hands-on assistance without going through much bureaucracy. Furthermore, outsourced UNOPS assistance was fully focused on the REACT Project with the REACT Technical Team being involved with activities such as cannibalizing wastewater treatment plants and getting Mission personnel trained on properly using incinerators. UNEP personnel, however, was likely to not have that focus.

72. The REACT Project was overseen by a PSC between 2016 and 2021, a high-level decision-making body with senior representation from DOS, UNEP, and UNOPS. A PSC working group was tasked by the PSC for substantive working level matters, comprising DOS and REACT team leads (the Chief of Environment Section in the Office of the Under-Secretary-General DOS, and Chief of ETSU, GSC, the REACT Technical Team Lead, and the UNOPS project manager).
73. Between June 2016 and June 2021, Project activities were recorded under UNEP's Project Information Management System (PIMS), ceasing in 2021 to be replaced by DOS processes. On-ground mission assistance has been operating under a controlled process since November 2017 under the auspices of the ETSU, GSC.

D.1. Availability of Output 1: Systemic change assessments - technical analysis and capacity building provided to UN Peace operations to support their systemic efforts to improve environmental performance

74. Output 1 was comprised of 9 milestones, which were tracked in the progress reports. Rather, progress of milestones was scattered throughout the progress reports. This TE report tracks REACT Project progress through the ProDoc including:
 - inputs into the 6-year DFS Environmental strategy;
 - assistance in implementing a systematic approach to environmental management; and
 - targeted assistance for a systemic change.
75. *Input into the 6-year DOS Environmental strategy.* The DOS Environment Strategy was launched in late 2016²⁴, after consultations with both the REACT and the SUN teams to several versions of the strategy with revisions in 2019 and 2020 to support REACT Phase 2. With UNEP leading this effort, priority was given to strategic priorities (as mentioned in Para 139, 1st bullet) to build systems to access reliable data to support analysis, and to measure and drive performance. It included the roll out of consistent methodologies for site assessments, and the building of systems for verified data gathering and sharing. Key Performance Indicators were developed by UNEP to track progress and data collection, mainly relying on estimates and self-reporting. Components of the DOS Environmental Strategy consisted of:
 - Environmental Management System: a) Design and implementation of Environmental Management Systems; b) Data collection, analysis and logistics; c) Investment needs and budget preparations; d) System contracts and use of contractors; and e) Inputs to Contingent-Owned Equipment (COE) Manual. Setup of the EMS structure was done in 2017;
 - Energy: a) Energy efficiency in power generation, transport and buildings; b) Renewable energy; and c) GHG accounting;
 - Water and wastewater: a) Wastewater management, particularly sewage treatment; and b) Potable water supply and use;
 - Waste: Solid waste management, including hazardous waste;

²⁴ Launched by the Under Secretary General Atul Khare at Columbia University and widely communicated to stakeholders.

- Wider impact: a) Land use and rehabilitation; b) Protection of wildlife and biodiversity; c) Integration of environment, climate and conflict dynamics into mission planning and mandate development, as well as camp design; and d) Socio-economic and cultural impacts of mission operations

Most importantly, the most value-added REACT services came from UNEP Project staff in collaboration with the UNOPS-REACT Technical Team assisting in implementation of the DOS Environmental Strategy (identifying strategic priorities), delivering technical assistance to all Missions, and developing a performance risk management framework (scorecards). This has been done with short in-person focused sessions at a Brindisi workshop, remotely by phone or email during the MEAP process (or from other ad-hoc assistance requests), and with increased levels of hands-on field work.

76. Assistance in implementing a systematic approach to environmental management. Assistance to provide a systematic approach to environmental management was largely completed with established environmental performance scorecards and a risk management framework. This included:
- development of Mission specific environmental scorecards and environmental action plans and management plans for energy infrastructure and waste management;
 - help to improve information management systems and GHG data collection;
 - analysis and gradual improvements to systems contracts where necessary;
 - improvement to the COE manual that can lead to greater resource efficiencies; and
 - development of mission budgets which will be the base for DOS to track progress at mission level.
77. Each component was given a lead consultant, with the exception of Wider Impact for which an Italian-funded temporary position was created in DOS in NY HQ, who provides the necessary expertise to all Missions. In 2019, UNEP tasked the Geneva-based CMB, the UNOPS Project Manager and the REACT Technical Team to provide equipment and technical services on EMS, and to guide technical teams on how to evaluate environmental performance²⁵. An EMS performance framework was being initiated with no precedence. The REACT Project was considered to serve both the UNEP DC Sub-programme, and the EG Sub-programme via the EMG and the SUN projects. On-going support has been needed to assess the progression in environmental performance over to Phase 2 to further embed processes within DOS. This was to ensure environmental action planning and performance evaluations were mainstreamed within existing performance reporting processes.
78. In terms of Indicator 1 for this Output: "System specifics assessments, reviews, analysis completed", a total of 41 system specifics performance assessments, reviews, analysis were completed by the UNEP, DOS and the REACT Technical Team against a target of 20. This included the following actions:
- by December 2016, there was advice provision and assistance to the development of DFS environmental strategy, and analysis and advice in view of the revision of COE;
 - by June 2017, there was further review and update of EMS aspects in environmental strategy; 10 working group meetings were organized during which analysis and review of missions and DOS-wide needs in terms of system approach to environmental performance; and specific systemic assistance delivered to 2 missions (UNFIL, UNDOF);
 - by December 2017, there were 17 TWG meetings on EMS held; a high-level gap/needs analysis completed; 3 mission assessments on EMS implementation in the field; 1 technical report on fuel, transport, procurement, liquidation, and communications functions; 1 technical report on COE/PCC/TCC internal audit functions; and 1 technical report on performance evaluation;

²⁵ Environmental performance on what was measured and how was it measured.

- by December 2018, 3 EMS field visits (UNAMID, MONUSCO, UNFICYP) and 4 EMS visits to NY HQ were completed. Findings were incorporated into EMS findings log, and informing the 2018-19 EMS workplan;
 - by December 2019, numerous documents related to EMS were developed with a review of DOS strategy, implementation structures, roles and responsibilities, all done at a Brindisi retreat;
 - documents were then handed over to the Office of Information and Communications Technology (OICT) in 2020 for internal development using OICT software which was also procured and deployed by UNEP for their use.
79. In terms of *Indicator 2 for this Output: "Number of tools, methodologies prepared"*, a total of 14 tools and methodologies were prepared against a target of 14. This included the following actions by UNEP, DOS and the REACT Technical Team:
- by December 2016, draft scorecards were delivered with discussions of what the final version of the scorecards should be sent to Missions;
 - by June 2017, a comprehensive methodology for site environment assessment, and specific checklists for risk assessment and performance review were delivered;
 - by December 2018, MEAP 3.0 was released with a guidance document;
 - by December 2019, tools were developed for levelized cost of energy (LCOE analysis) and business case justifications;
80. *Targeted assistance for systemic change*. Targeted assistance was provided by the REACT Technical Team, mainly for the benefit of the Environment Strategy Core Team:
- for system preparedness, including information management systems and GHG data collection;
 - to support to supply chain management, essentially through efforts to analyse and gradually improve systems contracts where necessary. This consisted of standardized Term Contracts, which once procured by the HQ are available on a call-off basis for all Missions;
 - to support for DOS to improve the environmental performance of TCCs and PCCs in field missions, including COE which is equipment supplied directly by TCCs/PCCs along with the personnel; and
 - that liaises with FACE and jointly report to senior leadership team of DOS.
81. An EMS Specialist conducted over 10 meetings by late 2017 with the EMS working group to complete an EMS gap analysis, needs assessment, systemic priorities and defined joint work plan. Technical assistance was provided by REACT team members (in their respective areas of expertise) to assist in the development of MEAP templates and performance review framework, and the data collection process. This was done to establish baseline information for all missions. Targeted TA missions on EMS and environmental baselining were conducted at all Missions by late 2019 including MINUSTAH, UNIFIL, UNDOF, UNISFA, MONUSCO, UNAMID, UNFICYP and MINUSCA.
82. Targeted assistance in the form of a joint environment and engineering workshop in Brindisi in May 2018 was provided to over 70 Mission environmental officers and engineers by the entire REACT Technical Team. The Team assisted in facilitating sessions on waste, water, energy and EMS that included a combination of experience sharing, training and discussion on methodologies. There were also subsequent clinics where each mission could share their MEAP and discuss strategies for dealing with issues raised:
- 7 guides and tools for strategic improvements in waste management, composting paper, an energy smart metering technical guide, incinerator specifications for strategic deployment stock, performance rating of building thermal properties, and an environmental annex for an updated liquidation manual on handover of sites;
 - improved GHG emissions inventories for 10 field missions with training in reporting templates that were designed and deployed for consistency in reporting. Individual assistance to

missions was provided via desktop, consuming significant levels of REACT resources. This was all done to align reporting within the new DOS structure in 2019.

83. By June 2019, EMS work was primarily focused on risk assessment and performance evaluation. Data collection had significantly improved from the 2017-18 reporting period and user training was provided to an expanded group of stakeholders. The “scorecard” framework was in place and reporting for Member states on 2017-18 data was provided for the first time. Technical assistance related to EMS, environmental baselining and data collection, was conducted at most Missions including MINUSTAH, UNIFIL, UNDOF, UNISFA, MONUSCO, UNAMID, UNFICYP, MINUSCA, UNMISS, MINUSMA and UNISFA.
84. Between March and December 2020 during the COVID-10 pandemic, there was:
 - desktop assistance provided to all missions for the preparation and verification of MEAPs and their spreadsheets with increased frequency of EMS working groups;
 - continued GHG inventory support including analysis of refrigerant data from UMOJA, consultations with Transport and MovCon counterparts for “scope 3” emissions (personnel transport and cargo), and reporting of GHG inventory data by mission;
 - advice provided on data collection requirements and remote techniques during the travel restrictions during COVID-19;
 - development of Environment Action Planning and Performance software (eAPP), an online application for data collection in collaboration with OICT that was launched in July 2020. REACT provided support for its design, oversight, user acceptance testing, and mission coordination launched; and
 - Mission completion of multi-year plans environmental impact assessment, following promulgation of SOPs that provide a more coherent and holistic approach to EMS operational requirements while taking environmental considerations into account.
85. In terms of *Indicator 3 for this Output: “Number of capacity building sessions”*, a total of 39 capacity building sessions were completed against a target of 20. The number of capacity building sessions to roll out the performance framework was extensive. This included the following actions:
 - in May 2017, REACT supported the organization of a joint environment and engineering workshop in Brindisi attended by over 70 environmental officers and engineers from HQ, GSC and the Missions. The REACT team assisted in chairing sessions on EMS, waste, water and wastewater, and energy that included experiences sharing, training and discussion on methodologies. The workshop and the subsequent clinics were opportunities for each mission to share their MEAP with REACT experts;
 - by December 2017, there was ad-hoc capacity building occurring during mission visits and the sharing of best practice within the technical working groups;
 - during 2018, there was a series of 5 training sessions on data collection delivered for 100 participants, waste training delivered in MINUSCA and chemical treatment training delivered in MONUSCO;
 - by June 2019, there were regular monthly meetings for capacity development of field staff in 4 technical areas delivered, a Brindisi training event delivered for 50+ participants, and 5 days of content delivered by the REACT team (2x2 parallel sessions plus approx 1 day in plenary sessions);
 - by December 2019, there was a strategy retreat held in Brindisi with key counterparts, a hazardous waste VTC provided to all humanitarian actors through network, and a solid waste presentation held at IMG Montreal.
86. In terms of *Indicator 4 for this Output: “Number of scorecards verified”*, a total of 111 scorecards were verified against a target of 17. This included the following actions:
 - by June 2017, MEAPs including scorecards were sent to Missions in April 2017 and filled in. A thorough analysis of each MEAP took place to ascertain their fitness for purpose and commented with missions in the course of “mission specific clinics” that took place in

occasion of the Joint Environment and Engineering Workshop in May 2017. No scorecard verification system was devised at this time;

- by December 2017, 2 mission visits were undertaken to provide direct assistance on verification of data entry, requiring further development of data methodologies to be used by mission for validation of the verification;
- during 2018 and 2019, 16 Missions produced verified scorecards. By December 2019, scorecard output went to member state reporting through the results-based budgeting (RBB) process;
- by December 2020, Mission scorecard validation was embedded in DOS RBB system with the number of cards reflecting the number of active missions.

87. In summary, there were systemic change assessments as well as technical analysis and capacity building provided to the Missions to support systemic efforts to improve environmental performance. By December 2018, systemic change was on track through regular ad-hoc contributions to DOS HQ initiatives and over 20 regular working group meetings with very good levels of compliance, senior management engagement, and compliance to systemic changes in regular planning and performance reporting linked to RBB process (vastly improved levels of reporting and quality of baseline information). By June 2019, key documents were delivered for improved environmental management in EIMPs and Waste Management Plans that includes SOPs, templates, and tools. By June 2020, Phase 2 was agreed on and documented with DOS. PRC held, and mid-term review completed. All of the above include analysis of systemic approaches. By June 2021, the UNEP exit plan was substantially complete with the DOS-UNOPS agreement in place and UNOPS technical assistance to DOS continuing with a focus on the revision of the 2009 DOS Environment Strategy. The availability of Output 1 is *highly satisfactory*.

D.2. Availability of Output 2: Mission Support - technical assistance provided to peacekeeping missions in the 5 key areas identified by the DFS Environment Strategy

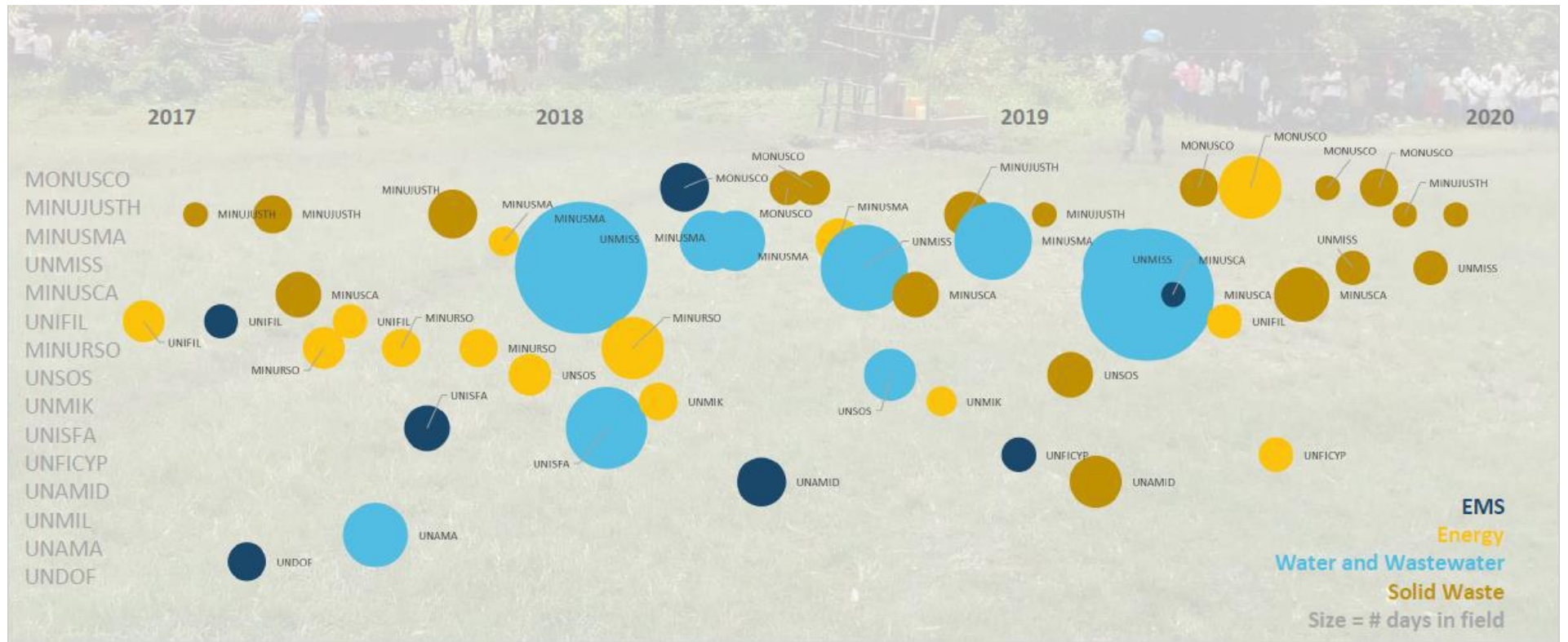
88. As of June 2017, the REACT Technical Team was mobilized, having received SSAFE training allowing them to deploy to all Missions and starting to assist working group meetings and advising Missions. By May 2017, the REACT Technical Team met most of the Mission engineering and environmental counterparts in a joint workshop, which was a key element in establishing the technical assistance needs and forming the work plans of REACT. The REACT Technical Team visited a number of Missions between January and September 2017, reporting an overall very positive attitude and a real interest in the expertise that they bring. The REACT Technical Team provided an outline of proposed procedures for the request and delivery of technical assistance that was to be implemented through the GSC to further imbed assistance within a defined DOS structure and process. Where required, REACT expert consultancies were recruited to support specific initiatives in areas of work identified by DOS Environmental Strategy working groups such as:

- part time hydrologist;
- communication specialist;
- a full time wastewater engineer in early 2018;
- a junior electrical engineer;
- consultancy on micro-wind turbines; and
- consultancy on fleet and fuel management.

89. REACT technical assistance has been provided to the majority of peacekeeping missions as summarized in Figure 3 (with exceptions being SPM's, UNMOGIP and UNFICYP). For the majority of Missions, multiple missions have been undertaken, either across different technical areas, or as follow-up activities arising from prior visits. Key substantive activities are outlined in the following Paras.

90. Energy: Technical assistance in energy included:

Figure 3: REACT Technical Assistance to Missions



- REACT engineers coordinating, providing technical content, and giving presentations at four Energy TWGs for the provision of inputs to Environmental Policy for Peacekeeping operations on performance standards of energy equipment and technical guidance on fuel consumption reduction in shortage situations;
- assistance with the development and finalization of Energy Management Plans for selected Missions such as MINUSMA, MONUSCO, UNISFA, and UNSOS/REACT generating cost libraries and business cases for a range of key equipment that was to be handed over to DOS to determine sourcing strategies;
- specifications for efficient energy production system contracts (for diesel generators and diesel/hybrid, solar PV, meters and batteries) and high energy demand equipment (split HVAC) provided to the Logistics Support Division (LSD);
- energy assessments, feasibility studies and energy infrastructure management plans (EIMPs) being developed and signed off by a number of missions (including MINURSO, MINUSCA, MINUSMA, UNIFIL, UNMIK and UNSOS);
- pilot metering projects initiated in MINURSO and MINUSMA with live metered data available to the Project team for analysis in 2018;
- energy efficiency considerations incorporated into the 2017 update to the COE manual to improve energy performance of TCCs in coordination with Uniformed Capabilities Support Division;
- LED retrofitting in 2020 via local procurement in the absence of a Global System contract as a part of Missions starting to implement EIMP approved projects;
- finalized inputs to the DOS Environmental Policy on performance standards of energy equipment in early 2019;
- review in 2019 of DOS/OSCM on HVAC SORs documents to enable availability of more efficient units under the OSCM Global System Contract resulting in more efficient units reducing fuel consumption by 290 litres/year;
- review in 2019 of DOS/OSCM on solar PV and solar streetlight SOR documents to enable improved equipment for hybrid solar plants with energy storage at Missions;
- developed energy strategy for Phase 2 of Environment Strategy;
- remote technical assistance provided to:
 - UNFICYP on two SOPs on HVAC maintenance, operation and decommissioning;
 - UNSOS on assistance to budget justification for approval process for PPA project in Baidoa, and development of SOW for connection to local power provider with a share of renewable energy in Mogadishu;
 - MONUSCO for lighting design study for offices, and a follow-up on actions to a field visit report including sending energy meters to the mission, and scoping for additional on-site solar-PV projects;
 - MINUSMA for a financial evaluation of design of 100 kWp Solar PV in Bamako;
 - UNDOF on energy data gathering;
 - UNISFA on energy data gathering scoping and additional 860 kWp of solar-PV projects;
 - UNMISS on site energy plan methodology for TCCs;
 - UNIFIL on a wind turbine pilot project and a scoping study for renewable energy projects in 2020;
 - all missions for review of MEAP Energy data;
 - 8 Missions on training for lighting design;
 - 14 Missions on five dedicated training sessions on EIMP energy assessment methodology and on UNSCAP;

- all Missions for review and feedback to HVAC RfP documents and reviewed energy category for category management;
- support to all missions to raise the ambition of energy projects in their EIMPs;
- with the synchronization of generators increased from 22% to 55% and installation of LED lighting from 37% to 63%, there has been completion by all Missions of multi-year plans for energy management, following promulgation of SOPs that provide a more coherent and holistic approach to energy operational requirements while taking environmental considerations into account;
- emphasis on efficiencies in the use and consumption of energy covering both UN owned equipment and COE, while innovative solutions to increase the use of renewables are being pursued through outsourcing, leasing, partnership and other options;
- promoting uptake of these activities through bilateral meetings with TCC's/member states and the "Group of Friends";
- supporting dialogue on facilitating renewable energy projects and potential partnerships with Stimson Cetner, World Bank Group and IRENA.

91. Water and Wastewater: Technical assistance in water and wastewater included:

- supported hands-on wastewater treatment plant operation, maintenance and troubleshooting training for UNAMA and MINUSMA. In MINUSMA, training was provided in Gao and Timbuktu (11 and 21 operators, respectively) as well as repair works in mid-2017, restoring 26 wastewater treatment plants to full operation. Training also included advice on optimization of inventories (assets and consumables);
- extensive support (up to 8 weeks field work per visit) for wastewater treatment plant commissioning, operation, maintenance and troubleshooting has been provided in UNAMA, UNMISS, MINUSMA, MINUSCA and UNISFA thorough a wastewater engineer recruited in early 2018. This often-included cannibalising old plants to reconfigure and bring back existing infrastructure into operation and high-risk wastewater practices still being observed in many missions: UNSOS, UNMISS and MONUSCO;
- following extensive review of information reported by missions for the January-June 2019 period and follow-up discussions with almost every field Mission, Water and Wastewater guidelines drafted in June 2020 in close collaboration with ETSU and Mission Task Force members was updated in December 2020. Strategic work was done on guidelines, SOPs and templates to better support wastewater management and provide technical options/solutions;
- during COVID-19 between March-December 2020, 13 field missions were monitored and specific support to preparing Emergency Contingency Plans was provided to UNMISS and MINUSCA;
- organization and participation in a Groundwater Monitoring webinar for UN Field Missions in late 2020;
- each field mission received dedicated support calls and detailed feedback on their assessment and reporting of municipal site risks as a follow-up to the wastewater risk assessment methodology;
- Water and Wastewater guidelines were promulgated in July 2021. This led to the development of the SOR for wastewater treatment solutions global system contract, which replaced the current WWTP containerized system contract in 2022.
- other key substandard activities conducted between June and December 2020 include the eAPP report support and presentations during the Water and Wastewater TWG meetings on performance results for the Pillar and on guidance development;
- conducting the 2nd webinar on groundwater monitoring in collaboration with the Finnish Water Forum;

- support to UNIOGBIS environment closeout assessments process on wastewater risk management and technical assistance on various topics to field missions: water quality monitoring, wastewater risk management guidance, procurement technical support for UNMISS, SOW on end-to-end wastewater management review for MINUSMA;
 - between January and July 2021, there was substantial support and task priority given to development of a Global System Contract work stream for new wastewater treatment solutions in collaboration with ETSU, LSD and Procurement Division;
 - technical exchanges with Mission water sanitation engineers in UNISFA, UNAMA, MINUSCA, UNAMI, UNDOF, MONUSCO, UNSOS, MINUSMA, MINURSO and UNMISS, to collect feedback and estimate the forecast need for the future contracts;
 - between January and July 2021, there was eAPP reporting support, and support to UNIOGBIS in relation to wastewater risk management as part of the ECOA process (Mission's closure), survey on lab reagents and treatment chemical usages and stockpiles in field missions in collaboration with the Waste Pillar team.
92. This all led to the provision of a Water and Wastewater Manual (instead of "Guidelines") to better accommodate the different levels of compliance for promulgation in 2022 including a risk assessment methodology to eliminate most of the significant risks. A Wastewater Management Plan for UNMISS was developed, forming the basis for a template for all missions, as a component of the SOP on the development of Water and Wastewater Management Plans. A dedicated procurement process was then launched to set up a new System Contract for water quality analytical equipment. Further support was required to the Wastewater Global System Contract procurement process.
93. Solid Waste: Technical assistance in solid water management included:
- early multiple Missions providing training by the REACT Technical Team and ETSU on designs on setting up in-house waste management yards for hazardous and non-hazardous materials, setting up global contracts for these works (in collaboration with HQ) and operation and maintenance of various infrastructure including incinerators. The use of simple market off-the-shelf solutions was a common theme of the training;
 - multiple mission visits by March 2019 to examine MINUSTAH liquidation process in respect of solid waste management and to provide assistance for the disposal of identified hazardous materials at UN and contingent camps. Advice notes providing guidance for the disposal of a range of expired hazardous chemicals, pesticides, fluorescent lamps, medical pharmaceuticals and waste x-ray chemicals have been developed. Guidance on composting and waste management yards was completed as well as field visits to explore options for e-waste disposal;
 - a detailed waste management strategy provided to MINUSCA with capacity building activities delivered in early 2018;
 - a completed Waste Management Plan template by 2019 that was disseminated to each mission to a high standard. REACT also contributed to ongoing work on systems contracts to ensure that appropriate infrastructure was available to missions to manage waste appropriately;
 - field assessments to MINUSCA, MINUSTAH, MUNSIMA, MONUSCO, UNMIL, UNSOS, MINUJUSTH, UNISFA and UNAMID (timing of field assessments can be seen on Figure 3). Required resources for waste management improvements were determined with some local procurement undertaken for waste management equipment such as incinerators, shredders and bulb crushers. Rapid assistance was provided to MINUSCA to assist with a landfill fire and to UNISFA to assist with waste management yard and incinerator commissioning;
 - remote technical assistance using video streamed from field operatives between March and December 2020. Remote assessments were carried out with handheld video from on-ground local mission support staff, allowing REACT Technical Team to identify environmental issues. There was no need for any specialized equipment other than a smartphone and good internet connection. Dynamics 365 software was useful to rapidly scribble pictorial advice and instructions. The most important aspect was to have good communication between video

operator and remote technical support, rather than the technology. Specific work tasks completed included:

- 6 Waste TWG meetings conducted on a range of technical topics based on mission case studies that included criteria analysis for improved solid waste management solutions (MONUSCO), rotational composters (UNIFIL), incinerator commissioning and operations;
 - 10 waste management plans signed (UNMISS, MONUSCO, MINUSMA, MINUSCA, UNIFIL, UNISFA, UNSOS, UNDOF, UNMIK and UNAMA);
 - on-ground technical assistance for liquidation provided to MINUJUSTH (now BINUH) and UNAMID (inventory and treatment of hazardous wastes and guidance on setting up a large waste management yard at El Fasher, where two large commercial scale general waste incinerators are commissioned and operating after training provided by REACT);
 - on-ground incinerator operator training conducted at UNISFA;
 - input into 3 SOPs for solid and hazardous waste management and review of project documents and technical advice and recommendations to MINUSCA in relation to the remediation of the Kolongo Landfill in Bangui;
 - technical guidance and material specifications for the installation of the incinerator ash monofill for MINUSMA;
 - technical guidance on used waste oil for MONUSCO;
 - comprehensive guidance document on COVID-19 waste and wastewater management developed and promulgated;
 - technical input and specifications for barrel incinerators provided for an emergency systems contract. Bi-weekly updates during COVID-19 on waste management and contingency planning was provided across all missions to assess risk relating to solid and biomedical waste and wastewater management with the updates being displayed on a dashboard for the office of the represented by the Under-Secretary General (USG) of DOS and Mission Chief/Director mission support.
- more specific work tasks completed between July 2020 and June 2021 including:
 - 6 more Waste TWG meetings held on a range of technical topics based on mission case studies: key technical principles for satisfactory incineration, production of briquettes from waste cardboard, bio-digestion for energy recovery, Waste Pillar guidance library, Waste Management Handbook content and format, and waste management yard set up and operations at UNISFA;
 - remote support to UNSOS on 2 commissioned large incinerators (effectively incinerating more than 2 tons of solid wastes per day due to sophisticated pollution control systems) with minimal emissions at the Mogadishu International Airport base in Somalia;
 - continued support to MINUSCA in relation to the remediation of the Kolongo Landfill in Bangui;
 - assistance to procure 21 solid waste incinerators and development of three SOPs for solid and hazardous waste management;
 - technical guidance for MONUSCO on hazardous waste inventory;
 - UNMISS support for shredder procurement;
 - training to all missions for the use of barrel incinerators to deal with excess COVID wastes and solid wastes at remote sites;
 - remote assistance to UNAMID in support of on-going liquidation activities;
 - a feasibility study on the sizing and cost model for bio-digestion for energy recovery; and
 - training for MINUSMA on hazardous waste management and UNMISS on incinerator operation and maintenance.

94. All these work tasks led to:

- the finalization and promulgation of the solid and hazardous waste management handbook in late 2021 providing comprehensive guidance and reference material for Missions to help improve their waste management efforts that included a risk assessment methodology to eliminate most of the significant risks;
- sign off of the remaining mission Waste Management Plans (UNAMA, UNVMC, UNFICYP, and MINURSO) from late 2021 onwards;
- ongoing support provided to MINUSCA, MONUSCO, and UNMISS to develop waste management yards including operational training for incinerators and other types of waste management equipment, and to UNAMID for the treatment and disposal of waste chemicals prior to closure of the mission;
- DOS having one central hazardous waste management specialist in 2022 and 2023 who can support a range of issues in different Mission settings and differing magnitudes;
- analyses of procurement data to identify issues and solutions for improved supply to reduce waste generation, especially of hazardous materials and packaging, and to improve mission waste inventories and to avoid waste accumulations and advise on treatment options; and
- support provided to Solid Waste Category Management and cooperative assistance provided to OICT in support of an RFP for more effective management of e-waste.

95. The availability of Output 2 is *highly satisfactory*.

The overall rating for the availability of the Project outputs is Highly Satisfactory.

D.3. Achievement of Outcome as defined in the reconstructed ToC

96. The RToC in Section IV illustrates the outputs and outcomes that the Project sought to achieve to contribute to an overall impact of “improved environmental performance of Peacekeeping operations within SDG 6, 7 and 12”. In the RToC in Figure 2, this impact is spread along a development pathway with the following intermediate states achieved prior to the Outcome: “system preparedness increased”, “improved supply chain” and “uniformed components trained”. The review of the effectiveness of the Project consisted of an assessment of causal pathways from the baseline to activities, detailed activities and the outputs of the Project to generate the intermediate states and outcome that would eventually lead to impacts, all based on the RToC in Figure 2. As such, the intended outcome of the Project is “procedures, policies and practices are in place, and technical advice has been implemented on the ground, resulting in the improved environmental performance of peace operations”.
97. With regards to drivers supporting the transition from outputs to outcome to impact, the drivers of “adoption of the Environmental Policy by UN Field Missions helps to reduce the environmental footprint of Peace Operations” and “Secretary-General articulated his expectation that “the United Nations system reaches full compliance with the United Nations Climate Neutral Strategy and becomes effectively climate neutral by 2020 at the latest” *are in place* due to all Peacekeeping Missions making efforts to fully comply with the DOS Environmental Policy. With all the KPIs, tools, report templates, scorecards and strategies to guide the process for environmental change made available to all the Missions, the efforts of the Missions to comply with the DOS Environmental Policy became much easier. As such, drivers to support the transition from outputs to the desired outcome are “in place”. There were no assumptions from detailed activities to outputs to outcome.
98. The achievement of the Outcome of “procedures, policies and practices are in place, and technical advice has been implemented on the ground, resulting in the improved environmental performance of peace operations”, outcomes as a result of REACT can be described as follows:
- the REACT Project has supported limited UNEP and Greening the Blue Helmets input into a new secretariat environmental policy resulting in a new Secretariat Environment Policy on 1 January 2019, which was a continuation of the former DFS multi-year draft Environment Policy formulated progressively from 2009 to 2017 as an umbrella for improved environmental

management in Peacekeeping Missions²⁶. With the REACT Project Document being prepared and approved in 2016, Project component priorities were drawn from that draft Policy and a draft Environment Strategy (with inputs from REACT and SUN teams). DOS has adopted an updated Environment Strategy that included an environmental management system, energy, water and wastewater, solid waste and wider impact with an environmental action plan, KPIs, budgetary provisions, a performance monitoring system, and a governance structure. The DOS Environment Strategy for field missions was regularly updated (in 2021), keeping in-line with “improved environmental performance of peace operations”, with a new version of the DOS Environment Strategy expected in 2023;

- REACT supported the writing of SOPs, plans, guidelines and manuals for Peacekeeping operations from 2018 to 2022²⁷;
 - 100% percentage of Missions reported implementing EMS in their operations by December 2019 (against a target of 50%) with all missions reporting annually and reporting at least some progress on some indicators through environmental scorecards indicating progress in environmental management and performance. This was supported by REACT technical assistance to Missions on risk assessment and performance evaluation, as well as desktop assistance on data collection, and to GSC and HQ on analytics and messaging. In Phase 2, REACT work was conducted on the reporting framework, supporting policies and SOPs, and on the internal verification and EMS assessment approach;
 - 66% of UNEP’s key proposals were accepted in the COE manual (against a target of 20%). Generator efficiency and building efficiency clauses were accepted with requirements for containment of fuel storage not accepted by member states. Unfortunately, with both generator and building efficiency updates being voluntary, uptake by Missions was weak with this sub-outcome being unsuccessful and further work after June 2021 required on engagement;
 - 12 DOS system contracts were completed that comply with the Environmental Policy. REACT provided in-depth support for the Systems Contracts, the centralized procurement mechanism, for waste management, energy and wastewater equipment and services;
 - 17 field missions were conducted with integrated environment issues (footprint issues and wider impact) into their existing communications strategies for DOS staff, host countries, local communities, and member states. The REACT team assisted DOS in the recruitment of environmental experts that resulted in a staffing structure for effective environmental management. Evidence of the increased capacity includes DOS operation of the EMS and joint development of an upgraded strategy.
99. The overall rating for achievement of Outcome 1 of “*procedures, policies and practices are in place, and technical advice has been implemented on the ground, resulting in the improved environmental performance of peace operations*” is *highly satisfactory*.

The overall rating for achievement of all Outcomes is Highly Satisfactory.

²⁶ A Waste Management Policy came under the umbrella of the Environmental Policy, which had been adopted in 2015.

²⁷ This included the SOPs on Development of Wastewater Management Plans in October 2022, SOPs on Development of Energy Infrastructure Management Plans for UN Field Missions in June 2020, Environmental Impact Assessment for UN field missions in September 2019, SOPs for Development of Waste Management Plans for UN Field Missions in December 2018, Waste Management Handbook for Peace Operations and Special Political Missions in February 2022, Water and Wastewater Manual for UN Field Missions in June 2021, Environmental Management Handbook for Military Commanders in February 2021, Guidelines for D/CMS-CAO-CEO End of Mission/Field Entity Report in September 2018, and Guidelines for Environmental Clearance and Handover of Mission/Field Entity/Field And the Sites in August 2018.

D.4. Achievement of Likelihood of Impact

100. With the “likelihood of impact assessment” (LIA) based mainly on the holding of drivers being in place to advance developmental results towards the desired impact, the following comments are made in response to the RToC “drivers” (Figure 2) for the LIA:

- the driver of “adoption of the *Environmental Policy* by UN Field Missions helps to reduce the environmental footprint of Peace Operations” *is in place*. This includes the REACT Technical Team supporting the transition from outputs to the intermediate states, and the transition from intermediate states to outcome and impact, by delivering capacity building sessions for Mission staff to improve system preparedness, improve supply chains, and training Mission staff including TCCs and PCCs to improve environmental performance of their actions. It also includes UNOPS support for an improvement in 2021-22 to the 2009 DOS Environmental Policy after UNEP’s involvement with the REACT Project;
- the driver “Secretary-General articulated his expectation that ‘the United Nations system reaches full compliance with the United Nations Climate Neutral Strategy and becomes effectively climate neutral by 2020 at the latest’” *is in place*. This includes the Greening the Blue Team (under the SUN project) and EMG officers (who monitored the offsets) who supported the transition from outputs to the intermediate states, and the transition from intermediate states to outcome and impact, through commitments by senior Mission staff to make systemic changes to their reporting of environmental practices to GSC-ETSU.

101. Overall, the likelihood of impact is rated as *highly likely*.

The overall rating for likelihood of impact of the Project is *Highly Likely*.

The overall rating for Effectiveness of the Project is *Highly Satisfactory*.

E. Financial Management

Adherence to UNEP’s Financial Policies and Procedures

102. The REACT Project under UNEP commenced in 2016 and was extended until June 2021 with US\$8.5 million in funds from DOS. After signature in June 2016, DFS (then DOS) transferred to funds to UNEP in instalments:

- first instalment: US\$ 3,000,000 in July 2016
- second instalment: US\$ 2,400,000 in July 2017;
- third instalment: US\$ 1,550,000 in July 2018; and
- fourth instalment of US\$ 1,550,000 in June 2020 for Phase 2.

103. With donors funding Peacekeeping operations, the annual Peacekeeping budgeting process allows donors to specify where Peacekeeping Missions should allocate funds. In the case of REACT, allocations could be for implementing REACT activities or the Environmental Strategy which are activities apart from REACT that would require management services or equipment. Environmental expenditures would be one line in amongst hundreds of other expenditure lines for the Peacekeeping Mission budget.

104. The Director of Mission Support / Chief of Mission Support of the mission appointed an Environmental Officer in the Mission to encourage Missions to implement their environmental policy or to adopt the mission’s environmental policy, guidelines and objectives. The budget for the Mission was to include adequate financial resources for supporting the environmental policy and the environmental objectives of the Mission, including the Environmental Officer and other human resources dedicated for this purpose.

105. As such, the expenses of the REACT Project consisted of:

- UNEP staff salaries;
- travel to missions and/or NY or Brindisi;

- procurement of VTC facilities and other enabling equipment;
- office and UNEP Programme Support Costs; and
- UNOPS activities including:
 - REACT engineer salaries;
 - their travel and disbursements;
 - procurement of supporting and technical equipment; and
 - associated UNOPS support costs (HR support, procurement and travel arrangements, and corporate overheads).

106. A UN to UN agreement between UNEP and UNOPS was executed in September 2016 for US\$5.0 million with an initial US\$ 2.0 million transferred to UNOPS in October 2016, a second tranche of US\$1.5 million was transferred in September 2017, a third tranche of US\$1.5 million was transferred in September 2018. Amendment of US\$ 1,395,000 for Phase II was signed in 2021 and a tranche of US\$1,200,000 issued in December 2021.

107. Rating for adherence to UNEP’s policies and procedures is *highly satisfactory*.

Completeness of Financial Information

108. Environmental work from REACT was done in missions located in vulnerable jurisdictions with the highest environmental risks (jurisdictions with no local infrastructure, a very sensitive local environment, and absence of a functioning government), defined by an environmental strategy with objectives. Based on progress reports, financing from donors was provided for implementing the strategy, pro-rated from their country budget. Financing information from the donors was not thoroughly examined in this TR report. These funds were placed into a “DOS account” for disbursement to UNEP which provided substantial funds to UNOPS to fund the REACT Technical Team.

109. Financial information was made available to the Review from:

- expenditure reports for all the years of Project implementation (2016-2021);
- budget revisions mainly from 2019 and 2020;
- proof of fund transfers (cash advance reports) for 2016, 2017, 2018 and 2020;
- all relevant Project legal agreements.

110. There were no co-financing reports (cash and in-kind) from Member States. This was due to the overall REACT budget being a very small portion of the overall Peacekeeping Mission budgets (with Peacekeeping budgets also including troop deployments, tanks, weapons, catering and other expenses), and the complexities of trying to keep track of a small amount of contributions from the several Member states. In addition, REACT funding appeared to be sufficient where additional co-financed resources would not have added more value, particularly with ETSU and other SMEs within DOS coming online.

111. There were no audit reports for REACT during all the years of implementation (2016-2021). Though the Office of Internal Oversight Services (OIOS) had the right to audit the REACT Project, it did not do so since there was no wrongdoing, and hence no active investigation on the REACT Project. OIOS also has a mandate to conduct evaluations on various UN Secretariat entities such as DOS and UNEP. As such, the REACT Project would have been too small an undertaking for an OIOS audit.

112. Overall, the completeness of financial information for the Project is rated *highly satisfactory*. The final disbursements of the Project are shown in Annex VI.

Communication Between Finance and Project Management Staff

113. Communications between Project management staff and finance can be characterized as follows:

- UNEP were kept apprised of the DOS account created for financing REACT activities. Peacekeeping Missions prepared their own annual budgets a year in advance for it to be approved by DOS and HQ with Member States and committees. For REACT activities,

DFS/DOS took funds from each Mission budget with the permission of the Missions and based on the size of the Mission, creating a REACT activity pot on behalf of all the Missions;

- an “Administrative Agreement” defined the relationship between UNEP, DOS and the Missions since they were all part of the UN Secretariat. No contracts between these entities existed;
- UNEP communicated with and opened a “Contribution Agreement’ with UNOPS to execute many of REACT’s activities since there were bureaucratic issues recruiting UNEP technical assistance through UN Secretariat channels, and capacity gaps in UNEP assistance with regards to in-field and hands-on technical assistance. UNOPS also had a track record of leaner implementation as compared with UNEP or any of the other UN Secretariat entities;
- if there were any inquiries about the REACT budget from Member states, these would generally be communicated through DOS and then to UNEP for responses. If there was communication between UNEP and Member states, it would be done in the Group of Friends forum, and in the presence of DOS. In terms of how money was expended, it was the domain of DOS to maintain the reputation of the UN Member states;
- there was an administrative process where the UNEP Project Manager would approve the recruitments, monthly payrolls (of both UNEP and UNOPS activities), and other expenses;
- surplus funds remained after the completion of Phase 1. After much communication between UNEP, DOS and UNOPS, these surplus funds were used finance for Phase 2.

Though these problems existed, there should be no qualms that UNEP fund expenditure resulted in effective delivery of the Project and a responsive, adaptive management approach (notably on the nature of the UNEP exit plan).

114. The aforementioned provides the Review with sufficient evidence that communications between the UNEP Project Manager, the UNOPS Project Manager, and DOS were satisfactory with all parties being aware of the financial status of the Project. A summary of financial management issues is provided on Table 2. Overall, the communication between finance and Project management staff for the Project is rated *highly satisfactory*.

Rating for Financial Management: Highly Satisfactory

F. Efficiency

Timeliness

115. The efficiency of the REACT Project was positively affected by the oversight of the PSC with senior representation from DOS, UNEP, and UNOPS. A PSC working group was tasked by the PSC for substantive working level matters, comprising DOS and REACT Technical Team leads (the Chief of Environment Section in the Office of the Under-Secretary-General DOS, and Chief Environmental Technical Support Unit of GSC-ETSU, the REACT Technical Team Lead, and the UNOPS project manager).
116. Efficiency was also driven by the commitment of UNEP, DOS and Mission personnel and the ability of the REACT Technical Team to tap into significant technical expertise, often drawn from the private sector. The Project was designed, mobilized, and led by UNEP from July 2016 to June 2020, and was effectively transitioned away from UNEP between July 2020 and June 2021 to become self-managing embedded within DOS functions and processes in terms of substantive delivery of UNOPS operations. UNEP’s role after the end of REACT Phase 2 in June 2021 was in-kind general oversight with UNOPS providing comprehensive operational support under a direct agreement with DOS in place of UNEP.

Table 2: REACT Financial Management

Financial management components:		Rating	Evidence/ Comments
1. Adherence to UNEP's policies and procedures:		HS	See Paras 102-107
Any evidence that indicates shortcomings in the project's adherence to UNEP or donor policies, procedures or rules		No	
2. Completeness of project financial information:		HS	
Provision of key documents to the reviewer (based on the responses to A-H below)			
A.	Co-financing and Project Cost's tables at design (by budget lines)	Yes	See Annex VI
B.	Revisions to the budget	Yes	See Paras 108-109
C.	All relevant project legal agreements (e.g. SSFA, PCA, ICA)	Yes	
D.	Proof of fund transfers	Yes	
E.	Proof of co-financing (cash and in-kind)	n/a	See Para 110
F.	A summary report on the project's expenditures during the life of the project (by budget lines, project components and/or annual level)	Yes	See Annex VI
G.	Copies of any completed audits and management responses (<i>where applicable</i>)	n/a	See Para 111
H.	Any other financial information that was required for this project	n/a	
3. Communication between finance and project management staff		HS	
Project Manager and/or Task Manager's level of awareness of the project's financial status.		HS	See Paras 113-114
Fund Management Officer's knowledge of project progress/status when disbursements are done.		HS	
Level of addressing and resolving financial management issues among Fund Management Officer and Project Manager/Task Manager.		HS	
Contact/communication between by Fund Management Officer, Project Manager/Task Manager during the preparation of financial and progress reports.		HS	
Project Manager, Task Manager and Fund Management Officer responsiveness to financial requests during the review process		HS	
Overall rating		HS	

117. Though Project launch was in June 2016, the majority of the REACT Technical Team were not recruited until early 2017. Their background was mostly from private sector environmental management, highly suited for the work involved despite the fact that none of them had worked in peacekeeping before. There were significant delays in recruiting processes and a significant number of changes in personnel during the Project, resulting in a core team of senior staff (of which two are based in Geneva), supplemented by either junior or on-retainer personnel. UNOPS and UNEP also experienced difficulties in providing clear visibility on contract terms, such as taxes, and contract extensions, affecting team morale in 2017 and 2018. This was especially true for the Energy component due in part to significant difficulties within UNEP management to maintain the focus of staff purely on the REACT Project, with some personnel becoming involved in activities extraneous to REACT. This further compounded the difficult human resource management aspects of the UNOPS contract that hampered efficiency during 2016-18.

118. On-ground field work was curtailed in March 2020 during the COVID-19 pandemic due to travel restrictions. However, due to the extent of prior field work during the 2017-19 period, the REACT Technical Team established an in-depth understanding of the field conditions already. The May 2019 adoption of MS Teams by the DOS Environment and Engineering Community resulted in technical assistance to missions seamlessly transitioning to remote mechanisms. This resulted in the REACT Technical Team having excellent working relationships with key mission stakeholders attending monthly working group meetings for each technical stream. With demand for ad-hoc queries and technical meetings increased, technical support through Teams “chat” and video calls accelerated significantly. Mission counterparts at home, or in quarantine on base, could more easily connect than through legacy VTC systems. By the end of the Project in June 2021, outcomes and outputs had been achieved with an optimum use of human resources by adding significant capacity to the DOS team, via joint development of an environmental strategy and then an in-depth formal Environmental Management System.

Cost Efficiencies

119. Project expenditures up to 30 June 2019 were US\$ 5,136,742. The estimated surplus of Phase 1 of the Project was around 10% of total budget of US\$ 5.95 million. This was essentially rolled over into Phase 2 starting in July 2020. By 30 June 2021, total expenditure of REACT was US\$ 8.5 million, as provided by Peacekeeping Missions via DOS.

120. The expenses covered by the Project were firstly UNEP costs: staff salaries (paid to UNOPS); travel to missions, New York and Brindisi; procurement of VTC facilities and other communication equipment; and office and UNEP Programme Support Costs, and secondly of Project activity expenditure incurred through UNOPS: REACT Technical Team salaries; travel and disbursements; procurement of supporting and technical equipment; and associated UNOPS support costs (HR support, procurement and travel arrangements, and corporate overheads).

121. By the end of the Project in June 2021, all outcomes and outputs had been achieved with an optimum use of financial resources due to the aforementioned expenditures, but also the provision of in-depth support for the centralized procurement mechanism called Systems Contracts, for waste management, energy and wastewater equipment and services.

122. Overall, the REACT Project delivered maximum results to an extent where interventions have been achieved at the lowest possible cost. The Project alignment with EMG, the SUN project, and “Greening the Blue Campaign” helped with REACT Project build upon pre-existing agreements and partnerships, data sources, creating synergies and complementarities these other initiatives, to increase REACT Project efficiencies. Planned activities were delivered according to expected timeframes and sequenced efficiently that provided timeliness of Project execution. Adding to the efficiencies, the Project extension to Phase 2 was planned to provide the resources and time for UNEP to exit the REACT Project and transfer activities to UNOPS.

Rating for Efficiency: Highly Satisfactory

G. Monitoring and Reporting

Monitoring Design and Budgeting

123. The monitoring design of the REACT Project Phase 1 is divided into 2 documents: a UNEP-DFS Project Summary and the ProDoc Phase 1. The Project Summary says the Project was to be monitored and evaluated in compliance with the UNEP Evaluation Policy:

- High level progress monitoring will be part of the role of the PSC;
- Working level progress on Project performance such as achieving agreed milestones was to be monitored via the UNEP-internal Project Information Management System (PIMS);
- An external consultant was to be recruited for mid-term and final Project evaluations. The ToRs were to include a field visit with the consultant supported by UNEP Evaluation Office staff and DFS nominated staff; and

- Throughout the Project, the team and DOS counterparts were to gather and monitor data to develop a baseline and track changes in the environment and climate footprint of UN Peace Operations. At the end of the Project, an impact evaluation was to be undertaken by the Project team with the results collated into a short report and published.

124. The ProDoc outlines the Project monitoring plan and budget progress on pgs 44-45, towards achieving the Project outcome and outputs through PLF indicators that meet SMART criteria while outlining the data sources, data collection methods and frequency of monitoring the indicator. There was no applicability for indicators disaggregated by gender, marginalization or vulnerability or those living with disabilities. Budgeting of the monitoring plan was through Project staff and their travel.

125. The ProDoc for REACT Phase 2 contained only an Evaluation Plan where a total of US\$40,000 was allocated in the Phase 2 budget to finance the terminal evaluation, making use of surplus Phase 1 UNEP funds. The Evaluation Office would be responsible for the Terminal Evaluation and liaise with the Project manager throughout the process.

126. Overall, the monitoring design and budgeting has been rated as satisfactory.

Monitoring of Project Implementation

127. The monitoring of Project implementation can be characterized as follows:

- The REACT Project did not provide progress reports that followed the PLF. Rather, it reported on administrative issues (expenditures, team mobilization, recruitment issues, and travel), followed by substantial work in the 5 Pillars of the DOS Environmental Strategy (EMS, waste management, energy, water and wastewater, wider impacts), challenges and concluding remarks;
- An external consultant completed a mid-term review of the Project in December 2019;
- There was a decent amount of information on Project expenditures.

128. The REACT Project was reported according to the PLF, and monitoring of Project implementation was operational with timely tracking of results and progress towards Project objectives throughout implementation. Overall, the monitoring of Project implementation has been rated as satisfactory.

Project Reporting

129. The REACT Project did provide progress reports. Progress reports were provided on September 2017, June 2018, December 2018, March 2019, June 2019, December 2019, June 2020, December 2020 and June 2021. Though these reports did not follow the PLF, they reported on administrative issues (expenditures, team mobilization, recruitment issues, and travel), followed by substantial work in the 5 pillars (EMS, waste management, energy, water and wastewater, wider impacts), challenges and concluding remarks. Planned activities were also reported only from the June 2020 reports onwards. An external consultant completed a mid-term review of the Project in December 2019.

130. The October 2021 Project Final Report did report progress according to the PLF as well as narrative highlights of Project results and long-term impacts, sustainability and the scaling up of positive results. Between June 2016 and June 2021, Project activities were recorded under UNEP's PIMS, ceasing in June 2021 to be replaced by DOS processes. However, the impact evaluation of the Project that was in the Project monitoring design was not prepared by the Project team.

131. As such, detailed information on the impact of the Project was difficult to report. However, the overall reporting provides a decent overall review of the progress made by REACT. Project reporting has been rated as moderately satisfactory.

Rating for Monitoring and Reporting:	Satisfactory
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H. Sustainability

Socio-political Sustainability

132. For the socio-political sustainability of the REACT Project, there appears to be strong ownership by all senior personnel in Missions to adopt new policies, procedures and practices for improved environmental performance in peacekeeping missions. This includes field missions successfully adopting EMS and integrating environment into their existing communications plans or strategies. This facilitated development of a stable and incrementally improving EMS and associated corporate culture that are now embedded in DOS core processes of the missions through:

- permanent and fixed term environmental management staff posts in the missions;
- a compulsory, online based, annual environmental performance reporting system for all missions;
- adoption of environmental related lines and tags in the mission annual budgeting processes;
- SOPs for multi-year strategic Waste and Energy planning in missions to underpin planning, budgeting and justification of projects;
- increased capability within missions on a range of technical areas, including cost-benefit analysis, EMS internal audit, soil remediation and incinerator operation.

133. As such, the socio-political sustainability assessment for the REACT Project is *highly likely*.

Financial Sustainability

134. The financial sustainability of the Project is assessed as *highly likely* due to the ongoing UNOPS-DOS agreement which provides continuity to the REACT Project under UNOPS.

Institutional Sustainability

135. For the institutional sustainability of the REACT Project, there is strong ownership by all senior personnel in HQ and GSC-ETSU to provide assessments, technical analysis and capacity building to UN Peace operations to support their systemic efforts to improve environmental performance. This includes:

- permanent and fixed term environmental management staff posts in DOS;
- getting environmental related lines and tags incorporated into mission annual budgeting processes;
- several central supporting tools and references available at DOS to the missions;
- establishment of fit-for-purpose “system” contracts for a range of environmental infrastructure;
- establishment of a Member State-led “Group of Friends” on peacekeeping environmental issues;
- various Member State mandates and policies.

136. Moreover, the USG of DOS and UN Member States expressed his warmest appreciation with the end results of the REACT Project, which designed, mobilized and supported the DOS Environmental Strategy, and resulted in steady progress across all performance indicators during the first 5 years of strategy implementation. He said the General Assembly have stressed the importance of continuing these efforts and as of July 2023, is proposing a way forward. Based on input from Missions and preliminary consultations at the end of 2022 with the Member State Group of Friends on Leading Environmental Management in the Field (LEAF), he is setting up a vision for “Environment Strategy 2030: Responsibility, Ambition, Legacy” that accelerates the sustained strategic efforts of the past 6 years. The vision proposes that implementation continue across the 5 operational Pillars: energy, waste, water and wastewater, environmental management systems, and wider impact/positive legacy, and puts forward three key themes to cut across each of these Pillars:

- **Do no harm:** including ongoing vigilance on risk and a focus on planning for and implementing responsible liquidation processes;
- **Increase ambition:** ramping up the focus on renewable energy and taking steps to reduce consumption through behavioral and systemic improvements, and strengthening the focus on multi-year planning through mission-set (and Member State agreed) performance targets;
- **Leave a positive legacy:** building on experiences to mainstream and build necessary relationships around the implementation of positive legacy approaches, delivering operational guidance and training to support missions during this transition.

137. In conclusion, the institutional sustainability of the Project is rated as *highly likely*.

Rating for Sustainability: Highly likely
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I. Factors Affecting Performance and Cross-Cutting Issues

Preparation and Readiness

138. During the July-December 2016 inception and mobilization period of the Project, there was evidence of the appropriate preparation and readiness of the Project:

- the Project had to include UN and African Union peacekeepers who are mandated to combine military and civilian forces deployed to conflict countries to support the transition from armed conflict to stability. As of 2016, there were 17 peacekeeping missions in Africa, the Middle East and the Caribbean (Haiti). While Missions operate as long as they are needed and mandated, the average duration of Missions is in the order of 25 years;
- with environmental impact of United Nations Peacekeeping Operations not receiving major public attention, Missions were coming under increasing scrutiny from Member states and media to improve their environmental performance including the good governance of natural resources and the environment;
- the REACT Project and the leadership of UNEP ramped up in scale from the Project inception in July 2016 to January 2017, laying the groundwork for collaboration with DOS (formerly DFS) on its significant increase in effort on greening its operations, focusing its efforts on DOS Headquarters in New York, GSC-ETSU in Brindisi, and Peacekeeping Missions. This work included:
 - receipt of an Administrative Agreement between DFS and UNEP on 8 June 2016 to start REACT;
 - signature of UNEP-UNOPS agreement for US\$ 5,364,980 in support of the project implementation on 26 September 2016 with an initial tranche of US\$ 2.0 million provided;
 - development and advertisement of ToRs for REACT technical team;
 - contract for the Project management support and the Project travel assistant;
 - procurement of technical equipment for REACT team;
 - advice on the development of the DOS environmental strategy;
 - extensive consultations and technical assistance on wastewater management;
 - advice provision on budgets to 6 missions;
 - proposal for modifications to the CoE manual;
 - over 10 conference calls with each mission to define priority issues;
 - tailored advice provision to UNIFIL with delivery of 2 advisory notices on energy and environment, and wastewater;
 - discussions on final version of the score cards;
 - assistance in DOS waste and GHG emission inventories;

- assistance to UN Department of Management with development of UN Secretariat-wide action plan for the inclusion of sustainable development consideration in the management of facilities and operations in view of reducing the impact on climate;
- start of initial analysis of the environmental performance of Missions through the completion of an environmental scorecard by all Missions; and
- discussions on how Project gender aspects can be realistically integrated into the action plan.

As such, the Project preparation and readiness is rated as satisfactory.

Quality of Project Management and Supervision

139. The quality of Project management and supervision by UNEP as an implementing agency was appropriate and as a result, was rated as satisfactory. Since January 2017, UNEP through the REACT Project has provided effective leadership as an implementing agency towards achieving the planned outcomes, maintaining productive relationships, communication and collaboration with UNEP colleagues, risk management and overall project execution:

- there was assistance from the UNEP Project Manager in 2016 on implementing the DOS Environment Strategy that was visionary from 2017 to 2023. His assistance was crucial in strategically identifying strategic priorities to implement the Strategy, the objectives and technicalities of the 5 Pillars, and types of approaches. This UNEP incremental assistance was extremely valuable to DOS;
- UNEP made the decision to recruit and deploy a team of experts and specialist organizations from UNEP and UNOPS to collaborate with DOS, GSC and Missions to substantially reduce the environmental impact of 165,000 UN and African Union peacekeepers and bring practices and systems that allow a more efficient use of natural, and financial resources in field Missions and headquarters. Deploying only UNEP personnel for this collaboration would run into bureaucratic issues described in Para 113, 3rd bullet;
- there was systemic change including specific assistance focused on supporting DOS headquarters in integrating sustainability considerations in crucial aspects of their operations. This included assisting DOS its Environmental Strategy, and specific assistance to Missions as outlined in Para 76;
- Project management and supervision of REACT stakeholders was conducted with 3 targets: the implementers for UNEP (in the context of the REACT Project being one recent part of a long running programme on improving the sustainability of the entire UN system that includes UNOPS), DOS stakeholders (in the context of general external scrutiny of peacekeeping performance, with a particular focus on expenditure), and civilian and military leadership and workforce of Peacekeeping Missions (who need to adopt new and improved environmental practices to drive real change in the organization). UNEP used Project resources to develop communication strategies for each group.

140. UNEP through the REACT Project also provided leadership as an executing agency by managing technical teams towards achieving the overall objective of:

- UNEP provided guidance towards UNOPS technical assistance provided by the REACT Technical Team to support field missions in planning, designing, financing and implementing a range of very specific actions targeting EMS, energy, waste, water and wastewater for substantial and permanent reduction in the environmental footprint of field missions during Phase 1 up to June 2020. Technical assistance was adaptively managed to accommodate the specific and urgent needs of the Missions. Funding for implementing these actions came from the Missions' own budget, not the Project budget, which is dedicated to technical assistance;
- UNEP effectively managed to lead the REACT Project by June 2020 to a state where the REACT Project was evolving into a self-managing entity in terms of substantial delivery and technical quality control with UNOPS providing comprehensive operational support package of services. Towards the latter half of Phase 1, the value of REACT funds was being taken from UNOPS positions, not UNEP. With DOS committed to continue financing and supporting

the REACT team after the exit of UNEP, the direct role of UNEP had evolved to oversight and administration;

- quality technical assistance was continued by the REACT Technical Team to all Missions in EMS, energy, waste, water and wastewater during Phase 2 between July 2020 and June 2021, almost all from UNOPS positions. This technical assistance was also adaptively managed to accommodate specific and urgent needs of the Missions;
- UNEP's role continued during Phase 2 from July 2020 to June 2021 to provide support to DOS and finance and manage the REACT team until the transition was fully complete. DOS developed a new direct agreement with UNOPS in January 2021 to take on REACT operational and implementation responsibilities in place of UNEP, which started in July 2021.

141. Overall, the quality of Project management and supervision REACT was rated as *highly satisfactory* considering the time during which the Project was being managed properly.

Stakeholders Participation and Cooperation

142. REACT stakeholders can be considered in 3 classifications:

- implementers including the REACT Technical Team and UNOPS;
- collaborators including DOS management personnel from GSC-ETSU and HQ in New York;
- beneficiaries that include Mission personnel.

143. Communications between UNEP, the REACT Technical Team, personnel from DOS management and Missions included monthly working group meetings for EMS, energy and waste technical streams. All working group sessions were well attended, indicating good participation and cooperation with Mission personnel. Moreover, early adoption of MS Teams by the REACT Team, DOS and Missions in May 2019 resulted in technical assistance to Missions seamlessly transitioning to remote communications which had later advantages as mentioned in Paras 69 and 145.

144. On-ground field work with the REACT technical team and Mission personnel was conducted for all peacekeeping Missions. During Phase 1, uptake of technical assistance was weak in the 2017-18 period with voluntary incentives and reliance on the COE manual insufficient to induce change. Technical assistance in the form of guidelines, SOPs, templates and business case studies brought the Missions to adopt new practices.

145. During Phase 2, there were travel restrictions imposed due to the COVID-19 pandemic. This did not stop communications between Technical Teams, DOS management staff and Mission personnel where effective remote technical assistance was provided with smart phones and internet connections. For many of the Missions, the extent of prior field work during the 2017 to 2019 period provided an in-depth understanding of field conditions for the Technical Teams. In addition, monthly working group meetings for each technical stream developed excellent working relationships between the Technical Teams and Mission personnel. There was also confusion over the roles and responsibilities of GSC-ETSU, REACT Technical Teams and leadership of the various work streams; this was resolved in late 2019 with the achievement of the Field Mission's Environmental Strategy now clearly resides with DOS, with UNEP's role being limited to an independent set of eyes on these workplans to help ensure the contribute to substantive change in the Field Missions' environmental footprint, in line with the PLF.

146. During Phase 1, UNOPS was responsible for administration of procurement, travel, ICT, finances and reporting. Communications between UNEP and UNOPS were normal and cordial during that period. UNOPS also communicated with UNEP to complete background human resources work for smooth transfer of UNEP to UNOPS oversight during the Phase 2 period of July 2020 to June 2021.

147. Some examples of the support from UNEP and the REACT Technical Team to GSC-ETSU included:

- preparing and arranging technical content for monthly working group meetings;
- substantial support to eApp platform development and performance commentary;
- delivery of EMS training to improve site assessment competencies;

- finalizing inputs to DOS Environmental Policy of energy equipment;
- drafting the Water and Wastewater Guidelines.

148. Overall, the quality of stakeholder participation and cooperation was highly satisfactory considering the strong engagement of all stakeholders, particularly after 2019.

Responsiveness to Human Rights and Gender Equality

149. The Project had appropriate representation of women in both HQ and GSC, and throughout the 5 Pillars where representation of both genders was evident. All working groups involving Missions, and all training and capacity building events had representation from both genders. However, this was offset by difficulties in attracting suitably qualified female engineering staff willing to undertake significant levels of travel. Over time, the Project reached gender balance, which it has maintained since 2019.

150. The Project has also struggled with personnel from diverse cultures in HQ and GSC. Many of HQ personnel are “Euro-centric” with difficulties in recruiting personnel from other regions such as Africa, the Middle East and Asia. There has been some progress with the recent hiring of a Kenyan national which should open opportunities for non-euro-centric cultures. Of course, the broader stakeholder group across DOS and the Missions include a diverse range of cultural backgrounds.

151. Overall, the REACT Project was gender balanced with the rating for the Project’s responsiveness to human rights and gender equality being satisfactory.

Environmental and Social Safeguards

152. The REACT Project was focused on environmental and social safeguarding. As such, this topic is comprehensively covered at the design and planning level. At the implementation level, safeguarding and management of risks was embedded in the technical advice from the REACT Technical Team provided to the Missions. This included direct and detailed interventions in several cases for hazardous waste treatment and disposal. As such, the criterion for environmental and social safeguards is rated as highly satisfactory.

Country Ownership and Driven-ness

153. There is strong ownership by all senior personnel in HQ and GSC-ETSU for the REACT Project’s efforts to provide assessments, technical analysis and capacity building to UN Peacekeeping operations that supports their systemic efforts to improve environmental performance. Indicators of DOS ownership and drivenness of the REACT Project are covered in Para 135. Their official cooperation and drivenness signals a level of ownership generated by the Project over outputs and outcomes and a change in behaviour embedded in the offices and Missions under DOS. Ownership of the Project extends to all groups considering the Project’s response to gender equality and marginalized groups in Para 149. Overall rating of country ownership and drivenness is highly satisfactory.

Communication and Public Awareness

154. There was no dedicated website for the Project. As such, there was little public awareness of the REACT Project. However, UNEP communications with its stakeholders was targeted as mentioned in Para 143:

- implementers that included the REACT technical team and UNOPS who improve the sustainability of the entire UN system as a part of a long-term programme;
- collaborators that included the DOS management personnel from GSC-ETSU and HQ in New York who have a particular focus on expenditure in the context of scrutiny of peacekeeping performance; and
- beneficiaries that include civilian and military leadership and workforce of the Peacekeeping Missions who need to adopt new and improved environmental practices to drive real change in the organization.

UNEP used Project resources to develop communication strategies for each group. Though there was no website summarizing the Project's achievements, communications and public awareness on the Project were satisfactory.

Rating for Factors Affecting Performance and Cross-Cutting Issues: Highly Satisfactory

VI. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

155. The UNEP-implemented portion of the REACT Project has strengthened the capacities of DOS personnel and Peacekeeping Missions to reduce their environmental footprint. This has been done from July 2016 to June 2021 with UNEP's responsibilities for REACT gradually being transferred to UNOPS between July 2020 and June 2021 with REACT continuing as an independent group of international consultants providing impartial technical expertise, overseen by a multi-agency PSC on behalf of Peacekeeping operations. With the DOS Environment Strategy being launched in late 2016, UNEP's role on the REACT Project was most valuable in identifying strategic priorities (as mentioned in Para 139, 1st bullet) to build systems to access reliable data to support analysis, to measure and drive performance, to roll out of consistent methodologies for site assessments, and to build systems for verified data gathering and sharing. KPIs were developed by UNEP to track progress and data collection, mainly relying on estimates and self-reporting. This all provided a sound foundation for improvement of Mission environmental performance.
156. In addition, UNEP personnel made a key decision to outsource technical workstreams of energy, water, wastewater and waste, to UNOPS as members of the REACT Technical Team (Para 71). With many of Team members from the private sector, the Team were able to provide industrial expertise and provide in-field hands-on experience on technical outputs and specialized areas (as opposed to UNEP personnel who would not have been able to provide field-level hands-on assistance without going through much bureaucracy). The REACT Technical Team was recognized as a major asset and success factor that was preserved during the transition from UNEP to UNOPS. While most of the REACT Technical Team has been in place since 2017 for three years or more, they have developed an in-depth knowledge of DOS and peacekeeping systems and challenges that will sustain assistance to DOS in the coming years. Despite COVID-19 constraints, the Team continued to provide valuable assistance to Missions.
157. As mentioned on Para 136, the appreciation of the USG of DOS and UN Member States of the end results of the REACT Project as of July 2023, and the General Assembly's stressing of the continuance of these efforts with the Member State Group of Friends on LEAF through an "Environment Strategy 2030: Responsibility, Ambition, Legacy", guarantees the sustainability of the REACT Project for several more years. This will be until the environmental objectives of the "2030 Agenda for Sustainable Development" and the emissions targets of the "United Nations Secretariat Climate Action Plan" are achieved. The vision proposes that implementation continue across the 5 operational Pillars: energy, waste, water and wastewater, environmental management systems, and wider impact/positive legacy, and puts forward three key themes to cuts across each of these Pillars: "*Do no harm*", "*Increase ambition*", and "*Leave a positive legacy*".

B. Summary of project findings and ratings

158. Phases 1 and 2 of the REACT Project provided numerous achievements:
- roll out of an extensive data collection and verification system that provides a reliable picture of the environmental footprint of UN peace operations down to the site level, with issuance of an annual scorecard for each mission that increases visibility that can identify priorities and gaps. This includes the increased use of remote monitoring methods that facilitate verification;
 - strengthened capacity in HQ and Missions that supports progress on environmental management to include both civilian and uniformed components, and established strong communities of practice across Missions;
 - emphasis on efficiencies in the use and consumption of energy covering both UNOE and COE, while innovative solutions to increase the use of renewables are being pursued through outsourcing, leasing, partnership and other options;
 - risk assessment methodologies have been developed and applied for both wastewater and solid and hazardous waste management, resulting in the elimination of most significant risks. This would include efforts to minimize waste to identify potentials for reduced packaging,

improved material use for recycling, reuse or disposal, and upgraded standards to improve quality of supplied goods for improved longevity;

- completed development of multi-year plans for all Missions in energy management, waste management and EIAs, following promulgation of SOPs that provide a more coherent and holistic approach to these core operational requirements while taking environmental considerations into account.
- provision of on-field and remote technical assistance over 900 days to 19 Missions for technical guidance, training and awareness raising on a wide array of topics, ranging from the role of individual uniformed peacekeepers in environmental management to how missions can safely dispose of hazardous waste, and from how to commission wastewater treatment plants to how to calculate costs savings on energy projects;
- tangible progress achieved across all pillars, with mission scores steadily increasing across the board and many examples of concrete steps taken to improve performance;
- an updated environment policy that is to be promulgated that includes clear expectations and standards for compliance, based on lessons learned and expertise gathered during the implementation of Phase 1.

159. Table 3 provides a summary of the ratings and findings discussed in Chapter V.

Rating for Overall Project Performance: Satisfactory

UNEP Evaluation Office Validation of Performance Ratings:

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

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

- That what is being assessed is the contents of the report and the extent to which it makes a consistent and justifiable case for the performance ratings it records.
- That the consultant has, within the report, presented all the evidence that was made available to them.
- That the Review has been based on a robust Theory of Change, reconstructed where necessary, which reflects UNEP's definitions at all levels of results.
- That the project team and key stakeholders have already reviewed a draft version of the report and provided substantive comments and made factual corrections to the Review Consultant, who has responded to them. The Evaluation Office assumes, therefore, that it has received the Final (revised) version of the report.

In this instance the Evaluation Office validates the overall project performance rating at the '**Highly Satisfactory**' level.

Table 3: Summary of the Project findings and ratings

Criterion	Summary assessment	Rating	Justification for any ratings' changes due to validation (to be completed by the UNEP Evaluation Office – EOU)	EOU Validated Rating
Strategic Relevance		HS	The rating is validated.	HS
1. Alignment to UNEP MTS, POW and strategic priorities	Strong alignment with UNEP MTS for 2018 to 2021, 2016 to 2021 PoWs, and BSP (see Paras 50-54)	S	The rating is validated. While the project was fully aligned with the MTS and POW, there was no identifiable contribution to MTS/PoW results due to weaknesses in the ToC.	S
2. Alignment to Donor/Partner strategic priorities	Project aligns with donor priorities as a fundamental part of its Project design by following resolutions adopted by the General Assembly (Paras 56-57)	HS	The rating is validated.	HS
3. Relevance to global, regional, sub-regional and national environmental priorities	Not applicable (Para 58)	n/a	Rating validated at "Highly Satisfactory" The project was aligned with global SDGs, specifically 13 (Climate Action) and the 12 (Responsible consumption and production) and several other SDGs are relevant such as 7 (Affordable and clean energy) and 9 (industry innovation, infrastructure). As a consumer of goods and services, the UN system, through its management, and behaviour in its field operations, can contribute positively (or negatively) to the fulfilment of these goals in the host countries. The sub-criterion is rated as high satisfactory.	HS
4. Complementarity with relevant existing interventions/coherence	Existing interventions includes the UN Environmental Management Group (EMG) (http://www.unemg.org), established in 2001 and the Sustainable UN (SUN) project (Paras 59-60).	HS	The rating is validated.	HS

Criterion	Summary assessment	Rating	Justification for any ratings' changes due to validation (to be completed by the UNEP Evaluation Office – EOU)	EOU Validated Rating
Quality of Project Design	To achieve REACT's general objective of mainstreaming of environmental sustainability in the UN system, REACT was designed to be an in-house technical assistance team, deployed into Peacekeeping operations, employing a systemic approach, and by using mature technology widely available in the global commercial marketplace. Notwithstanding, financial commitment made by each Mission was relatively small in light of their other expenditures, and success was highly dependent on the attitude and receptivity of individual Missions (Paras 62-66).	S	The rating is validated.	S
Nature of External Context	Project operations were not affected by externalities such as the COVID-19 pandemic. Due to the extent of prior field work in the 2017-2019 period, the REACT Technical Team established an in-depth understanding of the field conditions already and transitioned seamlessly to remote technical assistance during the pandemic (Paras 68-69).	F	The rating is validated.	F
Effectiveness		HS	The rating is validated.	HS
1. Availability of outputs	All outputs delivered (Paras 74 to 95)	HS	The rating is validated.	HS
2. Achievement of project outcomes	Outcome has been achieved through the REACT Project providing inputs into a new Secretariat Environment Policy, percentage of Missions implementing EMS in their operations was 100% (against a target of 50%) with all missions reporting annually and reporting at least some progress on some indicators, 66% of UNEP's key proposals were accepted in the COE manual (against a target of 20%), 12 DOS system contracts were completed that comply with the Environmental Policy, and 17 field missions were conducted with integrated environment issues into their existing communications strategies. (Paras 96 to 99)	HS	The rating is validated.	HS
3. Likelihood of impact	Likelihood of impact is due to drivers of "adoption of the Environmental Policy by UN Field Missions helps to reduce the environmental footprint of Peace Operations" and "Secretary-General articulated his expectation that 'the United Nations system reaches full compliance with the United Nations Climate Neutral Strategy and becomes effectively climate neutral by 2020 at the latest'" are in place (Paras 100 to 101).	HL	The rating is validated.	HL
Financial Management		HS	The rating is validated.	HS

Criterion	Summary assessment	Rating	Justification for any ratings' changes due to validation (to be completed by the UNEP Evaluation Office – EOU)	EOU Validated Rating
1. Adherence to UNEP's financial policies and procedures	REACT Project under UNEP commenced in 2016 and was extended until June 2021 with US\$8.5M in funds from DOS. After signature in June 2016, DFS (then DOS) transferred to funds to UNEP in instalments (Paras 102-105). A UN to UN agreement between UNEP and UNOPS was executed in September 2016 for US\$5.0 million for Phase 1 and US\$1.395 million for Phase 2 (Para 106)	HS	The rating is validated with reservations Whereas the report presents limited evidence on adherence to UNEP's financial policies and procedures, there is no contrary evidence to warrant a downgrade of the rating.	HS
2. Completeness of project financial information	Financial information was made available (Para 108).	HS	The rating is validated. While not required by UNOPS, an audit in view of the role of UNOPS and procurements actions carried out during implementation could have provided useful additional information.	HS
3. Communication between finance and project management staff	There is sufficient evidence that communications between the UNEP Project Manager, the UNOPS Project Manager, and DOS were satisfactory with all parties being aware of the financial status of the Project (Paras 113-114).	HS	The rating is validated.	HS
Efficiency	The efficiency of the REACT Project was positively affected by the oversight of the PSC with senior representation from DOS, UNEP, and UNOPS. The efficiency was also driven by the commitment of UNEP, DOS and Mission personnel and the ability of the Technical Team to tap into significant technical expertise, often drawn from the private sector (Paras Error! Reference source not found. -118). By the end of the Project, outcomes and outputs had been achieved with an optimum use of financial resources (Paras 119-121)	HS	The rating is validated.	HS
Monitoring and Reporting		S	The rating is adjusted to "Moderately Satisfactory" upon adjusting the ratings of two sub-criteria followed by computation.	MS

Criterion	Summary assessment	Rating	Justification for any ratings' changes due to validation (to be completed by the UNEP Evaluation Office – EOU)	EOU Validated Rating
1. Monitoring design and budgeting	Working level progress on Project performance such as achieving agreed milestones was to be monitored via the UNEP-internal PIMS (Paras 123-124). ProDoc for REACT Phase 2 contained only an Evaluation Plan where a total of US\$40,000 was allocated in the budget to finance the terminal evaluation (Para 125). The Evaluation Office would be responsible for the TE and liaise with the Project manager throughout the process	S	The rating is validated.	S
2. Monitoring of project implementation	REACT did not provide progress reports that followed the PLF but reported on administrative issues followed by substantial work in the 5 pillars (EMS, waste management, energy, water and wastewater), challenges and concluding remarks (Para 127)	S	The rating is adjusted to "Moderately Satisfactory" Evidence provided in the review report indicates that detailed data by indicator were made available to the reviewer but the progress reports did not follow the project logical framework, except for the final report.	MS
3. Project reporting	REACT did provide progress reports though these reports did not follow the PLF but reported on administrative issues, followed by substantial work in the 5 pillars (EMS, waste management, energy, water and wastewater), challenges and concluding remarks. The October 2021 Project Final Report did report progress according to the PLF. However, an impact evaluation was not prepared by the Project team (Paras 129-131).	MS	The rating is adjusted to "Moderately Unsatisfactory" Evidence provided in the review report indicates that while progress reports were duly prepared, it was only the October 2021 Project Final Report that reported progress according to the PLF (para 130). The reporting did not include information related to aspects of gender, marginalization or vulnerability or those living with disabilities.	MU
Sustainability		HL	The rating is validated.	HL
1. Socio-political sustainability	Strong ownership by all senior personnel in Missions to adopt new policies, procedures and practices for improved environmental performance in peacekeeping missions (Para 132)	HL	The rating is validated.	HL
2. Financial sustainability	There is an ongoing UNOPS-DOS agreement which provides continuity to the REACT Project under UNOPS (Para 134).	HL	The rating is validated.	HL

Criterion	Summary assessment	Rating	Justification for any ratings' changes due to validation (to be completed by the UNEP Evaluation Office – EOU)	EOU Validated Rating
3. Institutional sustainability	There is strong ownership by all senior personnel in HQ and GSC-ETSU to provide assessments, technical analysis and capacity building to UN Peace operations to support their systemic efforts to improve environmental performance (Para 135). In addition, the Global UN Head of DOS and UN Member States is proposing an "Environment Strategy 2030: Responsibility, Ambition, Legacy" that accelerates the sustained strategic efforts of the past 6 years (Para 136).	HL	The rating is validated.	HL
Factors Affecting Performance		HS	The rating is validated.	HS
1. Preparation and readiness	There was ample evidence of appropriate preparation and readiness including the REACT Project and the leadership of UNEP from July 2016 to January 2017 to lay the groundwork for collaboration with DOS on its significant increase in effort on greening its operations, focusing its efforts on DOS Headquarters in New York, GSC-ETSU in Brindisi, and Peacekeeping Missions (Para 138).	S	The rating is adjusted to "Moderately Satisfactory" Evidence provided in the review report indicates that there was confusion over the roles and responsibilities of GSC-ETSU, REACT Technical Teams and leadership of the various work streams (para 145).	MS
2. Quality of project management and supervision	UNEP through the REACT Project has provided effective leadership as an implementing agency towards achieving the planned outcomes, maintaining productive relationships, communication and collaboration with UNEP colleagues, risk management and overall project execution (Para 139). UNEP through the REACT Project has provided leadership as an executing agency by managing technical teams towards achieving the overall objective of REACT (Para 140).	HS	The rating is validated.	HS
2.1 UNEP/Implementing Agency:		HS	The rating is validated.	HS
2.2 Partners/Executing Agency:		HS	The rating is validated.	HS

Criterion	Summary assessment	Rating	Justification for any ratings' changes due to validation (to be completed by the UNEP Evaluation Office – EOU)	EOU Validated Rating
3. Stakeholders' participation and cooperation	Communications between UNEP, the REACT Technical Team, personnel from DOS management and Missions included monthly working group meetings for EMS, energy and waste technical streams. All working group sessions were well attended, indicating good participation and cooperation with Mission personnel. Early adoption of MS Teams by the REACT Team, DOS and Missions in May 2019 resulted in technical assistance to Missions seamlessly transitioning to remote communications (Paras 142-147).	HS	The rating is validated.	HS
4. Responsiveness to human rights and gender equality	The Project had appropriate representation of female in both HQ and GSC, and throughout the technical pillars where representation of both genders was evident. However, there were difficulties in attracting suitably qualified female engineering staff willing to undertake significant levels of travel (Paras 149-151)	S	The rating is validated.	S
5. Environmental and social safeguards	The REACT Project was focused on environmental and social safeguarding (Para 152)	HS	The rating is validated.	HS
6. Country ownership and driven-ness	Strong ownership by all senior personnel in HQ and GSC-ETSU for the REACT Project's efforts to provide assessments, technical analysis and capacity building to UN Peacekeeping operations that supports their systemic efforts to improve environmental performance (Para 153)	HS	The rating is validated. The review reported that stakeholders of the REACT Project were all considered to be Project partners, duty bearers and any other collaborating agents external to UNEP with a role in delivering REACT Project outputs. No national stakeholders were identified (para 35).	HS
7. Communication and public awareness	No dedicated website for the Project. However, UNEP communications with its stakeholders was targeted to implementers, collaborators and beneficiaries where UNEP used Project resources to develop communication strategies for each group (Para 154).	S	The rating is validated.	S
Overall Project Performance Rating		HS	The Evaluation Office notes that the Conclusions of the report <u>falsely</u> records the overall performance of the project at the 'Satisfactory' level.	HS

C. Lessons learned

160.

Lesson Learned #1:	DOS and the UN Secretariat are not capable of rapid or radical change. However, incremental change is fully possible.
Context/comment:	<p>Though there was some dysfunction in parts of DOS that proved to be major and chronic obstacles to reform and improvements, there were instances of changes being made in the 5 technical pillars: energy, waste, water and wastewater, EMS and wider impacts based on technical assistance from REACT Technical Teams. These incremental improvements lay the groundwork for DOS leadership to take decisive action to increase adoption of these changes.</p> <p>As an example, REACT was in a position to more forcefully support strategic change by recommending “low-tech” solutions suitable considering the length of the REACT Project. The next generation of solutions for environmental infrastructure will be left to the next phase of development where DOS can have sound development for the improvements with host country and other co-financing development partners.</p>

161.

Lesson Learned #2:	A process of more stringent EMS internal audit assessment was modelled on ISO14001 that has aided the effectiveness of the EMS.
Context/comment:	Early in the process, EMS systemic reporting noted there were instances of failure to identify localised poor performance, somewhat mitigated by the recruitment of an Environmental Officer. A process of more stringent internal audit was established to address this in collaboration with OIOS to assume an “audit” function. While OIOS has not addressed all environmental issues, an internal EMS assessment in accordance with ISO14001 requirements can go a long ways towards addressing environmental issues.

162.

Lesson Learned #3:	For the REACT Project and projects of this type, there is operational superiority of the UNOPS project staffing system compared to the equivalent UN Secretariat.
Context/comment:	UNOPS has been setup as the operational arm of the United Nations, supporting implementation of UN agencies’ peacebuilding, humanitarian and development projects around the world. This support translates into provision of advisory, implementation and transactional services in the areas of infrastructure, procurement, project management, human resources management, financial management and other management and shared services. UNEP took advantage of UNOPS’ contribution to the UN system, aiming to enable partners to do more with less, help achieve objectives at all levels, and support countries in achieving the 2030 Agenda.

163.

Lesson Learned #4:	The annual budgetary and contractual arrangements within Field Missions are a real and a significant hurdle. Alternative long term and more stable funding mechanisms involving partnerships with other agencies and donors need to be explored.
Context/comment:	All Mission budgets are under intense Member state scrutiny under high political influence. With 50-75% of Missions’ budgets being fixed (mandated troop strength, with associated payments to troop contributing countries),

	<p>most budgetary reductions are passed on to civilian support components. Thus, any expenditure, particularly on investments with payback periods in the order of 5 years or more, are exceptionally difficult to justify, and are likely to be an order of magnitude lower than actually needed to achieve step-change. Such analysis has been provided as a key output of the REACT Phase 1 Project, via UNSCAP.</p>
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164.

Lesson Learned #5:	Key environmental infrastructure, or infrastructure with significant influence on the environment should be procured using a system that results in globally consistent solutions across multiple UN entities.
Context/comment:	<p>Sourcing of key environmental infrastructure, or infrastructure with significant influence on the environment is either through DFS HQ system (global) contracts, or local mission procurement:</p> <ul style="list-style-type: none"> • the REACT approach has been to provide on demand technical specification or “schedule of requirements” (SORs). The SORs were consistent, irrespective of the sourcing strategy to provide globally consistent solutions across multiple UN entities; • some key environmental equipment would benefit from a global approach for consistency even though they are not considered strategic enough to justify a system contract; • the option of outsourced services for the design, build, construct, and the operation and maintenance phases could be provided involving formulation of a generic statement of work and individualised mission support for local procurement.

165.

Lesson Learned #6:	The use of energy management plans is a key to effective management of energy investments. This would include implementation of renewable energy at scale that requires significant levels of co-financing.
Context/comment:	<p>Energy management plans can be an effective screening tool for determining the hierarchy of energy investments and some limited deployment of monitoring systems to analyze energy demand patterns (such as various small pilot projects on renewable energy). This has resulted in increased allocations within Mission budgets to high ROIs (such as LED lights, EE air conditioners, building retrofits, generator efficiencies) supplemented by personnel awareness raising activities.</p> <p>However, implementation of renewable energy at scale will require significant levels of strategic work to obtain co-financing. This is due to requirements that both capital investment and technical management of the installation of renewables within Peacekeeping will need external partnerships with a range of actors to implement long-term infrastructure investments in fragile states. This needs to be considered for subsequent phases of REACT.</p>

166.

Lesson Learned #7:	The REACT Project has had to socialize within Missions to encourage them to prepare waste management plans for effective waste management investments, and to get Missions to compost recyclable waste and to incinerate non-compostable and non-recyclable solid waste. However, global solutions for recycling need to be advanced in the next phase of REACT.
Context/comment:	While medical incineration is common within missions, incineration of solid waste was generally not practised. Socializing within Missions has led to more than 4 key missions securing solid waste incinerators post 2018. The

	<p>use of waste management plans to drive effective project management of investments is also progressed after 2019 with REACT developing and supporting technical specifications for waste infrastructure; however, DOS's sourcing strategy for such equipment continues to be unclear and progress has been slow.</p> <p>Recycling opportunities are variable. While glass, aluminium and steel are sometimes possible, plastic is problematic at most sites. Global solutions for recycling need to be advanced in the next phase of REACT. The aforementioned problems with establishment of host-country infrastructure has constrained the Project into achieving significant results in this area. The most promising area is to co-ordinate an approach across all UN agencies on recycling and hazardous waste management (for example, eWaste is generally stockpiled in large numbers). This will require analysis of supply chains, available contractors and potentially the development of regional processing centres in partnership with other actors.</p>
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D. Recommendations

167. No UNEP or branch level recommendations are made in this case, as the host branch for the REACT Project (the CMB) and UNEP as a whole have fully exited from this work stream (provision of technical assistance to the Peacekeeping Missions). UNEP, however, continues its contact with the Missions and DFS via the Greening the Blue initiative and the Sustainable UN project team.

ANNEX I. RESPONSE TO STAKEHOLDER COMMENTS

Page Ref	Stakeholder comment	Evaluator(s) Response	UNEP Evaluation Office Response
Para E-12	To check	Re-wording provided	
Para 1	I suggest better to say overseen by DOS and executed by UNOPS?	I want to stay with implementation by UNEP and execution by DOS and UNOPS	
Para 15, 1 st bullet	Could be worded better. Seems the same as the next para? Not sure what this means	Edits provided I'm also not sure what it means. Deleted	
Para 20	Actually, unusually for the UN, international travel is a limited component. Its basically power generation, vehicles and local (UN flights).	Edits provided	
Para 32	Little if any of this was worked on under REACT. This scope was defacto not resourced in REACT due to resource and mandate issues – the mission and UNEP REACT priority was to focus on “inside the fence” issues linked to the operational presence of the missions.	Bullet point deleted	
Table 1, Output 2 (Phase 2)	I have deleted the next bit, this was not agreed and should not be in the report.	Deleted	
Para 34, 4 th bullet	Getting results in terms of outcomes (rather than outputs), or lagging vs leading indicators takes a substantial amount of time, due to: <ul style="list-style-type: none"> • Chronic delays in getting products and services available to missions in line with the budget cycle (i.e. having the contract and pricing available for missions to budget) • The budgeting cycle (i.e. Sept/Oct), which budgets for the next FY (i.e. Jul-Jun the following year) • Sometimes extensive delays in procurement and logistics. • The accumulation of results post commissioning - i.e. An RE project commissioned in June, accumulates the results in terms of GHG reduction / RE% from July to June the following reporting cycle. • The collection and reporting of data for the FY (i.e. Up to 6 months after end June). 	Placed as Footnote 12	
Para 36	More like yearly. Following DOS request this is now every 6 months.	Edits made	
Para 39	This probably overstates things. We had a log of activities and completed peer review on formal outputs. The vast majority of output was in the form	Edits provided	

Page Ref	Stakeholder comment	Evaluator(s) Response	UNEP Evaluation Office Response
	of informal meetings, emails etc., that was very difficult to track. Hence "core team meetings" and so on as oversight mechanisms. That said, as far as I'm concerned we achieved the right balance between rapid and fit for purpose output vs overly bureaucratic QA/QC.		
Para 44	The project predated the application of a formal TOC requirement or provision of templates. So TOC style work was done on an ad hoc basis.	Edits provided	
Para 50	There is very limited overlap here	Edits provided to reflect changes	
Para 51	This is the main one of relevance, rest are all tenuous IMO. That said, I do not see why it needs to align with the POW as the project is separately funded.	Edits provided to reflect changes	
Para 56	Suggest you link to the Member State mandates (i.e. Donor priorities) relating to peacekeeping as described in the Env. Policy.	Edits provided to reflect changes	
Para 61	During the UNEP phase we worked very closely, and were to some extent integrated with SUN. Those relationships continue, and I would grade this is highly satisfactory.	Edit made	
Paras 63-65	I see little here on project design and its strengths.	Edits made to reflect design strengths	
Para 66	I don't necessarily agree. Some 100M was spent on WWTPs. Virtually all missions have environmental officers and teams. RE requires very significant expenditures, and there are budget constraints, but there are also capacity constraints within missions (contracts/ors, in-house expertise, etc.), that are probably more telling. It is true that relative to some other priorities, RE is problematic given the nature of the investment (long payback period)	Edits made to reflect design weaknesses	
Para 66, 4 th bullet	Yes. Waste equipment took 4+ years to become available. Similar for new RE systems. Turn-key RE is not issued and at least 1 year behind schedule. Currently there is no WWTP contract - after being worked on for 3 years. In hindsight, we should have sidelined HQ LD/PD and run local procurement support to missions. REACT has no real influence over how DOS may address issues with its procurement function	Edits provided to reflect comment	
Para 69	I think this understates UNEPs role in strategic analysis, project design, recruitment and management of staff, project management functions, integration within the UN system, etc.	Edits provided to reflect comment	
Para 95	Where do these come from. I don't think we could do much to improve supply chain, and we weren't involved in T/PCC training	REACT may have not been involved in these states but it is the pathway to impacts.....I understand the limitations of	

Page Ref	Stakeholder comment	Evaluator(s) Response	UNEP Evaluation Office Response
		REACT's influence, but I still need to include these States....	
Para 97	Only limited input. This whole section should be re-written as its not clear and there are more relevant outputs related to PKOs. The two are not really related. Update to the strategy was not sue to a change in policy. I don't think so. A new strategy is expected in 2023.	Edits provided to reflect comments	
Para 99, 2 nd bullet	Not really, neither REACT nor DOS were instrumental in the UN securing credits/offsets for PKOs Offsets were monitored and promoted via the greening the blue team and the EMG. Sure, but all in the past now. Still, I don't know how the UN is supposed to service donor projects under XB funds under their HR model.	Edits provided to reflect comments	
Para 109	I suggest that the funding was sufficient. I'm not convinced additional resources would have added more value, particularly with ETSU and other SMEs within DOS coming online.	Edits provided to reflect comment	
Para 110	Occasionally missions were asked to account for their contributions to REACT (either OIOS or BOA I can't remember). Missions + REACT would provide them with details of the TA received, and there were no findings raised.	Edits provided to reflect comment	
Para 111	Details provided in Table III	Edits provided on Table III	
Para 112	How is this point relevant to the subject matter? There was no co-financing envisaged so this need to be deleted	Bullet points deleted	
Para 134	Add various member state mandates and policies etc.	Added	
Para 154	They were not UNEP strategic priorities	Edits provided to reflect comment	
Para 160	I think we should briefly discuss this	Discussed and edits made	
Para 162	These are likely to be able to be addressed through PPAs, though this switches the budgetary constraints issue to a contracting and liability issue. These are still being worked through,	Edits provided to reflect comment	
Para 163	Not following. We have provided technical input when requested to LD or the missions.	Let's discuss. I got this from the Terminal Report	

ANNEX II. PEOPLE CONSULTED DURING THE REVIEW

Organization or Location	Name	Position	Gender
UNEP	Mr. Andrew Morton	Project Manager	M
UNOPS	Mr. Richard Smith	UNOPS REACT Technical Team Lead	M
DOS	Ms. Jo Harvey	Chief, Environment Section	F
GSC-ETSU, Supply Chain Management Service, DOS	Mr. Richardo Alonso	Environmental Engineer for Solid Waste Management	M
Office of the Director, Office of Supply Chain Management, DOS	Ms. Jacquelyn Amoko	Administrative Officer and former head of ETSU	F
UNIFIL Mission	Ms. Jihann Shaheen	Chief Environmental Officer of Mission	F
MINUSCA Mission	Mr. Teka Beraki	Head of Waste Management Unit	M

ANNEX III. REVIEW FRAMEWORK MATRIX

TOR Ref	Main Evaluation Criteria / Questions	Evaluation indicators	Sources / means of verification
Key strategic questions from the TOR			
	Virtual offices do have their place in the modern communications environment, and especially nowadays with the Covid-19. What lessons can be learned from this project in terms of project management in this regard?	Qualitative. Any evidence of added efficiencies to implementation of the Project post June 2020.	Interviews / surveys with responsible stakeholders
	The initial project duration was just over 36 months. The operational closure of the project finally occurred after 60 months. Did the delays in the project implementation have an impact in the relevance and the potential obsolescence of the technologies used on the project?	Qualitative. Any evidence that a change in technologies affected Project progress.	Interview / survey question to all stakeholders.
	How were the recommendations of the MTR taken into account and what effects did it have on the project performance and progress?	Progress on all indicators after MTR	Progress reports, interviews with project team and all stakeholders
	Has the evaluation identified any unintended results (positive or negative) deriving from the project's implementation, and if so, what was it and how might it affect the intended project Impact?	Qualitative. Any evidence of unintended consequences of Project	Progress reports, Project reports, interviews with project team and all stakeholders
A. Strategic Relevance: The extent to which the activity is suited to the priorities and policies of the target group, recipient and donor?			
	Alignment to the UNEP Medium Term Strategy (MTS), Programme of Work (POW) and Strategic Priorities.	Confirmation against past and updated priorities and strategies; Evidence of cooperation / networking / information sharing with other regions	Desktop review (already confirmed for design phase). Project documentation and all relevant frameworks and reports; interviews with country stakeholders; interviews with relevant UNEP.
	Alignment to Donor/Partner Strategic Priorities Alignment with the sponsoring parties' priorities?	Confirmation against past and updated priorities and strategies; Evidence of cooperation / networking / information sharing with regions.	Desktop review (already confirmed for design phase). Project documentation and all relevant frameworks and reports; interviews with mission stakeholders; interviews with relevant UNEP interfaces.
	Relevance to Global, Regional, Sub-regional and National Environmental Priorities.	Confirm alignment with (i) SDGs and Agenda 2030, (ii) stated environmental concerns and needs of the countries, sub-regions or regions	Desktop review (already partly confirmed).

TOR Ref	Main Evaluation Criteria / Questions	Evaluation indicators	Sources / means of verification
	Assess alignment with (i) SDGs and Agenda 2030, (ii) stated environmental concerns and needs of the countries, sub-regions or regions where it is being implemented; and (iii) current policy priority to leave no one behind.	where it is being implemented, and (iii) current policy priority to leave no one behind.	Project documentation and all relevant reports; interviews with country stakeholders; interviews with relevant UNEP and Project team.
B. Quality of Project Design			
	How satisfactory was the project design?	Assessment / rating template completed. Any further insights gained during the evaluation with specific consideration of: - Stakeholder participation and cooperation; - Responsiveness to human rights and gender equity.	Inception Report has a matrix of Project Design Quality from desktop review Project documentation and all relevant frameworks and reports; interviews with project team
C. Nature of External Context			
	Were there any unforeseen developments that impacted the project success?	None anticipated or documented at design phase. Mention made of natural disasters (i.e. hurricanes) during implementation period – confirm and clarify extent of impact.	Interviews with project team, triangulation through stakeholder interviews and supporting information available in public domain, as relevant.
D. Effectiveness: To what extent have the expected outcomes and objectives of the project been achieved?			
	<u>Availability of Outputs</u> – How successful was the project in producing the programmed outputs and delivery targets / milestones. Were there any formal modifications / revisions made during the project implementation phase?	Evidence of programmed activities such as reports, publications, trainings, demonstration projects as per the indicators. Challenges identified with completing deliverables and measures taken to mitigate. Impact of challenges with recruiting and retaining a PM Occurrence of change in project design/ implementation approach (i.e. restructuring) when needed to improve project efficiency	Interviews with project team (primarily) and partners Review of related documentation and annual, quarterly and final project reports.
	<u>Achievement of Project Outcomes</u> – How successful was the project interventions and implementation in achieving the intended outcomes not within the control of the team.	Adoption of environmental policies, codes, standards or regulations; Qualitative. Evidence of knowledge base and tools used to inform policy and developmental	Interviews with project team and partners. Interviews with stakeholders regarding environmental clean-ups

TOR Ref	Main Evaluation Criteria / Questions	Evaluation indicators	Sources / means of verification
	<p>What evidence supports attribution of success to UNEP's interventions?</p> <p>Also prompt around cross-cutting themes in the discussion i.e. factors and processes affecting project performance:</p> <p>(i) quality of project management and supervision, (ii) stakeholder participation and cooperation, (iii) responsiveness to human rights and gender equity, (iv) communication and public awareness.</p>	<p>planning and decision-making (or commitment to do so)</p> <p>Evidence of improved awareness levels (general, ministries, building sector & professionals; Training feedback;</p> <p>Progress on range of influence / leverage; Quantified and projected environmental clean-ups.</p>	<p>Review of all related documentation and annual and quarterly reports.</p>
	<p><u>Likelihood of Impact</u> - How likely are the positive, intended impacts to occur? To what extent did the project catalyse, scale up or replicate positive impacts, such that they would have a long-term effect?</p>	<p>Have training and capacity building been done within relevant institutions?</p> <p>Evidence of financial mechanisms;</p> <p>Examples of new partnerships and/or evidence that particular partnerships/linkages will be sustained.</p> <p>Types/quality of partnership cooperation methods utilized.</p> <p>Test the causal pathways, assumptions and drivers suggested by the reconstructed TOC.</p>	<p>Interviews with project team and partners;</p> <p>Record of workshops / training events and attendance;</p> <p>Review of all related documentation, progress reports, half-yearly reports, final project report and MTR reports.</p>
E. Financial Management: Completeness of information and communication between financial and project management staff			
	<p>Adherence, Completeness & Communication – Are all records available? How much of the funds (from each source) were spent, and for which outputs? Compared to budget?</p> <p>Were the funds administered cost-effectively?</p> <p>How effectively did the Project & Task Managers & Fund Management Officer exchange information and adapt as needed to changes? Did any communication issues affect the quality of the project performance?</p>	<p>Availability and quality of financial and progress reports</p> <p>Timelines and adequacy of reporting provided</p> <p>Level of discrepancy between planned and utilized financial expenditures</p> <p>Planned vs. actual funds leveraged.</p> <p>Timing of advances and expenditure.</p> <p>Quality and regularity of reporting and communication.</p>	<p>Audits, Progress Reports, financial reports, Interviews with PM and financial team members / officers at UNEP</p>

TOR Ref	Main Evaluation Criteria / Questions	Evaluation indicators	Sources / means of verification
F. Efficiency: Extent to which the project delivered maximum results from the given resources			
	<p>How cost effective was the project? Was it executed in a timely manner? How were delays managed to minimize impacts? Were events sequenced efficiently?</p> <p>Could the project extension have been avoided? What was its cost impact? Were any cost-saving measures introduced?</p> <p>Were any efforts made during project implementation to make use of/build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency.</p> <p>Was anything done to minimise the UNEPs environmental footprint?</p>	<p>Adequacy of project choices in view of existing context, infrastructure and cost?</p> <p>Cost associated with delivery mechanism and management structure compared to alternatives?</p> <p>Efforts for coordinated actions with other relevant initiatives</p>	<p>Progress Reports, financial reports, comparative project and carbon costs</p> <p>Interviews with PM and financial team members / officers at UNEP.</p>
G. Monitoring and reporting			
	<p>What was the performance at the project's completion against Core Indicator Targets?</p>	<p>Delivery of technical assistance on various topics.</p>	<p>Monitoring reports</p> <p>Interviews with project management and stakeholders</p>
	<p>(i) <u>Monitoring design and budgeting</u> – was the M&E plan clear, SMART, adequate. Was there a budget allocation made for M&V</p>	<p>Monitoring plan; Effective tracking tool progress; adequacy of budget allocation; budget spend; challenges with plan and/or budget.</p>	<p>Monitoring reports,</p> <p>Interviews with project management and financial team members / officers at UNEP</p>
	<p>(ii) <u>Monitoring of project implementation</u> - Was the monitoring system operating? Did it facilitate timely tracking? Were allocated funds expended for monitoring?</p>	<p>Submissions of reports complete with respect to requirements of respective monitoring plans.</p> <p>Expenditures & payments align with approved budgets.</p>	<p>ProDoc, All relevant reporting, GEF tracking tool,</p> <p>Interviews with Project team</p>
	<p>(iii) <u>Project reporting</u> - How regularly and completely were project reports completed and submitted?</p>	<p>Quality of results-based management reporting (progress reporting, monitoring and evaluation)</p> <p>Quality of project documentation and records</p> <p>Timelines and adequacy of reporting provided</p> <p>Dated reports; signed (or email) acknowledgements of receipt of reports.</p>	<p>Reports, budgets, financial statements and correspondences.</p> <p>Interviews with project management and relevant stakeholders.</p>

TOR Ref	Main Evaluation Criteria / Questions	Evaluation indicators	Sources / means of verification
		Completeness of reports, per agreed-upon requirements.	
H. Sustainability: Probability of direct outcomes being maintained and developed after close of intervention			
	Financial – Which, if any, outcomes require additional funding to be sustained? Were financial risks analyzed and adequately addressed in proposals and plans?	Identified outcomes requiring additional funding to be sustained	Interviews with project team and stakeholders; Budgets and reports
	(iii) Institutional – To what extent is sustainability dependent on institutional frameworks and governance	Adequacy of capacity to pursue, implement and enforce new policies across all areas of the missions. Quality / evidence of commitment (i.e. level and resource allocation) to the above. Structures created or in place to support this implementation e.g. workgroup, forum? Evidence of developments adopting environmental practices into designs and construction	Interviews with project team and stakeholders; Review of all related documentation, PIRs and half-yearly and final project reports.
I. Factors Affecting Project Performance			
	Stakeholder Participation and Cooperation: What were the progress, challenges and outcomes regarding engagement of stakeholders in the project/program as evolved from the time of the MTR?	Progress reports after the MTR	Interviews with project team and country partners; Progress reports post MTR
	Responsiveness to Human Rights and Gender Equality: What were the completed gender-responsive measures and, if applicable, actual gender result areas?	Gender disaggregated data on the participation of women and marginalized groups to the Project activities	PIRs, half-yearly reports, final project reports.
	Environmental and Social Safeguards: What was the progress made in the implementation of the management measures against the Safeguards Plan submitted? The risk classifications reported in the latest PIR report should be verified and the findings of the effectiveness of any measures or lessons learned taken to address identified risks assessed.	No environmental and social safeguard reports available from Project	No means of verification

ANNEX IV. KEY DOCUMENTS CONSULTED

Project planning and reporting documents

- Administrative Agreement between UNEP and DFS. 31 May 2016;
- UNEP – DFS partnership: REACT Project and agreement development record - 2 May 2015;
- UNEP - DFS REACT Rapid Environment and Climate Technical Support Facility - Summary Project Document, February 2016;
- Project Summary - UN Peace Operations Rapid Environment and Climate Technical Assistance Facility – REACT Phase 2, 20 April 2020;
- Final Report, October 2020

Progress Reports

- REACT Progress Report November 2016;
- REACT Project Report to DFS for December 2016, September 2017, June 2018, December 2018, March 2019, June 2019;
- CMB Progress Report for REACT – December 2018;
- REACT Project Report to DOS for January-June 2020, July-December 2020, January-June 2021;
- REACT Project Final Report – October 2021;
- REACT PIMS Report – June 2023.

Steering Committee Meetings:

- 17 November 2016;
- Issue paper for the REACT Project Steering Committee July 2017;
- Issue paper for the REACT Project Steering Committee - August 2017

Other Resources:

- eApp Scorecards from various Missions;
- Environmental Policy for UN Field Missions, June 2009;
- Project Concept: Greening the Blue technical assistance facility for UN country offices, June 2017;
- Current Status of UNEP's Environmental Cooperation for Peacebuilding Programme: 17 August 2017;
- UN-UNOPS - Financial Agreement, 4 February 2021;
- UNEP REACT Project Closure Plan, 9 March 2021;
- Climate-Sensitive Programming in International Security: An Analysis of UN Peacekeeping Operations and Special Political Missions, International Peacekeeping, June 2022.

Previous evaluations

- Mid-Term Review of the UN Environment project 01954 - UN Peace Operations Rapid Environment and Climate Technical Assistance Facility – REACT, December 2019

ANNEX V. PROJECT LOGICAL FRAMEWORK

UNEP Logical Framework²⁸ updated (changes as per revision statement incorporated into original logframe in track changes)

Relevant Expected Accomplishment in the Programme of Work:

2016-2017 DC: EAb) : The capacity of countries to use natural resource and environmental management to support sustainable recovery from natural and man-made disasters is improved .

2018-2019: DC EA b: Emergency response and post-crisis recovery plans integrate environmental considerations to increase the sustainability of recovery

1. Project Outcome ²⁹	Indicators	Means of Verification
<p>Procedures, policies and practices are in place, and technical advice has been implemented on the ground, resulting in the improved environmental performance of peace operations</p>	<ol style="list-style-type: none"> 1. Strategy DOS has adopted an updated Environment Strategy incorporating advice on an Environmental Action Plan, Key performance indicators (KPIs), budgetary provisions, a performance monitoring system, and a governance structure. B=0, T=1 2. EMS Percentage of field missions that implement EMS in their operations, show progress in environmental management and performance via their scorecards B=0 T= 100% 3. Contingent Owned Equipment (COE) Percentage of UNEP's key recommendations in the areas of energy, water and waste efficiency are incorporated in the COE manual. B=0, T=20% 4. System contracts Percentage of UNEP's key recommendations in the areas of energy, water and waste efficiency are incorporated into system contracts. B=0, T=20% 5. Capacity building and communications: Number of field missions that have integrated environment (footprint issues and wider impact) into their existing communications plans or strategies targeting internal and external actors (Staff, host country, local communities, member states): B: 0, T 17 6. Impact sustainability DOS has mobilized and financed a long term cross mission internal expertise facility to replace the REACT team upon UNEP exit. B=0, T=1 <p>Note all outcome indicators are mapped to EA Env Gov (i) 2020 – 2021 EG: (i) Uptake by United Nations entities, international organizations and forums of environmental policy issues or approaches emerging from UNEP policy advice.</p>	<ol style="list-style-type: none"> 1. Strategy document. 2. EMS documentation/records/scorecards. 3. COE 2017 version and input record 4. System contract documents 5. Communications strategies and support materials (documentation, memos, slides in presentations, on-line campaign materials) 6. Revised DOS Environmental strategy v2020.

²⁸ Table 3 should build on the existing logical framework by adding output indicators, means of verification and PoW output numbers. Where the project coincides closely with a PoW output, there is no need to change the existing project outcomes, indicators, and outputs. However, where some retrofitting is needed, these fields might change and additional activities may need to be factored into the project included in the delivery plan.

²⁹ **Outcomes:** The uptake, adoption or use of project outputs by the project beneficiaries. Observed as change of Behaviour, Attitude/Action, Condition, Knowledge or Skill

Project milestones that show progress towards achieving the project outcome		Expected Milestone for each Jan-June, Jul-Dec reporting period
M1 Updated Environmental Policy for UN Field Missions is approved by DFS/DPKO management		Dec 2016
M2 Updated COE Manual with UNEP input is approved by COE Working group composed of member states		June 2017
M3 DFS management rolls out the implementation schedule for systems contracts to comply with environmental policy and strategy		December 2017
M4 3 additional DFS System Contracts include UNEP advice on environmental aspects approved by DFS management		June 2018
M5 50% of missions have approved a communications plan or strategy integrating environment in the areas of energy, water and waste efficiency (footprint issues and wider impact)		Dec 2018
M6 2019 review of the Missions' Environmental Scorecards shows improvements in the areas of energy, water and waste efficiency		June 2019
M7 Project exit strategy put into effect or renewed cooperation agreed with DFS with funding		Dec 2019
M8 Updated COE Manual with UNEP input is approved by COE Working group composed of member states		June 2020
M9 Updated Environmental Policy & Strategy for UN Field Missions is approved by DOS management, including objectives and targets.		December 2020
2. Project Outputs³⁰	Indicators	Means of Verification
A) Systemic Change Assessments, technical analysis and capacity building provided to UN Peace operations to support their systemic efforts to improve environmental performance	Number of system specific assessments, reviews, analysis completed (B=0; T=20) Number of tools, methodologies prepared: B=0 T=10 Number of capacity building sessions: B=0; T=10 % of scorecards verified (pa): B=0; T=90%	Documentation; training materials; meeting reports; letters exchange; participants feedback forms
Project output Milestones:		Expected Milestone for each Jan-June, Jul-Dec reporting period
M1 Template for Environmental Action Plans including a budget annex and an analysis of major investment needs for 2017-2018 budget delivered to DFS		June 2016
M2 First version of Environmental Scorecards and instructions for their completion are delivered to DFS		June 2016
M3 Contingent Owned Equipment (COE) Issue Papers are completed		Dec 2016
M4 Verification of Environmental Scorecards of 10 missions completed		June 2017
M5 Suggested schedule of new/improved systems contracts delivered to DFS		Dec 2017
M6 7 Guides and tools for strategic improvements in EMS, energy, water and wastewater, waste and wider impact are produced.		June 2018
M7 Improved GHG emissions inventories for 10 field missions released for calendar year 2017.		Dec 2018

³⁰ **Outputs** : are the products, capital goods and services delivered by the project. Outputs relate to the completion of activities and managers have a high degree of control over them

M8 Assessment of field missions' environmental performance and EMS uptake internally published		June 2019
M9 Publication on greening the blue portal of the project lessons learned and materials that can be used for replication in other field based UN or Humanitarian agencies launched.		Dec 2019
M10 Content provision for at least three of each of the EMS, Energy, Waste, Water WGs. Review, re-issue, or development of at least one SOP or technical guidance note in each of the EMS, Energy, Waste, Water subject areas. Design and develop at least one technical training output or methodological tool in each of the EMS, Energy, Waste, Water subject areas. Support Supply Chain / Category Management by provision of environmental clauses considerations in at least one SOW/SOR.		June 2020
M11 Content provision for at least three of each of the EMS, Energy, Waste, Water WGs. Review, re-issue, or development of at least one SOP or technical guidance note in each of the EMS, Energy, Waste, Water subject areas. Monitor, review and analyse mission management plans and report on progress to DOS and advise DOS on how best to support implementation at the strategic level (via Supply Chain / Category Management). Support Supply Chain / Category Management by provision of environmental clauses considerations in at least one SOW/SOR.		Dec 2020
M12 UNOPS -DOS REACT Phase III agreement signature, facilitated by UNEP.		Dec 2020
B) Mission Support Technical assistance provided to peacekeeping missions in the 5 key areas identified by the DFS Environment Strategy (EMS, energy, water and wastewater, waste, wider impact)	No of peace keeping missions that have been provided technical assistance to improve environmental performance in the 5 areas identified by the project. B=0, T=17 No of days of on-ground technical assistance provided. B=0, T=480	UNEP maintained TA logbook and output database
NB: numbers are to be interpreted as incremental in a progression from 0 to a total 17 field missions that have received assistance from UNEP on how to reduce their environmental impact		Expected Milestone for each Jan-June, Jul-Dec reporting period
M1 Agreement with DFS on modalities for service provision to Field missions		June 2016
M2 4 Field missions received advice from UNEP		Dec 2016
M3 6 Field missions received advice from UNEP		June 2017
M4 10 Field missions received advice from UNEP		Dec 2017
M5 Joint UNEP – DFS evaluation on how the technical assistance is contributing to improved environmental performance.		June 2018
M6 14 Field missions received advice from UNEP		Dec 2018
M7 17 Field missions received advice from UNEP		June 2019
M8 Final report on impact of Technical Assistance provided		Dec 2019
M9 160 on-ground person days delivered between Jul and Jun (1 x 10-day visit per pillar – EMS/Energy/Waste/Water) per quarter.		June 2020
M10 Desktop assistance is provided to at least 50% of missions in each of the EMS (MEAPs) /Energy (EIMP, SOW, SOR)/Waste (EMP, SOW, SOR)/Water and Wastewater W&WwMP, SOW, SOR) areas in the calendar year.		December 2020

ANNEX VI. PROJECT BUDGET AND EXPENDITURES

Outcomes	Budget (from Pro Doc)	2016*	2017	2018	2019	2020	2021**	Total disbursed	Total remaining
Output 1: Systemic change assessments - technical analysis and capacity building provided to UN Peace operations to support their systemic efforts to improve environmental performance	2,412,361	1,086,456	243,007	154,670	335,480	743,598	42,117	2,605,328	(192,967)
Output 2: Mission Support - technical assistance provided to peacekeeping missions in the 5 key areas identified by the DFS Environment Strategy	5,703,968	4,428,801	238,145	168,799	(96,571)	691,076	(376,606)	5,053,644	650.324
Project Management	383,671	9,408	32,018	22,953.77	150,074	160,561	161,114	536,129	(152,458)
Total (Actual)		5,524,665	513,170	346,423	388,983	1,595,235	(173,375)	8,195,101	304,899
Total (Cumulative Actual)		5,524,665	6,037,835	6,3894,258	6,773,241	8,368,476	8,195,101		
Annual Planned Disbursement (from ProDoc)***	8,500,000	3,000,000	2,400,000	1,550,000	0	1,550,000	0		
% Expended of Planned Disbursement		184%	21%	22%		103%			

ANNEX VII. GENERAL QUESTIONNAIRE FOR STAKEHOLDERS

For DOS HQ and ETSU:

1. Stakeholders – Assuming you are with DOS, how does DOS (or DFS, now Department for Operations Support) interface with UN Department of Peacekeeping Operations (then DPKO, now Department for Peace Operations, or DPO) to reduce the environmental footprint of Peace Operations?
2. What assistance did UNEP provide to DOS to develop and adopt an *Environmental Policy* for UN Field Missions to reduce the environmental footprint of Peace Operations? Was the assistance summarized in the published ECP report “Greening the Blue Helmets: Environment, Natural Resources and UN Peacekeeping Operations” (2012)? From the ECP report, it was clear that a new and strategic approach was needed to replace fragmented project technical assistance and site-specific solutions by individual agencies, but there was no agreed approach or mechanism for replication;
3. After UNEP offered the services of a senior environmental engineer to DPKO and DOS during 2012-2014 to implement the Environmental Policy through REACT, a 5-year Technical Cooperation Framework between DOS/DPKO and UNEP to improve environmental management for all of UN peacekeeping operations, both in the field and at headquarters. Is this correct?
4. This then led to a UNEP-DOS Administrative Arrangement for Phase I, and Letter of Administration (LOA) for Phase II. How was the technical assistance work in Phase I provided to DOS Headquarters in New York, the Global Support Centre in Brindisi, and peacekeeping missions? Were REACT personnel essentially from UNOPS?
5. How did this relationship change in Phase II?
6. How did EMS training proceed? Did you start pre-2020, and how was the training during the pandemic? What were the activities post-2020 (Q3 2020 to Q2 2021)?
7. Can you explain the Implementation Structures for the Environmental Policy? There was the:
 - a. PSC working group comprising of DOS and REACT personnel including the Chief of Environment Section in the Office of the Under-Secretary-General DOS, and Chief, Environmental Technical Support Unit (ETSU) GSC, the UNOPS Technical Team Lead and the UNOPS project manager with other parties, who were invited on an as-needed basis and to meet at least every 3 months and more frequently as required;
 - b. DOS Environment Strategy “Core” Team comprised of broader DOS and REACT teams actively involved or dedicated to the implementation of the Environmental Strategy, meeting fortnightly;
 - c. Field Advisory Committee on Environment (FACE) comprised of the chairs of technical working groups, Director-level field mission and HQ staff with formal oversight of the Environment Strategy for Field Missions;
 - d. Technical Working Groups (TWGs) consisting of DOS and field mission representatives that have responsibility for, or are beneficiaries of, the working group activities and outputs;
8. REACT TA Team responsible for delivery of Phase II outcomes, outputs, activities who are primarily home-based, full-time and rapidly deployable international consultants dedicated to the Project including:
 - a. Technical Team Lead and REACT EMS Lead responsible for line management and oversight of REACT consultant team including travel approvals and sign-off of work activities, coordination and peer review of REACT outputs, and provision of 6-monthly summary of activities to UNEP and DOS in an agreed format;
 - b. REACT waste lead;

- c. REACT energy lead;
 - d. REACT water and wastewater lead;
 - e. EMS support (GHG Inventory and MEAP support);
 - f. water and wastewater support;
 - g. energy engineering support;
9. Roles and responsibilities: were they clear for
 - a. ETSU in the GSC, Brindisi (Italy)?
 - b. Environmental Strategy Core Team through the “onboarding” of remaining technical positions in Brindisi (Waste and Water and Wastewater), enabling technical-level integration and closer collaboration?
 - c. What was the extent of REACT involvement in Secretariat and “Wider Impact” activities?
 10. Was the issue of the right equipment being easily available to missions in a timely manner ever resolved? Did REACT encourage DOS to increase efforts to improve the processes around sourcing of infrastructure? It is of critical importance but supply chain issues represent a significant impediment to change;
 11. All missions were aiming to have overall energy production efficiency to be higher than 4.5 kWh/liter diesel. Were the discrepancies observed between HQ Fuel Unit, the EFMS2 system and the self-reported data of missions ever resolved? Establishing baselines is of critical importance to the Environmental strategy. The lack of energy metering in the majority of power houses constrains the ability to design the upgrade strategy. Was this ever resolved?
 12. Current mechanisms for funding and budgeting for environmental initiatives were not sufficient to achieve wholesale transformational change at UN missions. Given that DOS was disbursing funds for Environmental Policy, has this ever been resolved? I am sure numerous co-financing and blended funding mechanisms exist to achieve the environmental strategy objectives and host country development outcomes. Did REACT and DOS contribute to these discussions and were other agencies with experience in these matters be consulted (e.g. World Bank, UNICEF, GFC, UNDP, UNOPS)? Did DOS and REACT seek additional funding to allow assistance on Secretariat activities, with a coordinating and leadership role being taken up by a Secretariat entity?
 13. Has deterioration of human resource management of the specialists deployed under REACT been resolved by transitioning the project from UNEP to UNOPS?
 14. Has REACT continued as an independent group of international consultants providing impartial technical expertise, overseen by a multi-agency Project Steering Committee on behalf of Peacekeeping operations? This exit could have been accelerated so that the TA team that is recognised as a major asset and success factor for Environmental Policy, is preserved during the transition;
 15. Has REACT’s technical assistance resulted in improved environmental performance of the peacekeeping missions and Brindisi?
 16. Has there been any positive developments regarding gender and women’s empowerment?

For Missions:

1. What is your position in the Peacekeeping Mission and what are your responsibilities? How long have you served in the Mission?
2. As Environmental Engineer as a part of the Environment Strategy “Core” Team in ETSU, what assistance did UNEP provide to your Peacekeeping Mission to develop to adopt an Environmental Policy for UN Field Missions to reduce the environmental footprint of Peace Operations?

3. I assume that you were a recipient of EMS training from UNEP and were responsible for implementing EMS and supporting Mission-wide Environmental Action Plan or MEAPs. Did you have any responsibilities with other disciplines such as energy, waste or wastewater? How did this EMS training proceed? Did you start pre-2020, and how was the training during the pandemic?
4. Was there ever an issue of the right equipment being easily available to missions in a timely manner? Was there a lot of equipment to be procured? Did REACT encourage the Peacekeeping Missions to increase efforts to improve the processes around sourcing of equipment and infrastructure?
5. All missions were aiming to have overall energy production efficiency to be higher than 4.5 kWh/liter diesel. Establishing baselines is of critical importance to the Environmental strategy. The lack of energy metering in the majority of power houses constrains the ability to design the upgrade strategy. Was this ever achieved?
6. Has REACT's technical assistance resulted in improved environmental performance of the peacekeeping missions? Are there scorecards available for measuring built capacities and improved environmental performance?
7. Has there been any positive developments regarding gender and women's empowerment?

ANNEX VIII. BRIEF CV OF THE REVIEWER

Name:	ROLAND WONG	
Position:	Chief Executive Officer of Clean Energy Alternatives Inc. International Energy and Environment Expert	
Nationality:	Canadian	
Education:	M.Eng., Civil Engineering (Water Resources and Environment), University of British Columbia, 1981 B.Eng., Civil Engineering, McGill University, Montreal, 1977	
Professional Affiliations:	Registered Professional Engineer in British Columbia	
Areas of Expertise:	Renewable energy development with a focus on waste to energy, hydropower and solar energy Energy efficiency in transport Evaluations of climate change mitigation projects	
Countries of work experience:	Canada, Bangladesh, India, Pakistan, Sri Lanka, the Maldives, Cambodia, China, Malaysia, Thailand, Viet Nam, the Philippines, Indonesia, Fiji, Solomon Islands, Tuvalu, Tonga, Samoa, Georgia, Belarus, Bosnia and Herzegovina, Serbia, Slovakia, Romania, Russian Federation, Montenegro, Turkey, Kyrgyz Republic, Kazakhstan, Tajikistan, Egypt, Ethiopia, Kenya, Tanzania, Botswana, Namibia, South Africa, Costa Rica, Dominican Republic, Haiti, St. Vincent and the Grenadines, Dominica, Chile, Guyana, Colombia and Peru.	
Employment:	Clean Energy Alternatives Inc President, Vancouver, Canada Manager, Business Development, Vancouver, Canada <i>Klohn Crippen Consultants Limited</i>	2005 to date 2002-2005
	Environmental Management Specialist, Dhaka, Bangladesh and Halifax, Nova Scotia, Canada <i>KPMG Consulting</i>	1999-2002
	Manager, Watershed Division, Richmond, B.C., Canada <i>Klohn Crippen Consultants Limited</i>	1993-1999
	Water Resources Technical Advisor, Dhaka, Bangladesh <i>Northwest Hydraulics Consultants</i>	1988-1993
	Area Engineer/President, Williams Lake, B.C., Canada <i>Ducks Unlimited/Cariboo Engineering Limited</i>	1984-1988
	Hydropower Intermediate and Area Engineer, Vancouver, B.C. and Nipawin, Saskatchewan, Canada <i>Klohn Crippen Consultants Limited</i>	1981-1984
	Junior Hydraulics Engineer, Montreal, Quebec, Canada <i>Montreal Engineering Company Limited</i>	1978-1980

Roland has over 25 years' experience with a recent focus on the development and management of projects in sustainable transport, green city development, renewable energy and energy efficiency. These projects encompass his experience in environmental management, institutional capacity building, policy and economic analysis, planning, management, monitoring and evaluation for projects

in more than 35 countries. His demonstrated abilities and experience include adoption and market transformation of sustainable low carbon technologies; formulation and preparation of low carbon and climate change investment projects; partnership building as a means to achieving adoption of clean technologies and energy efficiency practice; development and mentoring of energy, environmental and water resource professionals; networking, coordinating and negotiating projects in low carbon and climate change in several countries.

Key assignments that he is undertaken in climate change mitigation includes:

- Serving as a Senior Director since 2008 for a private sector company based in Vancouver, Canada developing investments in biomass waste-to-energy and solar power development using patented technologies. This includes the use of a unique gasification / thermo-oxidizer unit to produce heat sufficient for 5.7 MW of power generation. This has involved preparation of “white papers” for the firm, studies on the comparative advantages of the WTE technology to competitors and dissemination of technical and financial information to prospective investors, financiers, government policymakers and international donor institutions;
- Lead consultant in the formulation, preparation and evaluation (midterm and terminal) of several GEF projects since 2008 in low carbon/renewable energy development, energy efficiency, sustainable transport and green cities for several countries mainly in Asia, Eastern Europe and the Caribbean. Also involved with providing technical assistance in the management of these projects, sourcing of technical experts, strategic planning and strengthened monitoring and evaluation activities;
- Principal designer and international team leader for UNDP Bangladesh and UNDP-GEF (2002-2010) for a project to reduce GHGs from the brick making industry in Bangladesh. Completed concept formulation and PDF B (project preparation) phase that resulted in GEF commitment for full project funding in August 2006. GHG emission reductions based on market transformation and adoption to cleaner coal-fired kiln technology from China, increased awareness of the economic, environmental and social benefits on the use of a cleaner technology, increasing industry capacity to attract financial support for clean technologies, dissemination of a cleaner burning kiln throughout the industry. Facilitated discussions with stakeholders in the brick industry in Bangladesh, and provided a logical framework analysis in collaboration with a high calibre Bangladeshi team consisting of engineers, economists, financial and ex-government officers, and facilitated South-South cooperation on the project to access less energy intensive Chinese brick making technology. Provided assistance and negotiations to develop carbon finance that served as a means to reduce debt servicing costs for entrepreneurs;
- Served as environmental management specialist (1999-2002) for a CIDA-funded demonstration project in Bangladesh to introduce natural gas as an alternate fuel to mitigate urban air pollution for the Government of Bangladesh’s Department of Environment. Activities were geared towards providing better stakeholder outreach in the planning and implementation of environmental management projects, to demonstrate credible efforts required to effect changes in environmental quality, to allow DoE an opportunity to review their policies and standards against project results, and to improve enforcement capacities. The project started with the conversion demonstration of the highly polluting two-stroke auto-rickshaws to CNG, a domestically available fuel. A monitoring program comparing CNG and gasoline-fueled auto-rickshaws revealed operational costs and emissions of CNG converted auto-rickshaws were reduced by over 75%. The project was widely viewed by all to be a major success since it catalyzed the alternate fuel debate and industry development and transformed the alternate fuels market in Bangladesh where over a 24-month period, the number of alternate fuel vehicles rose from 1,000 to over 20,000, and the sale of compressed natural gas (CNG) increased 10-fold.

ANNEX IX. REVIEW TORS (WITHOUT ANNEXES)

1. Project Rationale³¹

Purpose

It belongs to UNEP's core mandate to assure a leadership role within the UN system to facilitate the coordination of UN activities on matters concerned with the environment. In this context, UNEP was requested in 2007 by Secretary General Ban Ki-moon to lead the efforts of the UN system in climate neutrality and internal sustainability management.

The Specific purpose of this project is to support the United Nations Department of Field Support (DFS) in its efforts to improve the environmental and energy performance of UN peacekeeping operations. UN peacekeeping currently involves approximately 165,500 people and has an annual budget in the order of over USD 8.37 billion (as of December 2015 for 17 peacekeeping operations (including UNSOA, UNMOGIP and UNTSO) and the HQ Support Account and Global Service Centre (GSC).

Justification summary

The justification for this project in summary is:

- The Secretary-General of the UN has publicly committed all of the UN to improve its environmental performance and achieve climate neutrality by 2020 at the latest.
- As shown under project Mandate and normative context: Member states have also expressed clearly their expectations that the environmental footprint of the UN system and UN secretariat, including peacekeeping operations is reduced and that Climate Neutrality is reached by 2020.
- The peace operations alone contribute to more than 50% of the overall UN Climate footprint as per latest UN moving towards a climate neutral UN report, their role in reducing the overall UN GHG emissions footprint is evident;
- Overall the environmental and energy performance of peace operations is at present of an uneven but generally low standard with substantial room for improvement as detailed in Annex I) .
- The top leadership of DFS -who is in the process of developing a multi- year strategy for improved environmental management has explicitly requested that UNEP provide technical support and has committed to provide the necessary funding commitment (UNEP DFS Administrative Arrangement attached Annex III)
- UNEP has in the DEPI and DTIE divisions the necessary in-house skill set to mobilize the project and can fill any remaining gaps via partnerships and recruitment.

2. Project Results Framework

The project has been formally revised twice. The original notes on rationale, intervention logic and TOC and the latest Rev2 Project results framework table is presented below.

Theory of Change

The **core challenge** for DFS is straightforward: the organization and its governing body wish to substantially and permanently improve environmental performance without compromising operational capacity to achieve mission mandates. The project challenge for UNEP is how to best help them achieve this goal.

As indicated above, the course of the past 7 years and in various locations, UNEP has reviewed the operational footprint of peace operations and the associated technical environmental management challenges. The conclusion reached by both UNEP and its DFS counterparts is that there is no environmental challenge within UN peacekeeping that cannot be fully addressed applying a systemic approach and using mature technology that is widely available in the global commercial marketplace. In technical terms, the challenges are relatively basic and familiar.

³¹ Grey =Info to be added

The project strategy and design has been developed using the Theory of Change model, and the Problem Tree. The Objective Tree and Theory of Change are contained in a single Excel spreadsheet, together with a detailed work plan and a draft scorecard.

The intervention logic and strategy

The UNEP role in this case is considered to be providing critical technical and political support to a large scale DFS organizational reform process. The intervention logic of the project flows from the following considerations:

1. UN peacekeeping operations are large and complex operations with an environmental footprint that is ill-defined but broadly considered to be in need of substantial reduction.
2. There are now clear indications that DFS leadership is motivated to lead a change process to achieve that reduction. There is also clear evidence of motivation at the Mission level.
3. Given the scale of peacekeeping resources at country level (compared to all other peacebuilding, humanitarian and development actors), improvements in their environmental performance could catalyze and underwrite improvements from other actors.
4. DFS and missions, however, clearly do not have all of the in-house expertise needed to design, plan and implement the change process.
5. UNEP and its technical partners can help fill the expertise gap in DFS and missions through the provision of technical assistance. This TA, if well designed and applied on a sufficiently large scale and for a sufficient continuous period, should help DFS and missions reach a tipping point where after they have sufficient internal organizational momentum to continue to improve without such intensive external support.
6. UNEP estimates that it will take DFS 6-8 years to deliver and truly anchor substantial improvements in its environmental performance, but the tipping point for self-supported improvement may be reached in 3-5 years.
7. Hence UNEP will deliver intensive technical assistance to DFS and missions, initially for a period of 3 years. In consultation with DFS, it will try to leverage project outputs where appropriate to also assist other actors. It will also, in consultation with DFS, use its technical credibility and mandate to support DFS in securing political and linked financial support from Member States.
8. After 3 years, a detailed joint evaluation will determine whether DFS and missions have passed the tipping point. The exit plan for UNEP will be determined at that point – either a successful early exit, or a potential further 2-3 year effort to ensure the tipping point is reached and comfortably passed.

3. Executing Arrangements

The project executing arrangements are detailed below, as an extract from the 2016 Project Document. Within UNEP, the lead organization was the Crisis Management Branch (now the Disasters and Conflicts Global Support Branch), within the Ecosystems Division.

Project Implementation Arrangements

The project will be managed, implemented and communicated as a UN inter-agency project. Multiple organizations will be involved, however the key parties are DFS, Peacekeeping missions, UNEP and UNOPS. The roles and responsibilities of each party are as follows:

- **DFS** Project partner and client. Consideration of, and follow up on the advice and support supplied by UNEP will be the responsibility of DFS.
- **UNEP** Project partner and implementer.
- **UN peacekeeping missions** Benefit from and implements (including possible investments) technical assistance delivered.

- **UNOPS** Project support services: contract staff and small scale procurement (e.g. electricity meters for generators) and logistics.

The controlling documents for the project will be:

- The UNEP-DFS Administrative Arrangement
- This UNEP project document and subsequent revisions
- The UNEP UNOPS interagency agreement
- The detailed project work plan and logical framework, which will be a living document and regularly updated.
- The DFS Environment Strategy

The project structure is straightforward, consisting of:

Project Steering Committee (PSC). The PSC will meet either face to face or by VTC quarterly. It will be jointly chaired by the UNEP Head of Office, New York and an appropriate member of the leadership team in DFS. In addition to these two higher level members, the PSC will be composed by the REACT Senior Advisor, and the REACT Project Manager, the DFS Chief of Environment Section in the Office of the Under-Secretary-General as well as a representative of the DFS Global Service Centre. Other parties will be invited on an as needed basis. The PSC will regularly oversee the progress of the partnership, based on reports supplied by the Project team. Any significant proposed changes to the project scope or direction will be developed by the Project team for prior approval by the PSC.

DFS Environment Strategy Team. This will be a small group of staff in DFS and UNEP – represented primarily by the REACT Senior Advisor and DFS Chief of Environment and drawing on wider team expertise as needed. The strategy team will develop an environmental improvement strategy for DFS, monitor its rollout and develop adjustments as appropriate.

Project Team The REACT Project Team will be headquartered in Geneva. UNOPS will supply support services to the team. The planned and budgeted UNEP team members and their roles are:

UNEP posts

All UNEP posts are Geneva based and existing staff.

- **Project Director** (P5, 80% , DEPI PCDMB) Project development and mobilization, strategic planning, technical leadership, DFS relationship management and Member State liaison, technical backstopping as needed, Mission joint project development.
- **Project Manager** (P4, 100%) Project management inc. PIMS, supply chain management and logistics, coordination with EMG and SUN activities. The project management function will be implemented through an arrangement with UNEP DTIE by which the latter will provide REACT with 50% time of the Sustainable UN project manager Isabella Marras (P4, RB) and –in return- the REACT project will provide to the Sustainable UN facility with a part time project assistant (P3 level) who will help fulfill the least strategic activities related to SUN project management. In addition the EMS specialist foreseen in the REACT project budget will also work within the Sustainable UN facility and act as a bridge between the SUN EMS work, the EMG and the REACT EMS for field missions.
- **Administrative Assistant** (G5, 50%, PCDMB) project administration.

Note that in practice the project manager post was part time for 2 years and then removed.

UNOPS Contract staff posts

All UNOPS contract staff posts will be focused on specific technical areas and will be recruited on a competitive basis for 1 year appointments, renewable for up to 3 years.

The 6 planned UNOPS posts will be planned around gaps in existing capacity in DFS. The final composition of the team will be decided in consultation with DFS but, provisionally, they are likely to include:

- GHG emission specialist (also in charge of assisting the project manager)
- Environmental Management Specialist
- Power Engineer
- Energy Management Specialist
- Solid Waste Management Engineer
- Water and Wastewater Engineer

Two posts (EMS and GHG emissions /Project Assistant) will be Geneva based in order to support project management and fully integrate the REACT and SUN EMS efforts. The other posts will be home based, but with a terms of reference requiring between 50 -75% of time per annum on international missions, including Geneva or GSC in Brindisi visits 4-6 times per annum.

The purpose of the UNOPS hosted European home based posts is to minimize project travel and staff move costs and allow the virtual office to operate within a feasible time zone range. Moving staff to Geneva for 6 technical specialist posts, which require such a high amount of was not considered viable for recruitment and would have added approximately US\$200,000 in moving costs.

UNOPS consultancies

Several other areas of expertise to be supplied by UNEP will be supported by short term and call-off consultancies. UNOPS will provide support in hiring such consultants as need arises. An allowance has been provided in the budget for consultancies without specifying the technical niches. While the exact areas of expertise will be determined in consultation with DFS, at this stage, demands for the following are anticipated:

- Environment, climate, and conflict dynamics
- Environmental crime
- Forestry and protected area management
- Sustainability and socio-cultural and socio-economic impacts
- Chemicals management

4. Project Cost and Financing

The project budget is USD 8,500,000

Overall Budget	Amount
A: Previously approved planned budget (from the last revision)	6,950,000 USD
B: Previously secured budget (from IMIS)	0 USD
C: Total change of secured budget [sum of (i)+(ii)+(iii)]	1,550,500 USD
i) Source of newly Secured budget (DOS/Field Missions)	1,550,500 USD
ii) Source of newly secured budget (state donor)	
iii) Source of newly Secured budget (state donor)	
D: Total revised secured budget (B+C)	8,500,000 USD
E: Unsecured budget (F-D)	0
F: New total for proposed planned budget	8,500,000 USD
G: In Kind contributions- Previously Secured	0
H: Revised total in kind secured contributions	0
I: Total revised planned budget: Planned + In Kind (F+H)	8,500,000 USD

Actual Secured Income by Year (to date)

Year 1 (2016)	Year 2 (2017)	Year 3 (2018)	Year 4 (2019)	Year 5 (2020)
3,000,000 USD	2,400,000 USD	1,550,000 USD	None	1,550,000 USD

Implementation Issues

[Describe any important issues mentioned by Project Manager during pre-review briefing, important issues emerging from Mid-Term Review/ Mid-Term Evaluation, important revisions to logframe or funds

allocations, significant delays, changes in partners, implementing countries, risks mentioned in PIMS/project reports during project implementation etc. Note the dates when such changes have been approved and who by]

Section 2. OBJECTIVE AND SCOPE OF THE REVIEW

(Apart from section 9, where you could insert up to 3 strategic questions that are in addition to the review criteria, this section is standard and does not need to be revised for each project)

5. Objective of the Review

In line with the UNEP Evaluation Policy³² and the UNEP Programme Manual³³, the Terminal Review (TR) is undertaken at operational completion of the project to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The Review has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote operational improvement, learning and knowledge sharing through results and lessons learned among UNEP and [main project partners]. Therefore, the Review will identify lessons of operational relevance for future project formulation and implementation, especially for future phases of the project, where applicable.

6. Key Review principles

Review findings and judgements will be based on **sound evidence and analysis**, clearly documented in the Review 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.

The “Why?” Question. As this is a Terminal Review 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 consultant(s)’ minds all through the review exercise and is supported by the use of a theory of change approach. This means that the consultant(s) 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.

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 reviews. 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.

Communicating Review Results. A key aim of the Review 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 review process and in the communication of review findings and key lessons. Clear and concise writing is required on all review deliverables. Draft and final versions of the main review report will be shared with key stakeholders by the Project Manager. There may, however, be several intended audiences, each with different interests and needs regarding the report. The consultant will plan with the Project Manager which audiences to target and the easiest and clearest way to communicate the key review findings and lessons to them. This may include some or

³² <https://www.unenvironment.org/about-un-environment/evaluation-office/policies-and-strategies>

³³ <https://wecollaborate.unep.org>

all of the following; a webinar, conference calls with relevant stakeholders, the preparation of a review brief or interactive presentation.

7. Key Strategic Questions

In addition to the review criteria outlined in Section 10 below, the Review will address the **strategic questions**³⁴ listed below (no more than 3 questions are recommended). These are questions of interest to UNEP and to which the project is believed to be able to make a substantive contribution:

- (a) How effective was the selected team HR model – based on a limited UNEP team and a larger flexible UNOPS hosted technical team?
- (b) How effective was the overall concept of using supplementary technical assistance, rather than boosting the core DFS-DOS teams (such as in NY and in Brindisi)
- (c) What role did the remainder of UNEP play in technically or substantially supporting the project, and what does this indicate for the role of UNEP in future in this field?
- (d) What changes were made to adapt to the effects of COVID-19 and how might any changes affect the project's performance?

8. Review Criteria

All review criteria will be rated on a six-point scale. Sections A-I below, outline the scope of the review criteria. The set of review 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 availability 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.

Annex 1 of these Terms of Reference provides a table with a list of various tools, templates and guidelines that can help Review Consultant(s) to follow a thorough review process that meets all of UNEP's needs.

A. Strategic Relevance

The Review 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 Review 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's Medium-Term Strategy³⁵ (MTS), Programme of Work (POW) and Strategic Priorities

The Review 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 Building³⁶ (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

³⁴ The strategic questions should not duplicate questions that will be addressed under the standard review criteria described in section 10.

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

³⁶ <http://www.unep.fr/ozonaction/about/bsp.htm>

Donor strategic priorities will vary across interventions. The Review 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 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

The Review 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 also be considered. Examples may include: UN Development Assistance Frameworks (UNDAF) or, national or sub-national development plans, poverty reduction strategies or Nationally Appropriate Mitigation Action (NAMA) plans or regional agreements etc. Within this section consideration will be given to whether the needs of all beneficiary groups are being met and reflects the current policy priority to leave no-one behind.

iv. Complementarity with Relevant Existing Interventions/Coherence³⁷

An assessment will be made of how well the project, either at design stage or during the project inception or mobilization³⁸, took account of ongoing and planned initiatives (under the same sub-programme, other UNEP sub-programmes, or being implemented by other agencies within the same country, sector or institution) that address similar needs of the same target groups. The Review 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 work within 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

The quality of project design is assessed using an agreed template during the review inception phase. Ratings are attributed to identified criteria and an overall Project Design Quality rating is established. The complete Project Design Quality template should be annexed in the Review Inception Report. Later, the overall Project Design Quality rating³⁹ should be entered in the final review ratings table (as item B) in the Main Review Report and a summary of the project's strengths and weaknesses at design stage should be included within the body of the Main Review Report.

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

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

C. Nature of External Context

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

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

³⁹ In some instances, based on data collected during the review process, the assessment of the project's design quality may change from Inception Report to Main Review Report.

At review inception stage a rating is established for the project's external operating context (considering the prevalence of conflict, natural disasters and political upheaval⁴⁰). This rating is entered in the final review ratings table as item C. Where a project has been rated as facing either an *Unfavourable* or *Highly Unfavourable* external operating context, and/or a negative external event has occurred during project implementation, the ratings for Effectiveness, Efficiency and/or Sustainability may be increased at the discretion of the Review Consultant and Project Manager together. A justification for such an increase must be given.

D. Effectiveness

i. Availability of Outputs⁴¹

The Review 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 Theory of Change (TOC). In such cases a table should be provided showing the original 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 Review will briefly explain the reasons behind the success or shortcomings of the project in delivering its programmed outputs and meeting expected quality standards.

Factors affecting this criterion may include:

- Preparation and readiness
- Quality of project management and supervision⁴²

ii. Achievement of Project Outcomes⁴³

The achievement of project outcomes is assessed as performance against the outcomes as defined in the reconstructed⁴⁴ 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 to show where substantive amendments to the formulation of project outcomes is necessary to allow for an assessment of performance. The Review 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

⁴⁰ Note that 'political upheaval' does not include regular national election cycles, but unanticipated unrest or prolonged disruption. The potential delays or changes in political support that are often associated with the regular national election cycle should be part of the project's design and addressed through adaptive management of the project team. From March 2020 this should include the effects of COVID-19.

⁴¹ 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)

⁴² 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.

⁴³ 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)

⁴⁴ UNEP staff are currently required to submit a Theory of Change with all submitted project designs. The level of 'reconstruction' needed during a review will depend on the quality of this initial TOC, the time that has lapsed between project design and implementation (which may be related to securing and disbursing funds) and the level of any changes made to the project design. In the case of projects pre-dating 2013 the intervention logic is often represented in a logical framework and a TOC will need to be constructed in the inception stage of the review.

- Stakeholders' participation and cooperation
- Responsiveness to human rights and gender equity
- Communication and public awareness

iii. Likelihood of Impact

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

The Review 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.

The Review will consider the extent to which the project has played a catalytic role⁴⁵ or has promoted scaling up and/or replication as part of its Theory of Change (either explicitly as in a project with a demonstration component or implicitly as expressed in the drivers required to move to outcome levels) and as factors that are likely to contribute to greater or long-lasting impact.

Ultimately UNEP and all its partners aim to bring about benefits to the environment and human well-being. Few projects are likely to have impact statements that reflect such long-lasting or broad-based changes. However, the Review will assess the likelihood of the project to make a substantive contribution to the long-lasting changes represented by the Sustainable Development Goals, and/or the intermediate-level results reflected in UNEP's Expected Accomplishments and the strategic priorities of funding partner(s).

Factors affecting this criterion may include:

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

E. Financial Management

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 Review will establish the actual spend across the life of the project of funds secured from all donors. This expenditure will be reported, where possible, at output/component

⁴⁵ The terms catalytic effect, scaling up and replication are inter-related and generally refer to extending the coverage or magnitude of the effects of a project. Catalytic effect is associated with triggering additional actions that are not directly funded by the project – these effects can be both concrete or less tangible, can be intentionally caused by the project or implied in the design and reflected in the TOC drivers, or can be unintentional and can rely on funding from another source or have no financial requirements. Scaling up and Replication require more intentionality for projects, or individual components and approaches, to be reproduced in other similar contexts. Scaling up suggests a substantive increase in the number of new beneficiaries reached/involved and may require adapted delivery mechanisms while Replication suggests the repetition of an approach or component at a similar scale but among different beneficiaries. Even with highly technical work, where scaling up or replication involves working with a new community, some consideration of the new context should take place and adjustments made as necessary.

level and will be compared with the approved budget. The Review will verify the application of proper financial management standards and adherence to UNEP's financial management policies. Any financial management issues that have affected the timely delivery of the project or the quality of its performance will be highlighted. The Review will record where standard financial documentation is missing, inaccurate, incomplete or unavailable in a timely manner. The Review will assess the level of communication between the Project Manager and the Fund Management Officer as it relates to the effective delivery of the planned project and the needs of a responsive, adaptive management approach.

Factors affecting this criterion may include:

- Preparation and readiness
- Quality of project management and supervision

F. Efficiency

Under the efficiency criterion, the Review 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.

Focusing on the translation of inputs into outputs, *cost-effectiveness* is the extent to which an intervention has achieved, or is expected to achieve, its results at the lowest possible cost. *Timeliness* refers to whether planned activities were delivered according to expected timeframes as well as whether events were sequenced efficiently. The Review 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 Review 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.

The Review 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 complementarities⁴⁶ with other initiatives, programmes and projects etc. to increase project efficiency.

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

Factors affecting this criterion may include:

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

G. Monitoring and Reporting

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

i. Monitoring Design and Budgeting

Each project should be supported by a sound monitoring plan that is designed to track progress against SMART⁴⁷ results towards the achievement of the project's outputs and outcomes, including at a level disaggregated by gender, marginalization or vulnerability, including those living with disabilities. In particular, the Review will assess the relevance and appropriateness of the project indicators as well as the methods used for tracking progress against them as part of conscious results-based management. The Review will assess the quality of the design of the monitoring plan as well as the

⁴⁶ Complementarity with other interventions during project design, inception or mobilization is considered under Strategic Relevance above.

⁴⁷ SMART refers to results that are specific, measurable, achievable, relevant and time-oriented. Indicators help to make results measurable.

funds allocated for its implementation. The adequacy of resources for Mid-Term and Terminal Evaluation/Review should be discussed, where applicable.

ii. Monitoring of Project Implementation

The Review will assess whether the monitoring system was operational and facilitated the timely tracking of results and progress towards project objectives throughout the project implementation period. This assessment will include consideration of whether the project gathered relevant and good quality baseline data that is accurately and appropriately documented. This should include monitoring the representation and participation of disaggregated groups, including gendered, 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 Review should confirm that funds allocated for monitoring were used to support this activity.

iii. Project Reporting

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 Review Consultant(s) by the Project Manager. Some projects have additional requirements to report regularly to funding partners, which will be supplied by the project team. The Review will assess the extent to which both UNEP and donor reporting commitments have been fulfilled. Consideration will be given as to whether reporting has been carried out with respect to the effects of the initiative on disaggregated groups.

Factors affecting this criterion may include:

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

H. Sustainability

Sustainability⁴⁸ is understood as the probability of the benefits derived from the achievement of project outcomes being maintained and developed after the close of the intervention. The Review 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 direct outcomes may also be included.

i. Socio-political Sustainability

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

ii. Financial Sustainability

Some project outcomes, once achieved, do not require further financial inputs, e.g. the adoption of a revised policy. However, in order to derive a benefit from this outcome further management action may still be needed e.g. to undertake actions to enforce the policy. Other project outcomes may be dependent on a continuous flow of action that needs to be resourced for them to be maintained, e.g. continuation of a new natural resource management approach. The Review will assess the extent to which project outcomes are dependent on future funding for the benefits they bring to be sustained.

⁴⁸ 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)

Secured future funding is only relevant to financial sustainability where the project outcomes have been extended into a future project phase. Even where future funding has been secured, the question still remains as to whether the project outcomes are financially sustainable.

iii. Institutional Sustainability

The Review 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 Review will consider whether institutional capacity development efforts are likely to be sustained.

Factors affecting this criterion may include:

- Stakeholders participation and cooperation
- Responsiveness to human rights and gender equity (e.g. where interventions are not inclusive, their sustainability may be undermined)
- Communication and public awareness
- Country ownership and driven-ness

I. Factors Affecting Project Performance and Cross-Cutting Issues

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

i. Preparation and Readiness

This criterion focuses on the inception or mobilisation stage of the project (i.e. the time between project approval and first disbursement). The Review 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 Review 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

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

The Review 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

Here the term 'stakeholder' should be considered in a broad sense, encompassing all project partners, duty bearers with a role in delivering project outputs, target users of project outputs and any other collaborating agents external to UNEP and the implementing partner(s). The assessment 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 Equality

The Review 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 Review will assess to what extent the intervention adheres to UNEP's Policy and Strategy for Gender Equality and the Environment⁴⁹.

The report should present the extent to which the intervention, following an adequate gender analysis at design stage, has implemented the identified actions and/or applied adaptive management to ensure that Gender Equality and Human Rights are adequately taken into account. In particular the Review will consider to what extent project design, implementation and monitoring have taken into consideration: (i) possible inequalities (especially those related to gender) in access to, and the control over, natural resources; (ii) specific vulnerabilities of disadvantaged groups (especially women, youth and children and those living with disabilities) to environmental degradation or disasters; and (iii) the role of disadvantaged groups (especially women, youth and children and those living with disabilities) in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation.

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, or mitigation of potential environmental and social risks and impacts associated with project and programme activities. The Review will confirm whether UNEP requirements⁵⁰ were met to: *review* risk ratings on a regular basis; *monitor* project implementation for possible safeguard issues; *respond* (where relevant) to safeguard issues through risk avoidance, minimization, mitigation or offsetting and *report* on the implementation of safeguard management measures taken. UNEP requirements for proposed projects to be screened for any safeguarding issues; for sound environmental and social risk assessments to be conducted and initial risk ratings to be assigned, are reviewed above under Quality of Project Design).

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

vi. Country Ownership and Driven-ness

The Review 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 projects results, i.e. either: a) moving forwards from outputs to project outcomes or b) moving forward from project outcomes towards intermediate states. The Review will consider the involvement not only of those directly involved in project execution and those participating in technical or leadership groups, but also those official representatives whose cooperation is needed for change to be embedded in their respective institutions and offices (e.g. representatives from multiple sectors or relevant ministries beyond Ministry of Environment). This factor is concerned with the level of ownership generated by the project over outputs and outcomes and that is necessary for long term impact to be realised. Ownership should extend to all gender and marginalised groups.

⁴⁹ The Evaluation Office notes that Gender Equality was first introduced in the UNEP Project Review Committee Checklist in 2010 and, therefore, provides a criterion rating on gender for projects approved from 2010 onwards. Equally, it is noted that policy documents, operational guidelines and other capacity building efforts have only been developed since then and have evolved over time.

<https://wedocs.unep.org/bitstream/handle/20.500.11822/7655/->

Gender_equality_and_the_environment_Policy_and_strategy-

2015Gender_equality_and_the_environment_policy_and_strategy.pdf.pdf?sequence=3&isAllowed=y

⁵⁰ For the review of project concepts and proposals, the Safeguard Risk Identification Form (SRIF) was introduced in 2019 and replaced the Environmental, Social and Economic Review note (ESERN), which had been in place since 2016. In GEF projects safeguards have been considered in project designs since 2011.

vii. Communication and Public Awareness

The Review 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 Review 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 Review will comment on the sustainability of the communication channel under either socio-political, institutional or financial sustainability, as appropriate.

Section 3. REVIEW APPROACH, METHODS AND DELIVERABLES

The Terminal Review will be an in-depth review using a participatory approach whereby key stakeholders are kept informed and consulted throughout the review process. Both quantitative and qualitative review 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 review implementation phase in order to increase their (and other stakeholder) ownership of the review findings. Where applicable, the consultant(s) should provide a geo-referenced map that demarcates the area covered by the project and, where possible, provide geo-reference photographs of key intervention sites (e.g. sites of habitat rehabilitation and protection, pollution treatment infrastructure, etc.)

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

- (a) **A desk review** of:
- Relevant background documentation.
 - Project design documents (including minutes of the project design review meeting at approval); Annual Work Plans and Budgets or equivalent, revisions to the project (Project Document Supplement), the logical framework and its budget;
 - Project reports such as six-monthly progress and financial reports, progress reports from collaborating partners, meeting minutes, relevant correspondence and any other monitoring materials etc.;
 - Project deliverables (e.g. publications, assessments etc):
 - The Mid-Term Review of the project;

A comprehensive project document management system and library (200+ documents) is available online in MS Teams/Share point. The PM will provide access and direct the consultant to key documents and sections.

- (b) **Interviews** (individual or in group) with:
- UNEP Project Manager/Director (PD);
 - UNEP Fund Management Officer (FMO);
 - Sub-Programme Coordinator;
 - The REACT UNOPS hosted core project management and technical team (6 people);
 - The UNOPS support team.
 - The DOS Environment team, based in NY
 - Selected UN peacekeeping mission personnel – including environmental officers, engineers and management (DDMS, DMS)

Note that DOS and the REACT team now continue to work in Phase II, under a UNOPS hosting agreement and with no further UNEP input. As such, most of the Phase I project memory is intact and key personnel from 2016 + are still available to interview.

Also note that the UN peacekeeping missions are all in difficult to access countries, with COVID and security related travel restrictions in place. The REACT-DOS team now routinely work online and so no site visits are considered necessary or viable for the evaluation.

9. Review Deliverables and Review Procedures

The Review Consultant will prepare:

- **Inception Report:** (see Annex 1 for a list of 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, review framework and a tentative review schedule.
- **Preliminary Findings Note:** 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.
- **Draft and Final Review Report:** containing an executive summary that can act as a stand-alone document; detailed analysis of the review findings organised by review criteria and supported with evidence; lessons learned and recommendations and an annotated ratings table.

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

Review of the Draft Review Report. The Review Consultant will submit a draft report to the Project Manager and revise the draft in response to their comments and suggestions. The Project Manager will then forward the revised draft report 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 Project Manager for consolidation. The Project Manager will provide all comments to the Review Consultant for consideration in preparing the final report, along with guidance on areas of contradiction or issues requiring an institutional response.

The final version of the Terminal Review report will be assessed for its quality by the UNEP Evaluation Office using a standard template and this assessment will be annexed to the final Terminal Review report.

At the end of the review process, the Project Manager will prepare a **Recommendations Implementation Plan** in the format of a table, to be completed and updated at regular intervals, and circulate the **Lessons Learned**.

10. The Review Consultant

The Review Consultant will work under the overall responsibility of the Project Manager Andrew Morton, in consultation with the Fund Management Officer Paul Obonyo, the Head of Unit/Branch and Stefan Smith, the Sub-programme Coordinators of the Disasters and Conflicts UNEP Sub-programme.

The Review Consultant will liaise with the Project Manager on any procedural and methodological matters related to the Review. It is, however, the consultants' individual responsibility (where applicable) 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 Review as efficiently and independently as possible.

The Review Consultant will be hired over a period of 6 months 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 7 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 environmental management systems (EMS) 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.

The Review Consultant will be responsible, in close consultation with the Project Manager, for overall quality of the review and timely delivery of its outputs, described above in Section 11 Review Deliverables, above. The Review Consultant will ensure that all review criteria and questions are adequately covered.

11. Schedule of the Review

The table below presents the tentative schedule. (**Total duration 4 months – 16 weeks**)

Table 3. Tentative schedule for the Review

Milestone	Tentative Dates
Inception Report	Week 3
Review Mission	NA
E-based interviews, surveys etc.	Weeks 3 -6
PowerPoint/presentation on preliminary findings and recommendations	Week 8
Draft Review Report to Project Manager	Week 10
Draft Review Report shared with wider group of stakeholders	Week 12
Final Main Review Report	Week 14
Final Main Review Report shared with all respondents	Week 16

12. Contractual Arrangements

The Review Consultant(s) will be selected and recruited by the Project Manager under an individual Special Service Agreement (SSA) on a “fees only” basis (see below). By signing the service contract with UNEP/UNON, the consultant certifies 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.

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

Schedule of Payment:

Deliverable	Percentage Payment
Approved Inception Report (<i>as per Annex I document #9</i>)	30%
Approved Draft Main Review Report (<i>as per Annex I document 10</i>)	30%
Approved Final Main Review Report	40%

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

The consultant may be provided with access to UNEP’s information management systems (e.g. PIMS, Anubis, SharePoint, etc.) 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 Review Report.

In case the consultant is not able to provide the deliverables in accordance with these guidelines, and in line with the expected quality standards by the Project Manager, payment may be withheld at the discretion of the Head of Branch/Unit until the consultants have improved the deliverables to meet UNEP's quality standards.

If the consultant fails to submit a satisfactory final product to the Project Manager in a timely manner, i.e. before the end date of their contract, UNEP reserves the right to employ additional human resources to finalize the report, and to reduce the consultant's fees by an amount equal to the additional costs borne by the project team to bring the report up to standard or completion.

ANNEX X. QUALITY ASSESSMENT OF THE REVIEW REPORT

Review Title: Terminal Review of the UNEP Project “UN Peace Operations Rapid Environment and Climate Technical Assistance Facility” (REACT Project) PIMS ID 01954 (2016 – 2021)
Consultant: Roland Wong

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

	UNEP Evaluation Office Comments	Final Review Report Rating
Report Quality Criteria		
<p>Quality of the Executive Summary Purpose: acts as a stand alone and accurate <u>summary</u> of the main review product, especially for senior management. To include:</p> <ul style="list-style-type: none"> • concise overview of the review object • clear summary of the review objectives and scope • overall review rating of the project and key features of performance (strengths and weaknesses) against exceptional criteria • reference to where the review ratings table can be found within the report • summary response to key strategic review questions • summary of the main findings of the exercise/synthesis of main conclusions • summary of lessons learned and recommendations. 	<p>Final report (coverage/omissions): Most of the required elements are addressed, including project identification table, project background, the review, methods and limitations, conclusions and summary of project findings and overall rating, and lessons learned.</p> <p>The executive summary does not include responses to the strategic questions and has no recommendations. The explanation provided for not including recommendations was that UNEP has exited the work stream of mainstreaming environmental sustainability in peacekeeping missions and operations.</p> <p>Final report (strengths/weaknesses): The project background has been presented well and succinctly including baseline scenario, however, the executive summary could have benefited from more information on the project’s results framework, the institutional arrangements in UNEP responsible for the implementation of the project activities and a summary response to the four strategic questions listed in the Review’s TOR.</p>	4
<p>Quality of the ‘Introduction’ Section Purpose: introduces/<u>situates</u> the evaluand in its institutional context, establishes its main parameters (time, value, results, geography) and the purpose of the review itself. To include:</p> <ul style="list-style-type: none"> • institutional context of the project (sub-programme, Division, Branch etc) • date of PRC approval, project duration and start/end dates • number of project phases (where appropriate) • results frameworks to which it contributes (e.g. POW Direct Outcome) • coverage of the review (regions/countries where implemented) 	<p>Final report (coverage/omissions): The Introduction section include an overview of the institutional context, review purpose, scope and review audience, overall project budget, timeframe, and MTR of the project.</p> <p>Final report (strengths/weaknesses): Short and concise introduction section covering most of the required elements. The introduction section of the report could have benefited for a clear description of the geographical scope</p>	4

	UNEP Evaluation Office Comments	Final Review Report Rating
<ul style="list-style-type: none"> • implementing and funding partners • total secured budget • whether the project has been reviewed/evaluated in the past (e.g. mid-term, external agency etc.) • concise statement of the purpose of the review and the key intended audience for the findings. 	and intended project results and how these relate to the UNEP Programme of Work (PoW).	
<p>Quality of the 'Review Methods' Section</p> <p><u>Purpose:</u> provides reader with clear and comprehensive description of review methods, demonstrates the <u>credibility</u> of the findings and performance ratings.</p> <p>To include:</p> <ul style="list-style-type: none"> • description of review data collection methods and information sources • justification for methods used (e.g. qualitative/quantitative; electronic/face-to-face) • number and type of respondents (see <i>table template</i>) • selection criteria used to identify respondents, case studies or sites/countries visited • strategies used to increase stakeholder engagement and consultation • methods to include the voices/experiences of different and potentially excluded groups (e.g. vulnerable, gender, marginalised etc) • details of how data were verified (e.g. triangulation, review by stakeholders etc.) • methods used to analyse data (scoring, coding, thematic analysis etc) • review limitations (e.g. low/ imbalanced response rates across different groups; gaps in documentation; language barriers etc) • ethics and human rights issues should be highlighted including: how anonymity and confidentiality were protected. Is there an ethics statement? E.g. <i>'Throughout the review process and in the compilation of the Final Review Report efforts have been made to represent the views of both mainstream and more marginalised groups. All efforts to provide respondents with anonymity have been made.'</i> 	<p>Final report (coverage/omissions): Most of the required sections are included in the report save for the justification of methods used, selection criteria for respondents, data analysis methods used.</p> <p>Final report (strengths/weaknesses): The sections mentions that data was collected with respect to ethics and human rights and use of anonymity and reference to UNEP guidelines and UN standards of conduct. Limitations and mitigation strategy are also described.</p> <p>The evaluation methods could have mentioned how the respondents were selected, how data collected using various methods was analysed and triangulated and ethical considerations.</p>	4
<p>Quality of the 'Project' Section</p> <p><u>Purpose:</u> describes and <u>verifies</u> key dimensions of the evaluand relevant to assessing its performance.</p> <p>To include:</p> <ul style="list-style-type: none"> • <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) • <i>Results framework:</i> summary of the project's results hierarchy as stated in the ProDoc (or as officially revised) • <i>Stakeholders:</i> description of groups of targeted stakeholders organised according to relevant common characteristics • <i>Project implementation structure and partners:</i> description of the implementation structure with diagram and a list of key project partners • <i>Changes in design during implementation:</i> any key events that affected the project's scope or 	<p>Final report (coverage/omissions): All the required section are described in sufficient detail the problem, the proposed solutions, stakeholders, implementation arrangements and changes in project design.</p> <p>Final report (strengths/weaknesses): The report presents a good analysis of the quality of project design albeit with a few gaps i.e.,</p> <ul style="list-style-type: none"> • The intervention logic could have been improved to include outcomes and impact. • Description of stakeholders would have benefitted from an analysis of their influence and interest. 	5

	UNEP Evaluation Office Comments	Final Review Report Rating
<p>parameters should be described in brief in chronological order</p> <ul style="list-style-type: none"> • <i>Project financing</i>: completed tables of: (a) budget at design and expenditure by components (b) planned and actual sources of funding/co-financing 	<p>The project financing section could have included information on sources of project budget, especially Phase 1.</p>	
<p>Quality of the Theory of Change</p> <p><u>Purpose</u>: to set out the TOC at Review in diagrammatic and narrative forms to support consistent project performance; to articulate the causal pathways with drivers and assumptions and justify any reconstruction necessary to assess the project's performance.</p> <p>To include:</p> <ul style="list-style-type: none"> • description of how the <i>TOC at Review</i>⁵¹ was designed (who was involved etc) • confirmation/reconstruction of results in accordance with UNEP definitions • articulation of causal pathways • identification of drivers and assumptions • identification of key actors in the change process • summary of the reconstruction/results re-formulation in tabular form. <i>The two results hierarchies (original/formal revision and reconstructed) should be presented as a two-column table to show clearly that, although wording and placement may have changed, the results 'goal posts' have not been 'moved'. This table may have initially been presented in the Inception Report and should appear somewhere in the Main Review report.</i> 	<p>Final report (coverage/omissions): The section covers description of the ToC review process, what elements were considered in the reconstruction of the TOC, identification and articulation of the causal pathways and includes a revised TOC diagram.</p> <p>Final report (strengths/weaknesses): The outcome and intermediate state results statements in the ToC could have been improved to make them less generic. The intermediate states are placed before the outcome statement contrary to the UNEP expectation/definition. The ToC is also devoid of key actors in the change process, assumptions and drivers.</p>	4
<p>Quality of Key Findings within the Report</p> <p><u>Presentation of evidence</u>: nature of evidence should be clear (interview, document, survey, observation, online resources etc) and evidence should be explicitly triangulated unless noted as having a single source.</p> <p><u>Consistency within the report</u>: all parts of the report should form consistent support for findings and performance ratings, which should be in line with UNEP's Criteria Ratings Matrix.</p> <p><u>Findings Statements (where applicable)</u>: The frame of reference for a finding should be an individual review criterion or a strategic question from the TOR. A finding should go beyond description and uses analysis to provide insights that aid learning specific to the evaluand. In some cases a findings statement may articulate a key element that has determined the performance rating of a criterion. Findings will frequently provide insight into 'how' and/or 'why' questions.</p>	<p>Final report (coverage/omissions): The findings in the report are evidence based, in line with UNEP's Criteria Ratings Matrix and are presented systematically and consistently across the report.</p> <p>Final report (strengths/weaknesses): Findings presented as part of assessments with reference to the frame of the individual review criteria and with performance ratings.</p> <p>Mention of critical findings and limitations in presentation of findings when deemed relevant by the reviewer.</p>	5

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

	UNEP Evaluation Office Comments	Final Review Report Rating
<p>Quality of 'Strategic Relevance' Section</p> <p><u>Purpose:</u> to present evidence and analysis of project strategic relevance with respect to UNEP, partner and geographic policies and strategies at the time of project approval.</p> <p>To include:</p> <p>Assessment of the evaluand's relevance vis-à-vis:</p> <ul style="list-style-type: none"> • Alignment to the UNEP Medium Term Strategy (MTS), Programme of Work (POW) and Strategic Priorities • Alignment to Donor/GEF/Partners Strategic Priorities • Relevance to Regional, Sub-regional and National Environmental Priorities • Complementarity with Existing Interventions: complementarity of the project at design (or during inception/mobilisation⁵²), with other interventions addressing the needs of the same target groups. 	<p>Final report (coverage/omissions): The sub-criteria for alignment with MTs and POW, and donor/ partners priorities and complementarities are rated. Relevance to global, subregional and national priorities is considered not applicable and not rated.</p> <p>Final report (strengths/weaknesses): The review report links the project to other UN initiatives and its complementarity and alignment to UNEP MTS, POW and the overall UN initiative to "Green the Blue Helmets".</p>	5
<p>Quality of the 'Quality of Project Design' Section</p> <p><u>Purpose:</u> to present a summary of the strengths and weaknesses of the project design, on the basis that the detailed assessment was presented in the Inception Report.</p>	<p>Final report (coverage/omissions): Section on project design quality presents strengths and weaknesses of the project design and its rating. The rating does not refer to assessment and rating of the quality of the project design at the inception stage of the review as required.</p> <p>Final report (strengths/weaknesses): The assessment of project design quality is insightful and mostly relevant but would have benefitted from a review of the parameters listed in the review tool for review of quality of project design quality.</p> <p>The weaknesses included in the analysis seem to be those related to implementation rather than to project design.</p> <p>The assessment of quality could have benefitted from an assessment of the coherence or design synergy of the REACT project with the overall UN programme to "Greening the Blue Helmets".</p>	3.5
<p>Quality of the 'Nature of the External Context' Section</p> <p><u>Purpose:</u> to describe and recognise, when appropriate, key <u>external</u> features of the project's implementing context that limited the project's performance (e.g. conflict, natural disaster, political upheaval⁵³), and how they affected performance.</p>	<p>Final report (coverage/omissions): The report presents a good analysis of the nature of the external context.</p> <p>Final report (strengths/weaknesses): The analysis of the external context also includes an assessment of the impact of the main negative</p>	5

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

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

	UNEP Evaluation Office Comments	Final Review Report Rating
<p>While additional details of the implementing context may be informative, this section should clearly record whether or not a major and unexpected disrupting event took place during the project's life in the implementing sites.</p>	<p>externality (COVID-19 pandemic) and the results of the mitigation measures put in place by the project.</p>	
<p>Quality of 'Effectiveness' Section</p> <p>(i) Availability of Outputs:</p> <p><u>Purpose:</u> to present a well-reasoned, complete and evidence-based assessment of the outputs made available to the intended beneficiaries.</p> <p>To include:</p> <ul style="list-style-type: none"> • a convincing, evidence-supported and clear presentation of the outputs made available by the project compared to its approved plans and budget • assessment of the nature and scale of outputs versus the project indicators and targets • assessment of the timeliness, quality and utility of outputs to intended beneficiaries • identification of positive or negative effects of the project on disadvantaged groups, including those with specific needs due to gender, vulnerability or marginalisation (e.g. through disability). 	<p>Final report (coverage/omissions): The section contains a detailed quantitative and qualitative assessment of deliverables and achievement of targets for output 1 and output 2 with an overall rating for each output and an overall rating.</p> <p>Final report (strengths/weaknesses): The report presents a detailed and evidence-based assessment of achievement of project outputs.</p>	5
<p>(ii) Achievement of Project Outcomes:</p> <p><u>Purpose:</u> to present a well-reasoned, complete and evidence-based assessment of the uptake, adoption and/or implementation of outputs by the intended beneficiaries. This may include behaviour changes at an individual or collective level.</p> <p>To include:</p> <ul style="list-style-type: none"> • a convincing and evidence-supported analysis of the uptake of outputs by intended beneficiaries • assessment of the nature, depth and scale of outcomes versus the project indicators and targets • discussion of the contribution, credible association and/or attribution of outcome level changes to the work of the project itself • any constraints to attributing effects to the projects' work • identification of positive or negative effects of the project on disadvantaged groups, including those with specific needs due to gender, vulnerability or marginalisation (e.g. through disability). 	<p>Final report (coverage/omissions):</p> <p>The section on achievement of the project outcome is detailed supported by available evidence and opportunities for behaviour changes of the Missions and overall rating is provided.</p> <p>Final report (strengths/weaknesses): The report presents evidence-based analysis of the availability and uptake of outputs by intended beneficiaries.</p> <p>A major weakness in the analysis of the likelihood of achievement of project outcomes is that assumptions are not included and therefore not tested. It is also difficult to assess whether project outcomes were achieved since no indicators and targets are available.</p>	4
<p>(iii) Likelihood of Impact:</p> <p><u>Purpose:</u> to present an integrated analysis, guided by the causal pathways represented by the TOC, of all evidence relating to likelihood of impact, including an assessment of the extent to which drivers and assumptions necessary for change to happen, were seen to be holding.</p> <p>To include:</p> <ul style="list-style-type: none"> • an explanation of how causal pathways emerged and change processes can be shown • an explanation of the roles played by key actors and change agents • explicit discussion of how drivers and assumptions played out 	<p>Final report (coverage/omissions): Section on the likelihood of impact contains a review of the two drivers in place and an overall rating is provided.</p> <p>Final report (strengths/weaknesses): The assessment is based on a generic review of the two drivers of the RTOC. The absence of assumption in the RTOC means that the assessment of likelihood of impact is based on a weak intervention logic.</p>	4

	UNEP Evaluation Office Comments	Final Review Report Rating
<ul style="list-style-type: none"> • identification of any unintended negative effects of the project, especially on disadvantaged groups, including those with specific needs due to gender, vulnerability or marginalisation (e.g. through disability). 		
<p>Quality of 'Financial Management' Section</p> <p><u>Purpose:</u> to present an integrated analysis of all dimensions evaluated under financial management and include a completed 'financial management' table (may be annexed). Consider how well the report addresses the following:</p> <ul style="list-style-type: none"> • <i>adherence</i> to UNEP's financial policies and procedures • <i>completeness</i> of financial information, including the actual project costs (total and per activity) and actual co-financing used • <i>communication</i> between financial and project management staff 	<p>Final report (coverage/omissions): The section meets requirements with a detailed assessment of the three sub-criteria under financial management with sub-ratings and an overall rating provided.</p> <p>Final report (strengths/weaknesses): The report presents a well-reasoned analysis of the completeness of financial information while providing explanation for missing information. The report also provides an evidence-based analysis of the communication between financial and project management staff. The report also mentions procurement action led by UNOPS for technical support and equipment.</p> <p>The assessment could have benefited from reference to more primary data obtained from UNOPS and DOS including interviews for the Review with UNOPS and DOS, as available / feasible.</p> <p>The report described what project funds were spent on but not how i.e. an analysing of adherence or no adherence to UNEP policies and procedures on financial management was missing.</p>	5
<p>Quality of 'Efficiency' Section</p> <p><u>Purpose:</u> to present an integrated analysis of all dimensions evaluated under efficiency (i.e. the primary categories of cost-effectiveness and timeliness). To include:</p> <ul style="list-style-type: none"> • time-saving measures put in place to maximise results within the secured budget and agreed project timeframe • discussion of making use, during project implementation, of/building on pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. • implications of any delays and no cost extensions • the extent to which the management of the project minimised UNEP's environmental footprint. 	<p>Final report (coverage/omissions):s</p> <p>The section contains the required elements and provided a detailed assessment of various efficiency aspects in the project focusing on timeliness and cost efficiencies.</p> <p>Final report (strengths/weaknesses): Table with assessment of RACT financial management and ratings based on review template.</p> <p>Mention of efficiency gains achieved through centralised procurement mechanism called Systems Contracts for waste management, energy and wastewater equipment and services (para. 121).</p>	5

	UNEP Evaluation Office Comments	Final Review Report Rating
	The report could have been more explicit on the whether the project was implemented within the project period at design and any extensions.	
<p>Quality of 'Monitoring and Reporting' Section</p> <p><u>Purpose:</u> to present well-reasoned, complete and evidence-based assessment of the evaluand's monitoring and reporting. Consider how well the report addresses the following:</p> <ul style="list-style-type: none"> • quality of the monitoring design and budgeting (including SMART results with measurable indicators, resources for MTE/R etc.) • quality of monitoring of project implementation (including use of monitoring data for adaptive management) • quality of project reporting (e.g. PIMS and donor reports) \ 	<p>Final report (coverage/omissions): The section contains an assessment of the three sub-criteria with ratings and an overall rating provided.</p> <p>Final report (strengths/weaknesses): The sub-section on quality of the monitoring design could have included a determination of the existence of a monitoring plan and if present an analysis in terms of the appropriateness of the indicators, data sources, data collection methods, frequency of collection and responsibility for collection.</p>	4.5
<p>Quality of 'Sustainability' Section</p> <p><u>Purpose:</u> to present an integrated analysis of all dimensions evaluated under sustainability (i.e. the endurance of benefits achieved at outcome level). Consider how well the report addresses the following:</p> <ul style="list-style-type: none"> • socio-political sustainability • financial sustainability • institutional sustainability 	<p>Final report (coverage/omissions): The section contains an assessment of each of the three sub-criteria with ratings and an overall rating.</p> <p>Final report (strengths/weaknesses): The report presents a well reason assessment of project sustainability from all the three dimensions i.e. socio-political, financial, institutional sustainability. A key pointer to sustainability of the project results is ownership by senior personnel in HQ and GSC-ETSU as key stakeholders.</p> <p>However, the financial sustainability section could have benefited from analysis beyond the UNOPS-DOS agreement.</p>	4
<p>Quality of Factors Affecting Performance Section</p> <p><u>Purpose:</u> These factors are not always discussed in stand-alone sections and may be integrated in the other performance criteria as appropriate. However, if not addressed substantively in this section, a cross reference must be given to where the topic is addressed and that entry must be sufficient to justify the performance rating for these factors. Consider how well the review report, either in this section or in cross-referenced sections, covers the following cross-cutting themes:</p> <ul style="list-style-type: none"> • preparation and readiness • quality of project management and supervision⁵⁴ 	<p>Final report (coverage/omissions): All factors affecting performance addressed and assessed in the section with sub-ratings and an overall rating.</p> <p>Final report (strengths/weaknesses): Quality of project management and supervision of UNEP as implementing agency is assessed and rated and its role as executing agency by</p>	5

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

	UNEP Evaluation Office Comments	Final Review Report Rating
<ul style="list-style-type: none"> • stakeholder participation and co-operation • responsiveness to human rights and gender equality • environmental and social safeguards • country ownership and driven-ness • communication and public awareness 	<p>managing technical teams is assessed.</p> <p>The review would have benefited from an assessment of demonstration of human rights/ gender considerations in the interpretation of results as indicators on the same is reported missing in the assessment of the monitoring and reporting section.</p>	
<p>Quality of the Conclusions Section</p> <p>(i) Conclusions Narrative:</p> <p><u>Purpose:</u> to present summative statements reflecting on prominent aspects of the <u>performance of the evaluand as a whole</u>, they should be derived from the synthesized analysis of evidence gathered during the review process.</p> <p>To include:</p> <ul style="list-style-type: none"> • compelling narrative providing an integrated summary of the strengths and weakness in overall performance (achievements and limitations) of the project • clear and succinct response to the key strategic questions • human rights and gender dimensions of the intervention should be discussed explicitly (e.g. how these dimensions were considered, addressed or impacted on) 	<p>Final report (coverage/omissions):</p> <p>The section presents conclusions, summary of project findings with emphasis on strengths of the project and ratings and achievements by the project and an overall rating of the project's performance is provided.</p> <p>Final report (strengths/weaknesses): Summary of the project findings and ratings provided in table 3 with reference to relevant paragraphs in the review report.</p> <p>Responses to the four key strategic questions of the TOR are not included in the conclusions section: The strategic questions appear to have been addressed partly or fully in assessments of relevant criteria in the review findings chapter of the report.</p> <p>The conclusions section would have benefited from a summary of human rights and gender dimensions beyond the summary assessment provided in table 3.</p>	4
<p>ii) Utility of the Lessons:</p> <p><u>Purpose:</u> to present both positive and negative lessons that have potential for wider application and use (replication and generalization)</p> <p>Consider how well the lessons achieve the following:</p> <ul style="list-style-type: none"> • are rooted in real project experiences (i.e. derived from explicit review findings or from problems encountered and mistakes made that should be avoided in the future) • briefly describe the context from which they are derived and those contexts in which they may be useful • do not duplicate recommendations 	<p>Final report (coverage/omissions):</p> <p>Seven lessons are presented in the format prescribed.</p> <p>Final report (strengths/weaknesses): The lessons are rooted in project experience and performance as documented in the review report and are applicable beyond the project.</p> <p>However, the report also includes some lesson that are written like or duplicate recommendations for example recommendations 4, 5, 7. Lessons 1-3 also read like findings and would have benefited from a stronger lesson learned oriented formulation.</p>	4
<p>(iii) Utility and Actionability of the Recommendations:</p> <p><u>Purpose:</u> to present proposals for specific action to be taken by identified people/position-holders to resolve concrete</p>	<p>Final report (coverage/omissions): No recommendations are presented in the section on recommendations</p>	N/A

	UNEP Evaluation Office Comments	Final Review Report Rating
<p>problems affecting the project or the sustainability of its results.</p> <p>Consider how well the lessons achieve the following:</p> <ul style="list-style-type: none"> • are feasible to implement within the timeframe and resources available (including local capacities) and specific in terms of who would do what and when • include at least one recommendation relating to strengthening the human rights and gender dimensions of UNEP interventions • represent a measurable performance target in order that the UNEP Unit/Branch can monitor and assess compliance with the recommendations. <p>NOTES:</p> <p>(i) In cases where the recommendation is addressed to a third party, compliance can only be monitored and assessed where a contractual/legal agreement remains in place. Without such an agreement, the recommendation should be formulated to say that UNEP project staff should pass on the recommendation to the relevant third party in an effective or substantive manner. The effective transmission by UNEP of the recommendation will then be monitored for compliance.</p> <p>(ii) Where a new project phase is already under discussion or in preparation with the same third party, a recommendation can be made to address the issue in the next phase.</p>	<p>with the justification that UNEP has exited from the work stream.</p> <p>Final report (strengths/weaknesses): The report would have benefited from recommendations for future interventions. UNEP having exited from the project and the “work stream” isn’t justification enough for excluding recommendations. Moreover, the review should have provided an explicit response to the strategic question of the review “(c)What role did the remainder of UNEP play in technically or substantially supporting the project, and what does this indicate for the role of UNEP in future in this field?” as required by the TOR of the review.</p>	
<p>Quality of Report Structure and Presentation</p> <p>(i) Structure and completeness of the report:</p> <p>To what extent does the report follow the UNEP Evaluation Office structure and formatting guidelines? Are all requested Annexes included and complete?</p>	<p>Final report (coverage/omissions): Structure and completeness of the report follows Evaluation Office structure and formatting guidelines.</p> <p>Final report (strengths/weaknesses): Required annexes are complete, including Annex I with response to stakeholder comments.</p> <p>Consistency of ratings presented in the review findings section and the summary table 3.</p>	5
<p>(ii) Writing and formatting:</p> <p>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?</p>	<p>Final report (coverage/omissions): Report is written in clear English language and grammar and adequate in quality and tone.</p> <p>Final report (strengths/weaknesses): Key required tables and figures are included.</p>	5
OVERALL REPORT QUALITY RATING	Satisfactory	4.5

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 review report is calculated by taking the mean score of all rated quality criteria.