United Nations Environment Programme

Final	Terminal Evaluation of the UNEP projects
	"Project 12/3-P1 – Support for Integrated Analysis and Development of Framework Policies for Greenhouse Gas Mitigation"
	And
	"Project 12/3-P2 – Support for the Deployment of Renewable Energy and Energy-efficient Technologies in Developing Countries"

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October 2016

Table 1: Project Identification Table for 12/3-P1: "Support for Integrated Analysis and Development of Framework Policies for Greenhouse Gas Mitigation"

UNEP PIMS ID:	609	**IMIS number:**	3873
Sub-programme:	Climate Change	**Expected Accomplishment(s):**	EA(b)
UNEP approval date:	10 June 2010	**PoW Output(s):**	2010/11 : 121, 122, 123, 124 , 125, 126 2012/13 : 121, 122, 123 2014/15 : 123, 126
Expected Start Date:	1 Jan 2010	**Actual start date:**	10 June 2010
Planned completion date:	31 Dec 2011[1]	**Actual completion date:**	31 December 2014
Planned project budget at approval:	US$6,525,750	**Total expenditures until 2011 (from ProDoc Supplement 20 Feb 2013)**	US$ 6,638,853
Planned Environment Fund (EF) allocation:	US$ 0	**Actual EF expenditures reported as of [date]:**	TBD
Planned Extra-budgetary financing (XBF):	US$6,525,750	**Actual XBF expenditures reported as of [date]:**	TBD
XBF secured:	US$4,012,630	**Leveraged financing:**	TBD
First Disbursement:	TBD	**Date of financial closure:**	TBD
No. of revisions:	3	**Date of last revision:**	06 May 2014
Date of last Steering Committee meeting:	N/A		
Mid-term review/ evaluation (planned date):	n/a	**Mid-term review/ evaluation (actual date):**	n/a

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[1] This is according to the overview table on page 3 of the project document, but all activities are plotted for a three-year time frame.

Table 2: Project Identification Table for Project 12/3 P2 - Support for the Deployment of Renewable Energy and Energy-efficient Technologies in Developing Countries[2]

UNEP PIMS ID:	619	**IMIS number:**	3874
Sub-programme:	Climate Change	**Expected Accomplishment(s):**	EA(b)
UNEP approval date:	10 June 2010	**PoW Output(s):**	2010/11 : 125, 126
Expected Start Date:	1 Jan 2010	**Actual start date:**	10 June 2010
Planned completion date:	31 Dec 2011	**Actual completion date:**	31 Dec 2011
Planned project budget at approval:	US$ 15,468,943	**Total expenditures reported as of [date]:**	TBD
Planned Environment Fund (EF) allocation:	US$ 753,054	**Actual EF expenditures reported as of [date]:**	TBD
Planned Extra-budgetary financing (XBF):	US$ 9,300,000	**Actual XBF expenditures reported as of [date]:**	TBD
XBF secured:	US$ 9,159,396	**Leveraged financing:**	TBD
First Disbursement:	TBD	**Date of financial closure:**	TBD
No. of revisions:	1	**Date of last revision:**	29 June 2011
Date of last Steering Committee meeting:	n/a		
Mid-term review/ evaluation (planned date):	n/a	**Mid-term review/ evaluation (actual date):**	n/a

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[2] Reflected budgets here only for the years 2010 and 2011

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List of acronyms & abbreviations

AP-CTNFC	Asia-Pacific Pilot of Climate Technology Network and Finance Centre in Asia Pacific
BSP	Bali Strategic Plan
CB Central Asia	Capacity Building Central Asia
CKAN	Comprehensive Kerbal Archive Network
COP	Conference of the Parties
CSPP	Community Satellite Processing Package
CTCN	Climate Change Technology Centre and Network
DTIE Energy Branch	Division of Technology, Industry and Economics Energy Branch
EA(s)	Expected Accomplishment(s)
en.lighten	Global Market Transformation for Efficient Lighting
EST	Environmentally Sound Technologies
FIRM	Facilitating Implementation and Readiness for Mitigation
GCF	Green Climate Fund
GEF	Global Environment Facility
GEF CC	Global Environment Facility Climate and Chemicals
GFEI	Global Fuel Economy Initiative
GHG	Greenhouse Gas
GNESD	Global Network on Energy for Sustainable Development
GSWH	Global Solar Water Heating Market Transformation and Strengthening Initiative
HSHW	Harmful Substances and Hazardous Wastes
IEA	International Energy Agency
IPCC	Intergovernmental Panel on Climate Change
LCT	Promoting Low-Carbon Transport in India
Liquid Biofuels MSP	Assessments and Guidelines for Sustainable Liquid Biofuels Production in Developing Countries
Logframe (s)	Logical Framework(s)
MCA4climate	Multi-Criteria Analysis for Climate Change: Developing Guidance for Pro-Development Climate Policy Planning
NAMA(s)	Nationally Appropriate Mitigation Action(s)
NESTLAC	Network for Environmentally Sustainable Transport in Latin America and the Caribbean
NGO	Non-Governmental Organisation
NMT	Non-Motorised Transport
PCFV	Partnership for Clean Fuels and Vehicles
PIMS	Programme Information Management System
PoW	UNEP Biennial Programme of Work and Budget
PRC	Project Review Committee
ProDoc(s)	Programme Document(s)
REGATTA	Regional Gateway for Technology Transfer and Climate Change Action in Latin America and the Caribbean
REN21	Renewable Energy Policy Network for the 21st Century
RIPECAP	Regional Industrial Pollution and CO2 Emission Abatement Project for Arab Countries
SEAN CC	South East Asia Network Climate Change
SMART	Specific, Measurable, Attainable, Relevant, Time-Bound
SWERA	The Solar and Wind Resource Assessment Tool
STR	Share the Road
TNA(s)	Global Technology Needs Assessment(s)

TOC	Theory of Change
UDP	UNEP-DTU Partnership
UN	United Nations
UNEP DTIE	United Nations Environment Programme Division of Technology, Industry and Economics
UNEP DTU	UNEP DTU Partnership (formerly UNEP Risø Centre (URC))
UNEP EO	UNEP Evaluation Office
UNEP MTS	UNEP Medium Term Strategy
UNFCCC	United Nations Framework Convention on Climate Change
UNIDO	United Nations Industrial Development Organisation

EXECUTIVE SUMMARY

i.   The focus of this evaluation is on two of the three umbrella projects of the UNEP DTIE Energy Branch, which have formed the core of the Biennial Work Programme 2010/2011 of the Mitigation Programme Framework of UNEP's Climate Change Sub-Programme. With the Biennial Work Programme 2012/2013, the two umbrella projects P1 and P2 were merged into one umbrella project that was extended until the end of 2014 and included all sub-projects of the original P1 and P2 that had not finished by then.

ii.   In line with the UNEP Evaluation Policy and the UNEP Programme Manual, this Terminal Evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements and (ii) to promote operational improvement, learning and knowledge sharing through results and lessons learned among UNEP and its partners. Therefore, the evaluation identifies lessons of operational relevance for future project formulation and implementation, especially for the follow-up projects.

iii.   The umbrella programmes were motivated by an institutional push for easier communicability of the very diverse global project portfolio. The project documents attempt to formulate a joint vision and objective to strengthen the internal coherence of the UNEP mitigation portfolio and its contribution to the stated institutional goals ("Expected Accomplishments"). In addition, the underlying rationale of the umbrella projects was to create a project structure which would accommodate existing and new donor funding for UNEP (sub-) projects that relate to the Expected Accomplishments (EA) of the Climate Change Sub-programme without a lot of administrative extra burden.

iv.   P1 and P2 were, therefore, created as collections of smaller projects, the sub-projects that had been able to raise funding from a variety of sources, including GEF and mostly from bilateral donors. The umbrellas themselves had no budget or financial planning character. 100% of the financial flows were determined by the activity in the sub-projects. By extension this meant that there was also no budget for management and oversight of the umbrella project(s) as distinct from their components. In addition, or as a consequence, there was no financial reporting on the umbrella level, and the budgets for the umbrella projects are hard to reconstruct, as the only budget figures given for the umbrellas are indicative expected annual budgets and include unsecured funding which partly has not materialized

v.   In line with the Biennual Programmes of Work (PoWs) of UNEP, both umbrella projects were planned for a period of two years. They are both global in scope with the main target group being country governments, policy makers or negotiators to the UNFCCC and often the environment ministries. Both have an important focus on supporting government planning and enhancing the understanding within governments of opportunities for GHG mitigation. P1 focuses on broader upstream climate change mitigation frameworks and their policies, while P2 has a stronger emphasis only on renewable energy and energy efficiency, though when looking at the project contents the delineation between the types of projects is not clear.

vi.   The reconstructed TOC illustrates that the umbrella projects centre on outcomes and outputs that derive from the sub-projects' outcomes and outputs. These sub-project outcomes and outputs are, respectively, almost always identical in formulation to the UNEP Expected Accomplishments and Outputs from the PoW 2010 – 2011 and have the character of Project "Outputs" as PIMS merely focuses on these so called "outputs", entries that often only relate to the immediate outputs rather than outcomes, longer-term objectives or impacts.

vii.   This use of terminology only complies to a limited extent with international standards and results in a mixing of the levels of the outcome hierarchy between sub-projects, umbrella projects and the PoW. In addition, most sub-projects and the umbrella projects have no formulated milestones. Baseline and targets as well as indicators on all levels are not used consistently.

viii.   Out of the 21 sub-projects under the two umbrella projects, six underwent a detailed review in the form of case studies under this evaluation contract. Five out of the 15 remaining sub-projects had been subject to review or evaluation under other evaluation contracts by the end of this report. This brings the total evaluation coverage to 11/21 or 52% of the total sub-project population. The sub-projects selected for a detailed review as case studies were REGATTA, SEAN-CC, Share the Road, Low Carbon Transport in India, FIRM and CTCN. The sub-projects evaluated under other evaluations were: en.lighten, GSWH, MCA4, GNESD and Liquid Biofuels MSP.

ix.   The six case studies highlighted that most projects managed to succeed in producing their programmed outputs. The types of outputs provided by the sub-projects are very different. A strong emphasis of the sub-projects lies in the area of knowledge networks (SEAN CC, REGATTA, CTCN) as well as technology generation and information dissemination (SWERA, GSWH, en.lighten). These sub-projects generally strongly promote and support south-south cooperation. Four projects work mainly on policies (GSWH, en.lighten, FIRM and LCT), all of which have national policy components, with mixed success. Several projects – specifically CTCN, AP-CTNFC and REGATTA - focus on a combination of all these approaches.

x.   The stated outcomes of the umbrella projects have been generally attained, but are under-ambitious. In addition, the exclusive reference to UNEP-internal output and objective formulations does not force the programme logic to spell out all the steps to actual GHG emission reductions, or actual investment or utilization of renewable energy. This allowed for projects that do not always maintain a line of sight towards the global environmental benefit. Leaving out the ultimate impact from the internal planning paradigm means stopping short of the ambition to actually reach it – built capacity and willingness in a government are just two preconditions that provide the ground for a government to put some policies in place. The effectiveness of the capacity and will, and whether other substantive barriers might prevent actual action on energy, is highly questionable. The path from project outcomes to actual GHG emission reductions is long and can still be derailed by many external factors.

xi.   In terms of project sustainability, the sub-projects vary significantly in their focus and duration. Financial sustainability at the umbrella level has never been sought, which is consistent with the expectations of the umbrella projects. But even on the project / activity level, financial sustainability has not always been a consideration. Some sub-projects, like FIRM, were only initiated to facilitate a political process of formulating low carbon development strategies. Once this facilitation is completed, it will be phased out within a short time span and potentially without any follow-up support. This puts the sustainability of project impacts at risk. Contrasting this with another policy-outcome oriented intervention like the en.lighten project shows that sustainability of project activities is also a function of project length. En.lighten covers a longer time span and has a chance to initiate longer lasting political processes by providing support for national efficient lighting programmes and the phasing-out of incandescent lamps in developing countries.

xii.   Some of the projects led to institutional changes but over a long time horizon only. In particular, the network projects (SEAN-CC, REGATTA and CTCN) have over time succeeded in building up some structures that could now self-sustain, at least in parts. The most successful example in this respect might be the GNESD – in this case the individual institutions in the network have probably benefitted in global reputation and an improved quality of their work through being linked to the UNEP network, and on the other hand, this also raised the profile of the network.

xiii.   Many projects intend to support the creation of enabling environments through catalytic effects. Outreach is therefore a component of all sub-projects, but with varying levels of effort. Though the individual project strategies sound promising, there are few instances of replication of the projects, specific activities, and/or their lessons and experiences in the region or at a country level. One positive example is the Share-the-Road project, which started in Kenya and then replicated its activities in Uganda, Rwanda and Burundi.

xiv.   In terms of efficiency, timeliness is not satisfactory. Slow bureaucratic processes caused by inefficient fiduciary and administrative procedures often lead to delays in the project start and the first disbursements, as the example of en.lighten shows. However, the projects that strengthen national capacities, work with government stakeholders or support in country activities are also dependent on the speed of the national implementation so that some of the delays might not be under the influence of UNEP.

xv.   At the time of its design, the umbrella project was justified as a way to reduce the overall number of small projects. In addition, a new project management database (PIMS) was introduced and managing these small projects in PIMS would have implied high additional administrative overhead. In that sense, the minimalistic design and intentional minimization of internal inter-linkages were a rational choice which served the purpose and did not affect performance – or so it seemed to the project team. However, the project team also notes that this did not allow them to leverage the expected benefit of the PIMS system, which from their point of view was to give a more closed and coherent strategic appearance to the Branch's activities. In addition, the PIMS bore the promise of improved monitoring and results-based management. If that system would have lived up to this promise, performance and performance monitoring should have been improved. However, the Branch team until today does not believe that PIMS improves information flow to managers nor trusts that the system strengthens monitoring and/or performance.

xvi.   The creation of the umbrella project allowed for extremely weak project monitoring only, as the PIMS reporting mechanism was not designed to take in information from 21 sub-projects. The umbrella projects had no "life of their own." In order to adjust the project documents to the developments of the sub-projects, the umbrella projects were regularly updated. Because the umbrella projects did not have their own mission statements or budgets, the project managers could not and did not dedicate a lot of time to the supervision, guidance and technical backstopping of the umbrella projects as interventions beyond collecting PIMS snippets from a selection of the sub-projects. However, joint funds and guidance management across the umbrella might have led to overall higher effectiveness and likelihood of impact for sub-projects. This is maybe the element that most clearly highlights that the umbrella was just a compilation of its sub-projects.

xvii.   The umbrella projects show considerable weaknesses in the design and implementation of M&E arrangements. This is indicative of a lack of standards for the definition of indicators, or M&E procedures at the time of their creation. Six-monthly reporting took place in the form that the PIMS requires, which could not do justice to the large and complex programme of activities under each umbrella. Until today, the most important aspect of programming and reporting seems to be on an output basis. However, the underlying understanding - as long as the outputs are delivered, impacts are ensured – is incomplete. Most projects display a broken results chains in the project documents but this seems to be a standard accepted practice. Overall the umbrella projects were rated moderately satisfactory.

xviii.   Sub-projects proved to be successful in their implementation, when they were built upon several main pillars such as: a well-functioning Project Steering Committee/Project Management Committee and/or Advisory Board ensuring that implementation follows a feasible and cost-effective path; committed project staff; pilot projects; partnerships with other initiatives; integrated

toolkits, which can provide a technical foundation for policy advice; sufficient counterpart resources and an enabling legislation fostering the uptake of new technologies.

xix.   Factors that have positively influenced stakeholder participation and thus lead to better project performance are: task forces composed of top international experts; committed and regularly meeting Project Steering Committees or Advisory Boards; small and relatively homogenous groups that know each other very well and new communication approaches such as open source internet platforms (e.g. CTCN, en.lighten).

xx.   An important ingredient to UNEP's success are partnerships at sub-project level, e.g. with DTU (e.g. CTCN, GNESD). Country ownership and driven-ness were generally high in projects with high government commitment, existence of political frameworks conducive to successful performance and direct benefits for the stakeholders (e.g. SEAN CC, REGATTA).

xxi.   The lessons learned pay tribute to the fact that the interviewees from UNEP generally acknowledge that the umbrella projects were a somewhat failed administrative exercise rather than a tool for programmatic results-oriented management. The intended effects of better communicability and internal synergies did not materialize. Country-drivenness is an important principle, but must not distract from good project design, good annual planning and results-oriented implementation, or serve as an excuse if any of these are not fully implemented. Branch level outcome hierarchies need to be aligned so that all activities can contribute to common impacts. For example, the DTIE portfolio has many networks, of varying intensity and effectiveness. This is interesting in and of itself, but even more interesting would be an identification of what would be recipes for moving from the networking mode into climate mitigation action.

xxii.   It is recommended that the DTIE Energy Branch formulates a joint Theory of Change that clearly illustrates how UNEP's energy projects contribute to mitigating climate change. It needs to include a consistent expected pathway to impact for the ultimate goal of GHG emission reductions for every project and/or umbrella project. This needs to be supplemented by clearly reflected assumptions and qualified by their degree of realism. Such a TOC should describe cause and effect pathways for all of the approaches taken in the DTIE Energy Branch's policy and technology units (i.e. various information products, knowledge platforms, networks, direct capacity building for national reports to the UNFCCC like NAMAs and TNA, response plans etc.).

xxiii.   Further recommendations relate to the compatibility with donor standards on M&E, and that there is no institutional opportunity to record and collect lessons, which becomes a problem when staff members change. UNEP should work towards placing the organisation strategically as a knowledge-driven and knowledge-providing organisation; and this requires investment in professional KM systems that help UNEP leverage its comparative advantages.

1 INTRODUCTION

1.   The focus of this evaluation is two of the three umbrella projects of the UNEP DTIE Energy Branch, which have formed the core of the Biennial Work Programme 2010/2011 of the Mitigation Programme Framework of UNEP's Climate Change Sub-programme. With the Biennial Work Programme 2012/2013, the two umbrella projects were merged into one umbrella project that was extended until the end of 2014 and included those sub-projects that had not finished by then.

2.   The umbrella programmes were motivated by an institutional push for easier communicability of the very diverse global project portfolio. They were an attempt to formulate a joint vision and objective to strengthen the internal coherence of the UNEP mitigation portfolio and its combined contribution to the institutional goals ("Expected Accomplishments"). Another motivation for the umbrella project was that UNEP intended to make its activities more communicable and wanted to summarize them into fewer items that would lend headlines to specific lines of work.

At the time of its design, the umbrella project was justified as a way to reduce the overall number of small projects. In addition, a new project management database (PIMS) was introduced and managing these small projects in PIMS would have implied high additional administrative overhead. They were seen as a way of combining reporting on project outputs in the newly introduced PIMS system, a system that was not then equipped with all its intended functionalities (and in the view of the Branch still is not working as intended).

1.1   Subject and scope of the evaluation

3.   Project 12/3-P1 "Support for Integrated Analysis and Development of Framework Policies for Greenhouse Gas Mitigation" and project 12/3-P2 "Support for the Deployment of Renewable Energy and Energy-efficient Technologies in Developing Countries" were designed in 2009, bundling a number of smaller ongoing projects, just initiated projects and project ideas into larger quasi-programmes ("umbrella projects"). These two umbrella projects are now undergoing a terminal evaluation. Project 12/3-P2, which was composed of seven sub-projects, was closed at the end of the 2010-2011 biennium and its ongoing activities were absorbed by Project 12/3-P1, which was extended until 31 December 2014. Project 12/3-P2 was not evaluated, and because some of its activities became part of Project 12/3-P1, both projects are now evaluated together. After Project 12/3-P1 was closed at the end of 2014, some of the efforts continued as part of new projects while others had ended.

4.   Even though significant effort was spent by the evaluation manager, the evaluation team and the DTIE Energy Branch, it was not possible to exactly define the scope of this evaluation in terms of sub-projects that have, or have not, been part of the umbrella project. Various project documents, lists and descriptions refer to different sub-project or activities. Some of these activities are not fully fledged projects with stated objectives, outcomes, project milestones and a budget. Some of these nevertheless generated outputs and outcomes, others did not. From the genesis and raison d'être of the umbrella projects – they were intended to represent all activities of the three units of the DTIE Energy Branch to facilitate internal reporting – it would be logical, if all projects were assumed to be part of the umbrellas. A list of all the sub-projects identified as part of the umbrella projects 12/3-P1&P2 at some stage or other is provided in the Inception report.

1.2   Evaluation objectives

5.   In line with the UNEP Evaluation Policy and the UNEP Programme Manual, this Terminal Evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements and (ii) to promote operational improvement, learning and knowledge sharing through results and lessons learned among UNEP and its partners. Therefore, the evaluation identifies lessons of operational relevance for future project formulation and implementation, especially for any follow-up projects.

6.   The key questions posed for this evaluation were:

   (a)   How relevant were the umbrella projects and the associated sub-projects to beneficiary needs and UNEP's mandate and Programmes of Work? How coherent were the sub-projects with the umbrella projects' objectives and proposed intervention strategies, and how complementary were they to each other and other UNEP projects in the same fields?
   (b)   To what extent and how efficiently did the projects deliver their intended outputs? How well did the projects strengthen the capacity of countries to analyse, plan and implement emission mitigation opportunities? In how far did the projects contribute to the adoption of cleaner energy technologies in specific sectors, with an emphasis on more-energy efficient and renewable energy technologies?
   (c)   What were the internal and external factors that most affected performance of the projects and their associated sub-projects? What management measures were taken to make full use of opportunities and address obstacles to enhance project performance?

7.   The evaluation assessed the projects' relevance in relation to UNEP's mandate and their alignment with UNEP's policies and strategies at the time of project approval. For this, an analysis of the project documentation as well as interviews with project managers and UNEP personnel have helped to understand how relevant the projects were for the specified outputs of the PoWs 2010-2011, 2012-2013 and 2014-2015, and in particular for climate mitigation. This was supported by an attempt to reconstruct the umbrella projects' theory of change[3]. This evaluation report discusses the dimensions of relevance, attainment of outputs and outcomes, financial, institutional, environmental and social sustainability, and financial management on the basis of the cases studies and available evaluations. The report formulates findings, lessons and recommendations at the level of the umbrella projects to the greatest degree possible.

1.3   Evaluation approach, methodology and criteria

8.   Due to the nature of the umbrella projects, this evaluation had strong characteristics of a programme evaluation. It attempted to draw conclusions and formulate findings with respect to the umbrella projects based on a comprehensive look at umbrella-wide results, but also looking into a sample of sub-projects in more depth.

9.   The sub-projects were all developed by different staff, financed by different donors and had different, but overlapping implementation periods. For that reason, the projects follow a wide range of individual styles, including the definition of project outputs, for financial planning, for outputs and results documentation. This influences this evaluation to some degree, though all possible efforts were made to leverage this effect by opening further communication channels such as email, visits, electronic surveys, in-person and telephone interviews. However, verbal and informal information,

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[3] Cf. Inception Report

often years after the fact, is considered less reliable than timely monitoring documentation and project reports.

10.   When the umbrella project evaluation was planned, five out of the 21 sub-projects had reviews or evaluations scheduled to coincide with the end of this report in the form of outcome reports, midterm or terminal evaluations. Five review/evaluation products were available by the end of 2015 and could be included in this report: MC4climate, Liquid Biofuels, GNESD, en.lighten and GSWH).

11.   In addition to these reviews/evaluations, six out of the 16 remaining sub-projects were selected for an in-depth assessment as case studies in the context of this evaluation (REGATTA, SEAN-CC, Share the Road, Low Carbon Transport in India, FIRM and CTCN). These six were selected on the basis of five criteria (Table 3): type of activity, umbrella project it belonged to, maturity, geographic scope and whether an evaluation was requested by the donor.

12.   In fact, in the end, only 11 sub-projects had evaluation products available: one terminal evaluation (Liquid biofuels), two outcome reports (GNESD and MC4Climate) and two mid-term evaluations (en.lighten and GSWH) could be included in this review and the six case studies. The other three expected evaluations (AP-CTNFC, GFEI and TNA phase 1) were not completed on time and therefore could not be incorporated.

13.   The total evaluation coverage was therefore 11/21 or 52% of the total sub-project population.

Table 3: Selection of case studies

	Assess-ments	Know-ledge Net works	Policies	Tech Plans	Umbrella project it initially belonged to	Maturity	Geogra phic scope	Evalua tion reques ted by donor(s)
Case studies initiated as part of this evaluation.								
REGATTA	V	V		V	12/3-P1	Mature	Regional, Latin America	V
SEAN-CC	v	V		v	12/3-P1	Mature	Regional, South East Asia	V
Share the Road (STR)	v	v	V		12/3-P2	Mature	Regional, Africa	
Low Carbon Transport in India (LCT India)	v	v	V	V	12/3-P2	Mature	National, India	V
FIRM	v			V	12/3-P1	Mature	Global	V
CTCN	V	V	V	V	12/3-P1	Incipient	global	V*
Evaluations available and reviewed as part of this evaluation.								
MCA4Climate (outcome rev)		V			12/3-P1			V
Liquid biofuels (TE)			V		12/3-P2		Global	V
GNESD (outcome rev)		V			12/3-P1	Mature	Global	V
En.lighten (MTE)		V	V	V	12/3-P2		Global	V
GSWH (MTE)		V	V		12/3-P1		Global	V
Evaluations expected to be available, but not completed in time to be part of this evaluation.								

AP-CTNFC	*V*	*V*	*V*	*V*	12/3-P1		Regional Asia/Pacific	*V*
Global Fuel Economy Initiative (GFEI)				*V*	12/3-P2		Global	*V*
TNA phase 1				*V*	12/3-P2		Global	*V*

*Evaluation required by UNFCCC COP decision; to be conducted by the Climate Change secretariat.

14.   Evaluation findings and judgements were based on **sound evidence and analysis** and are clearly documented in the evaluation report. The information was triangulated (i.e. verified from different sources) to the greatest extent possible, and when verification was not possible, the single source is mentioned as far as the evaluation guidelines allow. Analysis leading to evaluative judgements is clearly spelled out. The evaluation focused on understanding "*why things happened*" as they happened, which goes well beyond the mere review of "*where things stand*" at the time of evaluation. This is perceived to be the most relevant focus for the stakeholders of the evaluation, including, but not limited to, the Energy Branch of the DTIE, as it allows for the formulation of lessons.

15.   The evaluators used the six case studies as building blocks that allow further insight into the design, management and implementation of the umbrella projects. The writing of the case studies took several months, from the first missions in summer 2015 and autumn 2015, to the first case study drafts and on to the final drafts in June 2016. The whole process was accompanied by extensive communication loops between DTIE Energy Branch, project managers and evaluators. After the evaluators´ presentation of the preliminary findings of the case studies in Paris in April 2016, the final rounds of feedback were given by DTIE project officers and project managers and led to a last joint review which cumulated in the finalization of the last case studies in early July 2016.

16.   The individual ratings for the 6 cases are presented in Table 4 and relate to the main findings in the main body of the report. It is noted that the ratings for the umbrella projects, although informed by the process of evaluating the sub-projects, are not an aggregate of the sub-project evaluation findings.

Table 4: Overview of individual evaluation ratings of the 6 case studies (full case study reports are available under the project name on the Evaluation Office website: www.unep.org/evaluation)

	SEAN CC	REGATTA	StR	LCT	CTCN	FIRM	Umbrella
Criterion							
A. Strategic relevance	HS	HS	S	S	S	S	S
B. Achievement of outputs	HS	HS	S	S	S	MS	MS
C. Effectiveness: Attainment of project objectives and results	MS	HS	S	MS	S	MS	MU
1. Achievement of direct outcomes as defined in reconstructed ToC	S	HS	S	MS	S	MS	MU
2. Likelihood of impact using ROtI approach	MS	S	S	MS	Not yet assessable	L	MU

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3. Achievement of project goal and planned objectives as presented in the Project Document	S	HS	S	MS	S	MS	MU
D. Sustainability and replication	**MU**	**MS**	**ML**	**ML**	**MU**	**ML**	**ML**
1. Financial resources	MU	MS	L	L	MU	L	ML
2. Socio-political sustainability	MS	S	L	ML	MU	L	L
3. Institutional framework	MU	HS	ML	ML	S	ML	L
4. Environmental sustainability	HS	HS	L	ML	S	HL	L
5. Catalytic role and replication	S	S	ML	L	S	ML	L
E. Efficiency	**MS**	**MS**	**S**	**MS**	**S**	**S**	**MU**
F. Factors affecting project performance	**MS**	**MS**	**S**	**S**	**S**	**MS**	**MS**
1. Preparation and readiness	S	MS	S	S	MU	S	MU
2. Project implementation and management	MU	MS	S	S	MS	MS	S
3. Stakeholders participation, cooperation and partnerships	HS	HS	S	S	S	S	N/A
4. Communication and public awareness	HS	HS	S	S	N/R	N/R	N/R
5. Country ownership and driven-ness	HS	HS	MS	MS	S	HS	S
6. Financial planning and management	U	S	MS	MS	S	MS	U
7. UNEP supervision, guidance and technical backstopping	MS	HS	S	S	S	MS	MU
7. Monitoring and evaluation	MU	MU	MS	MU	S	U	U
a. M&E Design	MU	U	MS	MU	U	U	U
b. Budgeting and funding for M&E activities	HS	HS	MS	-	S	MS	U
c. M&E plan Implementation	U	MU	MS	MU	S	MU	U
Overall project rating	**MS**	**S**	**S**	**S**	**S**	**MS**	**MS**

2 PROJECT BACKGROUND

2.1 Context

17.   At the time of project design in 2009, improved scientific evidence pointed to the need to bring about faster reductions in global GHG emissions. But many countries and, in particular

developing countries, had insufficient capacity to evaluate options and formulate policies. They lacked the technical and administrative infrastructure needed to underpin priority setting and policy formulation, and in most cases their access to information was inadequate. Compounded by poor access to finance, these barriers hampered efforts to accelerate the rate of diffusion of new, cleaner and more efficient energy technologies.

18.   Both umbrella projects were conceptualized for the Programme of Work 2010-2011 under the Mitigation Programme Framework of the Climate Change Sub-programme of UNEP. They are composed of the numerous sub-projects (21 in total) that were on-going or in the pipeline at the time. The umbrella programmes were motivated by an institutional push for easier communicability of the very diverse global project portfolio. The project documents attempt to formulate a joint vision and objective to strengthen the internal coherence of the UNEP mitigation portfolio and its contribution to the stated institutional goals ("Expected Accomplishments").

2.2   Target geography, target groups

19.   Both umbrella projects are global in scope. Most of the sub-projects are also global in their scope, but several are regional. Very few have a focus on only one or two countries. The regional projects have either Latin America, Africa, South East Asia or the Asia/Pacific regions as their geographic focus. The project RIPECAP focused on North Africa and the Middle East, but was disrupted by the Arab Spring. The project "Share the Road" (STR) started with a focus on Kenya´s capital Nairobi as the first pilot city and then expanded to Kampala/Uganda, Burundi and then Rwanda. Only one project, "Low Carbon Transport" (LCT) is focusing on a single country, in this case India.

20.   The formulation of the sub-project outcomes in the umbrella project documents[4] implies that the main target group of the projects are country governments. In fact, most of the components and sub-projects target national policy makers or negotiators to the UNFCCC, and often the environment ministries. The stakeholder analysis of 12/3-P1 specifies that "the stakeholders include, but are not limited to UNFCCC climate change focal points and government officials responsible for formulating national energy and climate change policies, climate change officers within regional industry associations, and policy analysts in non-governmental organisations and academia." For the various activities of 12/3-P1, some of these groups are singled out as particularly relevant partners. Additional partners that are mentioned here include technology providers and standardization and certification bodies (for evaluations of sub-projects with a technology needs focus) and energy research centres.

21.   The stakeholder analysis of 12/3-P2 refers to a similar target group, i.e. decision-makers in governments and including not only ministries of environment, but also other ministries as well as industry and civil society counterparts. Links to academia and local centres of excellence were also considered important.

22.   The logic of including multiple target groups in the umbrella project that are related to energy and climate policy in developing countries is sound. In order to build capacity within the government, anchoring the initiative in other institutions and cooperating with local partners provides opportunities for policy makers to work out well-designed short-, medium- and long-term policies, reports and assessments. Indeed, in reality, most projects were providing services and platforms for information and exchange to policy makers, for example information on technologies (REGATTA, ERT, REN21), capacity building on UNFCCC reporting (FIRM, TNA) or opportunity for networking and specific requests (SEAN CC). Other stakeholder groups also benefitted from some of these activities, for example in STR, academic consortia played a big role, and in LCT environmental

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[4] Cf. Inception Report, reconstructed TOC

NGOs were heavily involved. A small set of projects targeted specific non-policy stakeholder groups. The GNESD project, for example, facilitated a network of research institutions in developing countries around the topic of sustainable energy development.

23.   However, as all projects were related to sustainable energy policies, the joint focus was generally on policy makers. Where opportunity offered itself, cooperation between the projects was facilitated by the DTIE Energy Branch, so that the same policy makers and government officials could benefit from multiple UNEP projects. This is true for example for the FIRM and SEAN CC. As UNEP and UNFCCC focal points might overlap in the countries this might be natural situation. According to project manager interviews, this effect did not become stronger when there was a joint umbrella programme for which reporting was necessary. Interviews with the project managers highlighted that there is, and has been, generally good exchange and collaboration between them that would facilitate such cooperation even without a joint umbrella.

2.3   Objectives and Programme Logic

24.   Project 12/3-P1 "Support for Integrated Analysis and Development of Framework Policies for Greenhouse Gas Mitigation" has the objective to strengthen the capacity of countries to analyse, plan and implement emission mitigation opportunities. It is based on the premise that the choice of appropriate policy mixes, integration of GHG mitigation considerations into sectoral policies and plans, and early planning and action are key to limiting the concentrations of GHG to a level that would avert the worst consequences of climate change. While this might be correct, it is also understood that they are not sufficient, but that investment in new technologies, changed practices, and other factors are almost always required but beyond UNEP's scope in most cases. The internal programme logic therefore often allows to skip these steps in the logical chain. This leads to a situation where it is "ok" to not be explicit about how the activities exactly relate to the overarching objective, which always puts projects at risk of losing focus.

25.   Activities of Project 12/3-P1, conducted in the different sub-projects and in different countries with different intensities, were to:

(i) promote cost-effective policies through integrated analysis at both the macroeconomic and sectoral levels, and through analyses of the effectiveness of selected policy instruments;

(ii) facilitate the phase out of obsolescent technologies and adoption of new technologies by identifying national technology needs in a coordinated fashion; and

(iii) provide support to and exchange of climate mitigation information amongst national governments by networking government agencies within selected sub-regions – as a means to strengthen institutional infrastructures.

26.   Project 12/3-P2, "Support for the Deployment of Renewable Energy and Energy-efficient Technologies in Developing Countries" has the objective to promote the deployment of cleaner energy technologies in specific sectors, with an emphasis on more-energy efficient and renewable energy technologies. The project based its programme logic on the observations that even as many low-carbon technologies were already commercially viable, transferring them to new markets and mainstreaming their use remained a challenge. In some cases cleaner technologies were too expensive compared to fossil-fuel technologies. In other cases, their uptake was slowed by market development barriers, limited access to information, inadequate government policies, poor regulations and procurement programmes, and insufficient or poorly implemented technology codes and standards. Similar barriers existed on the financing side. Unstable investment environments, fragmented energy policies, unfamiliar business models, inadequate financial instruments and limited know-how obstructed the mobilization of financial resources. As a result, financing was largely still bypassing much of the developing world and smaller-scale projects.

27.   Both projects thus contribute to the same objectives (Expected Accomplishments UNEP EA(b) and UNEP EA(c) of the Climate Change Sub-programme for the UNEP Programme of Work (PoW) 2010-2011). These were:

EA (b): countries make sound policy, technology, and investment choices that lead to a reduction in greenhouse gas emissions and potential co-benefits, with a focus on clean and renewable energy sources, energy efficiency and energy conservation

EA (c): improved technologies are deployed and obsolescent technologies phased out, through financing from private and public sources including the Clean Development Mechanism and the Joint Implementation Mechanism of the Kyoto Protocol.

Therefore, differences in the projects seem rather small. But both projects have an important focus on supporting government planning and enhancing the understanding within governments of opportunities for GHG mitigation.

28.   As the project document for project 12/3-P1 states, P1 focuses on broader upstream climate change mitigation frameworks and their policies, while P2 has a stronger emphasis only on renewable energy and energy efficiency. But looking at the project list, the line is blurred. For example, NAMAS and TNAs, both part of P2, are not necessarily renewable energy or energy efficiency related, but can include forestry, fossil power generation, or waste management; and on the other hand, the REN21 network (part of P1) like many other projects under umbrella P1 are focusing exclusively on renewable energy.

29.   Another criterion for attributing activities, components and sub-projects, according to DTIE Energy Branch staff, was the team structure – projects managed by staff from the DTIE Energy Branch's Policy Unit were preferably included in 12/3-P1, while projects managed by staff from the DTIE Energy Branch's Technology Unit were preferably included in 12/3-P2 with the intention to strengthen cross-project collaboration within the same units and create more synergies in achieving results.

30.   However, the project document for 12/3-P2 attributes the responsibilities for six activities to specific units in the Energy Branch (two activities to the Technology Unit, two activities to the Policy Unit, and two activities to the Transport Unit), four activities to the whole Energy Branch, and three activities to the Sustainable UN Unit of the Sustainable Consumption and Production Branch of UNEP DTIE. Therefore, the internal logic of the two projects seems to be almost indistinguishable – the logic that drove the allocation of the sub-projects to their respective umbrellas was the unit membership of the project manager.

2.4   Planned implementation arrangements and planned milestones/key dates in project design and implementation

31.   The composite nature of the umbrella projects required regular adjustments of the projects, in some cases in rather minor details. For example, 12/3-P2's milestones were adjusted per Project Document Supplement of 29 June 2011 by fine-tuning wording from "fuel efficiency" to "cost-effective emission reductions". 12/3-P1 revisions in 2011 are limited to the milestones.

32.   Larger changes occurred at the end of the Biennium 2010-2011. By then, a number of sub-projects had been completed. The merging of both umbrella projects in 2012 into an umbrella P1 led to a consolidation and significant changes. The project 12/3-P1 was extended, the project outputs were changed into the relevant 2012-2013 PoW Outputs and expected to "reflect any new developments and emerging issues from the UNFCCC negotiations".

33.   The implementation arrangements were different for each sub-project. Sub-projects vary in project duration, have different beginnings and endings, partnering arrangements etc. Many sub-projects had already started before the umbrella projects were approved, others not. Several projects like CTCN or FIRM are implemented through the partnership between UNEP and UDP

(formerly the UNEP Risoe Center). Others like en.lighten, Liquid Biofuels, Asia-Pacific Pilot of Climate Technology Network and Finance Centre in Asia Pacific, Global Technology Needs Assessment, Global Fuel Economy Initiative (GFEI) or GSWH are carried out with funding provided by the Global Environment Facility (GEF).

34.   As the umbrella projects proved to not achieve the expected communicability or scale-related impact, nor enabled a thematic networking between project managers, current thinking with DTIE Energy Branch staff (as of the time of this evaluation) is that grouping 3 to 4 sub-projects in smaller umbrella projects or small clusters ("parasols") is more useful. The transport projects for example are clustered and show coherent -but not co-dependent programme logics, administrative structures and use similar existing channels for fund raising. Within the transport cluster, there was also found a good level of complementarity on activity level with, for example, GFEI covering the national level and the vehicle fleet and StR covering the local and national levels and non-motorized transport.

2.5 Project financing

35.   No new information on the financing and financial management became available during the evaluation beyond the information that was already included in the inception report. Funding for both umbrellas came through the sub-projects from a multitude of sources. Apart from GEF funding, most funding came from bilateral donors. The biggest donor is DANIDA, followed by the German BMUB, the Finnish MOFA and the Norwegian government. This highlights that UNEP has a strong role as an implementing agency for Nordic donors with comparatively weak own implementation capacity.

36.   Financial details for the umbrella projects are hard to reconstruct. It became apparent that overall annual project budgets were never quite consistent. Initially, it was encouraged to include unsecured funds into the umbrella project's budget. Approved project ceilings were "hard", any funds that might be received additionally would have required additional administrative processing, and new indicators and milestones. Setting the umbrella volume higher than the sum of the already contractually secured path would leave more flexibility. Additionally, it was impossible to trace back how the annual budgets relate to the annual spending plans, because some projects had entered much larger amounts into the financial tableau than they could possibly spend in a year.[5]

37.   If the umbrella project budget had had its own financial status, this could have proved helpful for the DTIE Energy Branch. For example, if umbrella-project wide financial management had allowed that shortfalls in one project could have been mitigated by underspending in another project, this would have been a significant benefit to the umbrella structure. However, as every sub-project was responsible to its donors and needed to apply for extension and transfer of unused project funds between periods separately such financial cross-transfers were not possible. This means that unused funds could not be used for shortfalls of other more successful projects, and some projects were not able to spend the funding allocated. Only SEAN CC managed to support

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[5] The following documents were reviewed, but did not lend themselves to a coherent and substantial financial analysis: Original financing plan for P2, Original project budget of 12/3-P1 "Support for Integrated Analysis and Development of Framework Policies for Greenhouse Gas Mitigation" from project document signed 10 June 2010, Planned budget by component for 2010 and 2011 for P1 (from ProDoc 2010,) Planned budget by component for 2010 and 2011 for P2 (from ProDoc 2010), Project budget summary (sources) actuals for 2010 – 2012 and planned for 2013 (from ProDoc supplement 2013), Planned budget of remaining projects for 2014 (from ProDoc supplement 2014)

other project and initiatives with their funds. This was not in the form of a formal budgetary transfer but by aligning activities.

3 THEORY OF CHANGE OF THE UMBRELLA PROJECTS

38.   In the reconstructed TOC of the inception report the hypothesis was formulated that it would be useful to cluster the projects according to UNEP Outputs. Clusters on knowledge networks, policies, assessment and plans were postulated, starting with the typical outcomes of UNEP Energy Branch activities. Table 5, on the other hand, implies a clustering by the activities that the projects are focusing on: studies/analyses/research and data; capacity building, particularly in workshops; network structures and infrastructure; policy and decision-support tools; case-specific policies and plans (where "case" can refer to a topic and an administrative unit) and – in exceptional cases - their implementation. In future, these typical activities could serve as the building blocks for a coordinated Theory of Change for the Energy Branch – which should start at the overall objective of an environment-friendly energy sector.

39.   In addition, substantive differences between the interventions are highlighted when comparing the individual TOCs of the sub-projects. Well planned projects have TOCs with coherent links between outputs, outcomes and desired impacts that are in line with the thinking of the project team and reflect the overall approach of the project in the ProDoc and subsequent project reporting. In the case of other case studies and projects, the reconstruction of a TOC points to project weaknesses right from the start of the project, e.g. that the logframe in the ProDoc was not logically laid out and/or conceptually linked to the project statement and approach.

40.   However, even in the strongest sub-project TOCs often the logical pathway is not thought through to the actual GHG emission reduction. For instance, in the LCT India project: there are no direct links between project outputs and intermediate outputs for the national and local level. In the FIRM project the outcomes at the level of intermediate states are taken from the Expected Accomplishment or PoW outputs, but a poor conceptual link with the project outputs exists, and therefore the PoW outputs appear misplaced within the logical framework. Poor logical links might also be one reason for the fact that no reporting document ever refers to the logical framework. Where documents do not specify what the result of an activity should be, it is also hard to measure if they can ever contribute to the environmental and climate challenges in the way that was planned. Even if they do indicate that the ultimate objective of a project is to facilitate climate mitigation (and saying this does not necessarily mean that saved emissions are a measurable impact indicator), it is often not clear that they are aware of how exactly stakeholder capacity building or decision support systems contribute to that objective. This can easily lead to gaps in the impact chain, when for example the LCT project focuses strongly on academic outputs, or the capacity building programmes serve only as general knowledge repositories that might not have any influence on energy consumption and emission behaviour. Fundamentally, a lack of a clear causal pathway from outcomes to impact and not defining outcome indicators, limits the measurability of the impact, and might also limit the likelihood of impact.

41.   Table 5 illustrates another approach to comparing the logic frameworks of the sub-projects and presents the hierarchy of results for the six case study projects, starting with outputs on top, to impacts on the bottom. These elements have been reconstructed from the project documents within the six case studies. Table 5 illustrates that the sub-projects of the umbrellas do not use the same terminology. "Components" and "outputs" are used for elements that in a logframe would be on a higher level. "Objective" is typically used for elements that in other organisations would be a short-term or intermediate outcome. While for the evaluators it is confusing that standard terminology is not adhered to, the varied use of this also might support the hypothesis that there is no harmonized use of these terms internally either. This observation is also supported by the use of

the UNEP Outcomes on the highest level of the impact hierarchy in the project documents. As all project documents are signed off by UNEP's Quality Assurance Section, this is a criticism that also relates to the internal and conceptual understanding in the organisation, not only to its application in the Branch.

Table 5: Outputs, outcomes and intended impacts of case study projects

		FIRM	CTCN	Share the Road	Low Carbon Transport	REGATTA	SEAN-CC
outputs	unspecific						synergies and partnerships with other major CC initiatives
	Studies, Resaerch, Data	FIRM success stories and lessons learnt that build support for multilateral approaches to climate		UN Avenue Report: Kenya Showcase Project	Integrated assessment at national level Case studies		identification and assessment of national CC institutional strengthening needs
	Capacity building workshops		request incubator		Dissemination and information exchange	Regional roundtable and a web-based Regional Gateway for Climate Technology and Policy Innovation;	capacity building and training around UNFCC high profile topics
	Network structures, facilities, platforms, workshops	**Component C**: Increased South-South and North-South cooperation on climate change mitigation, technology transfer, and NAMA implementation Enhanced or expanded regional network for knowledge and experience sharing (e.g., in Africa)	**Output 3**: A network of national, regional, sectoral and international technology centres, network, organisations and initiatives is facilitated			Regional Knowledge and Technology Hub for Climate Change mitigation, and provision of mitigation /adaptation related advisory services to key stakeholders,	biannual network meetings, exchange visits for staff or focal points between countries regional sectoral subnetworks a roadmap for sustainability of the network
	Policy- and decision making-supporting tools		response plans	Share-The-Road Design Guidelines for NMT in Africa; Impact assessment tool for NMT	Development of sustainability indicators; Framework for climate proofing; Methodology for Low Carbon Mobility (LCM) for cities; Policy recommendation		
	Case-specific Policies and Plans	**Component A**: National sectoral low carbon development frameworks that contain a list of priority NAMAs, including assessments of policy and finance requirements, carbon finance possibilities, technology specifications, institutional strengthening needs, and considerations for MRV under the		NMT Policies for Uganda and Nairobi	Low Carbon Mobility (LCM) plans for cities		
		Component B: NAMAs or country specific priority mitigation programmes e.g. on renewable energy development or energy efficiency and conservation.					
	Implementation of Policies and Plans		**Output 2**: The development and transfer of existing and emerging environmentally sound technologies as well as opportunitites for North-South, South-South and triangular technology cooperation is stiulated and encouraged through				

		Output 1: Developing countries needs for technical assistance on climate technology are fulfilled				
Immediate Outcomes	**Component A**: Priority low carbon development options are identified for FIRM countries	**Output 1**: developing countries' needs for technical assistance (i.e. Requests) on climate technology are fulfilled / responded to		Transport Action Plan at the national level		
	Component B: FIRM countries benefit from increased national capacities for implementing low-carbon projects; improved national mechanisms, policies and instruments for deploying low-carbon technologies; and increased awareness of the national potential for low-carbon development	The capacity and capability of developing countries to identify technology needs, prepare and implement technology projects and strategies to support action on mitigation and adaptation; and to enhance low emission and climate resilient development is increased.				
	Component C: Developing countries beyond those participating in the FIRM project benefit from faster and more cost effective implementation of mitigation efforts	**Output 2:** the development and transfer of existing and emerging EST (…) and (…) technology cooperation is stimulated and encouraged				
Longterm outcome	Countries make sound policy, technology and investment choices that lead to the phasing out of obsolescent technologies and deployment of climate change mitigation technologies.		NMT encouraged		overall objective (outcome) is to "to strengthen the mobilisation and sharing of knowledge on climate change issues and enhance capacity for related technology transfer and deployment actions for climate change adaptation and	objective is "to strengthen institutional frameworks for coordinating climate change at national and regional levels with a view to enable countries to adopt integrated approaches for climate resilient and low carbon development and respond to UNFCCC
Impact	reduced GHG emissions	reduced GHG emissions and enhanced resilience to climate change	GHG emissions, accidents and air pollution reduced	reduced GHG emissions		

4   FINDINGS

4.1   Strategic relevance

42.   The umbrella projects are consistent with UNEP´s mandate and policies. Their expressed programme logic formalizes UNEP's mandate and the Expected Achievements of UNEP's POW as well as other language from UNEP's institutional documents. Strategic relevance has been rated *Satisfactory.*

43.   All sub-projects have been found to be consistent with UNEP's mandate and policy. UNEP´s projects build on existing capacities in developing countries. The activities undertaken have national ownership and could, potentially, lead to sustained capacity gains. This national ownership is essential and has offered the umbrella projects the possibility of tailoring capacity-building and technology support programmes to specific needs as identified in each country´s environmental priorities. Collaboration on sectoral issues with relevant specialized agencies and also with the civil society organisations, knowledge-based institutions and the private sector took place at different levels, depending on the country scope of the projects.

44.   Right from the start of the project, many of the projects are strongly country-driven. In the case of SEAN CC for instance, the level of country ownership and responsibility is relatively high as governments with their different entities, offices and staff are the primary stakeholders of this project. They decide on what climate change activity they will do with the 100,000 USD received by the project. When a country is hosting a SEAN CC event, the relevant government agencies help with the logistics of the meetings, in some cases contribute to agenda content, and in other cases even deliver that content.   Relevant project approaches were identified on the basis of inputs from Governments and relevant governmental and non-governmental organisations and stakeholders. Different participating countries were encouraged to identify their own needs in technology support and capacity-building to meet their own environmental priorities.

45.   FIRM was designed to deliver an "adjustable package for each country focusing on either renewable energy or energy efficiency mitigation opportunities". The idea that was presented in the project design was to offer each participating country a complete package of support from which each country could choose those components that fostered their efforts towards the implementation of cleaner technologies and overcame barriers that prevented their priority NAMAs from getting started.

46.   The Bali Strategic Plan (BSP) provides a comprehensive framework for strengthening the capacity of Governments in developing countries and countries with economies in transition to coherently address their needs, priorities and obligations in the field of environment. In line with the Bali Strategic Plan, many projects strongly promote and support south-south cooperation.

47.   Some projects like REGATTA are almost entirely based on south-south cooperation with a strong focus on knowledge-sharing with relevant stakeholders via technical assistance where project events enable the sharing of lessons among countries in the region. Thus they were overall strongly country-driven.

48.   Although the BSP also addresses the development of gender mainstreaming strategies in environmental policies, in many ProDocs gender considerations are only "politely" mentioned in a few sentences, if at all (e.g. REGATTA). In project implementation the projects widely differ in how they paid attention to the gender aspect. There are projects like LCT that addressed gender in form of an equity report that was discussed with project team and stakeholders, others like CTCN discuss gender mainstreaming strategies in their stakeholder workshops. SEAN CC has encouraged the nomination of women for network meetings, trainings and workshops in its second phase, recognizing that globally women are not adequately represented in the international climate change

policy fora. As a suggestion of the project team which was endorsed by the SEAN CC Steering Committee, female delegates were sponsored to attend the COPS and inter-sessional climate negotiations in Bonn. A general pattern on which type of projects looked more at gender than others could not be derived.

49.   Other approaches like the UN Common Understanding on Human Rights Based Approach or the UN Declaration on the Rights of Indigenous People are not specifically mentioned in the project documentation, neither are there remarks concerning the safeguarding management systems.

4.2   Achievement of outputs

50.   Most sub-projects are process and output focused and therefore generally strong in attaining their immediate outputs. However, for the umbrella projects, output formulations are often unclear and thus their attainment is also not clearly defined. This aspect is therefore rated *Moderately Satisfactory* on the umbrella level.

51.   The outputs of the two umbrella projects are effectively an aggregated list of sub-project outputs i.e. there are no separate outputs expected to be delivered by the umbrella projects independent of the sub-projects. Therefore the umbrella project outputs are often results statements and used as placeholders for sub-projects and therefore often pitched at a higher results level than outputs as defined in UNEP (products or services delivered by interventions). They often include terms like "adopted" or "used" which would typically be used in outcome statements, i.e. one step up from outputs in the results hierarchy. Overall, there was a lack of consistency in the levels at which outputs were pitched (see Annex 6.3, Table 8).

52.   For some other sub-projects it is also comparatively clear which sub-projects are contributing to which umbrella projects outputs (e.g. Liquid Biofuels). However, a number of sub-projects of the umbrella project cannot be mapped on the outputs, for example transportation sub-projects or energy access sub-projects (see Annex 6.3, Table 8).

53.   According to OECD DAC definitions, these "Outputs" would be more similar to outcomes. While it is clear that these outcomes need to be resulting from the sub-projects' outputs and outcomes, there are no clear linkages formulated. As discussed in the inception report, the logframes of the projects also do not describe this logic and lack useful indicators or means of verification.

54.   While most sub-projects managed to succeed in producing their programmed outputs, the six case studies highlight a number of challenges to timely project implementation. Sometimes adjustments to the work programme became necessary, for instance, when partners withdrew from the project. That was the case in LCT India, where one city withdrew from the project, or FIRM, when Ethiopia withdrew from the initiative. The reasons for these withdrawals are not always clear. In the case of Ethiopia, the reason for the withdrawal was only very briefly mentioned in a report as of "difference in perception" over the quality of work that should be required for satisfactory completion of the project. For the sake of learning from experience, it should be thoroughly documented why partnerships were ended and which activities and misunderstandings led to the break up. Overall project planning seems to be very much driven by the outputs rather than impacts beyond capacity building for individual stakeholders.

55.   Several sub-projects adopted a flexible approach to project implementation which made it convenient for the participating countries as they could take their time to organize a broad-range of stakeholder participation, but also led to slower implementation. For example, UNEP's and UDP's services under FIRM were delivered as an adjustable package focusing on renewable energy or energy efficiency opportunities as chosen by the countries. In a demand-driven approach FIRM offered each country support to overcome non-financial barriers by a process of formulating Low Carbon Development Strategies (LCDS) and NAMAs. However, this approach proved time-consuming

for the project staff and presents difficulties in terms of project management. Even if UNEP could have managed the process more directly, it would have needed more time than estimated.

56.   In other cases, the flexible approach made it difficult to understand if a project was successful in achieving its outputs or not. SEAN CC for example seemed to have such a high degree of flexibility in its work plan that it undermined the definition of SMART output indicators and subsequently also the reporting on these. Weak project planning resulted in a lack of focus and a failure to demonstrate success through standard approaches to project management. However, a letter of appreciation was submitted to demonstrate satisfaction by the Indonesian counterpart to the evaluation team. This indicates that the output seemed to be useful for the country, but a systematic assessment of outputs and structured learning are impossible on this basis, which poses a serious challenge to results based management.

57.   In terms of the types of outputs provided by the sub-projects, they are very different. Strong emphasis of several sub-projects lies in the area of *knowledge networks* (e.g. SEAN CC, REGATTA, CTCN) as well as *technology information dissemination* (SWERA, GSWH, en.lighten). Four projects work mainly on policies (GSWH, en.lighten, FIRM, and LCT), all of which have national policy components, with mixed levels of success. Several projects (CTCN, AP-CTNFC, REGATTA) focus on a combination of all these approaches and could be seen as a *technology transfer cluster*.

58.   Most projects, including those named above, produced guidelines, information databases and planning documents. The design guidelines for non-motorised transport in Africa, an output of the STR project, benefitted from the experiences and show-casing of a pilot project, which thus contributed to producing the expected output. The non-motorised policies for Nairobi and Uganda are important examples of effective replication.

4.3   Effectiveness: Attainment of project objectives and results

59.   The umbrella projects' documents do not formulate clear objectives. Their results are the sum of the results of the subprojects[6]. However, as projects are very output driven and often do not exhibit a significant orientation for environmental impact, results statements are very soft and often not measurable, and attribution is very difficult, and outcomes in terms of environmental outcomes are much more influenced by non-project related factors, the achievement of direct outcomes is only *Moderately Unsatisfactory*.

60.   According to the logframes of the umbrella projects, their outcomes are equal to UNEP EAs. The outcome formulation in the umbrella projects is not supported with SMART indicators. Using the UNEP EAs for the project outcome definitions, leads to a non-measurable and non-monitorable results statement ("Countries make sound policy, technology, and investment choices that lead to a reduction in greenhouse gas emissions and potential co-benefits, with a focus on clean and renewable energy sources, energy efficiency and energy conservation"). This project outcome is not measured or monitored, and it is doubtful if that would even be possible, without a norm of what is a sound choice, or what is the time frame on which it has to lead to energy savings. It is also not always defined how many countries are expected to make how many such choices – it can also not be assessed if the umbrella projects achieved these outcomes. As there is no guidance on how the activities should link to this outcome, it is not possible to fail on this outcome as its link to the activities ("relevance") is not defined.

61.   While it is clear that the umbrella-level outcomes need to be resulting from the subprojects' outputs and outcomes, there are no clear linkages formulated. The sub-project outcomes cannot

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[6] Cf., for example the logframe in the project document of umbrella P1/2-3 of 2010.

necessarily be aggregated to result in the umbrella project outcomes – which is understandable given the fact that often the sub-projects were created independent of each other and of the umbrella project. As discussed in the inception report, the logframes of the sub-projects do not describe this logic and lack useful indicators or means of verification. A comparison of the immediate outcomes of the six case studies reveals that many sub-projects delivered their intended outcomes, sometimes with adjustments in the work programmes. However, many of the projects also have non-measurable and extremely unambitious outcome statements. In addition, some, like LCT, do not demonstrate delivery against their objectives because in the programme logic the link between their outputs and the intended results was not considered sufficiently. In the case of CTCN the project was able to attain its outcomes, even in an early stage of deployment, and even if targets were not fully reached within some project components. After an analysis of the circumstances the Advisory Board supported a downward revision of targets for this particular project component.

62.   In addition, even when projects accomplish their immediate outcomes, no actual impact of GHG emission reductions has been demonstrated. This is largely impossible because the programme logic from building capacity or supporting policies to GHG mitigation impacts is very indirect and the impacts are dependent on many external factors (institutional, socio-political and economic). These are very country specific, out of project control and might not be measurable – let alone attributable to UNEP support. Also, where project activities might have triggered processes that go in the direction of the intended impacts like GHG emission reductions or better adaptation to climate change, the time needed to reach these long-term goals is far beyond the project lifetime.

63.   Overall, due to several structural reasons and the specification of outcomes, the question of whether or not longer term impacts will be achieved is unanswerable with any level of credibility. This weakness is clearly visible and relates to the indicator frameworks of the individual projects as well as of the umbrella projects. In a number of projects there are no indicators at all. Amongst those are REGATTA and SEAN CC. In others, like FIRM, indicators were only partially formulated in the ProDoc. None of them was apparently further developed during the early phases of project implementation and none of the projects has aligned its indicator framework with the umbrella project.

4.4   Likelihood of impact

64.   As discussed above, the programme logic of the umbrella projects and their sub-projects is anchored in the EAs, which are on the level of outcomes in terms of capacity built in governments and improved framework conditions for the utilization of sustainable energy technologies. This means that the programme logic does not reach all the way to actual GHG emission reductions, or actual investment or utilization of renewable energy. Leaving out the ultimate impact from the internal planning paradigm means stopping short of the ambition to actually reach it –built capacity and willingness in a government are just two preconditions that provide the potential for a government to put some policies in place. How good these policies are and whether other barriers might prevent actual action on energy is highly questionable. The path to actual GHG emission reductions is also long and can still be derailed by many external factors. This is true for sub-projects as well as umbrella projects, independently and together. The likelihood of impact is therefore overall *Moderately Unlikely*.

65.   The two umbrella programmes focus strongly on capacity building and analytical support for governments, providing policy proposals, data and analysis and academic capacity. The assumption that UNEP projects can reach the relevant stakeholders in the government did not always work out, even for those projects that work directly with the governments. For example projects like the STR or LCT that worked through non-governmental partners had trouble reaching policy makers. However, the GNESD programme which did not work with governments directly but with research institutions was able to provide evidence for policy impact.

66.   The projects in the case studies actually led to comparatively few tangible policy impacts. A lack of good internal documentation may have contributed to this finding, but as affecting change at a policy level is a core planned element of the change process, it is reasonable to expect this to be an important area to document. So far, the measurable outcomes from the six case-study projects are limited to a municipal NMT policy (STR), two adaptation monitoring systems (CTCN), and an unknown number of non-financed NAMAs (i.e. only declared intentions, so far, FIRM). The impacts resulting from the outcomes of the other projects – in particular in the form of improved county capacity – are very intangible. This balance is rather poor even though it is in line with what the projects set out to do, which is to increase capacity.

67.   Even in those cases where the programme logic of sub-projects includes the implementation of policies and plans that were formulated within the project, and where the financial means are available, the projects have not been particularly successful in implementing policies. An example is the FIRM project which has only recently completed the first NAMAs – expected project closure was in 2013 - and has not financed any implementation, even though funding was available. But also the CTCN is not implementing as many response plans as were initially envisioned. The reasons are currently still unclear. Potential reasons might be a lack of in-country capacity / presence, or too strong a focus on research and studies to support governments "behind closed doors" instead of leveraging financing and integrating the private sector or other in-country stakeholders in the process.

68.   Often, thus leveraging of impacts during the project remains out reach. In particular, as most projects stop at an early step in the causal chain towards these impacts, attributable GHG impacts cannot be part of these results. They depend too much on external factors (institutional, socio-political and economic) that are very country specific, are out of control of the project and will take years to materialise. This is true for most sub-projects and both umbrella projects. In addition, due to the lack of SMART indicators for their outcomes, UNEP will be challenged to demonstrate its contribution, even if policies in the target countries should be implemented.

4.5   Sustainability and replication

4.5.1   Overall Sustainability and Replication

69.   Sustainability of the umbrella projects is given, as the umbrella projects encapsulate all of the work of the Energy Branches Policy and Technology units, which will continue working towards sustainable energy systems. However, this does not necessarily apply to all sub-projects The resulting rating is *Moderately Likely.*

70.   The sub-projects under the umbrella project vary significantly in their project focus and duration. It is therefore hard to make generalized statements about the likelihood that project activities will continue after the project is closed. Some sub-projects, like FIRM, were only initiated to facilitate a political process of formulating low carbon development strategies. Once it is over, it will be phased out in developing countries within a short time span and without succession through UNEP, although the GIZ NAMA Facility might continue to support countries in planning and implementing NAMAs. In this case the project had enough financial means so that it could have implemented NAMAs, but did not reach that point in its implementation for unknown reasons. Contrasting this with another policy-outcome oriented project like en.lighten shows that sustainability of project activities is also a function of project length; en.lighten covers a longer time span and has a greater chance to initiate longer lasting political processes by providing support for efficient lighting programmes and the phasing-out of incandescent lamps in developing countries. If the initiative succeeds in the successful establishment of the Global Forum and the global plan of action, the foundation for achieving socio-political sustainability is laid.

71.   Similarly, the network and information platform projects SEAN CC, REGATTA, Ren21, GNESD have been supported for a long time. But unlike en.lighten, these projects rely on continued funding for the actual project activities. GNESD's funding is approaching a closing phase now. The example of REGATTA is rather exceptional as many of the consulted stakeholders have indicated that they would like to keep engaged in project activities even if the project closes. The communities of practice have managed to attract a good and consistent following. This shows that the level of ownership built within the project is sufficient to carry results into the future. The partner institutions are committed to what they have done with REGATTA and are highly likely to continue doing it even without REGATTA.

72.   A third type of project sustainability is the Liquid Biofuels sub-project that aims at encouraging the research, sustainable production and sustainable use of biofuels as one solution to reducing carbon concentrations world-wide. These types of international guidelines and information document will still be around when the project is finished and add to the global body of knowledge.

73.   In SEAN-CC, a high level of commitment was achieved amongst stakeholders (here government officials) with respect to climate change agendas. The project has successfully built capacity in key stakeholders, but whether or not these will continue to play a role in implementing low carbon and climate resilient actions is beyond the reach of the project.

74.   Overall, project sustainability is rated Moderately Likely (ML), albeit acknowledging that most knowledge efforts will require continued funding.

4.5.2   Financial Sustainability

75.   Financial sustainability at the umbrella level is not necessarily desired. On the sub-project level, funding after project closure is so far a challenge for many sub-projects. Although being contingent on funding, many project managers acknowledge that there are today numerous sources of funding available for low carbon and climate resilient development and projects might sometimes only need to know how to access those funds. Hence, financial sustainability is *Moderately Likely.*

76.   However, during project implementation, funding is so far a challenge for many sub-projects. This can be illustrated with the example of the CTCN. Even though it is the Implementation Arm of the UNFCCC Technology Mechanism, it has no institutionalised, stable financing and relies on voluntary bilateral contributions. Project management has to dedicate a lot of their time to discussions with potential donors. It can provide a certain level of service to the National Designated Entities, and support them in formulating response plans, but if these require more than 200.000 USD of funding for implementation, this is beyond the reach of the programme. While this is in line with UNEP's mandate as expressed in the BSP, it is not in line with the mandate of limiting GHG emissions, as the effort and finances spent on formulating the response plan might be lost if the plans are not funded before they are surpassed by events. The same applies to SEAN CC, where the participating countries received training via the network and because of that are in a much better position to access this funding. In the case of REGATTA, counterpart resources were contemplated in the project design, but in the end the project did not raise the additional funding it said it would contribute to the project staffing costs. In-kind resources were also identified, but the project has not effectively tracked these or others that may have been brought into the project by a collaborating partner or a country government. Particularly worrisome in this respect seems the FIRM where – judging from the large initial budget – it seems that implementation funds for one NAMA might have been available but were not spent.

77.   There are also other sub-projects like en.lighten, that do not require the continuous provision of financial resources once the barriers to the economic uptake of efficient lightning technologies are removed and the technologies adopted. Once there are tangible benefits and

savings provided by these technologies, they will be adopted by the users without further financial implications.

4.5.3 Institutional Sustainability

78.   To successfully implement the sub-projects UNEP strongly builds on long-standing established partnerships with acknowledged partners. Therefore, the overall, institutional sustainability of the umbrella projects is rated likely. However, changes in the enabling conditions such as the political sphere of individual developing countries can always cause unforeseen challenges to institutional sustainability on sub-project level as staff might be exchanged or institutions shut or re-organized. Institutional sustainability is rated *Likely.*

79.   The sustainability of the results and onward progress towards impact at the national level are highly dependent on appropriate institutional and governance structures. In many developing countries democratic elections result in a change of political leadership and some turnover of civil servants in Government and ministries. This might also lead to a leakage of the built capacity which is a threat to the sustainability of government-focused capacity building in general. Other challenges derive from the fact that the organisations/offices/bodies charged with dealing with climate change issues are not the most powerful and/or there is poor inter-sectorial coordination between the institutions.

80.   The example of SEAN CC shows that although the individual capacities of the staff of the national climate change focal points were strengthened, there is no guarantee that those capacities remain in place where they will be employed in a progressive execution of actions leading towards tangible low carbon or climate resilient action on the ground. It also displays that the focal points and their related staff do not always have the mandate to coordinate, or the ability to carry out the necessary coordination to positively affect climate change.

81.   The combination of personal commitment of staff combined with institutional commitment is an asset, as the example of LCT India demonstrates, where several key individuals from the project consortium, including the project manager, are permanent staff at their home institutions, which helps retaining institutional knowledge beyond the project lifetime including the continuation of dissemination as part of related projects and events.

82.   Supporting individuals in key institutions to help the process along and to advocate internally for a stronger role of EST policy might also be a winning strategy, even without institutional change. This can be through personal capacity building, but also through guidelines, manuals, internet platforms and other orientation tools. The updated guidelines on LCT published by the Ministry of Urban Development in India, for example, will contribute to secure a certain level of recognition and institutional sustainability. Institutionalization can also take place by supporting local agencies with advocacy and awareness raising to keep up the momentum with regard to stakeholders and the general public. STR does this effectively, because the STR project partner consider that to be the main role of the project.

83.   Institutional changes with relevance require a very long-term perspective. The network projects have partially succeeded in building up structures that continue to be self-sustaining. For instance, REGATTA has built communities of practice that might continue with their work, even without the project itself. The most successful example in the portfolio might be the GNESD – in this case the individual institutions appear to have benefitted in global reputation and quality of work through being linked to the UNEP network, and at the same time, this has also raised the profile of the network. The set of institutions involved in the GNESDs has formed the basis for the CTCN, and contributed to projects like the REN21. The ties that link UNEP, UDP and the GNESD institutions have benefitted both UNEP and those institutions and helped strengthen impact and sustainability.

4.5.4   Environmental Sustainability

84.   The umbrella projects and sub-projects are designed to implement adaptation and mitigation actions that favour or improve the environment. The sub-projects will likely not lead to significant environmental degradation, in particular, if additional environmental consideration accompanies further implementation of these projects. Therefore the rating is *Likely*

85.   Depending on the nature of each sub-project, different environmental outcomes are targeted. CTCN, for instance, focuses on the deployment of cleaner technologies, others on non-motorised transport (LCT India), on solar water heating (GSWH), on biofuels etc.

86.   As drafted within the TOC, the outcomes of the sub-projects of both umbrella projects contribute to the intermediate state that "low carbon and clean energy sources and technologies are increasingly adopted and inefficient technologies phased out" and the long-term impact of reduced reliance on fossil fuels and reduced global impacts of climate change and GHGs caused by the energy sector.

87.   The achieved outputs are intended to set processes in motion that are pointing towards the achievement of the intermediate state and long-term impact, but as mentioned above, the explicitly planned objectives do not automatically lead alone to the expected impacts

88.   Although negative environmental effects should not be resulting from the projects, any mitigation or adaptation action for which proper and thorough due diligence is not done, could have detrimental effects on the environment. The due diligence is the responsibility of the country stakeholders.

4.5.5   Socio-political commitment

89.   The socio-political commitment takes place at the level of the stakeholders and therefore only at sub-project level, because the umbrella projects don´t have stakeholders. While there are setbacks, generally it can be summarized that overall socio-political commitment within UNEP's target group is *Likely*.

90.   Almost all the sub-projects rely on the national political environment and the political internal decision making dynamics to foster low carbon options. The political will and support is crucial to the sub-projects´ outcomes and is present in most countries. Both umbrella projects contribute to that by creating greater awareness on environmental impacts through capacity building of various stakeholders on specific technologies, whether these are proven technologies (like SWH) or relatively new technologies with potential (like biofuels). Behaviour changes of better informed individual stakeholders are supposed to influence the behaviour of others, and thus lead to more socio-political commitment and facilitate the transformation of markets of SWH, LEDs etc.

91.   That this is not always easy is obvious: environmental ministries, the counterparts of UNEP on the national level, are not necessarily among the most influential parts of governments, and often short-staffed. They are also dependent on the political support of the rest of their governments, in particular in an area like energy where other line ministries are leading the political direction. Apart from the political willingness of governments to take action, success on sub-project level always depends on the effective participation, learning and satisfaction of its participants and the translation of learning to action on the ground.

4.5.6   Catalytic role and replication

92.   Catalytic role and replication are dependent on the stakeholders and therefore only apply at the sub-project level. Overall, the rating for catalytic role and replication is *Likely* as many projects pilot replicable activities in a country-driven manner and outreach and networking provide the grounds for replication**.**

93.   The basis for the catalytic role of many projects is its approach of supporting the creation of an enabling environment. In some sub-projects, the development of a toolkit comprises policy and technical measures to disseminate expertise and know-how. In other sub-projects, this approach is complemented by the creation of innovative pilot activities. For example, the pilot activities carried out under the en.lighten project have created an enabling framework to facilitate the widespread utilization of energy-efficient lighting products and the gradual phase-out of incandescent bulbs. Also, pilot activities under REGATTA focusing on ecosystem based adaptation are training specific community members on techniques to adjust their farming practices to climate change.

94.   There are projects where the project management demonstrably learned from earlier lessons and clearly avoided, for example, creating duplication with other UNEP or external initiatives. A good example for this is the FIRM project. The scoping mission to Costa Rica revealed that the country was already actively engaging with a UNDP project on Low Emission Capacity Building in support of Costa Rica´s carbon neutrality goal. Therefore both parties agreed to integrate the FIRM project activities with the existing UNDP project activities.

95.   Replication was the major objective behind the selection of mid-sized cities in the LCT India sub-projects. The replication and dissemination potential of the project has not been sufficiently exploited by the project staff, because networks such as ICLEI or UN-Habitat were not directly involved in dissemination activities and limited efforts (e.g. development of a draft proposal for the GEF) were made to replicate or upscale the project. But the involvement of IUT and the CMP guidelines will make a good contribution to the replication of the recommendations.

96.   However, even if open channels are maintained between organisations this does not automatically lead to better project results. Take the case of UNEP-UDP and GIZ NAMA Facility, for instance. Although within the FIRM project both organisations cooperated in the area of knowledge exchange and even produced joint publications, the NAMA Facility did not support the FIRM project by selecting and supporting the implementation of one of their developed NAMAs in one participating country.

97.   REGATTA however, is a good example of a sub-project that has synergised with several other initiatives in the region and has built its work with partner institutions. REGATTA has raised beyond a 2:1 ratio of co-financing from other organisations, in the form of in-kind contributions, to help implement their activities and achieve outcomes. En.lighten also placed special effort on accomplishing efficiencies by using pre-existing institutions, agreements and partnerships. Thus in Central America for instance, the project was implemented through a Mesoamerican Programme. The same applies for Chile, Tunisia, and the Russian Federation.

98.   The aspect of outreach is integral to all sub-projects, only varying in its details. There are projects like CTCN and en.lighten that strongly focus on facilitating the continuation of learning networks and co-operation between different stakeholders to manage and disseminate information, experiences and lessons learned. Scaling up examples of successful technology transfer is an important component within the knowledge management system of CTCN for accelerating and transferring the deployment of adaptation and mitigation technologies in developing countries, though the programme is too young to assess its impact. En.lighten was built upon the experiences of previous GEF initiatives and gained by the experience and lessons learned in the portfolio (i.e., direct engagement of private sector actors, mainstreaming within national energy policies, etc.). So while being a replication of a successful approach, it additionally leverages additional financial resources through partnerships and networking with the lighting industry.

99.   Replication strategies have been founded on the following

- Technical assistance activities aiming to lay the necessary foundation of supportive legal and regulatory framework, institutional structures and national capacities

- Global networking, management and dissemination of (inter-)national expertise and experiences, success stories and best practices
- Adoption of standards, quality control and some sub-projects labelling
- Public awareness raising efforts and effective dissemination of project results

100.   Though the individual project strategies sound promising, it is surprising that there is only little evidence of replication of the projects and/or their lessons and experiences in the region or at a country level. For example, STR used a replication strategy to get started in Kenya and then successfully replicated its activities in Uganda, Rwanda and Burundi. STR has planned regional and global outreach and replication activities in phase 5. Therefore, it is vital to ensure a reasonable level of implementation in the first four case study countries to prove the success of the project and its overall approach.

4.5.7   Knowledge management

101.   Unfortunately, there is no formal budget allocated at the umbrella level for communication and knowledge management. While exchanges between the project managers at the Energy Branch are certainly very intensive and allow for leveraging plenty of synergies between the projects, they take place in an informal setting. This also means that structures, target orientation and effectiveness of this knowledge management cannot be fully evaluated. Communication and knowledge management can only be evaluated at the sub-project level as they depend on the individual project approaches.

102.   The sub-projects employ different approaches to communication and knowledge management at sub-project level. Traditional communication approaches still dominate where e.g. communications about network events first go to the focal points and they then contact others, or let the network know who should be contacted (SEAN CC) and completely new approaches of Knowledge Management System (KMS). For instance, under CTCN the Comprehensive Kerbal Archive Network (CKAN) is used, an open source platform that enables the exchange of web-based resources between climate technology organisations, to facilitate a world-wide exchange of information between the stakeholders. Also under CTCN, the Community Satellite Processing Package (CSPP) was introduced. CSPP is a collection of software systems for processing direct broadcast data from polar orbiting meteorological satellites. It converts "raw" satellite data and is applied e.g. in disaster management to detect wildfires or by climate researchers for sea ice mapping or volcanic cloud monitoring. Developing-country practitioners, in particular modellers, use CSPP to conduct analyses and develop plans to create viable alternatives that offer low emissions climate resilient growth and thus contribute to better interventions and policies.

103.   The lesson that CTCN learned is that solving the challenge of thematically and geographically diverse capacity building and knowledge transfer requires a large network of diverse and competent partners. This joint UNEP/UNIDO project is probably providing the most comprehensive network in terms of technical competencies and geographic balance. While these two agencies are already specialized in technical assistance and global knowledge transfer, they are supported by two networks – the Consortium and the Network – with broad and in-depth technical competence. They are also working towards consistent expansion of the Network. This is necessary to address the challenge posed by technology transfer in the Convention, and while the system might have weaknesses in the area of linking with private sector technology providers and financiers, its breadth of coverage is difficult to match.

104.   The pooling of resources and mutual learning and cooperation with other organisations and networks vary from project to project. REGATTA has been very successful in pooling resources and doing joint activities, as was SEAN CC, a project that was all about finding ways to do things jointly with others. STR planned networking activities with ICLEI, WRI/EMBARQ and other networks and

there has been a noticeable level of corporation with the SUSTRAN project led by UN-Habitat. LCT India had minimal joint activities with other projects, such as dissemination activities of the Share the Road program and the LCT final workshop. Regional networks such as Clean Air Asia, ICLEI and UN-Habitat could have been more actively engaged. STR is fully integrated in the wider activities of the transport unit and there is some level of complementarity to other transport activities. However, beyond the sector there is fairly little interaction with other projects.

105. The GNESD project gives ample evidence that all GNESD centres have made all the efforts possible to share their research results with policy makers and other users of such information through workshops – national, regional and international conferences, sharing reports, and participating in development of policies (e.g. Afrepren, Enda, ERC). There is consensus among the GNESD centres and stakeholders interviewed that GNESD delivered on its objectives to generate useful results that can be adopted to make policy change. All centres, particularly in Asia and Africa, have recommended solutions to meet urban energy needs from electricity and Liquefied Petroleum Gas. Some of the recommendations have been adopted e.g. improving revenue collection, adopting the unique identification techniques and/or deploying small gas cylinders. GNESD has also been influential in developing the capacity of GNESD centres through learning by doing on new areas of focus and sharing experiences with other GNESD centres.

4.6 Efficiency

106. The umbrella projects neither had an independent budget nor clearly defined goals. An absolute rating of the umbrella level is therefore not possible as per the established definitions. The efficiency and cost-effectiveness is determined by the most inefficient sub-project. While efficiency is discussed separately for timeliness and cost effectiveness here, the discussion also shows how closely these two are interlinked. Often, delays result in higher costs. Overall, efficiency is rated *Marginally Unsatisfactory*.

4.6.1 Cost-effectiveness

107. Cost-effectiveness is defined as the most economical way of achieving a certain outcome. It is obvious that the portfolio of sub-projects in the umbrellas exhibits a wide range of cost effectiveness levels. Several aspects need to be highlighted: on the minus side, no patterns for unit costs are discernible, and budgeting seems to follow a supply-side oriented rationale. On the plus side, synergies leveraged between projects – which are plentiful – reduce duplications and costs. But this begs the question why there are duplications between projects in the first place. Often, this is related to factors driven by donor policies. In combination with slow and cumbersome internal processes this situation is rated *Moderately Unsatisfactory*.

108. Slow bureaucratic processes caused by inefficient fiduciary and administrative procedures within UNEP often led to delays in the project start and the first disbursements. The example of en.lighten illustrates this but also proves that delays in the first disbursements do not always have an impact on project effectiveness, if project implementation picks up rapidly afterwards . In the cases of the CTCN, for example, recruitment of advisors takes a year. For many projects the resulted in permanent gaps in the staffing table, as evidence by the CTCN or the REGATTA project. Nevertheless, these projects provide the required services, as they benefit from extremely committed staff, but this situation is taking a toll on staff and cannot be considered sustainable.

109. Other sub-projects like CTCN are constantly struggling with UNEP´s internal financial regulations which lead to delays in the receipt of funds from CTCN´s the biggest donor, the EC. In this case, the pooling of EC funds under the Special Cooperation Agreement has brought difficulties for CTCN, when UNEP received the EC contribution in April 2013, but the first instalment of 50% was not transferred to CTCN until November 2013, delaying project operations significantly.

110.   Another drag on cost effectiveness are dysfunctional administrative structures in financial management. For the evaluators it was astonishing to notice that apparently the shift to the new financial system "Umoja" took months and within that lengthy time span it was impossible to get feasible financial project data, as the example of FIRM illustrates. Many staff were almost unable to operate during the transfer, imposing enormous costs on the whole organisation and each project.

111.   Apart from that, the evaluators realized that there are gaps in the institutional memory, which also lead to cost-ineffectiveness. One reason for the lengthy duration of the case study of the FIRM project was that financial and technical staff had transferred to other projects and it took time for the current UNEP staff time to identify the staff with the "right project memory", able to recall project progress in a given time. This procedure was time-consuming and not always successful, because former project managers could either not be located or not involved in the communication process. This costly consultation process could be shortened by establishing a well-functioning monitoring system that makes the consultation of former staff only partially necessary.

4.6.2   Timeliness

112.   Delays in the sub-projects were the main reasons for revision of the umbrella projects. Timeliness of delivery is a challenge within UNEP and is still not at a *Satisfactory* level.

113.   Most projects complain about the slow bureaucratic processes that are perceived as mostly outside of the control of project managers. They lead to implementation delays right from the project start. This is certainly not the first evaluation to formulate this finding but it seems that consequences from this lesson have not been drawn so far. It persistently leads to costly and duplicative re-planning processes and the need to stretch the funds in order to retain staff.

114.   The example of SEAN CC illustrates that better yearly planning can also be used to improve the chance of delivering the project on a timely basis, because the existing work plan did not sufficiently take into consideration that working with the target group of government employees with busy agendas requires pre-thinking about the maximum absorptive capacity of meetings and trainings that they will be able to attend in a year. A project activity work plan that ignores these issues is prone to "institutionalized" delays.

115.   An extreme example in this respect is the GSWH project, where significant delays between the GSWH project getting placed in the UNEP Work Programme and final approval by GEF took more than three years and required two re-submissions. The project also needed to be extended from the originally planned duration of 48 months to 56 months, and needs further extension of another year to complete all outputs. Hence the project will take 50% longer than originally anticipated. No information is available about the reason for the delays during the design stage, but according to DTIE the project extension was mainly due to execution delays on account of the late signature of cooperation agreements between UNDP and the participating countries after GEF and UNEP had already approved the project. On the other hand, the FIRM project also took (so far) twice as long as planned and there are significant unused funds yet to be programmed for the next extension.

4.7   Factors affecting performance

4.7.1   Preparation and Readiness

116.   The umbrella project design has an ad-hoc character rather than taking the shape of an actively managed, coherent, structured, strategic and target-oriented programme. Preparedness and Readiness thus is a non-issue. The sub-projects show different levels of preparation and readiness. It is therefore unsurprising that the evaluation has not been able to identify a rationale for the split of sub-projects into umbrella P1 vs. P2 – beyond the unit membership of the project manager. Generally, they are often donor driven and prepared on a rather abstract level and preparation and

readiness are of small concern at the time of project design. Preparation and readiness are good for "second phases" but rated *Moderately Unsatisfactory* in this instance where new designs are set up.

117.   As the umbrella served as an envelope, no separate preparation was required. But the analysis of the ProDocs displays that in most sub-projects a stakeholder analysis was not performed, but stakeholder groups at large are identified. In project development this initial weakness was often compensated for by subsequent workshops with relevant stakeholders. For instance, within LCT India, a stakeholder workshop was organized in 2009 in cooperation with the Ministry of Environment to ensure that the project delivers on the National Action Plan on Climate Change and to seek endorsement from the national government. In a later stage the Ministry of Urban Development was involved. The GSWH Project has been developed in close co-ordination with the relevant national agencies in the targeted countries. Stakeholders have been mapped, their priorities and needs have been analysed and their involvement in the project well pondered using appropriate mechanisms and channels.

118.   Other projects, like CTCN have taken up a more "organic" approach. CTCN operates with multiple stakeholders at different levels and with different tasks provided. Because the demand side of the work programme was not entirely clear at the beginning, the degree to which different stakeholders are engaged in activities of the CTCN depends in part on the types of requests received and the organic development of CTCN. Until today, CTCN is in a start-up modus operandi.

119.   Preparedness and readiness were better where projects built on existing structures. En.lighten, for example, successfully managed to cooperate very well with existing initiatives and established partnerships at working level. Other projects like STR also managed to incorporate relevant activities, for example the SUSTRAN project led by UN-Habitat was able to build on the solid network of the UNEP transport unit. SEAN CC II built on its experiences in the first phase. The FIRM project also built on existing country relationships, which might have limited its impact because working in a larger number of countries would have hedged the risks (e.g. of a lack of political commitment or other disturbances).

4.7.2   Design

120.   The umbrella projects are meant to be a tool that enhances communicability and leverages synergies, but already the design of the umbrella-projects displays (great) deficiencies. The quality of the sub-project designs differs widely from project to project.

121.   To assess the project design, the design assessment templates have been used on the original ProDocs. The project design suffered from similar weaknesses for umbrella projects and sub-projects, which have been discussed in the Theory of Change section:

122.   As the umbrella projects need to cover a variety of smaller projects, the project documents generally lack specificity and remain rather vague in many respects. For example, stakeholder analyses and risk discussions remain generic by necessity. A large group of potential target countries are specified, but it is unclear which activities are conducted where or whether there might be synergies at the country level between activities.

123.   Even with extensive research, it could not be identified with complete certainty which sub-projects are part of the umbrella projects. Some of the activities mentioned in the umbrella project documents were not formal projects. Some of them were initiatives that UNEP staff contributed to outside of formal (donor-financed) projects. Others were ideas that the DTIE Energy Branch intended to develop. Some of these then developed into projects including some projects in other Branches which was encouraged within UNEP. For others it is impossible to determine if there were any activities under these headings or not. The clearest indication for attribution of a sub-project to an umbrella was the unit membership of the programme manager.

124.   One aspect that is interesting to note is that the evaluation has not been able to identify a rationale for the split of sub-projects into umbrella P1 vs. P2 – beyond the unit membership of the project manager. Both umbrellas focus on capacity building in governments, and FIRM as well as the TNA project – both of which are in the more renewable energy specific P2 – are actually extremely broad in terms of the technological scope that can and should be covered. On the other hand, some of the more technology-specific sub-projects like the ERT are in the policy-oriented umbrella P1. The bioenergy projects comprise very similar activities under both umbrellas.

125.   In this case, and from the outside perspective, it is a matter of speculation if the internal efficiencies were higher by ordering the umbrella projects along the lines of the units of the Energy Branch, or if they would have been higher had they been split more along the lines dictated by the project themes.

126.   In line with UNEP rules on budget clarification, both projects were revised regularly, to allow for carrying unspent budget forward. The first revision after the first year, also contained significant changes in the project substance. In 2011, the activities and milestones were updated, partially leading to a reorientation of the project. The next revision took place with the merger of both umbrellas into one project which was revised again in 2013. The revisions proposed quite significant changes in the formal project descriptions within rather short periods of time.

127.   In this light, many of the above points can be interpreted as indications that the umbrella projects were only a burdensome additional administrative exercise, rather than a tool that enhances communicability and leverages synergies between sub-projects. It is not clear if the expected high level accomplishments were achieved, or not, as the sub-projects´ outputs, outcomes, and intermediate states were too many moving targets, not necessarily aligned and keeping track of them in a balanced, coherent and coordinated manner to obtain and demonstrate a collective impact on high-level changes in GHG reduction and resilience to climate change proved more difficult than envisioned. Benefits that could have been offered by the umbrella project – for example closer cooperation between the project managers of the sub-projects – remained elusive: according to the interviews with the project managers of the sub-projects, the fact that they were now collaborating within a joint PIMS number did not enhance the mode for cooperation between them which was already sufficiently close in their opinion.

128.   In theory, the "shell" of the umbrella projects opened up the possibility of reducing the lengthy project review process by the Project Review Commission (PRC). The umbrella project contained some headlines that would have allowed for the inclusion of new funding and "real world projects" into the umbrella. In theory, such projects would not necessarily have had to be approved by the PRC as long as the previously outlined indicative funding structure did not change and no new PIMS number would have to be used. Such projects could have existed under the umbrella project but in the current portfolio, no evidence has been found that this happened. More often, additional funding was received by existing projects, and the "elevated ceiling" allowed for this to happen without additional and lengthy review and approval processes.

129.   There are big differences in the quality of the sub-project designs presented in the project documents: there are projects like GSWH, where the Logical Framework of the project presents the intervention logic quite clearly. The same applies to en.lighten, where the project is aligned with the GEF's methodologies for calculating GHG benefits in energy efficiency and renewable energy. It seeks to accelerate the global commercialization and market transformation of EE lighting technologies by working at global level and providing the support to country programs, a proven approach to reduce GHG emissions. The project´s objectives and components were clear and feasible within their timeframe, and the capacities of executing agencies were properly considered when the project was designed and the Results Framework and M&E plan clear and well designed. Many projects display weaknesses in their logframe. Sometimes, the logical connection between outputs and outcomes were mixed up, some of the activities unclear, and others were very

repetitive and not always feasible within their timeframe and included no M&E planning. Potentially there is a relationship between the stringency of the project design and logframe planning and the demands of the donors.

130.   At the time of their design the umbrella project was justified as a way to minimize the risk that administrative demands through PIMS might affect the performance of the individual sub-projects. In that sense, the minimal design and intentional minimization of internal inter-linkages was a rational choice which served the purpose. The objective of the PIMS was to make the programmes more communicable and support project management – and the Branch does not tire to emphasize that it considers it a failure, or, in their words "little more than a crude monitoring and reporting tool of little use to project managers and questionable value to senior management and governments". However, as discussed above, the umbrella projects might have been designed with additional purposes in mind, e.g. an active facilitation of collaboration between sub-projects by managing all efforts, for example, towards reinforced capacity building and policy outcomes, consistent reporting or more efficient utilization of budgetary resources of different projects. This design choice was not taken, and thus while the project design did not negatively affect overall performance, it also did not improve it.

4.7.3   Implementation Approach and Adaptive Management

131.   The umbrella projects had no "life of their own", no implementation approaches nor active management. Only the sub-projects had their own implementation approaches with staff being responsible for the project progress and adaptive management. There was one umbrella project each for the units in the Energy Branch. Therefore, the sub-projects of each umbrella were managed by the same group of project managers. Overall, project implementation and management is rated *Satisfactory*, given that a number of sub-aspects have been rated on other criteria.

132.   For the sub-projects, project staff often managed very well to operationalize key concepts into manageable activities even if that might not have been prescribed in the planning stage. In the case of REGATTA, specific objectives, activities, methodologies and expected results were not very well structured and specified so that the original work plan and budget had to be re-written several times to get a project extension. A successful approach to bring a better focus to the project in line with the ProDoc was chosen for the en.lighten sub-project, where one of the first tasks of the newly established Project Steering Committee was to establish working groups which were able to fine-tune the implementation plan and thus brought greater focus to planned activities.

133.   Within the majority of projects, project management arrangements were found to be adequate, though sometimes challenges of inappropriate? or insufficient staffing occurred. In the case of GSWH, the assignment of two UN agencies to the project was expected to make the best of both agencies' comparative advantages. However, this arrangement – and especially the fact that UNEP and UNDP are both implementing and executing their own components – has created a disconnection between the two components, leading to sub-optimal use of the intended synergies.

134.   Most projects, though, were implemented slower than planned and that necessitated repeated extensions and adjustments to the umbrella projects. In the case of FIRM, the project was amended and extended a couple of times and still ended up underspending its budget.

135.   The commitment of the project staff is an asset. Committed staff is able to compensate for weaknesses in project design, as the example of REGATTA shows. The REGATTA project team can be characterised as proactive and flexible as evidenced by responses from partner institutions. When challenges come up they looked for solutions, often consulting their partner institutions for strategic advice on resolving them. It is also an asset in better designed projects like the CTCN. Within SEAN CC, the most significant limiting factor, affecting implementation from a project management perspective have been the staffing issues of the SEAN CC project.

136.   A comparison between the capacity building knowledge network programmes REGATTA and SEAN-CC highlights a difference resulting from the incentive structure in the implementing partners: REGATTA partners are knowledge centres/providers and the relationship to the project's target group is seen as one that will continue in time so long as the knowledge provided is relevant to the issues in the region as defined by these very broad stakeholder groups. The centres, if they wish, can continue to provide services past REGATTA, because the stakeholder base is not in any way limited to existing REGATTA members. With SEAN CC the partners provide services on a need by need basis — that said some organisations have worked with the project for the duration. The organisations that work with SEAN CC will continue to do the work they do even without SEAN CC; what will vary is whose needs they cater for because with and through SEAN CC they have a very defined stakeholder group for which to provide services. That said, for both projects, partners speak well of the initiatives and understand how the initiative is structured to function within the region.

137.   Bodies that accompany the implementation like Project Steering Committee/Project Management Committee or Advisory Board have also often been asset, if they meet regularly and function well, as is the case in CTCN and others. In the case of GSWH, at the project execution level, the project is overseen by a Project Management Committee (PMC) which includes the International Copper Association, UNDP and UNEP. However, PMC members have stressed during the MTE that there is a need for better coordination amongst UNEP, UNDP and other relevant stakeholders. Though UNEP is providing dedicated technically qualified and experienced staff and adequate resources to ensure timely and effective execution of the project, the technical competence required at the regional and country level is hired through small scale funding agreements being signed with the regional partners. There is need for a more clear-cut division of roles and responsibilities between UNDP and UNEP. Within STR the funding agency (FIA Foundation) takes an active role in advising the project and providing constructive direct input and the steering committee of LCT India provided advice mainly at the early stage of the project.

138.   Summarizing, sub-projects that proved to be very successful in their implementation were built upon several main pillars. The following components foster successful project implementation:

- A well-functioning Project Steering Committee/Project Management Committee and/or Advisory Board can ensure that implementation follows a feasible and cost-effective path
- Committed project staff
- Pilot projects in countries and regions facilitate accelerated transition
- Partnerships with other initiatives
- Integrated toolkits that can provide a technical foundation for the policy advice
- Sufficient counterpart resources
- Enabling legislation that can assure and foster the uptake of new technologies.

4.7.4   Stakeholder participation, cooperation and partnerships

139.   Stakeholder participation, cooperation and partnerships only took place at sub-project level. As there was no stakeholder involvement to the umbrella projects, there cannot be a rating. But the umbrella projects were designed along the lines of two of the units within the Energy Branch. Therefore, the subprojects of each umbrella (and partially also across umbrellas) do often build on a common group of stakeholders.

140.   Partnerships are a recurrent characteristic of the sub-projects, and an important ingredient to UNEP's success. A comparatively large number of sub-projects are implemented jointly with other international agencies (for example CTCN with UNIDO, GSWH with UNDP, REN21 with IEA etc.) or research centres (e.g. GNESD, CTCN). Especially GNESD was particularly successful in involving stakeholders which led to the direct development and use of GNESD research outputs in developing

the SE4ALL Gap Analysis as well as action plans for a number of countries in West Africa and Latin America.

141.   Technology assessments and more country-specific work is often conducted jointly with other long-term collaboration partners, most notably UDP. A comparatively small number of projects and activities focus on national implementation (such as Share the Road and the Low Carbon Emission Transport in India projects), and some of these national implementation activities are linked to global efforts (e.g. in the en.lighten or GSWH projects). But the cooperation with other UN-agencies, for example UNDP, does not always function as intended. For instance, the global and national components of the GSWH sub-project are both managed and supervised completely separately by UNEP and UNDP, respectively. The GSWH PMC which was supposed to reinforce coordination between components seems not to be functioning as intended.

142.   However, in many sub-projects as well as on the umbrella level, no clear stakeholder analysis was available in the project documents. If the community of stakeholders is small, this might not affect the quality of the project approach. For instance, in STR, from a political and institutional perspective, the selection of the key stakeholders in the case study countries was fairly straightforward, because their key individuals, knowledge partners and civil society organisations working on non-motorised transport are usually very well-known as this community is small. But even then, it is important to engage the relevant stakeholders. Project performance might be negatively influenced by the fact that relevant stakeholders were aware of the project, but have not always been actively engaged (LCT India).

143.   Some projects like CTCN are demand-driven; the services provided are responding to requests from in-country stakeholders. Country driven-ness is an important aspect for UNEPs project implementation, and in fact is often used as an excuse for "open" project planning in order to leave flexibility for country driven-ness. However, this cannot count as a recipe for success.

144.   Comparing the success of REGATTA and SEAN-CC, a big difference lies in the stakeholder structure. While REGATTA's stakeholders are very broad based - anyone who is interested can and will participate, SEAN CC is very specific to the CC focal points and their offices in each country. According to the case study, it was precisely this narrow group that was a limiting factor for some SEAN CC work, because it meant that not necessarily the right people were being targeted/accessed for the topic at hand. SEAN CC always tried to reach out to the more precise stakeholder group for the topic at hand, however, because of the way the project was designed, it had to go through the CC focal points first and they would then reach out to others. This also led to delays in implementation, because trying to get to the "right people" was not always a straightforward process.

145.   The cooperation of FIRM and SEAN CC demonstrates that "pulling together" some of the resources from national-level efforts in the phase of project implementation has allowed UNEP to develop regionally-based "platforms" which support the implementation of broad activities in an efficient and synergetic manner.

146.   The example of GSWH displays that Project Steering Committees are definitely fostering performance, but the other key stakeholders have to be fully integrated into the communication process as well. The key stakeholders of the GSWH project include: global and local SWH manufacturers, dealers and installers, banks and financial institutions, ESCO companies, maintenance service providers and policy makers. Though project partners and implementing agencies have been interacting through (two) PMC's, internal communications and extranet, the other key stakeholders have been interacting with project implementers only during a few workshops and some feedback on the GSWH project website. The MTE did not come across any formal mechanism through which key stakeholders could have provided regular feedback on project implementation or any suggestions to improve it.

147.   Factors that can positively influence stakeholder participation and thus lead to better project performance are i.a. the following:

- Task forces composed of top international experts from various sectors including governments, civil society, academia, research organisations, international agencies and the private sector (e.g. en.lighten)
- Committed and regularly meeting Project Steering Committees or Advisory Boards
- Small and rather homogenous groups that know each other very well
- New communication approaches such as open source internet platforms

148.   Overall, stakeholder involvement seems to be a positive factor for performance on the project level.

4.7.5   Country ownership and drivenness

149.   Umbrella projects have no country strategy. Sub-projects generally try to be as country-driven as possible given their individual missions and history. They mostly build on and expand existing capacities in developing countries, and on this level, they are mostly rated as *Satisfactory*.

150.   The activities undertaken have national ownership and developing countries' stakeholders can therefore contribute to developed capacities being sustained. Right from the start of the project, the projects are country-driven. Relevant project approaches were identified on the basis of inputs from Governments and relevant governmental and non-governmental organisations and stakeholders. The different participating countries were encouraged to identify their own needs in technology support and capacity-building to meet their own environmental priorities.

151.   This national ownership is essential and has offered the umbrella projects the possibility of tailoring capacity-building and technology support programmes to specific needs as identified in each country´s environmental priorities. Collaboration on sectoral issues with relevant specialized agencies and also with the civil society organisations, knowledge-based institutions and the private sector took place at different levels, depending on the country scope of the projects. The Branch found the needs of the Countries to develop and change rather quickly, together with the external environment.

152.   The selection of partner countries has various reasons, often of an institutional or political nature. In the case of FIRM, the criteria was whether the project partner had -prior to the project start- successfully cooperated with certain developing countries and thus the project would be able to get a quick start and provide the expected outcomes in time. In the case of LCT India, India was considered to be a priority country by the funding agency. Within SEAN CC, the ASEAN countries were set since this was a project for South East Asia — all of them are included in the network, all have equal say in the network agendas and scope of work. Singapore and Brunei do not receive financial support to attend network events or to conduct climate change work, because Singapore and Brunei are both very wealthy countries with significant high development. Within STR, Kenya directly asked for support and so did Burundi. Policy development was already in the process in Uganda when further support was sought.

153.   How successful a project is in terms of country ownership and driven-ness strongly depends on the individual case. Many projects are demand-driven and therefore rely on the responsiveness of developing countries´ institutions. The more developing countries stakeholders are aware of the benefits of a project, and the higher the level of decision on their own activities, the higher the level of ownership. SEAN CC provides a good example with country governments being able to decide what climate change activity they will do with the 100.000 USD received by the project. REGATTA, too, has a high level of ownership among its partner institutions that are the backbone for providing the majority of the project services. Country stakeholders have high levels of ownership of all the

services they request and events they participate in, since it is their choice to be part of REGATTA activities.

154. LCT India strived for close cooperation with the Ministry of Urban Development and other national stakeholders, which contributed to awareness at the national level of the key pressing issues with regard to low carbon transport development. However, the link to actual national policy change is yet to be made. At the local level the development of Low Carbon Mobility Plans and their stakeholder engagement processes as well as the recommendations has created a high level of awareness in the three participating cities. With the smart cities another opportunity arose to integrate LCMP policy recommendations into local (pilot) actions.

155. Country ownership and driven-ness is generally high in projects with

- High government commitment
- Existence of political frameworks conducive to successful performance
- Direct benefits for the stakeholders
- Energetic and forward-looking champions.

4.7.6   Financial planning and management

156. The umbrella projects, as mentioned already, did not have their own budgets. Financial planning and management is rated as *Unsatisfactory* - no clear figures either for planned or for actual budgets exist.[7] Funding for both umbrellas came through the sub-projects from a multitude of sources.

157. Annual project budgets were therefore never quite consistent. The budgets by component seem indicative and it is difficult to relate them to sub-projects (especially in P1). The budgets by source are a compilation of actual and expected donor contributions, which do not cover all sub-projects. Additionally, it was impossible to trace back how the annual budgets relate to the annual spending plans, because some projects had entered much larger amounts into the financial tableau than they could possibly spend in a year.

158. Financial data were partially available for some of the sub-projects, but not for all. The range of findings on the financial management is very limited. Financial management (including planning and reporting) took place only at the level of the sub-projects, not on the level of the umbrella projects. As the evaluators could not get hold of complete financial records neither for the case studies, nor for the umbrella projects, the financial assessment of the umbrella projects is also not possible.

159. There are significant differences in the handling of financial management between the sub-projects. They range from projects with an efficient handling of financial issues and reporting to those where the financial management and reporting showed remarkable weaknesses. Sometimes, the financial management matches the planning at first, but in the course of the project new administrational arrangements and procedures often cause delays. In the case of REGATTA the financial report was delayed by a year for two reasons: a) administrative and financial responsibility passed fully to ROLAC from DEPI in late 2014 and b) the above mentioned internal UNEP changes of administrative systems and procedures related to Umoja.

160. In the case of LCT India, the financial management was well handled until under-spending and savings became an issue when an anticipated (budget neutral) project extension was not approved for almost one year by the funding agency. This created some challenges for the project to

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[7] Financial systems were changed at least once between the project start and the evaluation.

continue operating without spending until the extension was approved. In all sub-projects like CTCN or en.lighten, which required hiring staff, lengthy recruitment processes due to UNEP recruitment processes have generated lower expenditures related to project staff and technical experts. This can lead to delays in the project activities and negatively influence project outputs.

161.   Adding to that, funding of CTCN is on the basis of voluntary Donor contributions, which leads to the fact that the Secretariat is in a constant mode of fundraising, compounding the demands on staff time and worsening existing limitations. Because of the voluntary, often bilateral contributions, and criteria set by the Advisory Board, CTCN has limited financial resources and sets strict caps on the size of the projects. In addition, there are administrative challenges within UNEP that have delayed the funds from the biggest donor, the EC, reaching the CTCN quickly. The pooling of EC funds under the Special Cooperation Agreement (the ENRTP) proved difficult for CTCN in the year 2013, when UNEP received the EC contribution in April, but the first instalment of 50% was not transferred to CTCN until November 2013.

162.   Miraculously, financial shortfalls did not affect the project performance noticeably. Certainly, very hard work by staff contributed significantly to this. As stated earlier – joint funds management across the umbrella might have led to overall higher effectiveness and likelihood of impact.

4.7.7   Supervision, guidance and technical backstopping

163.   Instead of leading to improved sub-project design and implementation, with enhanced inter-linkages, more effective projects and new impulses for cooperation between the divisions, the umbrella projects had no – or if anything negative – impact on supervision and guidance. Technical backstopping was not affected at all. A more whole-hearted approach to the umbrella projects could have led to significantly improved supervision and coordination. But this remains an area of missed opportunity, especially with regard to the aspect that umbrella programmes were motivated by an institutional push for easier communicability of the very diverse global project portfolio and also to disburden themselves of financial management operations. Instead of making supervision and guidance easier, they proved to be an additional burden instead. This is rated *Moderately Unsatisfactory.*

164.   In terms of interaction between the sub-projects and the umbrella project, most project teams state that there has not been a lot of interaction. In many projects linkage to other initiatives under the umbrella project were not obvious. Learning across the umbrella projects that led to improved sub-project and component design and more effective projects could not be evidenced. The umbrella projects were organized along the lines of the units within the Energy Branch. This means that the colleagues within the unit were asked to provide backstopping services. As the staff has confirmed to the evaluators, the umbrella projects were not a dimension in their daily operations, so it cannot be assumed that they did anything with the umbrellas that they would not have done without them.

165.   Backstopping was not affected by the umbrella projects. Therefore, the situation was as it would have been without the umbrella projects, with existing limitations concerning the cooperation between the different divisions DTIE, DEPI or DELC. The prospects of reorientation to allow for easier collaboration across the technical divisions were not used, although project management teams such as the SEAN CC were in favour of it, because cumbersome administrative processes to share project funds hampered the collaboration with other initiatives.

4.7.8   Monitoring and Evaluation

166.   M&E was overall weak with no meaningful measureable targets and procedures that had little added value in terms of understanding and managing progress or learning lessons. Overall,

M&E management is rated as *Unsatisfactory.* The programme team credibly emphasizes that their M&E was nevertheless in line with UNEP procedures implying a larger institutional issue at the time.

167.   As already discussed in the inception report, the umbrella projects show considerable weaknesses in the design and implementation of M&E arrangements although monitoring existed in each unit and therefore each umbrella project assigned the responsibility for PIMS entries to a colleague who had to collect input from all project managers for the PIMS reporting a year.

168.   Because of PIMS the project documentation of the umbrella projects is extremely weak and leads to the fact that the evaluability of the umbrella projects is severely limited. The PIMS reporting mechanism was not designed to take in information from 21 sub-projects. Therefore, it was hard for the evaluation office and the evaluators to clearly understand the exact scope, i.e. which sub-projects were assumed to be part of an umbrella project. The documentation was put together specifically to meet the demands of PIMS, because PIMS entries automatically appear in the work plan. This means, that where the project management tool requires textual information about project progress, the given information on the umbrella projects is only very brief, because PIMS requires staff to summarise the achievements of up to 10 – 15 projects in a very limited space by a restriction of words. This "twitter-style" reporting allows staff to reflect on highlights of selected projects but cannot fulfil the functionality of a proper M&E system, nor did it provide a lot of detailed information for this evaluation.

169.   There are several systems beyond the PIMS that the project staff are required to report to. Unfortunately, neither the Programme Progress Reporting System (PPR) nor the IMDIS reporting systems nor any of the other systems which are set up and used by the UNEP staff with the purpose of reporting report on project progress at sub-programme level and directly to the UN-UNEP headquarters, serve the purpose of a monitoring tool, but do increase the administrative and reporting burden of staff. This also leads to significant discontent. Project managers feel ill served by the UNEP systems.

170.   Generally, the umbrella project documents focus on project "Outputs" which can be aligned with the UNEP Expected Accomplishments and Outputs from the Programme of Work 2010 – 2011. While it is clear that these outputs need to be resulting from the sub-projects' outputs and outcomes, there are no clear linkages formulated and users tend to mix up output and outcomes. As PIMS also merely focuses on these so called "outputs", entries often only relate to the immediate outputs rather than outcomes, longer-term objectives or impacts.

171.   Additionally, PIMS does not allow any reflection or recording of information on why things change, what progress has been made in the context of the project, or whether and how budgets change. This makes M&E difficult at umbrella level.

172.   At sub-project level, there are sub-projects that follow the standard monitoring methods of UNEP and others that have no M&E component at all or not yet in place. There is often no budget component directed towards M&E, and if there is a budget line set aside for the allocation of evaluations, these are foremost used for mid-term and final evaluation rather than a continuous internal M&E process.

173.   The examples of FIRM and LCT India demonstrate that it was possible in UNEP and UNEP DTU to have projects with no M&E plan, no continuous M&E system etc., in line with UNEP procedural provisions. The same applies to REGATTA. For the pilot project assessments of modal share and travel behaviour of STR, there had been M&E to assess the impacts of this pilot intervention for the presentation in a show case. Beyond that, there is no overall monitoring and evaluation plan. Monitoring and evaluation is being considered as an important issue only in the later phases of the STR sub-project to be able to track progress of the policy implementation and delivery policies, action plans and working papers (depending on the level of maturity in the

countries). An assessment that tracks the actual impact of improved walking and cycling infrastructure on indicators such as air quality, access, safety and GHG emissions is not planned yet.

174.   One of the positive examples is the en.lighten sub-project. It has an M&E plan that is consistent with the GEF Monitoring and Evaluation Policy. All M&E related costs are presented in the M&E Plan and are a part of the budget and include mid-term review/evaluation and terminal evaluation. The project management team also regularly monitors and continuously collects specific information to track the indicators. Project risks and assumptions are regularly monitored both by project partners and UNEP as described in the M&E plan in the ProDoc. Risk assessment and rating is an integral part of the Project Implementation Review.

175.   As the chapter on the Theory of Change reveals, the logical frameworks of the sub-projects only comply to some extent with the international standards for logframes. Sometimes no milestones for the planned activities are specified. Baseline and target information are sometimes only given at the objective level; baseline information on performance indicators has only been collected from the UNEP PoW, not adapted to project requirements and only defined at the objective level and baseline and indicative cumulative targets on outcome and output level are not worked out.

176.   Extensive discussions with the DTIE Energy Branch were conducted on that issue, and the responses suggest that the guidance at the time was that it was necessary to have the Expected Accomplishment as the objectives in the project logframes. It was discussed that this led to the project logframes representing outcome hierarchies that were missing important steps.

177.   In addition, these outcome hierarchies were not supported with corresponding indicators. Until today, the most important aspect of programming and reporting seems to be on an output basis even though all staff is familiar with the language around results-based management. This seems to be an issue of organisational culture. The evaluators consider this risky as it might imply that as long as the outputs are delivered, impacts are ensured. Broken results chains in the project documents are a standard accepted practice even after QAS and results terminology is not in line with international standards that are found across the board and defended vehemently by staff.

178.   Ultimately, the EAs are formulated in terms of "policy" outcomes. However, looking at the records in PIMS, very few actual policy impacts are reported. Overall, the outcomes that we could find were:

- two fuel efficiency vehicle standards
- two NMT policies
- NAMAs, e.g. on promoting energy efficiency technology in the steel industry in Ghana
- "Guide for Policy and Framework Conditions" by GSWH in cooperation with the regional partner ESTIF
- GNESD policy actions plans
- En.lighten Policy toolkit accessible to countries online and support provided to country programs for capacity building. The toolkit is fully functional online. Since its inception, the toolkit has been accessed 2,812 times, and the number of actual downloads include 51 in Arabic, 283 in English, 62 in French, and 102 in Spanish.

179.   These are all outcomes that were recorded for 21 sub-projects in the PIMS records of three umbrella projects. It is the opinion of the evaluators that probably more policy outcomes were achieved but not captured in the results monitoring system. There are two likely reasons for that: firstly, because of the inability to report at outcome level in the PIMS Version 2.0 and secondly, because after the end of a project, UNEP is no more actively involved in the internal communication in developing countries. This leads to the fact that even though the EAs are considered the measureable objectives on the institutional level, this measurement is not taking place, probably because the reporting tool and chain is broken.

180.   Whether the PIMS is the reasons for this is hard to say from the outside. As one interviewee put it, "we have probably allowed the PIMS to replace our own monitoring and project documentation as it is a requirement, and there are no formal (UNEP) requirements beyond that". Anecdotes about the genesis of the PIMS imply that its creation and introduction risked losing important institutional data. An equally likely reason is that there are too many different reporting requirements of project managers, a lack of understanding for outcome hierarchies and institutional objectives, and a lack of clear guidance on indicator frameworks and monitoring policies.

5   CONCLUSIONS AND RECOMMENDATIONS

5.1   Conclusions

181.   Before we look at the forthcoming recommendations that aim at enhancing the quality of services provided, Table 6 gives an overview of performance.

Table 6: Evaluation Ratings for the 1,2,3 P1 and P2 Umbrella Projects

Criterion	Summary Assessment	Rating[8]
A. Strategic relevance	The umbrella projects are consistent with UNEP´s mandate and policies and build on existing capacities in developing countries. In line with the Bali Strategic Plan, many projects strongly promote and support south-south cooperation and thus reflect its importance. The Bali Strategic Plan promotes the development of gender mainstreaming strategies in environmental policies, an aspect that in most Project Documents is not extensively worked out as gender considerations are only briefly sketched.	Satisfactory
B. Achievement of outputs	Most projects are process and output focused and therefore generally strong in attaining their immediate outputs. The outputs provided by the sub-projects are very different from each other in their programmatic orientation. A strong emphasis of the sub-projects lies in the area of knowledge networks (e.g. SEAN CC, REGATTA, CTCN) as well as technology information dissemination (SWERA, GSWH, en.lighten). On the whole, projects managed to succeed in producing their programmed outputs, even if sometimes slower than expected.	Moderately Satisfactory
C. Effectiveness: Attainment of project objectives and results		Moderately Unsatisfactory
1. Achievement of direct outcomes	The achievement of umbrella projects' outcomes are not easy to assess, because the umbrella projects as well as the sub-projects often have extremely soft, non-measurable outcome statements that make both achievement and attribution difficult. They have not been consistently	Moderately Unsatisfactory

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[8] The ratings relate to the umbrella projects

Criterion	Summary Assessment	Rating[8]
	tracked and – judging from the case studies – reached only partially.	
2. Likelihood of impact	As most sub-projects stop at an early step in the causal chain towards the achievement of impacts, their attainment is often unpredictable. Additionally, the identified impacts are dependent on external factors be it institutional, socio-political and/or economic and very country specific. Hence, many impacts are likely out of control of the project and will take many years to materialise.	Moderately Unlikely
3. Achievement of project goal and planned objectives	As described the sub-projects are strongly output-oriented. The achieved outputs set processes in motion that are pointing towards the achievement of project goal and planned objectives, but as mentioned above, the explicitly planned objectives do not automatically lead alone to the expected objectives.	Moderately Unsatisfactory
D. Sustainability and replication	The nature of the sub-projects under the umbrella project is very heterogeneous and therefore general statements on the level of sustainability within the umbrella projects cannot be made. Some sub-projects, like FIRM, were only initiated to facilitate the political process of formulating low carbon development strategies and NAMAs in developing countries within a short time span and phase out without succession. Other projects like en.lighten cover a longer time span, and initiate longer lasting political processes by providing support for efficient lighting programmes and the phasing-out of incandescent lamps for developing countries. Overall, the orientation of the projects is towards a long-term approach on capacity building and sustainability in all dimensions.	Moderately Likely *(as per EOU processes, this is the lowest rating of the four sustainability sub-categories)*
1. Financial	Financial sustainability at the umbrella level has not been necessarily desired. On the sub-project level, funding after project closure is so far a challenge for many sub-projects. Although being contingent on funding, many project managers acknowledge that there are today numerous sources of funding available for low carbon and climate resilient development and projects might sometimes only need to know how to access those funds.	Moderately Likely
2. Institutional framework	Some sub-projects have successfully built up institutional structures that continue to be self-sustaining after the end of the project, e.g. REGATTA, GNESD and REN21. These networks as well as the consolidated relationships with government stakeholders in partner countries strengthen	Likely

Criterion	Summary Assessment	Rating[8]
	the sustainability of the activities that were subsumed under the umbrella projects.	
3. Environmental	As drafted within the TOC, the outcomes of the sub-projects of both umbrella projects contribute to the intermediate state that "low carbon and clean energy sources and technologies are increasingly adopted and inefficient technologies phased out" and the long-term impact of reduced reliance on fossil fuels and reduced global impacts of climate change and GHGs caused by the energy sector. The achieved outputs are intended to set processes in motion that are pointing towards the achievement of the intermediate state and long-term impact, but as mentioned above, the explicitly planned objectives do not automatically lead alone to the expected impacts. On the other hand, as it is not clear that environmental benefits will ensue from the project activities.	Likely
4. Socio-political	Almost all sub-projects rely on the national political environment and the political internal decision making dynamics to foster low carbon options. The political will and support is crucial to the sub-projects´ outcomes and is present in most countries. Both umbrella projects contribute to that by creating greater awareness on environmental impacts through capacity building of various stakeholders on specific technologies, whether these are proven technologies (like SWH) or relatively new technologies with potential (like biofuels). Behavioural changes of better informed individual stakeholders are influencing the behaviour of others, and thus lead to more socio-political commitment and facilitate the transformation of markets of solar water heaters, LEDs etc.	Likely
5. Catalytic role and replication	The aspect of outreach is integrated into all sub-projects, only varying in its details. There are projects like CTCN and en.lighten that have focused strongly on facilitating the continuation of learning networks and co-operation between different stakeholders to manage and disseminate information, experiences and lessons learned. Other sub-projects like STR are successful in complementing the approach by the creation of innovative pilot activities.	Likely
E. Efficiency, cost effectiveness and timeliness	The issue of cost-effectiveness and timeliness is still not satisfactorily resolved. Most projects complain about the slow bureaucratic processes that are mostly out of project management control and lead to delays right from the	Moderately Unsatisfactory

Criterion	Summary Assessment	Rating[8]
	project start. Starting late mostly leads to the effect that it threw the rest of the sub-project work plans off course and the activities simply did not take place within the timeframe allotted.	
F. Performance	The performance of the umbrella projects is unsatisfactory in terms of its preparation and use as an "envelope" and satisfactory in terms of the performance of its sub-projects. Unsatisfactory is the way the umbrella projects were prepared and carried out. They present a missed opportunity to make central activities more communicable, to achieve higher level accomplishments and disburden financial management operations. Satisfactory is the actual project implementation of its sub-projects and the level of country ownership and driven-ness achieved.	Moderately Satisfactory
1. Preparation and readiness	As a general trend, sub-projects pursuing new approaches suffered from too few case-specific stakeholder analyses and milestone planning. Indicators and M&E frameworks were often missing. Some of these initial weaknesses were compensated by subsequent workshops with relevant stakeholders. The umbrella projects as an administrative exercise were handled with the corresponding low level of attention. This resulted in the fact that opportunities were missed that would have been offered by an actual programme with its own monitoring framework, theory of change and budget. This level of coherence might have seemed impossible at the time.	Moderately Unsatisfactory
2. Project implementation and management	There are big differences in the quality of the delivered sub-project designs. Often project staff managed to operationalize the key concepts into manageable activities very well, and thus committed staff often turned poorly designed projects into a well performing project. Within the majority of projects, project management arrangements were found to be adequate, though sometimes challenges of incorrect or insufficient staffing occurred.	Satisfactory
3. Stakeholders participation and public awareness	The umbrella projects had none of its own stakeholders. At sub-project level, the stakeholders involved a range from projects where almost everybody interested in Climate Change is involved (REGATTA) to projects that targeted Government officials in the Climate Change Focal Points (SEAN CC) to Research Centres (GNESD). GNESD was	N/A

Criterion	Summary Assessment	Rating[8]
	particularly successful in involving stakeholders which led to the direct development and use of GNESD research outputs in policy analysis and action plans for a number of countries in West Africa and Latin America. Partnerships are a recurrent characteristic of the sub-projects, and an important ingredient to UNEP's success.	
4. Country ownership and driven-ness	UNEP´s sub-projects build on existing capacities in developing countries. The activities undertaken have national ownership and developing countries stakeholders can therefore assess that built capacities are sustained. How successful a project is in terms of country ownership and driven-ness is highly dependent on the individual project approaches. Many projects are demand-driven and therefore rely on the responsiveness of developing countries´ institutions. The more developing countries stakeholders are aware of the benefits of a project, and the higher the level of decision on their own activities, the higher the level of ownership.	Satisfactory
5. Financial planning and management	The umbrella projects did not have a budget of their own. Financial issues did not affect its performance, although – as stated earlier – joint funds management across the umbrella might have led to overall higher effectiveness and likelihood of impact. Financial management of the sub-projects varied from efficient handling of financial issues and reporting to projects with remarkable weaknesses. Due to UNEP´s to the shift to Umoja, financial records for several subprojects have not yet been made fully available. Therefore, generally financial management needs to be improved.	Unsatisfactory
6. UNEP supervision and backstopping	Backstopping was not influenced by the umbrella projects. Therefore, the situation for the sub-projects was as it would have been without the umbrella projects. A more whole-hearted approach to the umbrella projects and their operationalization as a means to disburden financial management operations could have significantly helped backstopping, supervision and coordination. But without, this remains an area of missed opportunity.	Moderately Unsatisfactory
M&E	Monitoring and Evaluation is unsatisfactory, because PIMS does not provide the IT-software needed to comprehensively and continuously monitor all relevant log frame parameters over the project time.	Unsatisfactory
a. M&E Design	The project document does not provide for satisfactory SMART monitoring or evaluation indicators, and no further	Unsatisfactory

Criterion	Summary Assessment	Rating[8]
	monitoring or evaluation procedures were specified.	
b. Budgeting and funding for M&E activities	The umbrella projects had no budget of their own and accordingly also no funding for M&E activities. On sub-project level, M&E budgets were only included where the donor stipulated it.	Unsatisfactory
c. M&E Plan Implementation	The umbrella projects lack M&E arrangements. M&E procedures were limited to reporting in PIMS in one paragraph per reporting element, limited in length by the online form. The performance of M&E implementation ranges from satisfactory e.g. in UNEP-GEF projects or CTCN to those that show considerable weaknesses (FIRM), although a good documentation of the process helps the project management to learn about the delaying factors in country-driven work and to take active counter measures.	Unsatisfactory
Overall project rating		**Moderately Satisfactory**

5.2   Lessons Learned

> *Lesson 1.   Internal institutional system requirements should not undermine but support sound project design.*

182.   The umbrella projects were an attempt to formulate a joint vision and objective for the internal coherence of the UNEP mitigation portfolio and its contribution to the institutional goals ("Expected Accomplishments"). Their revision reveals that this attempt to achieve higher level accomplishments was not really successful and therefore the role of EAs in project design has to be reviewed.

183.   The umbrella projects are generally acknowledged as a somewhat failed administrative exercise. At least one of the umbrella projects under consideration here was lacking internal logic and strategic coherence. The differences between the two umbrella projects in the first period were hard to identify. The intended effect of better communicability therefore did not materialize. On the other hand, additional administrative burden was created. The standard reaction in the Energy Branch offices when the topic of umbrella projects comes up is a deep sigh. Several times we heard that the projects had to be put into an PIMS-system perceived as dysfunctional and possible also factually dysfunctional. Since only the most significant milestone for each project output is recorded in PIMS, a project manager might think to be on track even if other milestones and outputs in the sub-project logframe have not been achieved.

> *Lesson 2.   Leveraging programmatic and managerial synergies between projects requires more than joint reporting.*

184.   The two umbrella projects are effectively an aggregated list of sub-project. This is notable on many levels, but most obvious already from the project document: there are no joint outputs or

outcomes expected to be delivered by the umbrella projects, beyond the sum of the sub-projects. The umbrella project has no milestones, or goals that could be reached over the lifetime of the project, have the duration of the Biennual Programs of Work, and are revised and put through the QAS process whenever sub-project budgets require it.

185. As discussed here, if it would have been possible to create a deeper linkage between projects that were working towards the joint objectives, maybe even with the same (large) group of stakeholders on the same themes. The umbrella projects have many of the characteristics of programmes, although these usually adhere to the same logic and are monitored with a common indicator framework. In addition, they usually have a budget with some fungibility between different budget lines. Designing the umbrella project around a joint theory of change, compounded milestones and with an overall budget with some fungibility between budget lines might have led to a better result. It can also be very technically demanding and satisfying to consider sub-projects as pieces of a puzzle that together can create a much better result than if they are managed individually.

186. The formation of small clusters ("parasols") of 3-4 thematically related projects that was introduced lately by the DTIE Energy Branch holds the potential of saving money and reacting more cost-efficiently and quicker to external requirements. Consultants with a valid expertise for the whole cluster, for instance, can be hired for the whole "parasol" and costs can be leveraged within the cluster. Smaller umbrellas might also accommodate different donors' reporting and accounting needs better than collections of 12 or more projects.

> **Lesson 3.** **When major changes in reporting structures, systems and procedures are introduced this needs to be done carefully and with a plan to be reviewed after a reasonable length of time. Ignoring potentials for the consolidation of reporting requirements can create incentives to discount and underutilize the value of systems.**

187. Project staff were grappling with how to manage sub-projects in an umbrella project context in different ways with a mixture of different understandings and expectations at different levels in the organisations. Collaboration on sub-project level with other relevant teams across divisions could be improved by removing cumbersome administrative processes to share project funds.

188. The need for review of institutional procedures becomes obvious when project managers talk about the various levels of "reporting" that they are required. Apart from project management and reporting to the donors, there are PIMS reports, IMDIS and other internal requirements. Each of these requires and generates different small smatterings of text or data, separate workflows for reporting, approval and communications and the associated administrative burden. Yet, there are no consolidated and comprehensive, generally accessible data sources that would allow for consistent monitoring at common standards. This structure has grown over time and seems to the outside observer to be in dire need of review and harmonization.

> **Lesson 4.** **Country Driven-ness is an important principle but must not distract from good project design, good annual planning and results-oriented implementation, or serve as an excuse if any of these are not fully implemented.**

189. Many of UNEP's projects are demand-driven, and very open for country's to engage strongly or not so strongly. Examples are CTCN, FIRM and SEAN-CC. Some of these are performing better than others. A big different between CTCN and SEAN-CC seems to be that the management through the CTCN Secretariat is significantly more results-oriented than in SEAN-CC. This implies that project ownership can be maintained with UNEP even if country ownership is an important principle.

5.3   Recommendations

> **Recommendation 1.**   *It is recommended that the DTIE Energy Branch formulates a joint Theory of Change that clearly illustrates how UNEP projects contribute to mitigating climate change. The Branch is advised to then formulate consistent expected logical/causal pathways (TOCs) for every project for their ultimate impact of GHG emission reductions. These need to be completed with relevant and realistic assumptions and drivers.*

190.   The analysis found that each project is on its own in identifying the logical pathway to impact from the activities it is implementing. While it is acknowledged that each project has its own genesis and donors have different thinking about how their money should be spent, there is a clear hierarchy of the results that UNEP can help countries achieve. Typically it starts with an assessment of a problem through research, then a joint understanding, awareness and knowledge on what to do arises. This can form into political will and ultimately in effective policies that then might change energy consumption and emission behaviours and pathways and thus help reduce emissions. Having a joint understanding of how it is that UNEP can contribute to this objective will help coordinate UNEP DTIE Energy Branch activities. If it evolves into a standard (e.g. a project planning template or process) that is used across the units, it can support project planning and documentation. It is important that the end point of this Theory of Change is not "a policy" (which can be effective or ineffective, does not need to be enforced, and can also be reverted) but the (sustainable) reduction of GHG emissions.

191.   A nomenclature for the required project design elements needs to be standardized and clear definitions provided. A well-formulated TOC might support project and progress monitoring as well. This kind of umbrella programme could provide a linking tool for the project level activities and successes. Figure 1 from the inception report could be a basis, but should be improved in order to clearly describe the multitude of outcome levels that lead to effective policies. Such a TOC should describe for all of the approaches taken in the Energy Branch's policy and technology units (various information products, knowledge platforms, networks, direct capacity building for national reports to the UNFCCC like NAMAs and TNA, response plans etc.), how they build on each other to support the creation of supportive framework conditions and momentum in the country to deploy sustainable energy technologies. All UNEP Energy Branch activities are logically complementing each other.

192.   While formulating the logical frameworks, attention should be paid to the formulation of indicators of the immediate outcomes that are central and lead to the impacts. More incremental steps between outcome and impacts are necessary to work towards sustainability at outcome level. Drivers and assumptions have to be thoroughly identified right from the immediate outcome level until the impact level.

> **Recommendation 2.**   *Umbrella projects may present a good opportunity for programmatic work and more active management, even if in this case the intended benefits have not been realised. Grouping 3 to 4 sub-projects in smaller umbrella projects or small clusters ("parasols") is the current strategy at the Energy Branch and bears some promise. The Branch is advised to continue grouping sub-projects according to common outcomes reflecting common causal chains.*

193.   The starting point for formulating the umbrella projects was a fragmented portfolio of sometimes rather small projects that was challenging to communicate. The umbrella projects were a swing in the opposite direction – too summative. However, the underlying thought of a coordinated approach that works under a thematic bracket on several aspects is appealing. A consistent TOC for the Energy Branch allows to formulate programmatic approaches and project with higher level of specificity how the projects could overlap and could create synergies in working towards the

overlapping goals. With that it bears the promise of higher efficiency, higher effectiveness, higher impact and higher relevance. Active management could have facilitated the stringent leverages of UNEP's institutional advantages even in cases where project managers move, sit in different offices or projects are being implemented by different partners.

194.   The current practice in the UNEP DTIE Energy Branch is to subsume several thematically-related projects into "umbrellettes" or "parasols". In light of the results of this evaluation, this is a logical consequence and a recommendable practice. It can potentially leverage the advantages and avoid the disadvantages of the earlier umbrella concept. The DTIE should closely monitor whether this allows indeed for higher flexibility, synergies and better results.

> **Recommendation 3.**   *UNEP is advised to review the consistency of its understanding of project monitoring, reporting and evaluation. The expectations of what project monitoring (as opposed to PIMS reporting) is supposed to deliver, what is should be used for and how it should be done needs to be clarified between the CPR, QAS/PRC, Evaluation Office, Division Management, Branch Management and Project Managers. The QAS and Evaluation Office should undertake this as a joint exercise and review the consistency of messaging across the project cycle (e.g. within RBM training, in the Programme Manual, reflected in roles and responsibilities, in evaluation criteria etc.). Within this exercise UNEP is advised to develop M&E standards that are compatible with (varying) donor standards.*

195.   Country driven-ness is one of the strengths of the DTIE Energy Branch's portfolio. Projects like SEAN-CC or FIRM have been greatly appreciated by the target groups. However, in the evaluation, these projects were not able to demonstrate their successes. Urgent requests from project managers to receive endorsement and praise from project participants have resulted in a positive impression. But as no consistent monitoring took place, successes in the sense of outcomes or impacts could not be evidenced to the evaluation team. Partially, this is just an effect of the difficulty of keeping consistent documentation in a distributed organisation. In particular UDP should strive for a better monitoring and a closer coordination of record keeping with the Energy Branch. But ultimately, the onus is on the Energy Branch to develop and enforce monitoring and project planning standards that provide in-depth information about project status and achievements at a glance.

196.   Many challenges associated with M&E are associated to PIMS and – in this particular case – to the construct of the umbrella project, and both undermine any positive rating even if staff are trying to provide the monitoring data required by the system. M&E can only be improved if the M&E procedures are reviewed and conclusions drawn and put into practice.

197.   In a multi-donor funding environment, M&E standards can be difficult to develop, but are necessary tools. A functioning Monitoring and Evaluation system provides a continuous flow of information that should be used as a continuous management tool to inform on progress, problems and performance. It would aid project management when the PIMS mask would be altered in a way that supports project management in thinking about and clarifying not only immediate project outputs, but also longer-term outcomes and objectives, and overall project impact. A functioning M&E system helps the managers to identify the project weaknesses and to take action to correct them, eventually bringing about a more rapid completion of the project and leading to greater transparency. Measures can be undertaken on project level to ensure that the internal structure matches with "the outside world". Therefore, a well-functioning M&E system would aid UNEP in promoting greater transparency and accountability to the donor and when staff turn-over happens, knowledge can be easier preserved, the process of handing-over is facilitated.

198.   It is highly recommended to develop such standards on the basis of a thorough review of donor's M&E standards. These are evolving and generally becoming stricter. However, as there is a common understanding of the standards for M&E across the international community, it should be possible to define institution-wide standards that are compatible with most donor policies and optimize synergies with internal UNEP reporting. This should be led internally to UNEP by a collaboration between central management and quality assurance functions and the Evaluation Office as the representor of international M&E competence.

> *Recommendation 4.   UNEP is advised to review the role of the EAs in project design – project indicator hierarchies should follow international logframe conventions.*

199.   Part of the confusion arises from the attempt to link the performance targets from the institutional documents (e.g. Biennual Programmes of Work) to the project level. It must be noted however, that these institutional targets serve a different purpose and underlie a different rationale and logic than the operational project documentation. The institutional targets are an attempt to capture UNEP's mission and objectives in a small set of indicators that support communication to external stakeholders on UNEP's impact and reach. There are permanent attempts to arrive at a set of fewer higher-level indicators that are easier to communicate. Operational project documentation and monitoring serves on a much more granular level to provide ad-hoc detail information and guidance for project management and stakeholders. Here the need would be to provide sufficient detail for effective analysis and lesson-learning.

200.   To improve the comparability between the different projects and lead them altogether towards a more tangible policy impact, it is highly recommended that project designers stick to internationally accepted indicator hierarchies in project planning. It is not useful if typical output statements (like EA(c) "technologies are deployed") are used as outcome or impact indicators just because one of the levels of the institution uses them like it. If this means that dual terminologies (e.g. of "outcomes" on different institutional level – project outcomes could be programme outputs) would have to be reached, smart compromises need to be struck.

201.   It is also highly recommended to focus the programme logics in the DTIE Energy Branch on the ultimate objective of GHG removal. This means, even if the institutional indicators count the number of policies, the Energy Branch should still focus on the quality of these projects in their ability to leverage GHG emission reduction impacts. Basing Energy Branch projects on a pure GHG emission reduction logic will help reduce uncertainty of unpredictable project impacts and increase the likelihood of achieving the expected environmental impacts of climate change mitigation.

> *Recommendation 5.   The Evaluation Office is advised to undertake a special study to explore how UNEP expects to use its knowledge products to influence change, both externally in its projects and internally within UNEP itself.*

202.   In the context of the UN Family, UNEP considers itself a normative institution that helps countries build capacity. Rather than focusing on changing physical conditions in a country, the UNEP mandate is very knowledge-driven and focused on intellectual exchange. UNEP could embrace this mandate completely and make its performance stronger by adopting strong internal knowledge management systems, including for M&E but in particular also for environmental policies – these two can be very well linked. Work towards placing UNEP strategically as a knowledge-driven and -providing organisation; with the associated KM systems.

203.   This relates to how UNEP can help governments - many of the sub-projects work with the same toolbox, consisting of networks, online platforms, synthesis studies, national advisory services and outreach. It would be extremely helpful for the Energy Branch but also for the institution and a larger outside audience if the Energy Branch would take some time for reflection and understanding of the tools in this tool box and their optimized targeted used and collusion. For each normative challenge that UNEP is up against on the national, regional and global level, there might be recipes for how the tool box can be used for achieving successes in environmental policy through research, advice and advocacy, and UNEP has more experience than almost any other organisation in tackling these. Analysing and extracting these best practices on a higher and systematic level (including with meta-evaluations) and providing them in a shape that lets the global environmental community learn from the successes would provide an important service for the global environment.

204.   In addition, there are unextracted lessons and best practices on a meta level for each tool that can be helpful for larger audiences. For example, we found that the portfolio has many networks, of varying intensity and effectiveness. This is interesting in and of itself, but even more interesting would be an identification on what would be recipes for moving from the networking mode into climate mitigation action. The portfolio certainly harbours some ideas for factors of success. One is that it is important to relate all project activities to the ultimate goal of GHG emission reductions. This will also facilitate decision making, and make it easier to demonstrate impact.

> **Recommendation 6.**   *The QAS and Evaluation Office are advised to review jointly the UNEP systems to ensure there is an adequate system for recording lessons learned during project implementation.*

205.   Currently, there is no institutional opportunity to record and collect lessons, e.g. on what has worked and what has not. Almost all knowledge on energy project management is in the heads of the staff. This is not a very robust situation. UNEP needs to recognize that its USPs are not strong enough to compete with other agencies on this level. Examples where other agencies are already competing with UNEP are e.g. the TSU unit the NAMA facility (GIZ) or access to the GCF. Without funding from bilateral sources and GCF, UNEP will not be able to sustain its success in fund raising and contributing to the global environmental benefit. Therefore, more strategic planning and institutional investment in this area is highly recommended.

6 ANNEXES

6.1 List of individuals consulted for the umbrella study

6.1.1 List of individuals consulted for the inception report

Person	Relationship to P1/P2	Date	Place
Mark Radka	Chief, Energy Branch	21.07.2015	Paris
Rahel Steinbach	Programme Officer	21.07.2015	Paris
Tim Kasten	Deputy Director, DTIE	21.07.2015	Paris
Merlyn van Voore	Climate Change Sub-programme Coordinator (outgoing)	21.07.2015	Paris
Djaheezah Subratty	Project Manager FIRM and others	21.07.2015	Paris
Jerome Malavelle	Project Manager SEAN CC	21.07.2015	Paris
Francoise Estais	Head, Finance Unit, Energy Branch	21.07.2015	Paris
Zitouni Ould-Dada	Head, Technology Unit, Energy Branch	22.07.2015	Paris
Martina Otto	Head, CCAC (then Project Manager of Bioenergy Component)	22.07.2015	Paris
Amr Abdel Hai	Project Manager RIPECAP and GSWH	22.07.2015	Paris
Manfredi Caltagirone	Project Manager CTCN	22.07.2015	Paris
Giulia Ferrini	Consultant CTCN	22.07.2015	Paris
Agate Laure	Consultant CTCN	22.07.2015	Paris

6.1.2 List of individuals consulted for the evaluation report

Person	Relationship to P1/P2	Date	Place
Mark Radka	Chief Energy, Climate, and Technology Branch (DTIE)	20.04.2016	UNEP Paris
Alexander Koch	Programme Officer	20.04.2016	UNEP Paris
Christine Lins	Executive Secretary of REN 21	20.04.2016	UNEP Paris
Elsa Lefevre	Associate Programme Officer	20.04.2016	UNEP Paris
Helena Molin Valdes	Head CCAC Secretariat	20.04.2016	UNEP Paris
Jerome Malavelle	Programme Officer	20.04.2016	UNEP Paris
Merlyn Van Voore	Special Advisor, Climate Change	20.04.2016	UNEP Paris
Meseret Zemedkun	Programme Officer	20.04.2016	UNEP Paris
Nora Steurer	Associate Programme Officer	20.04.2016	UNEP Paris
Olola Vieyra Mifsud	Consultant, Regional coordinator for Africa en.lighten-United for	20.04.2016	UNEP Paris

	Efficiency		
Rob de Jong	Head Transport Unit	20.04.2016	UNEP Paris
Roberto Borjabad	Programme Officer	20.04.2016	UNEP Paris
Rahel Steinbach	Programme Officer, Energy, Climate and Technology Branch	21.04.2016	UNEP Paris
Mark Radka	Chief Energy, Climate, and Technology Branch (DTIE)	21.04.2016	UNEP Paris
Christine Lins	Executive Secretary of REN21	21.04.2016	UNEP Paris
Ruth Zugman Do Coutto	Task Manager, UNEP/GEF Climate Change Mitigation Unit	21.04.2016	UNEP Paris
Seraphine Haussling	Programme Officer	21.04.2016	UNEP Paris

6.2   Reconstructed Theory of Change

UNEP OUTPUTS

DIRECT OUTCOME

INTERMEDIATE STATES / MEDIUM-TERM OUTCOMES

INTERMEDIATE STATES /

LONG-TERM IMPACTS

P1 D — Knowledge networks

P2 A / P2 B / P2 D / P2 G — Key decision makers in govt, private sector and consumers are better in the reform of policies and the implementation of RE, EE and reduced GHG emissions

OTHER SUPPORTING FACTORS

OTHER SUPPORTING FACTORS

Preconditions and supporting factors for Impact / Impact drivers

Assumptions

P1 A / P2 C / P2 E / P2 F — Technical and economic assessments of CC mitigation options

Assessments are used in policy design

UNEP projects work with the relevant counterparts in governmeht

Adequacy of non-UNEP project related capacity on national level

Countries make sound policy choices on clean and RE sources, EE and EC

used to promote markets for cleaner energy technologies and hasten the phase-out of obsolete technologies

Political stability and no change in policy priorities at country level

P1 C — Technology specific plans to promote markets for cleaner energy technologies and hasten the phase-out of obsolete technologies

regulatory and fiscal frameworks promote EE, CE and RE, over Inefficient and less clean technologies

Low carbon and clean energy sources and technologies increasingly adopted and inefficient technologies phased out

Reduced environmnental and health impacts of energy system, reduced global impacts of climate change and GHGs caused by the energy sector

Policiesa are providing sufficiently accommodating framework for investment

behavioral change of investors and users

Reduced reliance on fossil fuels

Successful innovative financing mechanisms assessed and promoted

Macro-economic stability

financing becomes available from dedicated and mainstream sources

cost reduction of RE/EE and other climate mitigation technologies makes them more affordable and cost effective

Reduced poverty, improved well being and livelihoods through cleaner energy (and other) technologies and services

Analysis of costs, risks and opportunities of clean energy and low-carbon technologies in partnership with the finance sector

OTHER SUPPORTING FACTORS

6.3 Project "outputs" for 12/3-P1, 2010, 2011 and 2013, and relationship with UNEP PoW 2010-2011

Table 7: Project "outputs" for 12/3-P1, 2010, 2011 and 2013, and relationship with UNEP PoW 2010-2011

Project Outputs, Table 2	Project Outputs,, Table 4		Activities acc. To table 2/4	Project Outputs remained the same, revisions are restricted to the milestones for the project# — Milestones / Activities		- extension to 2013 - adjustment to project status - inclusion of components from P2 — Project Outputs / Pow Output	Associated subprojects	Project status
A) Macro-economic assessments are conducted and used nationally in four countries, to support national policy planning for climate change mitigation.	D) Macro-economic and sectoral analyses of policy options for fostering low greenhouse gas emissions, including technology transfer, are undertaken and used.	10	Stock-taking of existing policy planning initiatives, and assessment of current and anticipated climate change mitigation issues	Same	Milestone moved to project-specific-structure was abandoned and milestones and	A) Economic and technical assessment of climate change mitigation options that include macroeconomic and broad environmental considerations are undertaken and used by countries in developing broad national mitigation plans.	A.1 Facilitating Implementation and Readiness for Mitigation (FIRM)	extended
		11	Definition of national policy priorities and identification of specific policy goals through issuespecific, inclusive stakeholder consultations	Framework, methodology and approach available and under application for assessment of climate change policies			A.2 NAMA for buildings and other sectors	concluded
							A.5 Bio-energy	concluded
		12	Preparation of a scientifically sound, long-term policy plan for climate change mitigation which supports national development goals	Definition of national priorities and identification of specific policy goals through issue-specific, inclusive stakeholder consultations			A.6 Global solar Water Heating	concluded
C) Climate technology plans are prepared and used nationally in four countries, to support technology transfer for cleaner energy options.	B) National climate technology plans are developed and used to promote markets for cleaner energy technologies and hasten the phase-out of obsolete technologies	4	Analysis of regional technology trade flows and definition of target technology clusters based on trade and industry concentration data	Identification, assessment and prioritization of mitigation technologies supported in target countries		B. Climate technology plans are prepared and used nationally in eight countries, to support technology transfer for cleaner energy options.	B.1 Technology Needs Assessments	concluded
		5	Development of technology-specific action plans at the national level, outlining commercially viable technology substitution strategies	Reports with prioritized technologies and planning of technology specific action plans initiated			B.2 Energy performance standards	
		6	Strengthening of national (or regional, if relevant) certification and testing laboratories to support implementation of the action plans	Technology-specific action plans under preparation in target countries, outlining commercially viable businesses and projects involving application of clean technologies			B.2.1 Enlighten:Global Efforts to phase-out inefficient incandescent lamps	concluded
							B. 2.2 Sustainable Buildings	concluded
D) Knowledge networks are strengthened in 16 countries, to promote exchange of information and dissemination of successful approaches with potential for replication.	C) Knowledge networks to inform and support key stakeholders in the reform of policies and the implementation of programmes for renewable energy, energy efficiency, and reduced greenhouse gas emissions are established	7	Dissemination of best practices on issues of interest to network participants, to be identified, such as energy efficiency auditing schemes	Information exchange and mutual learning on mitigation relevant issues of interest to network participant		C. Climate change knowledge networks	C 1: Latin America regional climate change network (REGATTA)	extended
		8	Provision of technical expertise to expand the scope of the carbon markets in network member countries	Dissemination of the best practices on issues of interest to network participants, to be identified, including mitigation and adaptation			C. 2 South East Asian and Pacific network (SEAN)	extended
							C.3 Additional regional networks (West Asia, Africa)	concluded
		9	Provision of technical expertise to better prepare for meetings of the Conference of the Parties to the UNFCCC	Provision of technical expertise to expand the scope of the carbon markets in network member countries.			C.4: Global Network on Energy for Sustainable Development (GNESD)	unclear
							C 5: REN 21	extended
							C.7: Central Asia network[3]	extended

Table 8: Project "outputs" for 12/3-P2 and relationship with UNEP PoW 2010-2011

Outputs as defined in UNEP PoW 2010-2011 to which the project is contributing	Project outputs acc. Project document 2010	Project outputs acc. Project document supplement 2011
N/A (policy development is not part of the output framework)	A) 20 Countries receive support, drawing on their 'technology action plans', to establish and / or harmonize energy performance standards and labelling and certification procedures, with a view to promoting the deployment of energy efficent products that have reduced enviromental impact (for example, energy efficent refrigeration appliances with ODS phase out benefits).	A) Energy performance standards are developed and adopted in two countries, alongside related efforts to prepare national technology action plans
N/A (policy development is not part of the output framework)	B) Incentives and other measures for the preferential use of more efficient vehicles are established in at least 20 countries that have benefited from advisory and technical support services	B) Vehicle fuel efficiency standards are developed and adopted in two countries and cost-effective emission reduction opportunities are identified in partnership with governments and vehicle manufactures
Sustainability criteria and evaluation tools for biofuels development are refined globally and applied nationally [four countries]. (output b(5))	C) Global benchmarks and norms for energy efficiency in the building sector are developed, and the most effective policies are identified through, among other vehicles, the Sustainable Building and Construction Initiative.	C) Global benchmarks for building energy performance are developed which are amenable to adaptation by national governments
Mobility is not mentioned as part of the output framework in the PoW	D) Technical, financial and networking support services for the promotion and development of infrastructure for public transport and non-motorised transport modes are delivered, with pilots in cities or countries, to support a shift from high carbon modes of transport to low carbon modes of transport	D) Best practices reviewed and policy approaches designed and tested to integrate sustainable mobility considerations into urban management and land use plans
Technical and economic assessments of renewable energy potentials are undertaken and used by countries in making energy policy and investment	E) Assessments of the abatement potential of two mitigation technologies (e.g. CSP as suggested in the UNEP flagships) are undertaken, including an analysis of the economic, enviroment and social impacts of each technology	E) Assessment of bioenergy potentials are conducted, taking broader development and ecological considerations into account
Sustainability criteria and evaluation tools for biofuels development are refined globally and applied nationally [four countries]. (output b(5))	F) Bioenergy sustainability criteria and indicators are developed, decision support tools are made available, bioenergy support facility is created and countries receive advisory and capacity-building services to help promote sustainable bioenergy.	
N/A (global awareness raising and advocacy campaigns are not part of the output framework)	G) Two global advocacy and awareness-raising campaigns (on the issues of clean energy, sustainable transport, energy-efficient industrial processes and carbon sinks) are launched, including technical assistance on the linkages amongst climate change mitigation, green economic growth and creation of green jobs	F) Global advocacy and awareness-raising campaigns are launched to build support for a 'green economy'

6.4 List of sub-projects and activities subsumed under the umbrella

Table 9: List of sub-projects and activities subsumed under the umbrella

Project title	Implemented through	Start Date	End Date	Planned Budget in US$	Prog. Budget in US$	Countries	First mentioned in ProDocs/ Revisions	PIMS project under which reported	PIMS Output 2010-2011	PIMS Output 2012-2013	PIMS Output 2014
The Partnership for Clean Fuels and Vehicles, PCFV (Sulphur and Vehicles under CC; Lead under HWHS Priority Areas)	UNEP DTIE Transport Unit (Energy Branch)	01.07.2014	01.08.2018	5,000,000		Global	12/3-P2 ProDoc 12/3-P2 Rev Jun11				
Global Network on Energy for Sustainable Development (GNESD)	UDP	01.03.2003	31.12.2015		2,379,322	Senegal, South Africa, Kenya, Tunisia, Brazil, Argentina, China, Thailand, India, Mexico	12/3-P1 rev Feb13	P1		C4	C4
Renewable Energy Policy Network for the 21st Century (REN 21)	DTIE Energy Branch	01.05.2012	31.12.2015	1,420,466		Global	12/3-P1 rev Feb13	P1	Knowledge networks	C5	C5
Global Technology Needs Assessment (TNA) Phase I (GEF)	UDP	01.11.2009	30.04.2013	11,036,818	8,181,818	Global (36 countries[9])	12/3-P1 rev Feb13	P1	Climate Technology Plans	B, B1	

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[9]: Cote d'Ivoire, Mali, Morocco, Senegal, Ethiopia, Ghana, Kenya, Mauritius, Rwanda, Sudan, Zambia, Bangladesh, Cambodia, Indonesia, Thailand, Vietnam, Bhutan, Lao PDR, Lebanon, Mongolia, Nepal, Sri Lanka, Georgia, Azerbaijan, Kazakhstan, Moldova, Argentina, Costa Rica, Peru, Cuba, Colombia, Dominican Republic, Ecuador, El Salvador

Enhancing Renewable Energy Technology Information in Brazil, China and South Africa	DTIE Energy Branch	31.10.2008	30.12.2010	775,225	804,447	Brazil, China, South Africa, Nicaragua, Honduras, El Salvador, Guatemala, Cuba, Ghana, Kenya, Ethiopia, Nepal, Sri Lanka, Bangladesh, United Arab Emirates		P1		Sectoral analyses to support policy planning for RE and EE	
Bioenergy Programme	DTIE Energy Branch	01.01.2006	31.03.2014	N/A	N/A	Kenya, Ethiopia	12/3-P1 rev Feb13	P2 & P1	12/3-P2: Assessment of bioenergy potentials	12/3-P1: A, A5, Sectoral analyses	
Share the Road	UNEP DTIE Transport Unit (Energy Branch)	01.03.2006	01.08.2018	150,000***	955,276		12/3-P2 ProDoc				
Supporting Action on Climate Change through a Network of National Climate Change Focal points in Southeast Asia (SEAN CC), phase I+II	ROAP	01.01.2009	31.12.2011	2,914,974	3,182,653	Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam	12/3-P1 rev Feb13	P1	Knowledge networks	C2	C2
	ROAP	01.01.2012	31.12.2014	3,729,575	3,572,497		12/3-P1 rev Feb13	P1	Knowledge networks	C2	C2
	ROAP	01.01.2015	31.12.2015	1,014,631	1,014,631		12/3-P1 rev Feb13	P1	Knowledge networks	C2	C2
Assessments and Guidelines for Sustainable Liquid Biofuels Production in Developing Countries (GEF)		01.04.2009	30.06.2013	970,000	970,000	Global		P2	12/3-P2: Assessments of bioenergy potentials		
Global Solar Water Heating Market Transformation and	DTIE energy branch	01.05.2009	31.12.2015	3,750,000		Albania, Chile, India, Lebanon, Mexico	12/3-P1 rev Feb13	P1		A6	A6

Strengthening Initiative (GEF)										
MCA4climate initiative		01.06.2009	01.06.2011	1,168,000		Global		P1	A		
Global Market Transformation for Efficient Lighting (en.lighten) (GEF)	DTIE energy branch	03.01.2010	08.01.2015	8,000,000	5,000,000	Global	12/3-P1 rev Feb13	P1	12/3-P2: Energy performance standards	12/3-P1: A, B2, B2.1	
Facilitating Implementation and Readiness for Mitigation (FIRM) - Fostering Low Carbon development NAMAs and technology planning	UDP	01.01.2010	31.12.2015	6,898,658		Costa Rica, Mexico, Morocco, Senegal, Ghana, South Africa, Ethiopia, Indonesia, Vietnam	12/3-P1 rev Feb13	P1	A1		
Global Fuel Economy Initiative (GEF)		01.10.2010	01.05.2014	980,000	980,000	Chile, Kenya, Ethiopia and Indonesia	12/3-P2 ProDoc	P2	Vehicle fuel efficiency standards		
Promoting Low Carbon Transport in India	UNEP DTIE transport branch	01.10.2010	31.10.2015	2,620,848	2,620,848	India		P2	Integration of sustainable mobility considerations into urban management and land use plans		
Regional Gateway For Technology Transfer and Climate Change Action (REGATTA)	ROLAC	03.01.2011	31.12.2015	1,589,074	1,589,074	Regional Latin America / Caribbean	12/3-P1 rev Feb13	P1	Knowledge networks	C1	C1

Project	Branch	Start	End	Budget	Actual	Scope	Reference	Phase	Description	Code	Code2
Asia-Pacific Pilot of Climate technology network and finance centre in Asia Pacific (AP-CTNFC) (GEF)	ROAP	30.09.2012	30.06.2016	3,250,000	2,512,518	Asia Pacific		P1		C	
Climate Change Technology Centre and Network (CTCN)	DTIE energy branch	01.01.2013	31.12.2017	33,300,000	3,392,131	Global, all non-annex 1 countries	12/3-P1 rev May14	P1	Knowledge Networks	C	
NAMA for buildings & other sectors							12/3-P1 rev Feb13	P1		A2	
Sustainable Building and Construction Initiative							12/3-P2 ProDoc / 12/3-P1 rev Feb13	P2 & P1	12/3-P2: Global benchmarks for building energy performance	12/3-P1: B2.3	
West Asia Network Platform							12/3-P1 rev Feb13	P1	Knowledge Networks	C3	
Capacity Building Central Asia (CB Central Asia)							12/3-P1 rev Feb13	P1	Knowledge Networks	C7	C7
Sustainable Energy for All (SE4ALL)							12/3-P1 rev May14	P1		A C4	C4
Green Economy Initiative							12/3-P2 ProDoc	P2	Global advocacy and awareness-raising for a 'green economy'		
EST goes EAST???							12/3-P2 ProDoc				

6.5   List of documents consulted for the umbrella projects

GEF, December 2014, Establishing the Foundations of a Partnership to Accelerate the Global Market Transformation for Efficient Appliances and Equipment

GEF Trust Fund, February 2013, Establishing the Foundations of a Partnership to Accelerate the Global Market Transformation for Efficient Appliances and Equipment

Governing Council of UNEP, October 2008, Proposed biennial programme and support budgets for 2010-2011.

Governing Council of UNEP, October 2010, Proposed biennial programme of work and budget for 2012-2013.

República de Costa Rica - Ministerio de Vivienda y Asentamientos Humanos y Ministerio de Ambiente y Energía - Dirección de Vivienda y Asentamientos Humanos y Dirección de Cambio Climático, April 2014, Informe Final - Valoración de la situación y progreso en las ciudades y viviendas del Gran Área Metropolitana de Costa Rica en el contexto del cambio climático

UNEP, 2010, Annual Report

UNEP, 2010, January-December 2010, Programme Performance Report for the 2010-2011 biennium

UNEP, January 2010- December 2011, Programme Performance Report for the 2010-2011 biennium

UNEP, September 2011, Climate Change Sub-Programme (CCSP), Presentation to CPR on

18-months programme performance

UNEP, June 2013, Evaluation of the UNEP Sub-Programme on Climate Change, Component Review

UNEP, June 2013, Mid-term Evaluation Report, Global Market Transformation for Efficient Lighting (en.lighten)

UNEP, December 2013, Mid-Term Evaluation of the UNEP/GEF Project "Global solar water heating market transformation and strengthening Initiative" (GSWH Project – GEF ID2939)

UNEP, 2014, Sustainable low emissions transport

UNEP, December 2015, Programme Performance Report 2014-2015

UNEP, 2016, Annual Report 2015

UNEP, February 2016, Case study of the project Southeast Asia Knowledge Network of Climate Change Offices (SEAN-CC Phase II)

UNEP, February 2016, Case study on the Joint UNEP-UNIDO Programme to host and manage the Climate Technology Centre and Network (CTCN)

UNEP, June 2016, Case study - Regional Gateway for Climate Technology and Policy Innovation in Latin America and the Caribbean (REGATTA)

UNEP, July 2016, Case Study FIRM project – Facilitating Implementation and Readiness for Mitigation

UNEP, July 2016, Case study of Low Carbon Transport in India (LCT)

UNEP, July 2016, Case study - Share the Road: Promoting Investments in Walking and Cycling Road Infrastructure in Africa

UNEP Medium-term Strategy 2010-2013, Environment for Development

6.6 Comments received from the project team

206.   Throughout the evaluation, a constructive spirit was maintained between the evaluation team and the project and programme staff. The programme staff had ample opportunity to comment on the case studies as well as on the umbrella programme evaluation. Most of their comments were welcomed by the evaluation team and adopted into the evaluation report. However, some differences in opinion persist. These also lead to differences about the ratings and opportunity for improvement.

207.   In order to represent fairly the views of the programme team this annex serves to document where comments from the programme team where not adopted into revised text.

208.   Paragraph 24: comment received: "We believe these are necessary but not necessarily sufficient in most cases. Investment in new technologies, changed practices, and so on are almost always required, but beyond UNEP's scope in most cases." *Response from Evaluation Team:* we have amended the paragraph to make our point clearer: we understand that it is considered beyond UNEP's mandate to facilitate investments. However, this can lead very easily to the feeling "it is beyond my mandate so I will not care" whether what I do really provides the optimum ground for investments or for changed activities. Quite the contrary, as it is beyond UNPEP's mandate and control, it is particularly important to integrate these aspects into the logical chain and consider them carefully.

209.   Paragraph 40: comment received: "I don't disagree with any of this in an academic sense, but it is important to keep in mind UNEP's role in the intergovernmental system. We are usually somewhere near the beginning of long causal chains. It is a good thing that primary school teachers know that some of their students will become heart surgeons, but somewhat bizarre to think that they should spend a lot of time thinking about this." *Response from Evaluation Team:* We are not talking about actually doing all the steps. However, we are wondering about just how much capacity one should build on a normative level without ensuring the link to action on the ground within the programme planning. Not formulating the link with actual climate action opens the door for building capacity for the sake of building capacity. Networks for the sake of talking to each other can be enjoyed by the stakeholders, they can have the perception of being linked in to a global community and of benefitting greatly personally and for their work. However, from that outcome to an outcome where their countries and governments provide the appropriate frameworks for climate mitigation, and where the private sector and consumers in their countries can live with fewer emissions, is a long way which needs to be considered.

210.   Paragraph 61: for the part "which is understandable given the fact that the sub-projects were created independent of each other and of the umbrella project", we received the comment "this was not always the case". The text was amended to include "often". However, the evaluation team wants to emphasize that we did not find a sub-project that was created as a consequence of the umbrella. There were a number of sub-projects included in the umbrella project documents that did not have a budget or project document at the time of the creation of the umbrella project. However, none of these then materialized into projects that the evaluation team learned about.

211.   Paragraph 64, for the rationale for the "likelihood of impact" rating of Moderately Unlikely we received the comment: "On this I disagree. Perhaps you mean that it is difficult to measure the likelihood of impact or directly attribute impacts to the projects, which is a different thing." The evaluation team agrees that measuring the likelihood of impact is difficult. It is also difficult to attribute impacts to the projects. But probably the main difference lies in what is considered the

ultimate impact. If a country writing a NAMA or participating constructively in the UNFCCC negotiations is considered the ultimate impact, then attribution might be possible. But if we consider impact as a country reducing its emissions, the measurable "impacts" detailed above are only intermediate outcomes in this change process. In our assessment even these outcomes are moderately likely. But that emissions reductions result from them is in our opinion moderately unlikely because a very large number of other preconditions are necessary which are not touched upon by the sub-project. One might have expected an umbrella project to offer an opportunity to tie the sub-projects together more firmly and plaster the road to results with more coordinated support from UNEP's side.

212.   Paragraph 67: Comment received: Financing implementation was "not the intention" of the FIRM project. We have heard this consistently from the implementers of the FIRM project. However, the project document mentions implementation. This also is in line with the relatively high amounts of initial funding for the project.

213.   Paragraph 154: Comment received: "I believe that in the case of India city and state level change is equally important given the federal structure of that country. There has, I believe, been pick up of approaches in other cities and states, but this should be verified." *Evaluation team:* our cases study has not documented evidence of this, so we unfortunately cannot include such a statement.

214.   Paragraph 158: comment received: "Unfortunately the evaluation occurred during the period of maximum Umoja madness, with an almost total inability to extract information from the new system and incomplete data obtainable from IMIS. It was not only the evaluators who were in the dark; all staff were as well." Evaluation team response: we agreed and this search for information extended the evaluation to a duration of one and a half years. However, we would have expected old data to be available as any organisation that is under constant reporting pressure cannot survive without access to any kind of financial records. We have not been able to obtain records for at least one of the subprojects, and for none of the umbrellas.

215.   Ratings Table, "Financial planning and management", comment received: "It would be good to distinguish between the systems and the people. I believe we have in the Branch some of the best financial and administrative staff working in UNEP. However the systems were not up to the task. PIMS is an abomination and the challenges of the transition to Umoja could fill books." We point to paragraph 214. We also appreciate the manager's backing of their staff. We cannot assess whether the Branch's financial and admin staff is better or worse than in other units.

216.   Paragraph 188: comment received: "Amen! I sometimes feel we are in a parody of a centrally controlled economy where the system demands lots of the wrong information and doesn't care much about (or provide) useful information."

217.   Paragraph 200 contains the sentence: "It is not useful if typical output statements (like some of the EAs) are used as outcome or impact indicators just because one of the levels of the institution uses them like it." Comment received: "We have an institutional challenge in that the EA's are ultimately subject to approval by the CPR and New York, which often changes the wording to suit the views of particular countries or individuals. We are left with EAs that have perplexing elements but are the law of the land." The evaluation team appreciates this background, but does not see that this means that the EAs should be the ultimate objective of the activities of the Energy Branch. It is important that they are part of the logical chain, and the appropriate place would be at outcome level. The ultimate impact for any UNEP activity will be improved environmental conditions, as far as the evaluation team's understanding is correct.

218.   Paragraph 203 and 204: Comment received: "I like these suggestions very much, but they hint at having a sort of research arm for UNEP. The suggestions sit above any individual project and thus are hard to justify including in a budget. But the information revealed by such an analysis

would be very good for UNEP or the Branch." The evaluation team finds: Throughout the evaluation, UNEP was repeatedly described to us as an institution that is knowledge driven and normative oriented. We have the feeling that it might be the cause of some of the persistent challenges in the Branch's operations that it might be too project-driven and reliant on individuals rather than institutional knowledge. A structured knowledge management system would be necessary for a modern distributed knowledge-driven global Organization.

6.7   Quality Assessment of the Evaluation Report

Evaluation Title:

Terminal Evaluations of
"Project 12/3-P1 – Support for Integrated Analysis and Development of Framework Policies for Greenhouse Gas Mitigation"
And
"Project 12/3-P2 – Support for the Deployment of Renewable Energy and Energy-efficient Technologies in Developing Countries"

All UNEP evaluations are subject to a quality assessment by the Evaluation Office. The quality assessment is used as a tool for providing structured feedback to the evaluation consultants.

The quality of both the draft and final <u>evaluation report</u> is assessed and rated against the following criteria:

	UNEP Evaluation Office Comments	Draft Report Rating	Final Report Rating
Substantive report quality criteria			
A. **Quality of the Executive Summary**: Does the executive summary present the main findings of the report for each evaluation criterion and a good summary of recommendations and lessons learned? (Executive Summary not required for zero draft)	Draft report: This evaluation report is a synthesis of findings from 11 other evaluation products, including 6 case studies (each one evaluating a sub-project against the full range of evaluation ratings, with primary data collection). This posed challenges in terms of coordinating inputs from the case studies and generating a useful and relevant synthesis from wide ranging sub-projects. Final report:	N/A	6
B. **Project context and project description**: Does the report present an up-to-date description of the socio-economic, political, institutional and environmental context of the project, including the issues that the project is trying to address, their root causes and consequences on the environment and human well-being? Are any changes since the time of project design highlighted? Is all essential information about the project clearly presented in the report (objectives, target groups, institutional arrangements, budget, changes in design since approval etc.)?	Draft report: The first draft was submitted before the feedback of case study findings to UNEP staff in Paris and some gaps in information still existed. Final report:	4	6
C. **Strategic relevance**: Does the report present a well-reasoned, complete and evidence-based assessment of strategic relevance of the intervention in terms of relevance of the project to global, regional and national environmental issues and needs, and UNEP strategies	Draft report: Relevance in terms of alignment is presented and other aspects under the UNEP Strategic Relevance criterion are discussed. Final report:	5	6

	and programmes?			
D.	**Achievement of outputs**: Does the report present a well-reasoned, complete and evidence-based assessment of outputs delivered by the intervention (including their quality)?	Draft report: As outputs at umbrella level are essentially the deliverables of the sub-projects it would be unreasonable to repeat them, but an overview of main highlights is given. Final report:	5	6
E.	**Presentation of Theory of Change**: Is the Theory of Change of the intervention clearly presented? Are causal pathways logical and complete (including drivers, assumptions and key actors)?	Draft report: The TOC at inception was designed along the lines of project approaches and an alternative clustering by project activities was proposed in the draft report, as a table. **The TOC diagram from the inception needs to appear in the final report, even if it was found to be unhelpful.** Final report:	4	6
F.	**Effectiveness - Attainment of project objectives and results**: Does the report present a well-reasoned, complete and evidence-based assessment of the achievement of the relevant outcomes and project objectives?	Draft report: The evaluation of the umbrella effectiveness is challenged by the lack of a coherent and interdependent design for the sub-projects. **These design weaknesses of the umbrella will need to be written in a concise manner in the early stages of the report so that it does not have to be repeated throughout the report.** Final report:	4	6
G.	**Sustainability and replication**: Does the report present a well-reasoned and evidence-based assessment of sustainability of outcomes and replication / catalytic effects?	Draft report: Final report:	5	6
H.	**Efficiency**: Does the report present a well-reasoned, complete and evidence-based assessment of efficiency? Does the report present any comparison with similar interventions?	Draft report: Final report:	5	6
I.	**Factors affecting project performance**:	Draft report:	4	6

	Does the report present a well-reasoned, complete and evidence-based assessment of all factors affecting project performance? In particular, does the report include the actual project costs (total and per activity) and actual co-financing used; and an assessment of the quality of the project M&E system and its use for project management?	The report does its best to summarise findings across a disparate range of sub-projects. **A means of 'packaging' both the umbrella report and the 6 bespoke case studies needs to be proposed for the final report.** Final report:		
J.	**Quality of the conclusions:** Do the conclusions highlight the main strengths and weaknesses of the project, and connect those in a compelling story line?	Draft report: As above, summarising findings across this disparate range of sub-projects is challenging. **The umbrella ratings will not be an aggregate of the individual sub-project ratings. It would be helpful to have a landscape table with just the ratings for each sub-project and then the umbrella ratings (ie no evidence/comments section). This will help to illustrate the relationships between sub-projects and umbrella in terms of performance.** Final report:	4	6
K.	**Quality and utility of the recommendations**: Are recommendations based on explicit evaluation findings? Do recommendations specify the actions necessary to correct existing conditions or improve operations ('who?' 'what?' 'where?' 'when?)'. Can they be implemented?	Draft report: **The lessons and recommendations at umbrella level are of strategic importance to UNEP and need to be clear and concise to have the appropriate impact at senior management level.** Final report:	4	6
L.	**Quality and utility of the lessons**: Are lessons based on explicit evaluation findings? Do they suggest prescriptive action? Do they specify in which contexts they are applicable?	Draft report: **The lessons and recommendations at umbrella level are of strategic importance to UNEP and need to be clear and concise to have the appropriate impact at senior management level.** Final report:	4	5
Report structure quality criteria				
M.	**Structure and clarity of the report**: Does the report structure follow EO guidelines? Are all requested Annexes included?	Draft report: Final report:	6	6
N.	**Evaluation methods and information sources**: Are evaluation methods and information sources clearly described? Are data collection methods, the triangulation / verification approach,	Draft report: Final report:	5	5

	details of stakeholder consultations provided? Are the limitations of evaluation methods and information sources described?			
O.	**Quality of writing**: Was the report well written? (clear English language and grammar)	Draft report: Final report:	5	5
P.	**Report formatting**: Does the report follow EO guidelines using headings, numbered paragraphs etc.	Draft report: Final report:	6	6
		OVERALL REPORT QUALITY RATING	4.9	5.9

The quality of the <u>evaluation process</u> is assessed at the end of the evaluation and rated against the following criteria:

		UNEP Evaluation Office Comments		Rating
Evaluation process quality criteria				
Q.	**Preparation:** Was the evaluation budget agreed and approved by the EO? Was inception report delivered and approved prior to commencing any travel?			6
R.	**Timeliness:** Was a TE initiated within the period of six months before or after project completion? Was an MTE initiated within a six month period prior to the project's mid-point? Were all deadlines set in the ToR respected?	Timelines became extended but this was outside the control of the evaluation team.		4
S.	**Project's support:** Did the project make available all required documents? Was adequate support provided to the evaluator(s) in planning and conducting evaluation missions?	There were gaps in the information provided, especially financial data. The process of collecting final data also became prolonged for unclear reasons.		2
T.	**Recommendations:** Was an implementation plan for the evaluation recommendations prepared? Was the implementation plan adequately communicated to the project?			6
U.	**Quality assurance:** Was the evaluation peer-reviewed? Was the quality of the draft report checked by the evaluation manager and peer reviewer prior to dissemination to stakeholders for comments? Did EO complete an assessment of the quality of the final report?			5
V.	**Transparency:** Were the draft ToR and evaluation report circulated to all key stakeholders for comments? Was the draft evaluation report sent directly to EO? Were all comments to the draft evaluation report sent directly to the EO and did EO share all comments with the commentators? Did the evaluator(s) prepare a response to all comments?			5

W.	**Participatory approach:** Was close communication to the EO and project maintained throughout the evaluation? Were evaluation findings, lessons and recommendations adequately communicated?			6
X.	**Independence:** Was the final selection of the evaluator(s) made by EO? Were possible conflicts of interest of the selected evaluator(s) appraised?			6
	OVERALL PROCESS RATING			**5**

Rating system for quality of evaluation reports

A number rating 1-6 is used for each criterion: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1

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