

RESOURCE EFFICIENCY SUB-PROGRAMME EVALUATION REPORT

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This report has been prepared by independent consultant evaluators and is a product of the Evaluation Office of UN Environment. The findings and conclusions expressed herein do not necessarily reflect the views of Member States or the UN Environment Senior Management.

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Table of Contents

Lists of Annexes, Figures and Tables.....	5
Key Definitions	6
1. Executive Summary	7
Introduction	7
Evaluation Inquiries	8
Driving Change at Sub-Programme Level	8
Theory of Change at the Sub-Programme Level	9
Institutional Narrative on Influencing Global Change Processes	10
Higher Level Results Reporting	11
Regional Aspects of the Sub-Programme	13
Sub-Programme Performance.....	14
<i>Relevance</i>	14
<i>Design and Structure</i>	14
<i>Efficiency</i>	14
<i>Effectiveness</i>	14
<i>Impact</i>	15
<i>Sustainability</i>	15
Factors Affecting Performance.....	15
Recommendations.....	17
2. Introduction	19
Objectives and Scope of the Evaluation	19
Evaluation Audience	20
Resource Efficiency Sub-Programme 2010-17	20
Method and Approach of the Evaluation	22
3. Driving Change at a Sub-Programme Level	25
Transition Management	25
Science-Policy Interface	28
The Normative Function	31
4. Theory of Change at the Sub-Programme Level	33
Reconstructed Theory of Change of the Sub-Programme, 2014-17	33
Relation to 2018 Outcome Mapping and Beyond	35
Implementation of the Reconstructed Theory of Change (2014-17) in Projects	37
5. Institutional Narrative on the Influence of Resource Efficiency Sub-Programme on Global Change Processes	42
Project ‘Snapshots’	42
Summary Table and Consolidation of Findings	49

6. Higher Level Results Reporting	50
Current Situation	50
Discussion of Findings.....	51
<i>Results Articulation</i>	53
<i>Reliability and Transparency of the Reporting System</i>	54
<i>Data Collection</i>	54
<i>Integration</i>	56
<i>Validation and Verification</i>	58
<i>Attribution</i>	60
Situation in the Medium-Term Strategy 2018-21	61
Custodian of SDG 12 Indicators.....	62
7. Regional Aspects of the Sub-Programme	64
Introduction	64
Discussion of Findings.....	67
8. Synthesized Analysis of Project Evaluations in Resource Efficiency Sub-Programme Portfolio	
70	
Analysis Framework.....	70
Aggregation and Analysis of Overall Evaluation Ratings	70
Aggregation and Analysis of Evaluation Ratings	72
Synthesis of Evaluation Recommendations and Lessons Learned.....	74
Synthesis of Strengths and Weaknesses for Cross-cutting Themes	76
9. Factors Affecting Performance	79
Organisation, Coordination and Management Arrangements	79
Human and Financial Resources and Management	80
Stakeholder Cooperation.....	83
Monitoring and Reporting	84
Gender Equality and Human Rights.....	85
Communication	86
10. Conclusions and Recommendations	87
Conclusions	87
Driving Change at Sub-Programme Level	87
Theory of Change at the Sub-Programme Level	87
Institutional Narrative on influencing Global Change Processes	87
Higher Level Results Reporting	88
Regional Aspects of the Sub-Programme	88
Synthesized Project Evaluation Findings.....	88
Factors Affecting Performance.....	89
Recommendations.....	90

List of Annexes

Annex I:	Summary of the Expected Accomplishments and Programme of Work Indicators Over Time	92
Annex II:	Country Level Cases: India, Kenya and Mongolia	95
Annex III:	UN Environment's Custodianship of SDG 12 Indicators	99
Annex IV:	Projects under the Resource Efficiency Sub-Programme	103
Annex V:	Sample of Project Evaluations Used in this Sub-Programme Evaluation	107
Annex VI:	Analysis of Evaluation Criteria with Sub-Categories	109
Annex VII:	Examples of Good Practice at Project Level in the Cross-Cutting Themes	112
Annex VIII:	Sub-Programme Financial Information	116
Annex IX:	Evaluation Terms of Reference	117
Annex X:	People Interviewed	135
Annex XI:	Documents Reviewed	137
Annex XII:	Comments from Respondents (only partially resolved in main body of text)	140
Annex XIII:	Acronyms Used in this Evaluation	144

List of Figures

Figure 1:	Multi-level Perspective Theory Diagram (Geels, 2002)	25
Figure 2:	Transition Management Cycle Diagram (Loorbach, 2010)	25
Figure 3:	Diagrammatic Representation of Discussions on the Science-Policy Interface	29
Figure 4:	Reconstructed Theory of Change for the Resource Efficiency Sub-Programme, (TOC 2014-17)	33
Figure 5:	Resource Efficiency Outcome Map (Medium Term Strategy 2018-21)	35
Figure 6:	Theory of Change Resource Efficiency Sub-Programme, (TOC 2018-19)	36
Figure 7:	Diagrammatic Representation of the Roles Played by Staff in Substantive and Regional Office	64
Figure 8:	Overview of Project Performance	69
Figure 9:	Average and Range of Performance Ratings	70
Figure 10:	Analysis on Moving from Outputs to Outcomes to Impact	72
Figure 11:	Linking Evaluation Recommendations to Rating Criteria	73
Figure 12:	Analysis of Effectiveness Ratings	109
Figure 13:	Analysis of Sustainability Ratings	110
Figure 14:	Analysis of Factors Affecting Performance Ratings	110
Figure 15:	Analysis of Monitoring and Evaluation Ratings	111

List of Tables

Table 1:	Overview of General Recommendations for the Sub-Programme	17
Table 2:	Evaluation Methods	21
Table 3:	UN Environment Comparative Advantages as Features and Benefits	30
Table 4:	Consolidation of Findings on Models of Action	48
Table 5:	Projects with Integrated Components	55
Table 6:	Recommendations from Project Level Analysis - by cross-cutting theme	75
Table 7:	Overview of Actionable Recommendations	87
Table 8:	Listing of Projects under UN Environment Resource Efficiency Sub-Programme 2010-17	106
Table 9:	Summary of Evaluated Resource Efficiency Sub-Programme Projects	108

Key Definitions

<p>Resource Efficiency (RE)</p>	<p>Resource Efficiency seeks to reduce the actual quantity of resources deployed (resource decoupling) to produce products and services, along with the associated environmental impacts from that deployment (impact decoupling). Resource efficiency has the potential to allow humanity to continue to expand its use of the services derived from resources while promoting human well-being and reducing environmental impact.</p> <p>Resource efficiency represents a critical opportunity to address the unsustainable path of increased pressure on our finite and fragile resources, by building green economies in which economic growth is decoupled from environmental harm. Through enabling the design and production of low-impact products and services, resource efficiency can help us meet human needs while respecting the ecological carrying capacity of the earth. UN Environment Programme defines resource efficiency from a life cycle and value chain perspective. This means reducing the total environmental impact of the production and consumption of goods and services, from raw material extraction to final use and disposal.</p>
<p>Sustainable Consumption and Production (SCP)</p>	<p>Sustainable consumption and production is about promoting resource and energy efficiency, sustainable infrastructure, and providing access to basic services, green and decent jobs and a better quality of life for all through decoupling of economic growth from unsustainable use of national resources and environmental impact. The implementation of SCP as an integrated approach helps to achieve overall development plans, reduce future economic, environmental and social costs, strengthen economic competitiveness and reduce poverty.</p> <p>Sustainable consumption and production is defined as “the use of services and related products, which respond to basic needs and bring a better quality of life while minimising the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardise the needs of future generations.” Norwegian Ministry of Environment, Oslo Symposium, 1994.</p> <p>SCP aims at “doing more and better with less,” increasing net welfare gains from economic activities by reducing resource use, degradation and pollution along the whole lifecycle, while increasing quality of life. This change towards SCP involves different stakeholders, including business, consumers, policy makers, researchers, scientists, retailers, media, and development cooperation agencies, among others. It requires a systemic approach and cooperation among actors operating in the supply chain, from producer to final consumer. It involves engaging consumers through awareness-raising and education on sustainable consumption and lifestyles, providing consumers (which include intermediary business and governments along value chains) with adequate information through standards and labels and engaging in sustainable public procurement, among others.</p>
<p>(Inclusive) Green Economy (IGE)</p>	<p>UNEP has developed a working definition of a green economy as one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. In its simplest expression, a green economy can be thought of as one which is low carbon, resource efficient and socially inclusive.</p> <p>An Inclusive Green Economy (IGE) has evolved from earlier work on Green Economy. In its simplest expression, such an economy is low carbon, efficient and clean in production, but also inclusive in consumption and outcomes, based on sharing, circularity, collaboration, solidarity, resilience, opportunity, and interdependence. It is focused on expanding options and choices for national economies, using targeted and appropriate fiscal and social protection policies, and backed up by strong institutions that are specifically geared to safeguarding social and ecological floors. And it recognizes that there are many and diverse pathways to environmental sustainability.</p> <p>IGE speaks to the multiple benefits – economic, health, security, social and environmental – that such an approach can bring to nations, mindful of the different challenges faced by states along the development continuum, be they developed, developing, emerging, or in conflict. It argues for policies that are nuanced, context-dependent, and modulated. An integrated approach can help states understand how to maximize, prioritize, and sequence the different benefits to human well-being that can be derived from a healthy environment. At the end of the day, an inclusive green economy must provide not only for jobs and income, but for our health, our environment, and our future.</p>

1. Executive Summary

Introduction

1. This evaluation of the Resource Efficiency Sub-Programme (hereinafter 'the Sub-Programme') was launched in September 2017 in accordance with the UN Environment Programme Evaluation Policy (March, 2016), which provides for each sub-programme to be evaluated within the course of two Medium-Term Strategies. The evaluation reflects on the period 2010-17 and looks forward towards to the Medium-Term Strategy 2018-21 in so far as the Sub-Programme has developed planning documents for that time period.
2. The evaluation team was led by Dr. Marcel Crul, with Dr. Dick Van Beers (analysis and synthesis of project level evaluations) and Dr. Derek Eaton (Green Economy expert) as team members and managed by the UN Environment Programme Evaluation Office. The evaluation team was supported by an Evaluation Reference Group of four members: Dr. Mark Halle, Dr. Alice Kaudia, S. Vijay Kumar M.Sc., and Dr. Oyun Sanjaasuren.
3. The process included extensive interviews with UN Environment Programme staff in various locations and with external parties, as well as a desk-based review of relevant documentation. The evaluation team is particularly grateful to representatives from the Committee of Permanent Representatives who contributed to this exercise.
4. A presentation of the key insights derived from this evaluation exercise was made, supported by a Powerpoint document, on 9th November 2018 to key UN Environment staff. The Powerpoint slides are available from the UN Environment Evaluation Office. A presentation will be organised to the Committee of Permanent Representatives after a management response to this evaluation report has been received from UN Environment senior management.
5. In this evaluation, a distinction is made between the Sub-Programme as a results-oriented and thematically bounded construct and the Economy Division, through which a large part of the Sub-Programme portfolio is operationalised. The focus of this evaluation is the Sub-Programme itself and it is not intended as an evaluation of the performance of the Economy Division or other divisions and offices that manage and implement projects associated with the Sub-Programme.
6. Although in the Medium Term Strategy 2018-2021 and the current Programme of Work 2018-2019 the strategic focus has been strengthened, during the evaluation period (2010-17) the nature of the Sub-Programme as an operational entity was not entirely clear. Sub-programmes represent the framework by which the Programme of Work is organised and, therefore, also provide the structure for the higher-level results (i.e. Expected Accomplishments). One would expect the Resource Efficiency Sub-Programme, therefore, to be driving UN Environment's interventions from a strategic perspective and to firmly host the causal logic that connects interventions to results. However, the evaluation observed that the strategic emphasis of the Sub-Programme during the evaluation period is largely driven at the level of individual projects and sometimes by trends in extra-budgetary funding, with project alignment and contributions to results being largely fitted retrospectively to the results frameworks of the Programmes of Work 2010-2017. As a Sub-Programme Outcome Map and Theory of Change for 2018-21 were developed for the first time during 2015, (approved at UNEA 2 in May 2016) , it is anticipated that a more strategic dynamic will become more evident over time.

Evaluation Inquiries

7. The Evaluation has performed a number of inquiries relevant to the Sub-Programme. These inquiries deal with: change processes and the theory of change; institutional narratives on influence of global processes; higher-level results reporting and regional aspects of the sub-Programme. Next to this, the standard evaluation topics on the performance and factors affecting performance have been assessed. These are based, amongst other sources, on a synthesized analysis of 25 project evaluations. The findings of these inquiries are described below.

8. The evaluation gathered feedback and input on early drafts from institutions across the house that are not directly involved in the Sub-programme. Several of those comments supported findings in the evaluation and suggested recommendations along these lines for other Sub-programmes or for the overall Un Environment Programme. Examples of this include better integration, development of broader programmatic approaches, better storyline development across programmes, the incorporation of other Sub-Programme Coordinators into substantive divisions, development of a broader outcome map/theory of change for the whole UN Environment programme. The Evaluation team welcomes these highly relevant comments. However, within the scope and objectives of the Evaluation, processes and developments outside the Resource Efficiency Sub-Programme were not thoroughly investigated and analysed, and therefore no recommendations on it were included in this Evaluation report.

Driving Change at Sub-Programme Level

9. New social and economic pathways often have a hard time competing with the existing mainstream systems. That is certainly the case for the Sub-Programme, that advocates for the acceleration of societal changes in Resource Efficiency, Green Economy and Sustainable Production and Consumption. A strong science-policy interface alone does not solve this. For this reason, this Evaluation has explored the potential for Transition Management as an approach to help achieve these changes, since its concept and application have a strong focus on sustainability topics. This choice does not intend to exclude any other innovation approaches that can be relevant for the Sub-Programme.

10. Transition Management advocates a disruptive strategy for change in which a new concept destabilizes the existing socio-technical regime, followed by an 'evolutionary stabilization' and impact strategy. This fits in the UN Environment Business Model in the sense that UN Environment catalyses effort at the beginning of a proverbial 'steep learning curve' and stewards the work until a 'take-off' stage is reached, at which point further implementation is handed over to partners who have previously been engaged in 'walking-the-walk'. These aspirational business models involving more disruptive innovation are likely to be met by resistance since they will also intend, in part, to disrupt business-as-usual strategies by governments and corporations. Therefore, they can also be taken up by other stakeholders with conceptual and scientific support from UN Environment. A Transition Management approach provides useful insights for the evaluation of the Resource Efficiency Sub-Programme. An initial workshop on building up transition agendas by the Sub-programme project management team showed the approach to be applicable and leading to novel and promising results.

11. Distinctive comparative advantages of UN Environment as a whole, that are relevant in this context and can support and accelerate approaches to disruptive change include: Technical expertise on global environmental issues; political independence; global representation and membership and its set-up as a normative institution. These features create benefits that can be

put to good use, such as credibility, neutrality and a strong mandate to engage in emerging agendas.

12. The normative character (of UN Environment as a whole) is put under pressure by various forces that promote a more operational role (e.g. the preferences of funders, requests from countries and regions, emerging approaches of financing pitches by private sector, the need to demonstrate results etc.). The UN Environment business model also reflects the need to create 'take-off points' when other parties can move forward, through both normative and demonstration actions. The normative nature of UN Environment's role, with the implication that results are less tangible or emerge over a very long time period, is also sometimes used to justify why results cannot be clearly identified or measured. However, since normative change also depends on operational processes (i.e. require proof of concept through experimentation, depend on an enabling environment for multiplying intended effects, and need mechanisms to take them to scale for implementation), they can and should be identified, set up and managed in a similar way as transition and application/implementation processes.

Theory of Change at the Sub-Programme Level

13. As no explicit Theory of Change existed for the period under evaluation the evaluation team reconstructed a Theory of Change for the period 2014-2017, based on available Sub-Programme documents. This reconstruction, which was acknowledged by most respondents to be a fair representation for that period, shows there could be further improvements to the articulation of the causality between the Sub-Programme's interventions (i.e. projects) to the key deliverables (i.e. Sub-Programme Outputs), and from there to the Expected Accomplishments (see figure 4, page 33 for the reconstructed Theory of Change 2014-17). The 2018-21 Theory of Change, which was developed by the sub-programme during 2015, reflects a logical progression from the 2014-17 model. In both versions of the Theory of Change a central causal pathway on the science-policy interface and normative work could be added, as well as relevant output areas of marketing and communication, and capacity development deliverables.

14. Comparative analysis of the intermediate states, long-term outcomes and impacts of eight recently evaluated, major projects of the Sub-Programme show a consistent and clear connection with the overall Sub-Programme Theory of Change, suggesting alignment of the projects' outcomes with the Sub-Programme results. It is however questionable whether the project-level distribution of resources - towards different sectors and targeting different stages of change processes identified - is designed strategically (and causally) in such a way that it delivers optimally and efficiently to the Sub-Programme's objectives.

15. One example of this is that almost none of the individual projects evaluated and analysed contributes to the Sub-Programme's Causal Pathway on sustainable consumption (see figure 4, page 33). This causal pathway contributes to the Expected Accomplishment of enabling conditions to promote sustainable consumption and lifestyles, which indicates an uneven distribution of resources across the Sub-Programme's result areas.

16. Because of the availability of very detailed theories of change at project level, the Sub-Programme Theory of Change has a limited functionality in practice. It is mostly used by Project Managers in periods of submitting or renewing project proposals for internal project review. The theories of change for individual projects with a defined project period, a clear design stage and relatively clear activities, outputs, outcomes, intermediates states and impact are more widely used.

17. In the Resource Efficiency Outcome Map presented in the Medium Term Strategy 2018-21 (see figure 5, page 35), which shows the Sub-Programme's progression from 2017 towards the 2030 Sustainable Development Goals (2030 SDGs), the potential contribution of the Sub-Programme to the 2030 SDGs is formulated. However, the descriptions used in both the Sub-Programme Theory of Change and the Outcome Map could be better aligned with these global goals.

18. This Evaluation has gathered reflections on the comparative advantages on UN Environment, which support its mandate as a normative agency. It is seen as important to direct resources to its strengths and mandate and ensure all work has an explicit change model or causal pathway that links project implementation to the normative work and global change. External respondents commented on the importance of UN Environment building on its strengths as: a) they reported instances where regionally managed projects had not delivered with the quality they had come to expect from UN Environment as a whole and b) UN Environment's strength in normative work is not always demonstrated when more operational projects are implemented. The evaluation team notes that the group of external respondents is small, but well-informed.

19. This evaluation recognises that new corporate priorities have been developed since 2017 and the Resource Efficiency Sub-Programme has the potential to contribute directly to all the five¹ priority areas and in particular to Green Finance and Economy.

Institutional Narrative on Influencing Global Change Processes

20. The Institutional Narrative of the Sub-Programme's influence on global change processes is described in four 'snapshots' of influential bodies of work - Green Economy Initiative; Finance Initiative and the Inquiry; Resource Efficiency (through the International Resource Panel) and Sustainable Consumption and Production. It shows the Sub-Programme has substantial influence on initiating and accelerating novel concepts in global processes as well as on stewarding implementation until it can be handed over to appropriate partners and involving broad alliances in these follow-up stages.

21. The first two, Green Economy and the Inquiry in combination with the Finance Initiative are good representations of a more disruptive model of action, focused on initiation and acceleration of pressing themes – starting with setting their own strong agendas - respectively: showing that the greening of the economy can be an engine of growth and jobs and does not imply increased costs, and the need to transform the financial system toward sustainability. Both had an early internal champion (UN Environment's former Executive Director), show influential, disruptive key publications with fast first responding groups of countries. Indirectly, the work of these initiatives strengthens UN Environment's contributions in the processes of G7 and G20, and regional fora such as the African regional Green Economy Program, as well as the dialogues with the global financial and economic fora and institutions.

22. The last two, Resource Efficiency and Sustainable Consumption and Production, represent a more evolutionary model of action, focused on stewardship of the work until it can be handed over to partners previously engaged in the sector. They show a steadier path over a longer period of time of using their global mandate, political neutrality and technical expertise to influence global agendas and use hosting secretariats to accompany the global dialogue and inform political processes. Both have had a clear and ongoing influence on global processes – IRP is well

¹ The Evaluation Office is advised that the 'strategic focus areas' are currently: Pollution/Health; Oceans; Biodiversity and Wildlife; Green Finance and Economy and Environment and Security.

represented in the G7 and G20 ongoing dialogue on Resource Efficiency, and SCP has a strong influence on the formulation of SDG12 and 6 other interlinked SDGs in which SCP is an important enabler.

23. The two models are of course strongly connected and fit within the UN Environment Business Model to first catalyse efforts in the steep learning curve. After the initial action, the initiatives are then embedded in platform initiatives to continue implementation. Green Economy is further advanced implemented in platforms like PAGE, IRP and GGKP. The Inquiry moves to country engagement and, possibly, a stronger link to capacity development in the Finance Initiative.

Higher Level Results Reporting

24. During the period under review (2010-17), the Resource Efficiency Sub-Programme has made considerable progress in developing a robust and transparent results reporting system. Part of this process is due to institutional changes, such as the move to a project approach and Results Based Management in 2010 and the appointment of a dedicated Sub-Programme Coordinator. Positive features of the reporting system that are specific to this sub-programme include:

- a well-defined, active and highly coordinated team of results Focal Points;
- a detailed and transparent Indicator Tracking System that allows a complete history of reported results to be interrogated;
- consistency with OECD results definitions and levels
- definition of four stages of progress in terms of policy formulation and enactment (assessment, design, adoption and implementation) that provide clearer classification of states of change;
- storage of documentary evidence on the Project Information Management System, organized by results indicator;
- the system of validation and verification of data has improved and is open to interrogation;
- provision of clear and high-quality information to the Committee of Permanent Representatives; and
- performance reports are available in the public domain.

25. The results (i.e. Expected Accomplishments) that have been reported are, based on explorations of the data carried out during this sub-programme evaluation, found to be evidence-based and consistent with external sources of information. Reported results were assessed in three countries, Kenya, Mongolia and India and confirmed to be correct. It is noted that the results only indicate achievement at output/short term outcome level and do not reflect on the required longer-term change processes that are expected by the countries. The results also do not capture changes that may have taken place beyond the environment sector or among multiple sectors.

26. There are, however, several reasons why the reported results offer only a superficial and fragmented picture of the change processes that are taking place in countries, business sectors, cities and among people. These reasons are common across all UN Environment sub-programmes and represent a specific feature of the Resource Efficiency Sub-Programme only insofar as the Sub-Programme has a high proportion of donor-funded projects:

- the reported results are frequently² 'counts' of deliverables, which are, from a national perspective, still close to outputs (e.g signing a common statement, forming a national alliance, workshops/conferences, issuing a national action plan or guidelines and running projects managed by international and UN agencies)³.
- there is no mechanism to evaluate the Sub-Programme's impact.
- the project constructs that are identified in the Project Information Management System (PIMS) do not accurately reflect the donor-funded projects that are implemented under that identity, although in theory the donor-funded or 'sub-projects' should be fully aligned with the Programme of Work. The results reflected in the logical frameworks of funded projects are frequently 'retrofitted' against the results frameworks of approved projects entered into the Project Information Management System.
- the institution adopts a narrow definition of monitoring, which is limited to the six-monthly reporting against progress indicators (milestones) of projects identified in the Project Information Management System. This type of reporting does not capture sufficient in-depth understanding of the changes brought about by projects; and
- there are two points of disconnection: the first between the funded project that is implemented and the project construct entered into the Project Information Management System and the second between the planned results of projects and the indicators of the Expected Accomplishments. However, it should be noted that for some PIMS projects, especially those that do not have sub-projects, the stated results show a closer alignment to the Expected Accomplishments.
- the time necessary for countries to implement action plans and adopt related laws or bylaws can bring the results outside the project life and reporting period.

27. The limitations outlined above contribute to the Project Information Management System being inadequate for gathering the required data, thus data is extracted from various other sources on a bi-annual basis making it a manual and time-consuming process with high transaction cost for the organisation.

28. A connected, structural issue influencing the results reporting is the tension between the normative role UN Environment is designed to play, and the operational role it often plays in practice. Results reporting falls short of providing the strategic global vision, yet required 'counting' monitoring often falls outside its direct agency. Substantive changes that may take place across multiple sectors of a country, or changes in the global discourse, appear difficult to track and therefore are not reported.

29. Integration and collaboration are important topics in the Sub-Programme, but are hard to capture within the current results framework. Evidence was found for existence of more emergent integration and collaboration between bodies of work within and between divisions, and outside UN Environment. However, where the funding of staff positions is largely tied to donor-funded projects, there are financial constraints to staff time being spent on integration efforts that are not clearly described as part of an agreed intervention. Moving the integration agenda forward into

² The evaluation notes the strengthening of the approach since 2015, for example, under Expected Accomplishment a i) four states of change are outlined and the fourth step 'initiated related policy implementation' attempts to record change at an outcome level (see para 173 below).

³ See Comments Table, Annex XII.

the 2030 is found to be a key topic, aligning the 3Ds – Decoupling, Decarbonizing and Detoxifying – and bringing them into the global discussion.

30. In relation to this, due to the integrated change process over a variety of actors, countries and topics that UN Environment is driving, attribution of results is highly complex and difficult to achieve.

31. The recent incorporation of the Sub-Programme Coordinator into the Economy Division increases the potential perception of compromised impartiality with respect to results reporting as the Coordinator is now an integrated member of staff of the substantive division with the overall accountability for the results. There is also an implication that corporate level results will be devolved to a divisional level, which lessens the likelihood of monitoring across Sub-Programmes or at corporate level. Ensuring a good functioning of the independent monitoring and oversight function outside the division is therefore essential.

32. The Programme of Work 2018-2019 for the Sub-Programme is designed around 10, rather than the former 5, indicators giving more homogeneity in each indicator. Although specific units of measure have been identified there is still possible overlap between indicators at a conceptual level. The further breakdown and single counting still does not allow for insight into the scale of the adoption of change or the implementation of agreed action. The new indicator set focusses more on the implementation phase (outcomes) as opposed to a mix of adoption and implementation in the old set.

Regional Aspects of the Sub-Programme

33. The substantive divisions and regional offices operate within a symbiotic relationship within which early inclusive planning, two-way communication and recognition of the equal value of technical and contextual knowledge is essential (see figure 7, page 64). Weak understanding of roles within each operational entity and/or competition over finite resources can obscure the importance of this co-dependency and undermine its effectiveness. Importantly, regional and sub-regional offices are well-positioned to amplify demand-driven inputs to offset what some see as a strong supply-driven approach within the sub-programme.

34. A number of contributions were received on the 'bigger picture' behind UN Environment's regional, sub-regional and country presence. This evaluation cannot do justice to the questions being raised⁴ and concludes that either a clearer articulation of the UN Environment's strategy vis-à-vis geographic representation would be beneficial or wider dissemination of the same. The 'Strengthened Regional Strategic Presence Policy' was launched in June 2015 and changes in resource allocation have been taking place. However, more clarity around the operationalisation of this policy would be beneficial.

35. Regional offices are currently managing the implementation of several large projects within the Sub-Programme portfolio, such as the SWITCH projects (Asia, Africa) with budgets ranging from EUR 5m to 20m). Apart from their strategic, political and representation roles, from a programming perspective, regional offices can support the integration of project activities across the Sub-Programme and tailor approaches to the needs and priorities of countries or sectors.

36. Regional workplans are developed on an annual basis and those for 2016 were reviewed during this evaluation. These plans represent the full range of regional and sub-regional goals and

⁴ See Comments Table, Annex XII.

deliverables and, at project level, are organised by sub-programme. These are helpful documents but need to appear more prominently and consistently in a central location⁵, for example within the intranet platform WeCollaborate.

37. The development of local partnerships and stakeholder engagement is a key activity that can be performed at a regional or sub-regional level and it is important that such relationships are valued and understood within the context of a change process and UN Environment's business model. The signing of a Memorandum of Understanding is an important act of partnership but only marks a milestone in partner relationships, with effective collaboration being the ultimate result.

Sub-Programme Performance

Relevance

38. The Sub-Programme has been analysed against the standard evaluation criteria used by the Evaluation Office. The strategic relevance of both the Sub-Programme and the contributing projects is high, specifically for the significant contribution to Sustainable Development Goal (SDG) 12, 'Ensure sustainable consumption and production patterns', and to SDG 8, 'Promote sustained, inclusive and sustainable economic growth [...]'. The strategic relevance has been established especially for the areas of Green Economy, Resource Efficiency and Sustainable Consumption and Production. These universal concepts should remain at the heart of the communications and branding of the UN Environment Programme. The very relevant topic of sustainable consumption and lifestyles seems to be less developed and needs increased attention in the coming period. Strategic relevance can be increased even further when a more demand driven attitude is taken towards the specific needs of countries and regions.

Design and Structure

39. The design of the Sub-Programme along three main causal pathways – strengthening the science base and implementing cross-sectoral policies; adoption of sustainable management and practices; enabling conditions for sustainable consumption and lifestyles – is reflected in the design of its major projects, with a relatively low emphasis on the third pathway on consumption and lifestyles. It is questionable whether the direct outcomes of the projects will deliver optimally and efficiently to the Sub-Programme's strategic objectives (see para 12 above).

Efficiency

40. It is difficult to assess the efficiency of the Sub-Programme since there is little detailed financial information available at a disaggregated level. For instance, there is a need for information on the amounts of the total budget allocated to each of the three Expected Accomplishments (policy development, sustainability in sectors and enabling conditions for sustainable consumption). Also, at the level of individual projects, there is a lack of information on expenditures and on optimal alignment to the beneficiaries' budget cycle in relation to the delivery of each project's outputs or direct outcomes.

Effectiveness

41. At the level of individual projects, outputs appear to be delivered effectively and as planned across the board. However, the translation of outputs into longer-term outcomes and impact

⁵ Searching under 'regional workplan' in the intranet (WeCollaborate), one regional workplan was retrieved.

needs attention. At a Sub-Programme level, to increase effectiveness there is a need to integrate work more closely between the different components of the Sub-Programme and also across the house on science knowledge generation, sharing and management, (Science Division – UN Environment Live, Sustainable Development Goals Unit, Global Environmental Outlook, Frontiers to work with Green Growth Knowledge Platform, International Resource Panel, 10 Year Framework Programme, Partnership on Action for Green Economy)

Impact

42. Themes of resource efficiency, sustainable consumption and production and, more specifically, inclusive green economy and sustainable finance have made their mark at a global level and are embedded in various initiatives of important global fora such as G7 and G20. The 2012/2013 annual report of the Office of International Oversight cited the work on Green Economy to be one of the most impactful within UN Environment. Also, regional fora like the African Ministerial Conference and the Committee of the African Heads of State have been influenced.

43. The actual impact of the Sub-Programme on change in the recipient countries and organisations however is hard to gauge, since the changes that are reported show a limited and superficial picture of the deeper change that possibly takes place in the countries, business actors, cities and consumer groups. This change often materializes only after project closure. A connected issue is the tension between the normative role UN Environment Programme as a whole is designed to play, and the operational role it has in practice. Because of the normative focus, any substantive changes that are achieved in practice may go unreported.

44. There is a need to accelerate the process of better aligning results (Expected Accomplishments if possible) with the Sustainable Development Goals, especially 12 and 8, and thus embedding results on a more strategic level. Of particular importance to both the Sub-Programme and the UN Environment Programme itself is the Sub-Programme's custodianship of a large number of the indicators under SDG 12 (10 out of the 17 indicators). This work requires both the commitment of resources and greater support through integrated approaches (e.g. Science and Economy Divisions as well as individual key projects such as the Green Growth Knowledge Platform, International Resource Panel, UN Environment Live, Global Environment Outlook X etc).

Sustainability

45. The strategic sustainability of the Sub-Programme is reduced by the strong dependency on external funding which increases donor influence and reduces the possibilities for strategic focus and integration of projects. Financial and institutional sustainability at a project level is similarly limited and often dependant on follow-up funding. Sustainability can be improved by closer cooperation with regional strategies and planning. There are some examples of 'sunset clauses' (PAGE and Financial Inquiry), which is admirable.

Factors Affecting Performance

46. The organisation, coordination and management arrangements of the Sub-Programme are well developed and are reflected in good management scores at the project level. Being mostly externally funded, the focus on fund acquisition fosters diversification but can hinder integration.

47. The recent⁶ integration of the Sub-Programme coordination function in the Division as well as integration of most of the work into one branch (Resources and Markets) potentially brings closer alignment and lower transaction costs. The positive contribution of the Sub-Programme Coordinator in this process is well noted. This positive trend is also reflected through the project level evaluations, where the criterion UN Environment Supervision and Management is showing high scores. However, this evaluation notes that a previous review of the sub-programme coordination function⁷ highlighted the need for the role to be supported by dedicated administrative and substantive staff. This need remains valid in the new structure.

48. Despite the reliance on external funding sources, cooperation between projects in the Sub-Programme is increasing, but there is a clear need for more alignment and integration between projects to be able to contribute more effectively to the results of the Sub-Programme. Integration is necessary on different levels: within the substantive division; across sub-programmes within a region; and integration across regions for the sub-programme - this is one of the weakest areas at present.

49. During this evaluation period the first phase of the Umoja system was introduced, covering the administrative (travel, leave, recruitment etc) and finance components (financial transactions, objects of expenditure). Many respondents referred voluntarily to their experiences to-date with the Umoja system. Although it is a relatively new system, the Umoja administrative and financial system was reported to be cumbersome in use, not user-friendly and not set up yet to donor reporting requirements. These views will encompass the initial challenges when Umoja was introduced and cover personal use (administrative) and project use (financial). Efforts by the substantive branch to reduce problems related to this and other administrative issues are ongoing and include pro-active peer-to-peer sharing and learning among Fund Management Officers. The Business Intelligence module has the potential to address some of the reporting needs of project staff, but has not yet become fully accessible or been fully exploited. Further training on this module and the development of templates for reporting to major donors was promoted as a priority. The next upgrade of Umoja is scheduled for September 2018, (Umoja 2.0) and will integrate the administrative and financial features of the current Umoja system with the project information and management system. It is deemed important that all existing project data quickly become available in the new system. It is also important that staff are adequately trained in a timely manner, both in the Headquarters as well as in the Paris and Geneva sites and in Regional Offices.

50. Performance with regard to stakeholder participation and cooperation was assessed as relatively poor across the project level evaluations. A surprising finding, given UN Environment's focus on partnership. However, the Evaluation Office notes that UN Environment lacks a robust definition of 'stakeholder' resulting in different interpretations by different respondents and evaluators. The Evaluation Office also notes that projects across all sub-programmes have consistently performed relatively poorly under the criterion 'project preparedness and readiness'⁸. This criterion includes consideration of partner and stakeholder engagement in the period between project approval and mobilisation. The issue of stakeholder participations could be more closely associated with a weak demand-driven approach than during actual project implementation. Also from the regional perspective, the translation of global projects to regions and countries is not optimal and often ad-hoc. Stakeholder engagement is well developed and is

⁶ See para 228 of this report.

⁷ UN Environment Evaluation Office, February 2017, 'Review of the Sub-Programme Coordination Function'.

⁸ Evaluation Synthesis Report, 2016-17, paragraphs 77 and 118. The report notes that the percentage of projects rated 'Satisfactory' or better for this criterion has not improved much in the Medium Term Strategy 2014-2017 (with 36% in 2014-15 and 37% in 2016-17),

given high priority in the multi-stakeholder knowledge and implementation Platforms in the Sub-programme, since these require intensive interaction with multiple partners.

51. The Project Information Management System is widely viewed as housing projects that have a largely artificial structure. It allows for multiple full projects to be recorded under one PIMS project entity and will continue to do so. This is partly because the required internal project documents are experienced as long and time-consuming to produce and review. Some of this is due to lengthy commenting processes and the need for extensive reworking of elements like Theory of Change and Logical Framework. Project Managers find this process to be incompatible with the proposal development and approval systems run by donors. While the internal project approval system allows for both a) an earlier concept review process and b) the use of donor project documents with additions to cover the institutional project proposal requirements, in reality 'real' donor project documents are developed in parallel to those put forward in the internal project review process and implemented. Also, comprehensive internal documents are rarely used externally. As a result, the project entered into the Project Information Management System often does not entirely match the work delivered or is delivered via multiple, often separate, donor-funded projects. The existence of more than one set of project results (one reviewed and approved internally and another forming a commitment to a donor) poses challenges for accountability and weakens the potential for the demonstration of performance.

52. Across the institution a narrow definition of monitoring is in evidence; limited to the six-monthly reporting against indicators entered into the Project Information Management System. Understanding and acceptance of the need for the monitoring of project implementation (i.e. tracking progress against an agreed plan to inform adaptive management) is weak and has an effect on efficiency (through the need for project extensions).

53. Monitoring and Evaluation is the lowest scoring criterion in the analysis of individual project evaluations. An overreliance on the reporting in the Project Information Management System to serve as a basis for 'monitoring' of the projects seems to be one of the reasons for this.

54. The Sub-Programme has not been actively applying the UN approaches on Human Rights, Rights of Indigenous People and Gender Equality. More discussion and attention to these issues was given at the level of Regional Offices. Also, the broader social angle of sustainability has not received the attention required.

55. Internal communications within the Sub-Programme have been improved since 2014 when the Sub-Programme Coordinator was recruited. However, external communications with partners and audiences are still better developed and planned than the internal communication that is often ad-hoc and fragmented.

Recommendations

56. Based on the findings and conclusions of this Evaluation, the following table 1 gives an overview of general **recommendations for the sub-programme**, grouped per topic. A version of this table identifying people responsible for further action, along with several additional recommendations to the house, is included in the Conclusions section of this evaluation report:

Line of Inquiry	Overall recommendation
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Theory of Change	1	<p>Strengthen the Theory of Change of the Sub-Programme so that it can better inform strategic thinking and operational planning:</p> <ul style="list-style-type: none"> - Making longer term results levels in the TOC consistent with levels in the Outcome Mapping - Continue to establish strong alignment/links with SDGs - Ensure causal pathway on science-policy interface is well represented - Incorporate thinking on disruptive innovation approaches - Include communication and capacity building within the TOC
Longer Term Impact and Results Reporting	2	<ul style="list-style-type: none"> - Continue working to keep resource efficiency issues on the G7 and G20 agendas - Work with Science Division and SDG Unit to identify ways of recording longer-term country level effects
Strengthen Sub-Programme Portfolio of Projects	3	<ul style="list-style-type: none"> - Continue to develop strong common narrative for the Sub-Programme - Define strategic niche of projects and create strong integration, linkages and synergies with related topics - Experiment with limited number of transition arenas (alliances, frontrunners etc) - Strengthen causal pathway 3 (sustainable consumption and lifestyle initiatives)
Strengthen Project Designs	4	<p>In the areas of:</p> <ul style="list-style-type: none"> - Sustainability (clear continuation strategies) - Effectiveness (beyond delivery of outputs, strengthen outreach) - Human Rights, Social Issues and Gender (pro-active approach in design, document/share successes)
Donor Relations and Report Formats	5	<ul style="list-style-type: none"> - Ask for rationalization of donor reports and use successful examples as leverage (PAGE, 10YFP etc) - Proactively proposed pooled funding approaches
Work Closely with Regional Offices	6	<ul style="list-style-type: none"> - Document in more detail Sub-Programme approach to working with regional, sub-regional and country offices - Continue to increase involvement of regions at design stage - Promote enhanced connectivity and team building between global and regional offices

Table 1: General overview of recommendations for the sub-programme

2. Introduction

57. This is the draft report for the evaluation of the Resource Efficiency Sub-Programme of the UN Environment Programme (hereinafter 'UN Environment'), with the focus on: (1) the exploration of key theories of change, (2) an institutional narrative of UN Environment's contribution to global change processes, (3) the contribution of the Sub-Programme to higher level results and global change processes (4) regional aspects of the Sub-Programme, (5) a synthesis of project level performance and, (6) factors affecting performance of the Sub-Programme.

Objectives and Scope of the Evaluation

58. The evaluation has reviewed work carried out under the Resource Efficiency Sub-Programme from the beginning of 2010 to the end of 2017. One of the objectives of this evaluation is to assess the Sub-Programme against standard evaluation criteria (relevance, efficiency, effectiveness, sustainability and impact). Given that both a results' focus and the sub-programme construct were first introduced to UN Environment from 2010, this evaluation has been guided primarily by the articulation of the Sub-Programme during 2014-17, when its conceptualisation became more apparent and stable.

59. The evaluation fulfils two main purposes: a) supporting accountability by analysing, at a meta level, the performance of all those Sub-Programme projects evaluated during the evaluation period and b) contributing to institutional learning by providing formative reflections based on analysis of the Sub-Programme's effectiveness as a coherent and coordinated unit within UN Environment's results framework.

60. The Evaluation considers the extent to which, in the period under review, UN Environment was able to meet its objective as stated in the Medium-Term Strategy (2014-17): 'to promote a transition in which goods and services are increasingly produced, processed and consumed in a sustainable way that decouples economic growth from resource use and environmental impact while improving human well-being'.

61. Broadly, the evaluation has followed six lines of inquiry to provide a holistic review combining both 'bottom-up' (i.e. aggregating project-level findings) and 'top-down' (i.e. analysing the evidence informing results reporting in the Programme Performance Report) perspectives:

1. Sub-Programme Change Processes: a Theory of Change was reconstructed for the period 2014-17 around the three main results areas in order to explore how projects were expected to have a collective or aggregated effect at the level of the Expected Accomplishments. An analysis of the performance of the Sub-Programme in relation to the principles of Transition Management was made to identify different models of action for the Sub-Programme, which were explored further in the second line of inquiry on the institutional narrative.

2. Sub-Programme's Contribution to Global Change Processes/Institutional Narrative: drawing on the reconstructed Theory of Change (2014-17), but also considering flagship projects and key areas of investment, an analysis was undertaken to establish the extent and nature of UN Environment's contribution to changes at sectoral and global levels. The narratives underpinning four areas of work that have made a strong contribution at a global level have been compiled and common insights brought together to present the key features of such narratives.

3. Higher Level Results Reporting: this analysis examines the Sub-Programme's reporting of results against the Expected Accomplishments. The analysis is structured around key stages of results articulation, data collection, data validation and the extent to which reported results can be attributed to the Sub-Programme's efforts.

4. Regional Aspects of the Delivery of the Sub-Programme. this line of inquiry explores the nature of the relationship between the Resource Efficiency Sub-Programme's programmatic base and the activities performed by the Regional Offices at a regional and country level.

5. Synthesised Project Level Performance: a desk-based, systematic review of the findings from 25 project-level evaluation exercises carried out between the beginning of 2011 and June 2017 is presented under this line of inquiry. The analysis provides aggregated scores against standard evaluation criteria and identifies and discusses trends in the factors contributing to particularly high or low performance.

6. Key Factors Influencing Sub-Programme Performance: in this section the insights provided by respondents are synthesized under the topics of: organisation, coordination and management arrangements; human and financial resources management; stakeholder cooperation and partnership; monitoring, reporting and evaluation; gender equality and human rights and communication.

Evaluation Audience

62. The evaluation is expected to help UN Environment identify key lessons on strategic positioning, portfolio planning, management arrangements and programme implementation that will provide a useful basis for improved Sub-Programme design, coordination and delivery.

63. The immediate and priority users of the evaluation include: members of the UN Environment Assembly and the Committee of Permanent Representatives; UN Environment senior management (including Division and Regional Directors); Sub-Programme Coordinators; members of the Strategic Programme and Policy Division and all staff involved in the Resource Efficiency Sub-Programme.

64. Interest in the Evaluation is likely to be shown by other stakeholders and partners, including: the UN Secretariat, UN or other international bodies working in the area of Resource Efficiency, commissions and committees, NGOs and civil society groups, research centres and academia.

Resource Efficiency Sub-Programme 2010-17

65. The Sub-Programme background is extensively described in the Terms of Reference (TOR) for the evaluation (Annex IX). Referring to these TOR, a summary is provided below.

66. Responding to the dual challenge of unsustainable production and consumption patterns and persistent poverty, the overall goal and objective of the Sub-Programme is to promote and support the transition towards Inclusive Green Economies for Sustainable Development, decoupling economic growth from unsustainable resource use and environmental impact while improving human well-being.

67. The three key related approaches to reach the objective of the Sub-Programme are Resource Efficiency, Green Economy and Sustainable Consumption and Production (see definitions on page 5), which will enable countries to transform their economies into drivers of sustainability.

68. Since the Medium-Term Strategy 2010-13, UN Environment's resource efficiency-related activities have been coordinated under the Resource Efficiency Sub-programme. Over time, the notion of decoupling economic growth from resources use and thereby offsetting their environmental impact was incorporated into the objective. The 2014-17 Medium-Term Strategy presents the objective as 'to promote a transition in which goods and services are increasingly produced, processed and consumed in a sustainable way that decouples economic growth from resource use and environmental impact while improving human well-being'.

69. The work undertaken within the Sub-Programme consistently intended to contribute to three result areas (Programme Performance Report, 2016), which are similar to the three Expected Accomplishments that can be found in Medium-Term Strategies (2010-13; 2014-17) and the associated Programmes of Work:

- **Enabling policy environment**, supporting countries in creating policies to facilitate the transition to an inclusive green economy that is resource efficient, low carbon and that adopts sustainable patterns of consumption and production;
- **Sectors and supply**, enhancing the ability of governments, businesses and other stakeholders to adopt sustainable business strategies and production practices across global supply chains in key sectors;
- **Lifestyles and consumption**, enhancing the ability of countries, businesses, civil society and individual consumers to make informed choices for sustainable consumption and lifestyles.

70. The project portfolio for the Sub-Programme comprises 51 projects since January 2010. The Programme Framework (2014-17) indicates how each project intends to contribute to a given Programme of Work Output under each of the Expected Accomplishments. Each Programme of Work Output is expected to be delivered by at least one project, while some are delivered by more than one. In some cases, projects contribute to several indicators, even if these are spread across different Expected Accomplishments.

71. Several of the interventions identified as Programme of Work projects effectively operate as 'umbrella' projects. They were created as 'envelopes' for a number of sub-projects⁹ being implemented in one thematic area. These sub-projects often have their own logical frameworks, based on specific donor requirements, and formats. It is not always the case that the logical frameworks of sub-projects are fully aligned to the results framework of the umbrella project.

72. Further, the Sub-Programme hosts a number of secretariats, including the Secretariat of the 10 Year Framework of Programmes for Sustainable Production and Consumption Patterns, the UN Environment Finance Initiative, the Partnership for Action on Green Economy, the International Resource Panel, the Green Growth Knowledge Platform, the Life Cycle Initiative, the Global Initiative for Resource Efficient Cities and the Sustainable Rice Platform. UN Environment assumes both a secretariat and delivery/implementation role within the same initiatives.

73. The total resources expended for the Resource Efficiency Sub-Programme project portfolio for 2014-17 was USD 164 m, (Finance Dept, May 2018). The Terms of Reference in Annex IX provide further details on the funding sources.

74. The majority of this Sub-Programme's work is carried out by UN Environment's Economy Division, Resources and Market Branch. A number of projects are carried out in the Cities Unit of the Energy and Climate Branch and in the Communications Division. All Regional Offices are

⁹ At the time these 'sub-projects' were stand-alone projects, also known as 'donor projects'.

contributing to, or carrying out, a number of sub-regional and country level Sub-Programme projects.

75. The Resource Efficiency Sub-Programme has been one of UN Environment's more under-evaluated Sub-Programmes, simply because the workplan of the Evaluation Office is driven by the date of project completion and comparatively fewer projects from this sub-programme had reached completion. Project evaluations from this Sub-Programme represented 4 % of all UN Environment evaluation reports produced until 2016. In recent years, the Evaluation Office has increased the number of evaluations of projects (and sub-projects) under this Sub-Programme, which has enabled the evaluation to analyse the findings from a reasonably-sized sample of 25 project evaluations. It is noted that seven of these cases are substantial evaluations (with evaluation ratings' tables) of sub-projects under the Green Economy Initiative.

Method and Approach of the Evaluation

76. The evaluation was conducted under the overall responsibility of the UN Environment Evaluation Office. It represents an in-depth study using a participatory approach whereby UN Environment senior representatives and relevant staff were kept informed, and regularly consulted, throughout the process. Interviews in one Regional Office (Asia-Pacific) were carried out by the Resource Efficiency Sub-Programme Coordinator himself during a mission. The potential conflict of interest was managed by providing the Coordinator with a set of evaluation questions; triangulating the responses with the interview findings from other Regional Office staff and offering respondents direct contact with the Evaluation Office for any additional inputs.

77. The evaluation is an independent exercise. The Evaluation Team, composed of three independent consultants, was supported by Evaluation Office staff, who contributed on any logistic and/or methodological issues to properly conduct the assessment in as independent way as possible, given the circumstances and resources provided.

78. Evaluation findings and judgments are based on sound evidence and analysis, clearly documented in the evaluation report. Information is triangulated (i.e. verified from different sources) to the greatest extent possible¹⁰. Analysis leading to evaluative judgments is clearly spelled out.

79. The evaluation used different methods and tools to understand and assess the Sub-Programme, including: desk-based review of UN Environment strategic documents; meta-analysis of the ratings of previously evaluated projects; trend analysis of evaluation findings and interviews in the reconstruction and exploration of Theories of Change and an analysis of the contributions of the sub-programme to higher level results informed by the Programme Performance Reports, documents held in the Project Information Management System and the Indicator Tracking Sheet held by the Sub-Programme Coordinator. Visits to the Paris and Geneva UN Environment offices and some of the Regional Offices were required for this.

80. An overview of the evaluation methods is provided in Table 2 below.

Type of Activity	Description
Desk Based Review	- Reading of thematic and strategic documents to situate the Sub-Programme evaluation within global and sectoral contexts and to articulate UN Environment's position and efforts within the Resource Efficiency sector.
Interviews	- Exploration and analysis of the factors affecting Sub-Programme performance.

¹⁰ Individuals will not be mentioned by name where anonymity needs to be preserved.

	<ul style="list-style-type: none"> - A guiding document and interview protocols was developed, tailored for target group(s). - See Annex X for the list of people interviewed
Reconstructed Theory of Change	<ul style="list-style-type: none"> - Reconstruction of the Theory of Change - Collaborative development of Transition Management approaches - Analysis of the different strategic models of action for the Sub-Programme
Institutional Narrative on Contribution to Global Agendas	<ul style="list-style-type: none"> - Description of the institution's work on Resource Efficiency as it relates to Global Agendas such as the G7 and G20 fora. The work documents the interaction between the Resource Efficiency Sub-Programme and these global fora, highlights key events, documentation and actors.
Higher Level Results Reporting	<ul style="list-style-type: none"> - This inquiry was structured around key stages of results articulation, data collection, data verification and validation, and attribution of results. Areas of questioning were developed and key respondents selected.
Regional Delivery of the Sub-Programme	<ul style="list-style-type: none"> - Exploration of how the sub-programme is articulated and delivered at regional level, based on report analysis and interviews with Regional Offices.
Systematic Review of Findings from 25 Project Evaluations	<ul style="list-style-type: none"> - Aggregation and analysis of the ratings across 25 Resource Efficiency project evaluations. - Analysis of trends in the evaluation findings against the standard evaluation criteria used by the Evaluation Office. <ul style="list-style-type: none"> • Strategic Relevance • Achievement of Outputs • Effectiveness (Achievement of Project Objectives and Results) • Sustainability and Replication • Efficiency • Factors Affecting Performance - In-depth exploration of key criteria including: <ul style="list-style-type: none"> • Project Designs¹¹ (under Preparation and Readiness) • Gender Equality (under Strategic Relevance) • Financial Management (under Factors Affecting Performance) • Monitoring and Evaluation (under Factors Affecting Performance) • Synthesis of issues underpinning project level evaluation recommendations - Analysis of this sample of project evaluations as a representation of the sub-programme itself (i.e. magnitude and nature of the evaluation coverage of the sub-programme)

Table 2: Evaluation Methods

¹¹ Using the Evaluation Office template for the Assessment of the Quality of Project Design, which is prepared during all project evaluations.

81. Desk review included:

- Relevant background documentation on the scientific, socio-economic and environmental dimensions of resource efficiency, and on current policies, strategies, multilateral agreements, approaches used in resource efficiency; detailed background documentation on UN Environment's strategy and engagement in resource efficiency in the areas of sustainable consumption and production, green economy and consumer information;
- UN Environment Medium Term Strategy 2010-13 and 2014-17; Programme Framework documents; Programme of Work documents (from 2010 onwards);
- Sub-Programme reports and monitoring data including: Programme Performance Reports, Tracking documents; Indicator Tracking Sheet; project progress and final reports, financial reports, entries into the Project Information Management System.
- Background documentation on UN Environment partnerships with key actors in the area of Resource Efficiency; and
- Project level: evaluation reports, including assessments of the Quality of Project Design.

82. Interviews were held with UN Environment management and other staff involved in the planning and implementation of the Sub-Programme, including: Economy Division Director and Deputy Division Director; Regional Directors of visited Regional Offices; the Sub-Programme Coordinator; Focal Points for Results Reporting within the Resources and Markets Branch; Regional Sub-Programme Coordinators; Fund Managers and other divisional staff. Staff members from other parts of the house were also interviewed including from the Strategic Programme and Policy Division (including quality assurance and monitoring staff) and Ecosystems and Communications Divisions as well as representatives from other Sub-Programmes, the Policy and Inter Agency Affairs Unit and the Sustainable Development Goals Unit and Heads of Unit (including Cities Unit). A full list of people interviewed is found in Annex X.

83. In addition, interviews were conducted with members of the Committee of Permanent Representatives as well as key partners and stakeholders, including selected representatives of UN and other external partners; other UN agencies active in promoting resource efficiency (e.g. UNDP, UNIDO, ILO, WB, etc.) and funding mechanisms (e.g. UN Environment – EC Strategic Cooperation Agreements).

84. The evaluation team was supported by an Evaluation Reference Group of four distinguished members: Dr. Mark Halle, Associate and Former Executive Director, International Institute for Sustainable Development (IISD), Switzerland; Dr. Alice Kaudia, Permanent Secretary, Ministry of Environment, Kenya; S. Vijay Kumar, M.Sc., Distinguished Fellow at TERI; IRP Panel member, India and Dr. Oyun Sanjaasuren, Head of the Zorig Foundation, Former Minister of Environment and Green Development, Mongolia. The Evaluation Reference Group took part in two internet-based group conversations and has reviewed and commented on the Draft Evaluation report. Individual members were interviewed by the Evaluation Team.

3. Driving Change at a Sub-Programme Level

85. The purpose of this chapter is to present some of the theoretical insights that were discussed during the evaluation process or which emerged from the interview process. They are discussed here in order to stimulate further discussion and to form a common basis for informed debate.

Transition Management

86. If the Resource Efficiency Sub-Programme (hereinafter 'the Sub-Programme') is seen as a vehicle to influence societal transition processes towards resource efficiency, inclusive green economies and sustainable consumption and production, then the concept and approaches of Transition Management have the potential to provide useful insights to this evaluation.

87. Transition Management was developed as an approach to deal with the persistent nature of complex problems (complexity theory), often in dedicated areas of sustainable technology and energy transitions and the transition to the circular economy, by engaging a small and diverse group of frontrunners in a learning process. Frontrunners are typically people with creative minds, strategists and visionaries, (Rotmans and Loorbach 2009). They can also be called 'first responders', 'champions', 'agents of change' etc. These actors are brought together in a transition arena - an informal but well-structured setting for thinking and working beyond 'business as usual'. They engage in activities such as problem structuring, envisioning, networking and experimentation. Many of the members in the platforms and networks in the Sub-Programme can be viewed as 'frontrunners' for resource efficiency, inclusive green economies and sustainable consumption and production.

88. The change model of transitions (figure 1, below) emphasises the processes by which change happens over the outcomes that change brings. The model discerns different stages and levels whereby the transition requires technological niches from where momentum can be built in response to the processes and opportunities that are associated with changes in the 'landscape' or 'regime'. The model recognises pre-development, take-off and acceleration, break through, stabilisation and impact stages. The pre-development of a new niche socio-technological concept (such as inclusive green economies, life-cycle approaches or sustainable finance) is followed by take-off and acceleration stages in which the new concept breaks through, taking advantage of specific windows of opportunity and fired by the new ecosystem developed in the transition arenas. The existing socio-technical regime (the middle level) is challenged and altered in this phase. Next a stabilisation takes place, with a re-arranged socio-technical system and, at the highest level in this model, clear impact on the overall landscape development. In our case the desired socio-technical regime is one of resource efficiency and reduction of negative environmental and social impacts. See figure 1 below for a depiction of this multi-level perspective theory.

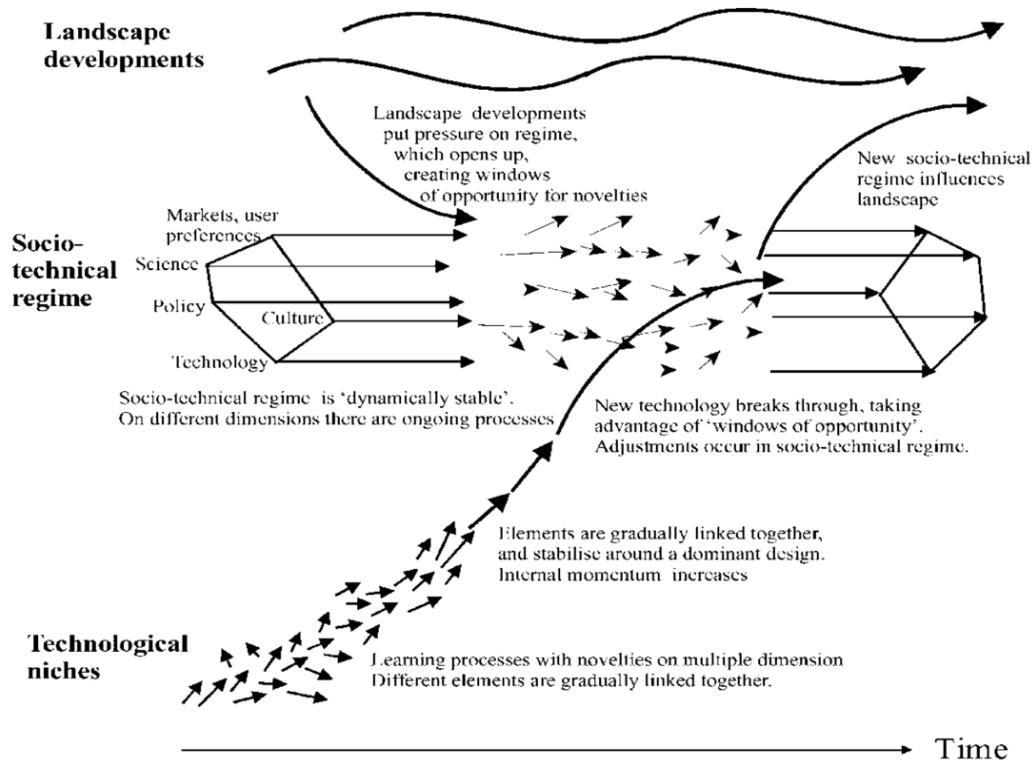


Figure 1: Multi-level Perspective Theory Diagram (Geels, 2002)

89. The management model to act in this multilevel system is the transition cycle (see figure 2 below) with a four-phased approach. In the strategic phase, the problem is structured, a vision formulated, and the transition arena is developed. The coalitions, narratives, and corresponding transition agendas are then developed in the tactical phase. In the operational phase, all relevant actor groups are mobilized and projects and experiments are executed. Finally, in the evaluative

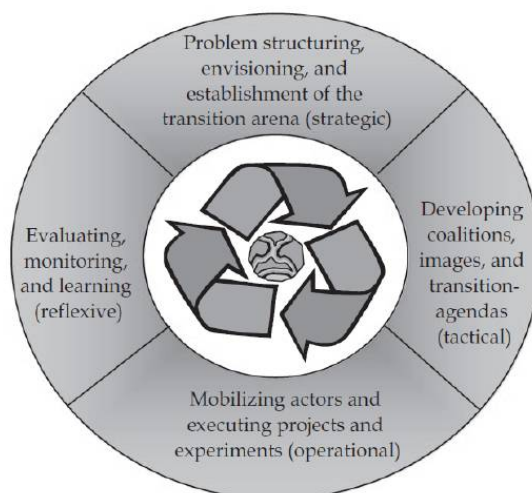


Figure 2: Transition Management Cycle Diagram (Loorbach, 2010)

phase the results are monitored and reflected upon. Based on the learning of this first cycle, the second cycle is initiated.

90. A transition agenda typically consists of: a cluster of outcomes of the vision creation process, which include the core of the persistent problem (the transition task); guiding sustainability principles; a limited number of target scenarios and transition paths (i.e. short-term experiments and actions) and the conditions which allow them to be implemented. For instance, transition agendas have been developed in The Netherlands for many of the sectors involved in the transition towards a Circular Economy in 2050.

Discussion of Findings

91. During this evaluation, experience and learning with building transition agendas was tested in a one-day workshop with the Resources and Markets Branch Director and the Heads of Unit involved in delivering this Sub-Programme. Using a practical co-creation design approach, the team went through the phases of vision development; setting up simplified transition pathways for the Sub-Programme towards 2030; ideating key transition tipping point activities and testing these activities from stakeholder perspectives.

92. During the workshop representatives from different Units, which have recently been brought together under one Branch, collaborated intensively in different groupings, which was a positive by-product of the one-day meeting.

93. The results of the workshop were enlightening and promising. Although the vision development stayed relatively close to the formulation of the 2030 SDGs, the development of transition pathways showed integration between existing Sub-Programme elements and led to new and promising 'tipping point' activities, such as the set-up of transition arenas for flagship projects (e.g. circular plastics, textiles), for new resource efficiency partnerships and an SDG readiness check for infrastructure investments such as China's Belt and Road initiative. A full report has been made available to the Branch. These type of piloting projects with a focus on disruptive strategies clearly need adequate funding to be effective.

94. Transition management theory advocates for a disruptive strategy (take-off/break-through/acceleration), in which a new concept destabilizes the existing socio-technical regime, followed by an 'evolutionary' stabilization/impact strategy in which the new, altered socio-technical regime influences the overall political and economic landscape. Both strategies can be identified in projects within the Resource Efficiency Sub-Programme. In chapter 5 on the Institutional Narrative, these two interconnected, disruptive and evolutionary models are further explored.

95. A related review on complexity theory/systems thinking has been recently published by the GEF evaluation office as guidance for the GEF on how to develop integrated projects and programmes. The review introduces transition thinking and distinguishes between disrupting aspects of the system and thus overcoming system resilience, or by modifying the existing trajectory (i.e. evolution). The review mentions the relevance of adaptive planning approaches based on learning and experimentation over the more traditional linear planning and management approaches commonly used. (A. Zazueta, 2017).

96. The GEF review elaborates adaptive management as follows: "Multiple outcomes and assumptions that are not met bring uncertainty in project implementation, and require information-gathering and, when warranted, adjustments to the original project design. Non-

linearity and tipping points should be anticipated and managed whenever possible. To deal with this uncertainty [...] the adoption of learning processes [is proposed] based on anticipation and adaptation, where approaches are tried and results evaluated prior to their broader promotion.”

97. The concept of global innovation flows such as resource efficiency, inclusive green economies and sustainable consumption and production is inherently complex, with many inter-relations which are only becoming more diverse and entangled in time and places. The natural tendency has been to address this complexity by deconstructing the entire process into smaller sub-problems and trying to manage these (a process of disaggregation). However, by thinking more in terms of using complexity instead of forcefully reducing it, moving strategically and simultaneously in several thematic and geographic contexts, complexity can be recognised in its own right (rather than as an attribute of a situation) and valued as an opportunity. One way of doing this is by forming an orchestra of capabilities. That orchestra then needs to represent what is needed in terms of cultural context knowledge, policies, global and local execution capacities, production and consumption and above all the ability to combine all these aspects. So, instead of managing and controlling stakeholders that currently happen to be connected in the system, it seems to be necessary to engage in orchestration of collaborations that extends beyond the formal boundaries of the system, (based on Kersten, Crul et al., 2016)

98. This evaluation notes the recent combining of relevant inclusive green economy and sustainable consumption and production units under one Branch. The possibilities for collaboration and further integration of the different themes under the Sub-Programme have therefore increased and this creates an opportunity for such orchestration of transition agendas.

Science-Policy Interface

99. During this evaluation respondents from the substantive division, regional offices, other parts of the house and representatives from the Committee of Permanent Representatives gave their views on the comparative advantages of UN Environment and reasons why other parties wish to work with the organisation (see Table 3, below). The majority view (mentioned most frequently and more often first) is that UN Environment is most valued for its technical expertise. Responses concerning UN Environment’s technical expertise and how it is appreciated and sought after coalesced around ideas of the ‘shaping’ and ‘stewarding’ of the global science-policy interface on environmental concerns. The importance of the strategic inclusion of policy makers, petitioners, academics and private sector in the process, not only on the global scale but also at a country and local level, was stressed. The individual responses are brought together and summarised in a diagrammatic form below, (see figure 3, page 29).

100. It is noted that members of the Science Division have produced a detailed and insightful analysis of the functioning of the science-policy interface (Delivering the Environmental Dimension of the 2030 Agenda for Sustainable Development: a gap analysis to strengthen the science-policy interface including governance measures, October 2017).

101. Transition thinking offers a useful complement to thinking about the science-policy interface. Discussions on the dynamic underlying work that aims to strengthen and promote the science-policy interface¹² can be supported by applying a Transition Management Cycle lens:

Top Quadrant: 'Problem structuring, envisioning, and establishment of the transition arena (strategic)'

- Work in the 'Science' domain of collecting data, identifying new trends and developing technical expertise can be seen as belonging here.

Right Quadrant: 'Developing coalitions, images, and transition agendas (tactical)'

- Work in the 'Shaping Norms' domain of working with frontrunners, building alliances and 'stewarding' change in normative processes is relevant to this area.

Bottom Quadrant: 'Mobilizing actors and executing projects and experiments (operational)'

- Work in the 'Demonstration' domain i.e. running pilot projects and supporting the uptake of new policies and strategies at a national level is consistent with this area.

Left Quadrant: 'Evaluating, monitoring and learning (reflexive)'

- Work in the 'Demonstration' domain that relates to establishing business cases, proving the efficacy of new technologies and supporting the replication and scaling-up of new approaches is the most pro-active approach to reflexive learning.

¹² **Delivering the environmental dimension of the 2030 Agenda for Sustainable Development: a Gap Analysis to strengthen the science-policy interface including governance measures. UN Environment, 2017**

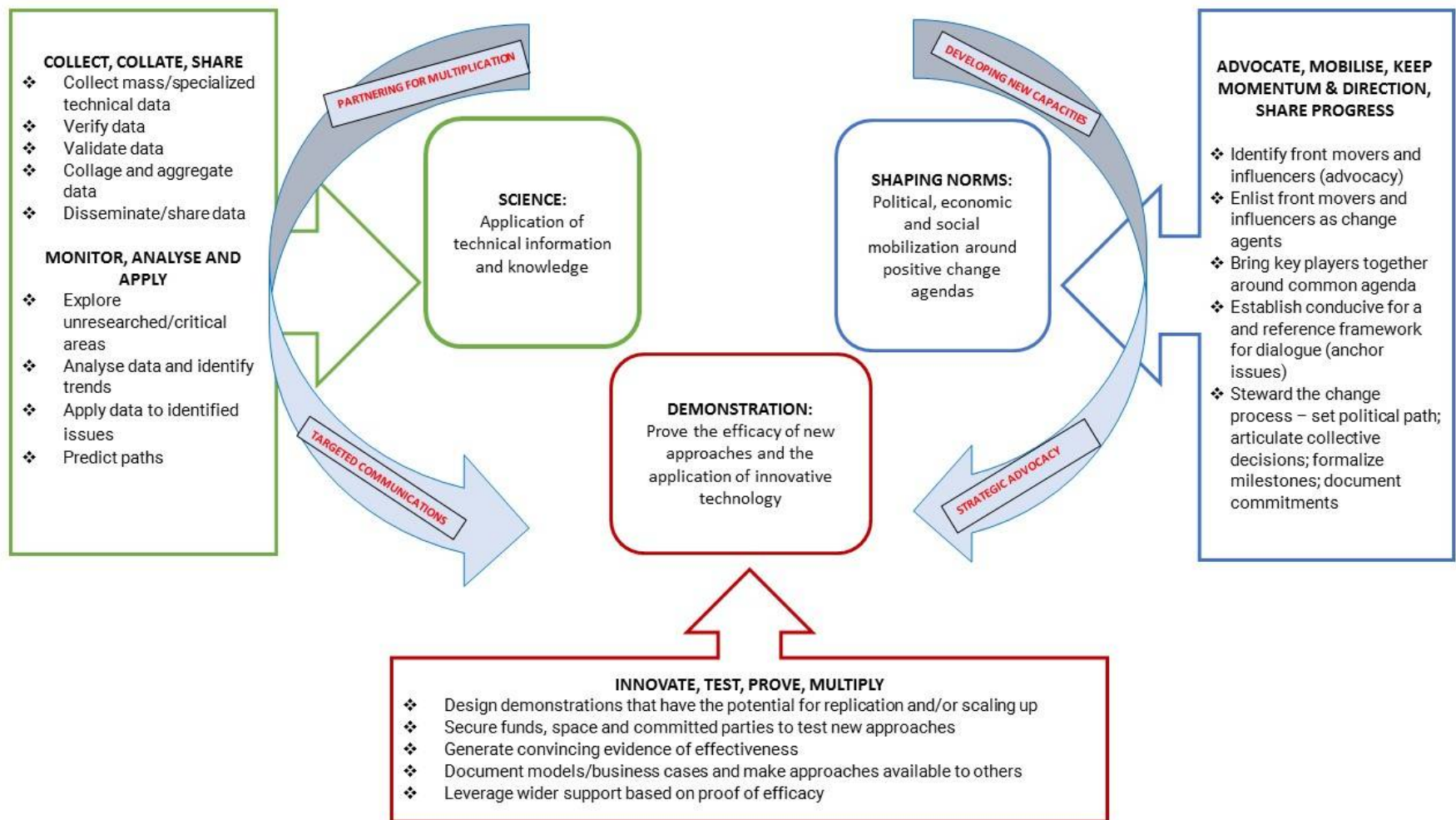


Figure 3: Diagrammatic Representation of Discussions on the Science-Policy Interface

102. Although the discussions were in the context of the Sub-Programme evaluation, the responses have a wider relevance to the organisation as a whole. The comparative advantages are summarised below (see Table 3) in the form of 'features' (distinctive characteristics of the organisation), 'benefits' (what positive results come from those features) and 'applications' (how these features are put to good use).

103. Isolated respondents also highlighted the importance of UN Environment's unique mandate to identify emerging environmental issues and raise their visibility, see table 3 below.

FEATURES	BENEFITS	APPLICATION
Technical expertise on environmental issues that affect the whole world	Credibility as technical leader and innovator	Creating visibility around identified emerging issues (e.g. Frontiers Report)
Political independence	Political objectivity/neutrality	Setting, articulating, justifying and influencing global, regional, country agendas
Global representation/membership	Strong mandate that lends authority to its voice	Convening power for negotiation, decision-making and forging alliances (arenas)
Set up as normative institution	Opportunities to engage with priority and emerging agendas	Building consensus on paths of action (offering visibility and 'club' membership)
Technical expertise on environmental issues that affect the whole world	Credibility as technical leader and innovator	'shaping' and 'stewarding' of the global science-policy interface on environmental concerns

Table 3: UN Environment Comparative Advantages as Features and Benefits

The Normative Function

104. Some of the reflections that were provided relate more to UN Environment as a whole and, specifically, to its normative character. The organisation's formation as a normative agency presents a significant challenge as there are also numerous and various forms of pressure to function as an operational entity (e.g. funding sources, constituents' requests, need to demonstrate results etc).

105. There is also a challenge associated with the partnership model in the sense that whereas UN Environment intends to initiate and support initiatives until a 'take-off' point is realised when other parties can move forwards with the work (i.e. through both normative and demonstration initiatives). Confidence in UN Environment's catalytic effect and its ability to scale-up proven approaches is a fundamental assumption in all the theories of change discussed in this chapter. There is also pressure to demonstrate longer term results that can be attributed to the institution and that depend on lengthy periods of implementation to be realised.

106. From the perspective of change models, a normative function is as pro-active, lengthy and complex as any transition management process or the application of the science-policy interface model of change:

- Underpinning any normative change is work to establish the **proof of concept** (often pilot projects, demonstration initiatives or the generation of new scientific knowledge

etc) that stimulates interest and confidence in the proposed change. A strong proof of concept can be used to encourage funding partners to support new approaches.

- Creating an **enabling environment** to support the adoption of new norms (often seen in isolation as 'normative work') is, in fact, a form of multiplier effect. This is because national or sectoral policies, frameworks, action plans etc work to systematise change in a way that affects whole populations (i.e. all public procurement is affected by a policy change; all new buildings must follow newly adopted standards etc). Country buy-in, multi- and inter-sectoral approaches and effective stakeholder engagement are critical during this stage.
- Implementing new normative frameworks is, effectively, **taking the initiative to scale**. The conditions for launching new policies, actions plans etc need to be established during the creation of an enabling environment: key actors need to be involved in the planning and development of new frameworks; work has to encompass sustainability measures and an exit strategy needs to be designed and started etc. It is during the creation of an enabling environment that strong and relevant partnerships have to be built to take the work forwards (e.g. while a new Green Development Strategy was adopted in Mongolia, for the Ministry of Education to build green kindergartens, they first needed the design for a green education institution – developing the school design formed the basis of an exit strategy).

107. Holistic models of change, as discussed briefly in this chapter, can add depth to the design of interventions at any level – project, Sub-Programme, sector or institution etc. This evaluation indicates two weak areas in the 'effectiveness' chain of the Sub-Programme Theory of Change: a) at a project level between outputs and direct outcomes and on to longer-term effects and b) at a Sub-Programme level between Sub-Programme key deliverables (outputs) and the Expected Accomplishments. These findings suggest that more exploration (and shared discussion/understanding) of relevant change models would be beneficial.

4. Theory of Change at the Sub-Programme Level

Reconstructed Theory of Change of the Sub-Programme, 2014-17

108. This evaluation has assessed the design and structure of the Sub-Programme and considered the internal coherence and logic between Sub-Programme Outcomes, related Programme of Work outputs and the Expected Accomplishments (EAs). A Theory of Change (TOC) is helpful to both discuss and assess the causal logic of the Sub-Programme. No explicit TOC was constructed for either the whole, or part, of the period covered in this evaluation (2010-17).

109. The years 2014-17 are central to the development of the Sub-Programme as they represent the period of greatest stabilisation after the introduction of Results Based Management and projectization in 2010 and encompass the time when global Sub-Programme Coordinators were recruited (2014). The Programme Framework (2016-17) is also the document that has an explicit narrative of the Sub-Programme TOC in the materials made available. Therefore, the narrative of the Programme Frameworks (2014-17) and the results in the Programmes Of Work (2014-17) were used to reconstruct a retrospective TOC for the period 2014-2017 (see figure 4, next page) related to the three main results areas: enabling policy environment; sectors and supply and lifestyles and consumption and their connection to the three Expected Accomplishments.

110. As future Sub-Programme design documents were already available - TOC for the Outcome Map (2018-21, see figure 5, page 35) and the Sub-Programme (2018-19, see figure 6, page 36) - these served as a reference for the longer term aims of the reconstructed TOC 2014-17.

111. There were doubts about the usefulness of mobilising sub-programme staff for a workshop to validate the reconstructed TOC 2014-17 as it would have been a retrospective task. Respondents were, however, asked to reflect on the TOC 2014-17 during interviews. The feedback received is therefore based on opinions provide at an individual level and does not represent the views of a defined group. For the purpose of this evaluation these individual contributions gave useful insight into the use of, and feedback on, the reconstructed TOC 2014-17 and were found to be largely consistent.

112. Since no fundamental changes to the Sub-Programme have taken place since approval of the Programmes of Work of 2014-15 and 2016-17, no additional causal pathways were identified during the evaluation. This is confirmed by the TOC 2018-19, which has similar, though adapted and re-phrased, causal pathways showing the future intended development of the Sub-Programme. Respondents agreed with the overall structure of the TOC 2014-17 and mentioned that the new TOC 2018-19 represents its logical development.

Resource Efficiency Sub-Programme – Reconstructed Theory of Change (2014-17)

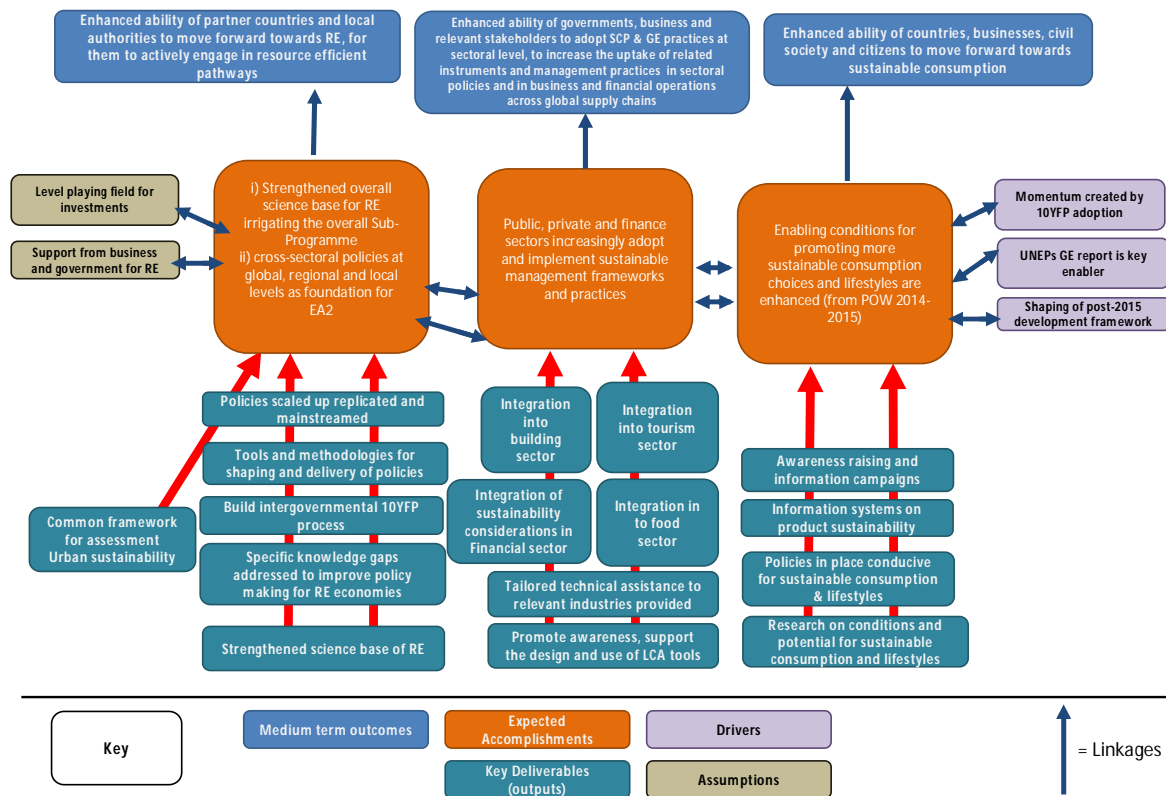


Figure 4: Reconstructed Theory of Change for the Resource Efficiency Sub-Programme, (TOC 2014-17)

113. Despite building on available Sub-Programme documents for the period, the reconstructed TOC 2014-17 faces a number of challenges. The causality between the interventions (i.e. projects) and the Sub-Programme key deliverables (i.e. Programme of Work outputs) could be improved, as well as the causality of those deliverables to the Expected Accomplishments. The inclusion of Intermediate States would have improved the quality and causality of the TOC. Explicit drivers and assumptions can be expanded upon for both the Programme Framework text (2014-17) and the related POWs (2014-15 and 2016-17). These challenges were put to interview respondents during the evaluation.

114. Some respondents identified a certain artificiality of the programming process. The Programme of Work for a biennium that outlines the sub-programmes, Expected Accomplishments and indicators is approved by UNEA. The Sub-Programme therefore only provides a rough structure, it seems, in which to place projects, which are funded largely by donors and with limited internal funding, as they arise and are requested. To a certain extent, the internal coherence of its logic (TOC) therefore needs to remain somewhat loose or vague, to accommodate the variety of projects and work that is actually done. This may affect the potential for a stronger strategic focus.

115. Several respondents noted that the Sub-Programme Theory of Change is selectively used by them in practice and this lack of use is symptomatic of Project Managers who are submerged in the daily tasks of implementing projects to the extent that they overlook the potential contribution they

are making to the 'bigger picture' or higher-level results. These results are quoted or referred to when submitting or renewing a project proposal to the Project Review Committee. The theories of change included in formal project documents are much more influential in leading thinking and actions in the day-to-day running of projects and are more relevant during project formulation phases for donor and funding submissions. As seen in chapter 7, the translation of project level outputs to direct outcomes is currently weak. In order to maximise the effectiveness of projects, the theory of change at the project level should be linked through causal logic to the Sub-Programme TOC and this causal linkage should be assessed during the project approval process.

116. A number of topics were identified by individual respondents as possible additions to the TOC 2014-17. A cluster of topics mentioned were: marketing and communication outputs as important deliverables; the processes of policy influence and strong narratives that influenced the 2030 agenda and the relevance of peer influence and 'club' membership at sectoral, national and regional levels. It is noted that these three topics all relate to the agenda-setting, influencing and visibility work that UN Environment does and suggests that an important causal pathway may be added. One respondent mentioned that the citizens movement is building faster than political changes, but that this area of civil engagement gets limited attention in the TOC. In the opinion of the respondent, this goes beyond the awareness-raising elements mentioned in the sustainable consumption causal pathway, which are typically uni-directional and do not reflect the transfer of agency to citizens.

117. Other possible additional elements that were mentioned are: the need for a stronger emphasis on the science-policy interface that UN Environment provides which was repeatedly referred to as the central causal pathway (see chapter 3, above). As solid pockets of this interface, IRP and the Life Cycle initiative were identified. Also mentioned were: the need to explicitly mention capacity development as an integral part of UN Environment's work (now included in the 2018-21 TOC) and a more explicit link between life-cycle approaches and sustainable consumption practices, as this is a nascent relationship.

118. The respondents added several drivers and assumptions that were, in their opinions, relevant. It was mentioned that at a sub-programme level this list could be almost endless and that the use of drivers/assumptions is more useful at a project level. A driver identified was the added momentum gained from the engagement of private sector leaders who are pushing more towards the achievement of the SDGs. Interestingly, negative assumptions were mentioned as well, such as the negative influence on resource efficiency and sustainable consumption and production of the rising middle class, as well as the connected energy, nutrition and mobility transitions taking place in Asia and Africa.

Relation to 2018 Outcome Mapping and Beyond

119. The importance to add Intermediate States and longer-term impact (future Medium-Term Strategy periods or 2030) to the reconstructed TOC 2014-17 was noted by respondents. An effort to address this has been made in the Resource Efficiency Outcome Map of the Medium-Term Strategy (MTS) 2018-21 (see figure 5, next page), where accomplishments for all MTS periods until 2030 are described, and where a connection is also made to the corresponding SDGs (primarily 8 and 12) and their specific targets. This has led to the formulation of a number of specific indicators for each of the three causal pathways. The gradual development of the three main areas of work embodied in ongoing projects, which often continue in consecutive phases, is reflected in the further development

of the TOC (2018-19) and the connection to the SDGs in the Medium-Term Strategy (2018-21) Outcome Map. This is seen as a positive and consistent development.

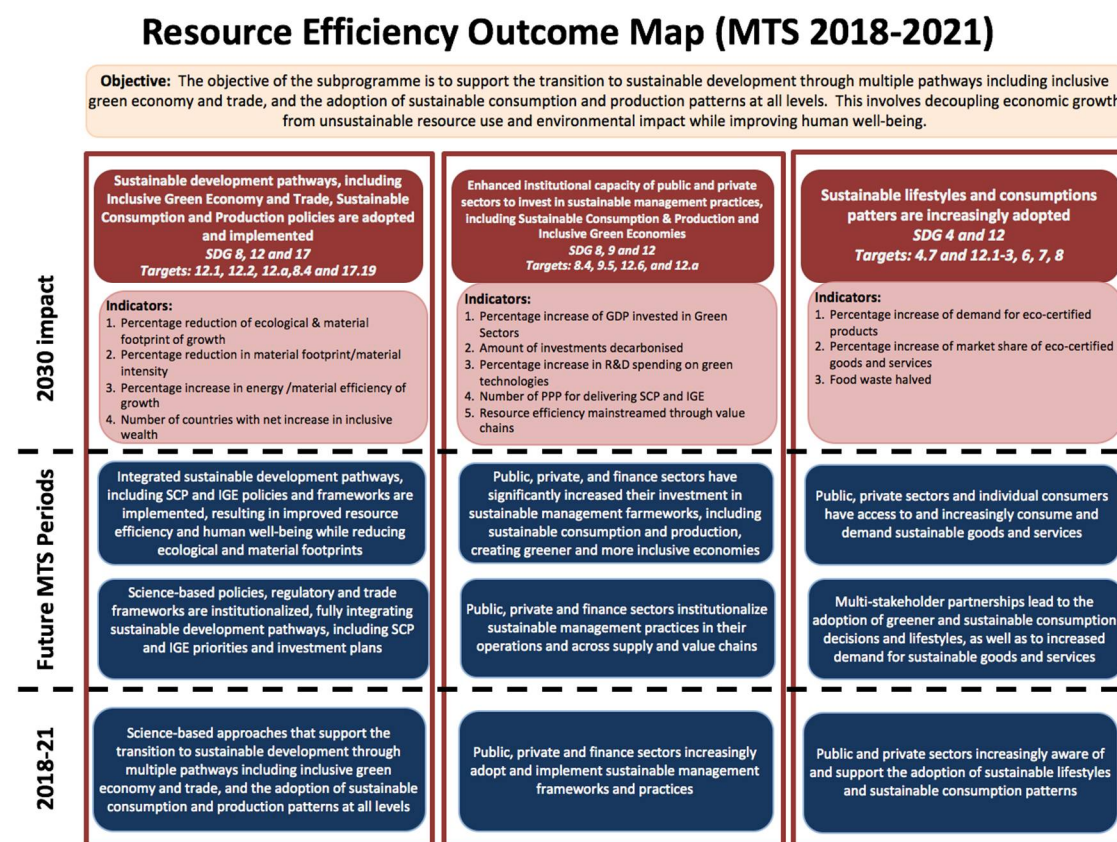


Figure 5: Resource Efficiency Outcome Map (MTS 2018-21)

120. The steps of this development are not yet clearly articulated and there is no apparent timeframe for the transition. In order to be able to report a contribution to the SDGs in 12 years' time, the Sub-Programme will need to articulate its alignment and develop methods of measuring its effect that are in line with SDG indicators.

121. The evaluation noted that the text for '2030 impact' in the Outcome Map (dark red boxes) is the same as the descriptions of "Intermediate States" in the 2018-19 TOC (blue boxes in figure 6, below). Since one would expect Intermediate States identified for the 2018-19 TOC to be achieved sooner than 2030, it is unclear how this is compatible. Further, a key issue is to clarify how, and to what extent, the results developed in the Outcome Map will contribute to the Expected Accomplishments.

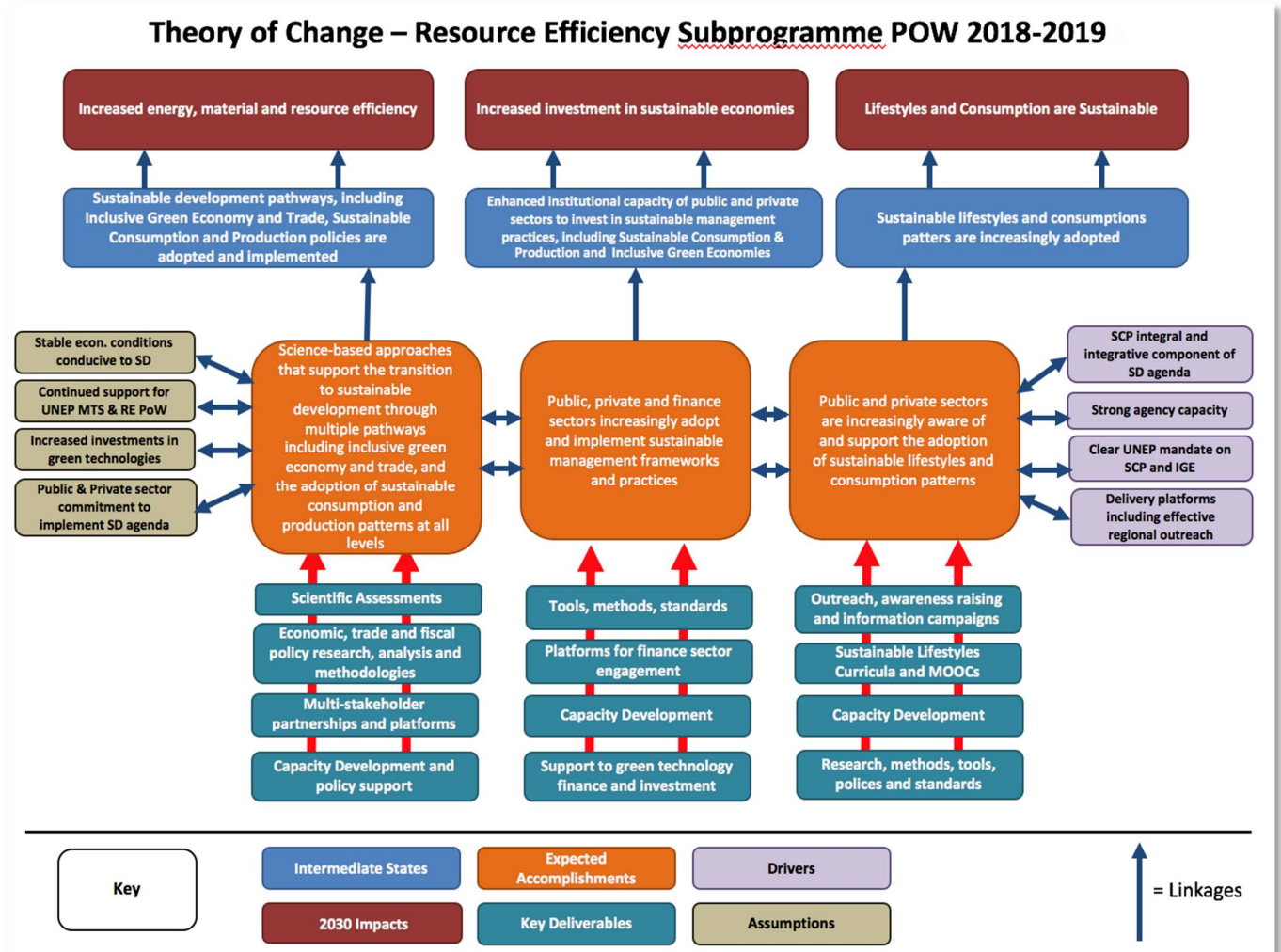


Figure 6: Theory of Change Resource Efficiency Sub-Programme, (TOC 2018-19)

122. Although it is recognised that the richness of individual project TOCs cannot be maintained at the same detailed level in an overall Sub-Programme TOC, both the reconstructed Sub-Programme TOC (2014-17) and that for 2018-19 can be strengthened with strategic insights that are critical for driving global change at a pace that is appropriate for the environmental challenges faced at a global level. Further analysis and understanding of the change process the Sub-Programme is aiming to drive (see chapter 2) would be beneficial in developing the Sub-Programme TOC further.

Implementation of the Reconstructed Theory of Change (2014-17) in Projects

123. The eight most recently evaluated projects within this Sub-Programme are considered central to understanding the effective implementation of the reconstructed TOC (2014-17). These projects are considered to be of great strategic impact to the overall Sub-Programme and represent major activities and interventions which have potential impact on the outcomes and longer-term results.

The evaluation has considered the relationship between the TOCs from these projects and the Resource Efficiency Sub-Programme TOC (2014-17).

124. These individual projects either have TOCs within their project design documents (ProDocs) or took part in the reconstruction of a TOC during their evaluations. These are listed below by earliest start date.

Green Economy Initiative: 'Policy, Macro-economic Assessments and Instruments for Resource Efficiency and Green Economy' (2010-14)

International Resource Panel: 'Science Policy Interface to Support Resource Efficiency' (2010–14)

UNEP FI: 'UN Environment Finance Initiative' (2010-15)

SWITCH Asia: 'SWITCH Asia Regional Policy Support Component' (2011-16)

Eco-Innovation: 'Resource Efficiency and Eco-innovation in Developing and Transition Economies' (2012-17)

10YFP: 'Global Platform for Action on SCP' (2013-16)

GGKP: 'Green Growth Knowledge Platform' (2013 -17)

PAGE: 'Partnership for Action on Green Economy' (2014-17)

125. An analysis of the individual TOCs shows, not surprisingly, that there is a wide variation in structure and detailing of the TOCs, each drafted within the boundaries of the specific project. Comparative analysis of the levels of project activities and their outputs and, to a lesser extent the direct outcomes, is not useful because of this. However, one would reasonably expect a comparison of medium/long term outcomes, intermediate states and impacts to show a clear connection with the results of the overall Sub-Programme's TOC.

126. More detailed discussions at a project level are displayed in the text boxes below (presented in a random sequence).

Science Policy Interface to Support Resource Efficiency (IRP)

The International Resource Panel (IRP) project also began in 2010. The 2016 TOC reconstructed during the evaluation (a TOC was not developed during the project's design) - shows medium-term outcomes still focused on IRP itself: formulating the understanding, consideration and influence of IRP approaches and research within UN Environment/EC, policy venues, the research community, and general sustainability discourse. The project contributes to the intermediate state of more resource-efficient policies and strategies being formulated by key decision makers, which is primarily in line with the **causal pathway 1** of the Sub-Programme TOC for 2014-17. The strong influence IRP has had on the discourse in the G7/G20 on Resource Efficiency certainly falls under this contribution. The impacts that IRP finally contributes to are more sustainable production, processing and consumption of natural resources (**causal pathway 2** in the Sub-Programme TOC) and formulation of more sustainable and resource-efficient politics, which again corresponds with **causal pathway 1**.

Policy, Macro-economic Assessments and Instruments for Resource Efficiency and Green Economy (Green Economy Initiative)

The Green Economy Initiative (GEI) can be considered one of UN Environment's most visible contributions to the global environmental debate during the past decade, as described in the institutional narrative in Chapter 5. A terminal evaluation was conducted for GEI for the implementation period 2010-14. As an umbrella project, it covered all the work conducted by the Initiative, which was financed through 16 individual sub-projects. No TOC was developed initially during the design of the intervention. Due to the cumulative nature of an umbrella project and its dependence on the results frameworks of contributing sub-projects, the reconstructed TOC at Evaluation includes a clarification of the outcomes and intermediate states. Two causal pathways are defined. The first, 'promoting the economic case for GE', shows the activist nature of the project and fits **causal pathway 1** of the Sub-Programme TOC (2014-17). This causal pathway moves from effective information on Resource Efficiency/Green Economy being made available to relevant decision makers to those decision-makers considering Green Economy scenarios better than business-as-usual. This is supported by the project's **causal pathway 2**, 'guidance for GE implementation', with several intermediary stages, the last being 'initial experiences [...] are practiced as effective examples of GE' which fits **causal pathway 2** in the Sub-Programme TOC (2014-17).

Next to this, the Green Economy Initiative formulates three strategies in the TOC: (1) research and communication (2) partnership development and (3) advisory services. These are in line with what are called 'key deliverables' (outputs) in the Sub-Programme TOC (2014-17).

UNEP Finance Initiative (FI)

The third and last project started in 2010 (being a continuation from the start of the initiative in 1992) is the UNEP Finance Initiative (UNEP FI). As an example of global influence, the project evaluation report quotes the key announcements of the first week of COP21, among which were: (i) special sessions on the role of private sector financing and (ii) President Obama's pledge of \$30 million towards climate risk insurance.

The project was evaluated against a reconstructed TOC. In addition to the project formulated outcomes - 'Finance Institutions systematically consider environmental, social and governance factors and value drivers' and 'green finance solutions delivered', the evaluators formulated 'accountability towards key stakeholders' as an outcome since it was seen as an essential lever in sector-wide voluntary initiatives. These fit under **causal pathway 2 of** the Sub-Programme TOC (2014-17). As a separate project causal pathway, 'policy development and regulatory reform' was formulated as an outcome – fitting **causal pathway 1** of the Sub-Programme TOC (2014-17). The impacts for the first project level causal pathway were aptly formulated as 'changing finance' and 'financing change'. For the project's causal pathway 2 this was formulated as 'enabling environmental and financial stability'; all leading to accelerated progress towards the achievement of the SDGs.

Resource Efficiency and Eco-innovation in Developing and Transition Economies

In the reconstructed TOC for this project, the Project's intermediate outcomes, which were explicitly linked to those of the Sub-Programme included: availability of tools and technical capacity; more openness of policy makers to include eco-innovation in legislation; usefulness and effectiveness of the concept to respond to environmental challenges established and leadership of RECPnet (A UNIDO – UN Environment supported global network of RE & Cleaner Production Centres) and increased experience and knowledge sharing. Two causal pathways for impact are established, one leading to more policy makers promoting eco-innovation (**causal pathway 1**), the other leading to more businesses designing and offering products and services that respect sustainable consumption and production principles (**causal pathway 2**).

Partnership for Action on Green Economy (PAGE)

The reconstructed TOC for the Partnership for Action on Green Economy (PAGE) closely resembles the TOC developed in the project design. Four outcomes cover country level reinforcement and the integration of inclusive green economy goals and targets into economic planning, along with implementation of sectoral and thematic reforms, supported by capacity development and an improved knowledge base. This fits in **causal pathways 1 and 2** of the Sub-Programme TOC (2014-17). The intermediate state is separated between strong uptake of inclusive green economy investments/projects /actions in PAGE countries and global uptake of PAGE approaches, learning and skills. The final impact of PAGE, "countries are transforming their economies to eradicate poverty, increase jobs and social equity, strengthen livelihood and environmental stewardship, and sustain growth in line with SDGs" is defined at a much broader level than the impact statement in the Sub-Programme TOC (2014-17) itself.

Global Platform for Action on SCP (10YFP)

The TOC for 10YFP was reconstructed from the project's log frame. The project's focus was on building a global platform for action on sustainable consumption and production and supporting and facilitating SCP strategies and decision-making. This includes support to the development and launch of six 10YFP programmes. The intermediate outcome was formulated as 'SCP mainstreamed in national development plans', which fits **causal pathway 1** from the Sub-Programme TOC (2014-17). The (sequential) final outcome is "SCP is implemented and scaled up at regional and national level" which rather fits the second and third causal pathways, building on capacity development and technical assistance. So in the project, the policy oriented causal pathway is not separated from the implementation pathways.

Green Growth Knowledge Platform (GGKP)

The Green Growth Knowledge Platform (GGKP) reconstructed TOC identifies two outcomes: the identification and addressing of gaps in green growth knowledge and data, and the use of policy relevant green growth knowledge and data resources by policy makers. Both fit mainly in the **first**, and to a certain extent in the **second causal pathway** of the Sub-Programme TOC (2014-17). The project impact is the development, adoption and implementation of green growth policies and practices, leading to the long-term development impact of good and services produced, processed and consumed in a sustainable way.

SWITCH Asia Regional Policy Support Component (SWITCH RPSC)

The evaluators of the SWITCH RPSC project reconstructed the TOC based on the logframe of the project and an existing TOC from the larger programme 'Mainstreaming Resource Efficiency into Policy'. Two medium term outcomes are articulated, the first being 'creating the enabling environment to strengthen policies that mainstream Resource Efficiency/Sustainable Consumption and Production'. This fits within the **first causal pathway** of the Sub-Programme TOC (2014-17). The second is 'institutional capacity building to design and implement those policy-oriented activities', which fits into the **second and third Sub-Programme TOC causal pathways**. The intermediate state defines an interesting combination of (sectoral) policy enforcement from the first line and (sectoral) policy compliance from the second, jointly leading to 'improvement of Sustainable Consumption and Production and Resource Efficiency' as the final impact. The three platform projects 10YFP, GGKP and PAGE all started in 2013 and are central projects in the Medium-Term Strategy (2014-17). 10YFP had a terminal evaluation, while GGKP and PAGE had mid-term evaluations with TOCs from their project design stage, which were revised during the evaluation.

127. This comparison of medium/long term outcomes, intermediate stages and impacts at project level show that it is possible to demonstrate alignment of the project's longer-term outcomes with the results in the Sub-Programme's TOC (2014-17). However, this analysis shows that the distribution of project-level resources is not strategically designed to deliver this TOC: projects address different sectors, concentrate their effort at different stages of the change process; operate in isolation from each other etc. 'Alignment' of the project and sub-programme results alone is unlikely to deliver the planned results and consideration of strategic effort and substantive contributions of the project portfolio is needed for the Sub-Programme to be delivered effectively.

128. One stark example is the fact that almost none of these projects contribute to causal pathway 3 on enabling conditions for sustainable consumption and lifestyle. This may be partly because relevant projects were not due for evaluation during the past seven years, or because no flagship projects have been developed in this area. However, respondents also noted that financial resources, to the extent that their allocation is under the control of UN Environment, are not directed evenly across the results areas.

5. Institutional Narrative on the Influence of Resource Efficiency Sub-Programme on Global Change Processes

129. This chapter describes the institutional narrative of UN Environment's contribution in general, and the influence of the Resource Efficiency Sub-Programme in particular, to global change processes. Four areas of work have been identified to build this narrative, falling into the two categories for models of action, as developed in Chapter 3:

Initiation and Acceleration (representing a 'disruptive' model of action)

- The influence of the Green Economy Initiative on international agendas (period 2010-14), with PAGE (2013-17) as its successor;
- The influence of the UNEP Finance Initiative and the Inquiry¹³ on financial institutions worldwide over the period 2014-17;

Stewardship (representing a 'evolutionary' model of action)

- The influence of the Resource Efficiency topic on the agendas of the G7 and G20 in 2016-17, strongly influenced by the International Resource Panel; and
- The influence of UN Environment on the Rio+ 20 process on Sustainable Consumption and Production, the 10YFP platform and the Sustainable Development Goal 12 on Sustainable Consumption and Production.

130. This chapter presents summary 'snapshots' of the four areas of work that have had a global influence and follows this with a discussion of the emerging narratives. These areas were mentioned by the respondents for this inquiry as the most relevant for the institutional narrative. The chapter concludes with an attempt to present the key insights in tabular form. Any form of 'modelling' implies simplification and generalisation in order to identify patterns. The usefulness of models is to reveal insights that may help to improve approaches in real-life situations that are much more complex than the models themselves.

Project 'Snapshots'

Snapshot 1: Green Economy

Work on 'Green Economy' began to be developed within UN Environment from 2008, was initially supported with internal funds (Environment Fund) and represented the majority of the work in the Economics and Trade Branch. A new Chief of the Branch led the implementation of the initiative from a management perspective and the Executive Director championed the work. As external funding was secured more staff were recruited and the team grew in size.

This body of work, which had the features of an '**institution-wide flagship theme**¹⁴', was formalised under the 'Green Economy Initiative' (GEI) in 2010. The initiative was developed with a much stronger macroeconomic policy orientation than the existing work on sustainable consumption

¹³ The Financial Inquiry falls outside the Resource Efficiency Sub-Programme and is a UN Environment-wide initiative.

¹⁴ GEI Evaluation Report, Hofstede, 2017

and production. The team was able to execute several studies, develop activities, initiate partnerships, attend meetings and events and produce publications.

In October 2008, UN Environment launched its Green Economy Initiative initially with a call for a Global Green New Deal, as a strategy for addressing the multiple crises (financial, economic, environmental) confronting government leaders. The initiative provided analysis and policy support for investment in green sectors and for greening environmentally unfriendly sectors. In June 2009, in the lead up to the UN Climate Change Conference in Copenhagen, the UN released an interagency statement supporting the green economy as a transformation to address multiple crises. In March 2010, the General Assembly agreed that green economy in the context of sustainable development and poverty eradication would form one of the two specific themes for Rio+20 (resolution 64/236). This led to a great deal of international attention on green economy and related concepts and the publication of numerous reports and other literature aiming to further clarify and develop the concept.

One of the key publications was the 'Green Economy Report' published in 2011. Uptake of the Report's content was supported by its visibility at the Rio+20 Conference on Sustainable Development in 2012. The Report challenged the prevailing idea that taking care of the environmental sustainability necessarily implies inferior economic outcomes. The alternative narrative was that sustainability offers investment opportunities, many of which were attractive in their own right. Furthermore, an economy-wide strategy for this transition process would deliver greater gains through synergies between sectors. This was a powerful narrative in the aftermath of the global financial crisis of 2008, particularly given its appeal to economic policy makers. The economic and policy analysis of the Green Economy Report contributed to 'debunking' many of the myths and misconceptions around the economics of 'greening' the global economy. It provided timely and practical guidance to policy makers on what kind of reforms were needed to unlock the productive and employment potential of a green economy. In the Report the greening of economies is demonstrated to be supportive of growth, a net generator of 'decent' jobs and a vital strategy for the elimination of persistent poverty.

A number of front-running African countries (i.e. Burkina Faso, Egypt, Ghana, Kenya, Mauritius, Rwanda, Senegal and South Africa) were the first to respond to the possibilities presented in the Report and adopted relevant strategies and policies in the years after (2010-15)¹⁵. Through the Green Economy Initiative UN Environment was able to support country-level assessments of such policy options and the governments of these countries implemented green economy policies across key sectors. In South Africa and Ghana, green public procurement has supported developments of emerging markets in areas of sustainably produced food, renewable energy and energy efficiency. Sound fiscal reforms are being implemented in Ghana, Mauritius and South Africa to introduce environmental taxes, remove environmentally harmful subsidies and reallocate budget expenditure towards green sectors. Capacity development programmes and institutions, such as the Kenya National Cleaner Production Centre and the Rwanda Resource Efficient and Cleaner Production Centre, have been created to develop skills and support access to new green job opportunities.

Institutionally the work on Green Economy is now housed within the broader portfolio of the Resources and Markets Branch in the Economy Division and is part of the Resource Efficiency

¹⁵ Building Inclusive Green Economies in Africa – Experience and Lessons Learned, 2010-15. UN Environment, 2015

Sub-Programme. The work is formally identified with the Green Economy Initiative (2010-17) and was incorporated within, and promoted through, the Partnership for Action on Green Economy (PAGE, 2014-17), Green Growth Knowledge Platform (GGKP, 2013-2017) and International Resource Panel (IRP, 2006 - ongoing). The concept incorporated dimensions of biodiversity and ecosystems-based approaches into its economic models and has been expanded to incorporate the principles of inclusivity, (now, 'inclusive green economies'). The translation of Green Economy thinking into the financial sector is supported by the UNEP Finance initiative, while the UNEP Inquiry has concentrated on how the design and regulation of this crucial sector can be reformed to support a transition to a green economy (see Snapshot 2 below).

More recently the Green Economy agenda has been incorporated in the Sustainable Development Goals, adopted in 2015, as Goal 8 'Promote sustained, inclusive and sustainable economic growth'. This SDG formulation seems to have a stronger tone of 'green growth' than 'green economy': 'green growth' (closely associated with the work of OECD) aims to continue economic growth while ensuring that natural assets are used sustainably while the concept of 'green economy' (closely associated with the work of UN Environment) has a stronger focus on economic transformation and innovation. For many institutions and stakeholders active in this area, a green economy agenda should also question whether economic growth can be pursued while respecting environmental and resource limits.

A central risk that was identified during the promotion of Green Economy was that the obstacles facing first responders and barriers to implementation would lead to disappointment and damage the credibility of the Green Economy proposition. The response was to introduce Green Economy as an overarching approach to achieve innovation, empowerment and systemic change which requires a global learning process, rather than positioning it as a brand-new paradigm.

The work on Green Economy is associated with a strengthening of UN Environment's contributions in the G7 and G20 processes as well as in dialogues with other, more overtly economic, institutions such as the World Bank.

Snapshot 2: Sustainable Finance

UN Environment has worked to engage the global financial sector in sustainable development since the 1990s, specifically under the UN Environment Finance Initiative (UNEP FI). The Finance Initiative is a **membership-based platform** with separate committees on banking, investment and insurance and UN Environment manages the Secretariat. UNEP FI aims to improve the incorporation of standards within the financial sectors and to promote the uptake of best practices. It develops, and promotes the use of, technical guidance, tools and best practices that enable financial services and stakeholders working in the financial services and capital markets to integrate environmental and social considerations into their business practices.

A central issue that emerged over time was the need for more deep-rooted reform in the financial sector. It was less clear what form the changes should take. Within this context the 'Inquiry into the Design of a Sustainable Financial System' (the Inquiry) was launched in 2014. The Inquiry was created as an **'offshore platform'** with characteristics that enhanced its capacity to be highly responsive to identified needs, triggers of action and opportunities to network and influence. Specifically, the Inquiry was operationalised comparatively quickly by hiring a highly-specialised, experienced and well-connected team under UNOPS consultancy contracts with 'sunset' clauses.

Resources were mobilised on a 'fast-track' basis through the direct engagement of the Executive Director with specific donor countries. Operating outside the management and administrative structure of the Sub-Programme, financial transactions were approved by the Head of the Economics and Trade Branch, within the Economy Division.

The aim of the Inquiry was to design and deliver innovations in financial policy, regulatory frameworks and standards that would better align national and global financial systems with sustainable development principles and goals. The Inquiry team worked with high level global finance policy makers and over 20 countries in order to initiate and support the transformation of financial systems. They also produced and disseminated numerous published papers (90+) and reports.

In 2015, 'The Financial System We Need' was published and launched at the IMF/World Bank Annual Meeting in October 2015. It was disseminated first to an advanced group of banks and financial institutions who started the analysis on what policy measures can better align the financial system with sustainable development. Uptake of the report's content within the financial sector was supported by the extensive network built by the Inquiry team and the creation of/engagement with effective 'groups'. For example, China (host of the 2016 G20 Summit) was one of the first countries the Inquiry team began working with. A G20 study group on Green Finance (GFSG) was created which delivered a number of reports to G20 members and observers. Inquiry work was done with its country and global partners. A synthesis report was produced, prior to the 2016 Summit. The synthesis report was adopted by the G20 at the 2016 meeting. Work linked to green finance is woven across policy-making arenas and the decision-making processes of regulatory bodies. These include: G2; G7; Green Finance Study Group; FSB's industry-led Task Force on Climate-related Financial Disclosures (TCFD); the Sustainable Banking Network hosted by the IFC and the Green Finance and Investment Centre hosted by the OECD. The GFSG was then continued for following presidencies, including Germany in 2017 and Argentina in 2018.

Some lessons learned: The Inquiry was the right initiative at the right time, having a historic window to advance changes in the financial system. It developed its overarching narrative iteratively in public through debate, refinement and amplification. It chose not to seek consensus in- and outside the UN system, to avoid dilution of efforts. Neither did it rely heavily on best practices from mature markets, thus keeping room for innovations from developing countries. It also did not program or blueprint the work itself but was seeking to crowd-in others for this. The role of UN Environment as an international organisation with a strong authority, but not central in the financial market, was essential. (source: presentation of the Inquiry to the Committee of Permanent Representatives, 2018)

Institutionally, the Inquiry operated outside the typical structure and systems of a Sub-Programme or Division while the UNEP Finance Initiative operated under standard operating procedures. The Inquiry will be closed at the end of 2018 and it is expected some of its work will be incorporated within the UNEP Finance Initiative's scope of work.

131. Both the Green Economy and Inquiry initiatives show a similar path of initiation and acceleration, although they operated within different institutional contexts. With flexible funding mechanisms and the 'championing' by the Executive Director, innovative concepts and compelling narratives were quickly developed on the back of sound research and analysis. This knowledge was crystalized in an accessible and convincing publication that could provoke and support an informed dialogue and significant numbers of influential actors were 'primed' in the run up to key decision-

making events. Alongside this, early-adopting countries were mobilised and supported to demonstrate the viability and relevance of the documented approaches. Once the initial impetus had peaked and momentum reached a plateau the work has been embedded within existing (UNEP Finance Initiative) or new (PAGE, GGKP and IRP) mechanisms that are consistent with the institution's mainstream 'evolutionary' management model.

132. This model of action has similarities with the UN Environment Business Model¹⁶ In the sense that UN Environment catalyses effort at the beginning of a proverbial 'steep learning curve' and stewards the work until a 'take-off' stage reached, at which point further implementation is handed over to partners who have previously been engaged in 'walking-the-walk'. The difference with the Green Economy and Inquiry initiatives appears to lie in the level of flexibility and responsiveness given to the initiating teams; the high profile 'championing' of the cause; understanding of the 'flow' of global dialogues; engagement of first-responders; ability to forge alliances and moderate between different interest groups; harnessing the power of small, specialised groups and the ability to take advantage of strategic opportunities to join (and influence) decision-making arenas.

133. This approach fits within the 'Transition Arena' thinking of transition management as described in Chapter 3, where innovative frontrunners are brought together within an informal but well-structured and funded setting for thinking and working beyond 'Business As Usual', protected to some extent from the system it tries to change, to accelerate the break-through of the new concept leading to adjustment of the existing socio-technical system.

Snapshot 3: Resource Efficiency

Resource efficiency was identified as a priority issue for UN Environment and was selected as the unifying concept for one of the six¹⁷ Sub-Programmes created in 2010.

The International Resource Panel (IRP) was created in 2006. The IRP project being discussed began in 2010 with the aim of providing independent, coherent and authoritative scientific assessments of policy relevance on the sustainable use of natural resources and their environmental impacts over the full life-cycle; and to contribute to a better understanding of how to decouple economic growth from environmental degradation. Nine assessment areas are covered - Decoupling, Cities, Water, Metals, Land and Soils, Food, Trade, Resource Efficiency, Green Technology and Global Materials Flows, on which a large number of authoritative reports have been published.

The IRP was included in the Rio +20 final document in 2012. Also, it provided scientific guidance to the development of the 10YFP. By 2015 the issues-based research, analysis and reporting carried out by IRP and published in its reports had attracted attention and secured a solid reputation at a global level.

The Japanese government had an interest in resource efficiency and they had already planned to address related concepts such as the 3Rs – reduce, reuse, recycle – at the 2016 G7 Summit meeting it was hosting. In the previous Summit in 2015, hosted by Germany, resource efficiency was raised as a crucial topic and the IRP was asked to provide a synthesis report ready for the 2016 meeting in Japan. Recognising an opportunity to influence dialogue on the topic at the

¹⁶ Medium Term Strategy, 2014-17 page 43.

¹⁷ The Sub-Programmes were increased to seven in 2013 when Environment Under Review was added.

highest level the team shortened the typically long report preparation timeline and produced a high-quality product within one year. This work was championed by Paul Ekins, a member of the IRP.

The 2016 report 'Resource Efficiency: Potential and Economic Implications' was incorporated in that year's G7 meeting and, subsequently, into the broader G20 meeting. The G7 presidency of Japan announced the G7 Alliance on Resource Efficiency, as a multi-stakeholder initiative. During the Italian G7 Summit in 2017, the commitment to the Alliance was reconfirmed, and the 5-year Bologna Roadmap was adopted, aimed to advance common activities on Resource Efficiency.

During the German presidency of the G20 in 2017 resource efficiency was included in the summit's declaration and the establishment of the G20 Resource Efficiency Dialogue was announced. Through this dialogue mechanism a series of high-level workshops were planned with the aim of exchanging good practises and national experience to improve the efficiency and sustainability of natural resource use across the entire life-cycle and to promote sustainable consumption and production patterns. The resource efficiency vocabulary can be seen to have been adopted.

Snapshot 4: Sustainable Consumption and Production

UN Environment's work on sustainable consumption and production has its origins before 2002 when the Sustainable Consumption and Production Branch of the Economy Division worked on the 'bottom-up', multi-stakeholder participation Marrakech process (2002-11). Working together with UNDESA, UN Environment continued to work on this theme and provided significant inputs to the establishment of the 10-Year Framework of Programmes on Sustainable Consumption and Production. This programme was finally adopted for implementation at the Rio+20 conference in 2012 and was announced in the outcome document, 'The Future We Want'.

The 10YFP programme was set up as an implementing agency outside UN Environment with a board with representation from the five regional groups and a relatively complex governance structure. UN Environment serves as the Secretariat for the 6 programmes within the framework and administers the Trust Fund. UN Environment is co-lead in two of the programmes: Sustainable Public Procurement and Sustainable Buildings and Construction. The 10YFP has over 500 partners and its key focus is on replication and scaling up. Challenges are met in supporting the implementation and mainstreaming of SCP and the involvement of the private sector.

SDG Goal 12 "Ensure Sustainable Consumption and Production Patterns" has been influenced to a large extent by the 10YFP. The Programme and Secretariat were strongly engaged in the lengthy multi-stakeholder and open workshop process on the development of the SDGs between 2013 and 2015. The SCP concept had further impact on the formulation of twelve of the other SDGs with targets that integrate and orient future actions and policies towards achieving SCP.

Target 12.1 under SDG 12 is entirely focused on the actual implementation of the 10YFP itself: "implement the 10-year framework of programmes on sustainable consumption and

production, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries". The indicator for this is the number of countries with SCP action plans or mainstreamed in policy, which is directly related to the higher-level results reporting analysed in Chapter 6.

SCP and SDG12 have a strong interlinkage with 6 other SDGs – and specifically 14 out of their 31 targets - under review in 2018 (SDG 6,7,11,12,15 and 17) with the key aspects Resource Efficiency, Environmental Impact, and Human Well-being, all essential in decoupling economic growth from environmental degradation. From this perspective, sustainable consumption and production is a strong enabler of the implementation of a range of other goals and their targets besides SDG12.

134. The work on Resource Efficiency and Sustainable Consumption and Production demonstrates a steadier path along which UN Environment has used its global mandate, political neutrality and technical expertise to inform and influence global agendas and support the formal adoption of resolutions and goals. Hosting Secretariats provide the opportunities for the institution to 'accompanying' specialised global dialogues – inform political processes, formalize milestone achievements, articulate collective decisions and document commitments.

135. The challenge for initiatives following both the 'disruptive' and the 'evolutionary' strategy is to keep the topics high on the agenda of the global fora, and to increase their influence from the level of excellent reports and dialogues, and high level technical working groups and alliances, towards actual impact by policy changes and implementation.

Table 4. Consolidation of Findings in Models of Action

	'Disruptive' model of action		'Evolutionary' model of action	
	Green Economy	UN Environment Inquiry (and Finance Initiative)	Resource Efficiency	10 Year Framework Programme on SCP
OLD TO NEW THINKING	Greening the economy need not imply increased costs but can be an engine for growth, innovation and decent jobs.	Transforming the financial system by exploring, testing and implementing innovative changes in market leadership and national actions	Need for sustainable and efficient use of natural resources; need to decouple economic growth from resource use and environmental degradation	Urgent need for uptake of sustainable consumption and production
GLOBAL CONTEXT	2008 Economic and Financial crisis	2008 Economic and Financial Crisis	G7, G20	2030 Agenda, Sustainable Development Goal 12, Marrakesh process
DISRUPTER	Green Economy Report 2011	The Financial System We Need 2015 report	None	None
CHAMPION	Achim Steiner -Executive Director, UN Environment (2006-16)	Achim Steiner - Executive Director UN Environment (2006-16); Simon Zadek, Nick Robins	Not one explicit champion. Strong role of influence of G7/G20 by Paul Ekins	Not one specific champion
FIRST RESPONDERS	Group of 8 African countries embracing the concept	Group of 13 countries starting with analysis and implementation	Gradual uptake, inclusion in Rio +20	Marrakech Process 2001 -11
OPPORTUNITIES TO BUILD MOMENTUM	Rio +20 visibility one year after report publication. Adoption of Green Growth agenda by OECD	Uptake by Financial Stability Board (2015), issue of Green Bonds (2016), China national policy package (2016), G20 and EU strategies on green finance (2016)	G7 and G20 uptake in 2016 and 2017	Close linkage to SDG12 and linkage to several other SDGs
EMBEDDING	GEI projects 2011-2013; PAGE, GGKP	Inquiry projects on country engagement (2016-2018); link to Finance Initiative capacity development	Scientific base informing many other projects and programmes, for instance 10YFP	10YFP stakeholders ecosystem

6. Higher Level Results Reporting

136. This chapter serves an accountability function as it documents the process by which the Sub-Programme collects data and applies them to the overall results that are reported to Member States. The chapter also comments on the challenges associated with the articulation of the Expected Accomplishments, which has been highlighted in previous evaluative reports.

137. The analysis in this chapter is structured around key stages of results articulation, data collection, data validation and the extent to which reported results can be attributed to the Sub-Programme's efforts.

Current Situation

138. The highest level of results' statements identified by UN Environment and directly relevant to each sub-programme are the Expected Accomplishments, which are agreed with the Committee for Permanent Representatives¹⁸ for each four-year Medium-Term Strategy and broken down into indicators and units of measure in the two-year Programmes of Work. The Expected Accomplishments are articulated at sub-programme level.

139. Progress towards the achievement of results is reported to the Committee of Permanent Representatives every six months and incorporated in an annual report to the Committee and the Governing Council. Previously UN Environment prepared two separate documents, an Annual Report and a biennial Programme Performance Review, but these are now combined as one Annual Report. From 2018 the Annual Report is planned to be presented at the UN Environment Assembly.

140. This evaluation notes one Expected Accomplishment under the Executive Office, to which all sub-programmes could be expected to contribute: EA (b) 'promotion by UNEP of greater coherence and complementarities relating to environmental issues in the United Nations system. The indicator is framed as: 'number of subjects of global environmental concern on which the United Nations system takes joint actions, including system-wide strategies for the environment, as a result of UNEP engagement'.

141. The Policy and Inter Agency Affairs Unit within the Strategic Programme and Policy Division works on behalf of all sub-programmes in relation to this indicator. Through this Unit the work carried out within UN Environment, based primarily on information from the sub-programmes, is connected to the workstreams of high level committees¹⁹ and is reflected in corporate reports and Ministerial Outcome documents. For example, work on sustainable consumption and production is currently being incorporated into the workstream on 'Transiting Towards Resilient Societies'. Documentation was provided by this Unit to evidence the incorporation of green economy experience and materials from the Resource Efficiency Sub-Programme into the G7, BRICS and Rio+20 fora.

¹⁸ And approved by ACABQ and fifth committee at UN HQ - Governing Council/UNEA

¹⁹ High-Level Committee on Programmes and High-Level Committee on Management

142. Previous evaluations of UN Environment's Medium-Term Strategies and Programme of Work²⁰ indicate a process of institutionalization and refinement of a results-based approach over time. In the 2014-17 Medium-Term Strategy more consistency with OECD results' definitions is noted, along with more consistency within results levels. The evaluations confirm other improvements in the articulation of causal pathways through theories of change at both sub-programme and project levels. However, it is also noted that the Expected Accomplishments, although to be achieved within a PoW period, still represent changes that do not extend beyond an immediate outcome level and are sometimes a mix of output (reflected in phrases such as knowledge products being 'developed' and 'shared' or practices being 'increased') and immediate outcome (reflected in phrases such as practices being 'applied' and behaviour patterns being 'enhanced') statements. Further, the Indicators of Achievement in the Programmes of Work are consistently formulated at an output level.

143. The general challenges posed by the current articulation of higher level results, which apply across all sub-programmes, are that: a) a substantial gap remains between the results that are reported against the Indicators of Achievement in the Programme of Work (derived from project achievements) and the ambition of the Expected Accomplishments, which also represents the ambition of the Sub-Programme, and b) where indicators refer to the uptake of action at a city, sector or national level, demonstrating progress is dependent on reports from implementing partners and/or countries themselves (i.e. UN Environment's interventions are designed around the transfer of agency to other parties after change processes have been stimulated).

144. An underlying dilemma in UN Environment's identity, (see chapter 3) is that the UN Environment Programme was designed and initiated to play a normative role in shaping and stewarding the global environmental agenda, but is frequently requested to fulfil an operational role by various constituencies. The current formulation of high-level results (i.e. Expected Accomplishments in Programme of Work) faces challenges at both ends of the scale: they fall short of providing a global strategic vision yet, when broken down into indicators of achievement, rely on monitoring type counting tasks, some of which are outside UN Environment's direct agency. For the Resource Efficiency Sub-Programme this can mean that what is reported are partial stages of a change process (e.g. adoption of a single policy at national level) or disaggregated results (e.g. work in a series of hotels in one country) without reflecting substantive changes that may be taking place across a sector or country or the changes in the global discourse to which the Sub-Programme has made a substantive contribution.

Discussion of Findings

145. The findings of this line of inquiry are presented from three main perspectives: i) the articulation of the results statements and associated indicators; ii) the reliability and transparency of the reporting mechanism and iii) reflections on the results framework in the Medium-Term Strategy 2018-21. Examples of results reporting at a country level are explored in Annex II and reflections included under the reliability and transparency of the reporting mechanism.

146. The Resource Efficiency Sub-Programme is designed around three main areas of focus: supporting the development of: i) an enabling policy environment; ii) sustainable business practices

²⁰ Formative Evaluation of the Medium-Term Strategy 2014-17, Evaluation Office, August 2015; Mid-Term Evaluation of UNEP's Medium-Term Strategy 2010-13, July 2013 and the Formative Evaluation of UNEP's Programme of Work 2010-11, Evaluation Office, July 2011.

and iii) sustainable consumption and lifestyles. The formulation of Expected Accomplishments has developed over time, culminating in the 2014-17 Medium-Term Strategy as:

- (a) Cross-sectoral scientific assessments, research and tools for sustainable consumption and production and green economy are developed, shared and applied by policymakers, including in urban practices in the context of sustainable development and poverty eradication;
- (b) Uptake of sustainable consumption and production and green economy instruments and management practices in sectoral policies and in business and financial operations across global supply chains is increased, in the context of sustainable development and poverty eradication; and
- (c) Enabling conditions for promoting more sustainable consumption choices and lifestyles are enhanced.

147. Developments in the reporting system were reported by evaluation respondents across the organization and confirmed through a review of data storage mechanisms, documentary archives, PowerPoint presentations and annual reports. Since 2012/13 the roles of people involved in the data gathering and reporting process have, at an institutional level, become more clearly defined and separated. There has also been a shift from focusing on confirming the alignment of projects with the indicators (2012/13) to collating and examining evidence to demonstrate progress in achieving the stated results (2016/17). Since the recruitment of the Resource Efficiency Sub-Programme Coordinator (2014) there has been a gradual clarification of the Sub-Programme indicators and their units of measure, with the most substantial changes being evident in the 2018-21 Medium Term Strategy (see paras 187 and 188 below).

148. Six-monthly reports to the Committee of Permanent Representatives are made in person by the Sub-Programme Coordinator and supported by PowerPoint presentations and supporting documents. The quality, volume and frequency of information provided by the Sub-Programme is appreciated by members of the Committee of Permanent Representatives and this Sub-Programme provides a high standard of information exchange.

149. During the evaluation the availability of UN Environment results reporting, including separate and distinct sections on the Resource Efficiency Sub-Programme, to the wider public was confirmed. Simple internet searches on 'UN Environment annual report' led to PDF versions of all Annual Reports in the evaluation period²¹ (2010-17). The evaluation notes that the information in the Annual Reports and Programme Performance Review reports, if appropriately archived and used as a documentary resource, can contribute to a high-level narrative of change over time²², disaggregated to a sub-programme level where appropriate.

²¹ Some Annual Reports and Programme Performance Reviews were retrieved from wedocs.unep.org while others were found under web.unep.org. The evaluation also confirmed that Annual Reports were easily found from 2006 to-date at www.unenvironment.org. Other Annual Reports were found for 2001 and 2003 (in French only).

²² PDF versions of reports are assumed to be more suited to archiving and it is advisable for them to have the same scope and detail of results information as online versions. It is observed that the online version of the 2016 report at web.unep.org/annual-report/2016, provides access to the material typically included in a Programme Performance Review report through active links (e.g. 'See How We Performed on Resource Efficiency in 2016'). However, the PDF version of the same report limits the information on Resource Efficiency to one page and the detail typically included in the Programme Performance Review is not present.

Results Articulation

150. The purpose of the Expected Accomplishments reporting mechanism is for UN Environment to communicate to its governing body what has been achieved at an outcome level (i.e. what long-lasting changes of state or behavior have taken place as a result of UN Environment's actions and the application of its resources). The primary audience for these reports is therefore Member States, represented by the Committee of Permanent Representatives. A second key audience for sub-programme progress reporting is the staff of UN Environment itself who need to know where they have made progress and where more attention and effort is needed. A third, indirect, audience of bi-lateral funding partners is acknowledged. Although funding partners may be more interested in project-level results, and frequently have their own reporting requirements, there is an assumption that each project is also contributing to broader objectives and long-term goals that are dependent on contributions from multiple interventions. For example, the Sub-Programme's work on SWITCH Asia is a 'regional support component' of the EC-funded SWITCH-Asia Programme as well as being part of UN Environment's project 'Mainstreaming Resource Efficiency Aspects into Sustainable Development Planning, Policies and Regulatory Frameworks'.

151. According to the responses from a sample of members of the Committee of Permanent Representatives²³ the supply of information on this Sub-Programme is found to be of good quality, detailed and accessible. However, the underlying usefulness of the reporting is limited by the nature of the Expected Accomplishments themselves. Several members find that the data and knowledge provided does not lead to the in-depth understanding of achievements, or changes at a country level, that they would find valuable. For example, they would expect the Expected Accomplishments to capture how much effort is going into actual policy implementation or results in industrial sectors and changes in individual consumption.

152. The question of how change at a country level can best be assessed, beyond the current reported indicators, was raised by several groups. Ideas that were put forward include: a) selected country level impact studies; b) impact feedback from member countries through the Committee of Permanent Representatives as a standing agenda item and c) country-level analysis of the data collected by the Science Division against the SDG indicators.

153. The results' formulation also lacks a strategic nature and is not found to build a solid picture of progress across each Programme of Work period. Some individuals pointed out that whereas the supply of information is regular and helpful for keeping head offices informed, there is much less scope for demand-driven responsiveness (e.g. to specific technical or policy issues of interest to a Member State). There were repeated suggestions that the Expected Accomplishments should move closer to the articulation of the Sustainable Development Goals.

154. These responses suggest that the finding of the 2011 Formative Evaluation of the Medium-Term Strategy is still valid, i.e. that the Expected Accomplishments are framed at an output or immediate outcome levels that lend themselves to a monitoring approach (i.e. tracking progress against a planned path) whereas demonstrating results at a longer-term outcome or impact level (i.e. stable changes of state or collective behaviour) would require independent assessment and

²³ Committee of Permanent Representatives members from China, EC, Kenya, Norway, USA and Zimbabwe provided input to the evaluation process.

mechanisms to examine causality and to determine attribution. To-date budgets have not been available for such assessments.

155. The internal audience for reports on the Expected Accomplishments, represented by those staff involved in the reporting process²⁴ recognized the value of having a structured approach to results tracking, appreciated the learning that goes on during the data collection process and recognized that the indicators help in clustering projects. However, they also raised several concerns about the articulation of the results. It was noted that the results statements and indicators have a country focus whereas UN Environment adopts a project approach and the mechanism to effectively reflect a cumulative country effect is not there. More broadly, a disconnect between the level of results required for reporting on the Programme of Work indicators and the project level results was highlighted. Since indicators for 2018-19 have been developed collectively and endorsed by Division Directors (before putting them to United Nations Environment Assembly (UNEA) for review and adoption) it is hoped that these issues are being addressed.

156. Other insights include: the indicators are not well-suited to reflect UN Environment's influence on global processes; sustainable development is a fluid process while the indicators are static and the change processes that UN Environment aims to drive take longer to come into effect than two or four years. It is important that these reflections are not used to avoid making a commitment to delivering discernible results.

157. Staff members noted that a substantial amount of time and effort is also put into reporting at project level to funding partners, in addition to reporting in the UN Environment Project Information Management System and then again, twice in the year, against the Programme of Work indicators. One of the underlying reasons for the repetition in this reporting is that UN Environment project documents are rarely used for resource mobilization purposes but only for internal (and sometimes 'umbrella' project) purposes. Every donor receives his/her own proposal and project document and is often not aware that this funding and intervention is part of a larger institutional endeavour. This frequently leads to multiple results frameworks and multiple reporting requirements. This issue is discussed further in chapters 8 (para 219) and 9 (para 256) monitoring and reporting.

158. With respect to reporting on the delivery of the Programme of Work (i.e. through the Programme Performance Report), a further concern was raised about the weak dissemination and use of the reports within UN Environment itself.

Reliability and Transparency of the Reporting System

159. The observations in this section are based on inputs from staff members involved in the reporting process.

Data Collection

160. An extensive data collection process was consistently described by staff involved in reporting on individual or multiple projects across all three Expected Accomplishments. The Sub-Programme has an established network of Focal Points and a clear mapping that shows which projects are feeding data into each indicator. While the Project Information Management System is the most obvious starting point for the six-monthly data gathering task, all staff members reported this system as being inadequate. The information found in PIMS is reported to frequently be incomplete, inaccurate or inappropriate for the indicator. There is little confidence in this source of

²⁴ Interviews were held with 23 staff members either directly or indirectly involved in the reporting process.

information. While this is experienced as a limitation of the Project Information Management System it is also symptomatic of the disconnect between 'approved' Programme of Work projects and 'donor projects' that are embedded in funding agreements (as discussed above in para 126). Further, when multiple donor projects are all nested in one approved Programme of Work project (i.e. a single entry in the Project Information Management System) it becomes difficult to retrofit the results to report against one formal project and results framework.

161. An alternative view was expressed by staff who rely on the data in the Project Information Management System to fulfil their own roles. Those staff note that it is the role of the Project Managers to enter data into the system and it is their responsibility, along with that of Unit/Branch Heads, to ensure that data are complete, accurate and appropriate for the official results framework.

162. As a result of the limitations of the information available in the Project Information Management System, Focal Points rely on their own knowledge of the projects, information that has been circulated during project implementation and the more in-depth knowledge of colleagues working on project implementation. Focal Points liaise with colleagues, often engaging in lengthy email exchanges and Skype calls, to establish the current status of achievements. A template for uploading progress on the indicators is provided through Project Information Management System. A webinar-based training session run by the Resource Efficiency Sub-Programme Coordinator and Quality Assurance Support in 2017 was mentioned repeatedly and highly appreciated.

163. The main concern arising from this description of the data collection process is its time-consuming and manual nature. Considering this is a biannual process the cost to the organization is high.

164. Management is keen to minimise the transaction costs of this regular data collection process and is considering how greater alignment with the Sustainable Development Goal indicators could make a more efficient process possible by: a) adopting SDG indicators into the results statements and b) using knowledge platforms such as the Green Growth Knowledge Platform and SCP Clearing House to collect data. This has to be negotiated during project design with the donor organisation, based on mutual interest and added value. Several Committee of Permanent Representatives also highlighted the need for greater alignment with the SDGS and one Representative emphasized the need to access Big Data during the data collection process for extended and deeper analysis.

165. Staff members referred to areas of work where no high-level reporting data are collected and that are, therefore, not visible in the Expected Accomplishments. Staff questioned situations where the level of resources committed to an initiative is not consistent with the magnitude of its contribution to an indicator (i.e. low funded projects making a relatively substantial contribution to an indicator).

166. A further observation, made by several Focal Points, is that knowledge of the link between project level results and the Expected Accomplishment is weak among other project staff members. Rather than having internalized the high-level results framework, it appears that a large number of project staff are relying on the relatively small number of Focal Points to provide guidance on project alignment or potential contributions.

167. From a capacity development perspective there is an apparent need to provide more (or continue providing) results-based management training that emphasizes the importance of the

Expected Accomplishments and the contributions made by projects. One respondent reflected that the training offered to P4 level staff is needed by all those who manage projects, including those in P3 level posts. There is also a need to ensure that any staff member given the responsibility as Focal Point is appropriately trained and that existing members of the Focal Point network are kept up-to-date with any changes, e.g. through webinars.

168. However, this evaluation notes that unless the more fundamental issues behind supply-driven project design (i.e. the supply of resources from donors) as opposed to evidence-based and demand-driven project development are addressed, no amount of training on results-based management will remove the challenges.

Integration

169. One concern that was raised by several members of staff was the difficulty of capturing integrated approaches within the current results framework. Integration and collaboration are important parts of the Sub-Programme Theory of Change for knowledge exchange, creation of new information, providing dissemination opportunities and the amplification of change messaging. Also, one of the anticipated benefits of the sub-programme working horizontally across divisions (supported by a matrix management structure) was the greater integration of bodies of work both within and between divisions. To a certain extent there is evidence to suggest that integration was being promoted. For example, the UNEP Finance Initiative was the first project to be formally mapped onto more than one sub-programme. Other examples of collaboration that were mentioned are listed in Table 5 below. However, the conditions for single counting and the need for discrete indicators, mean that collaborative efforts are not made visible through the reporting system, although they can be highlighted in the narrative section of the Programme Performance Report.

Collaboration Within the Economy Division/Branch
Green Growth Knowledge Platform with the SCP Clearing House, 10 Year Framework Programme and Partnership for Action on Green Economy
Collaboration Between Resource Efficiency and Other Sub-Programmes
International Resource Panel with the Global Environment Outlook, the Life Cycle Initiative, and 10 Year Framework Project.
Cities Unit and Ecosystem Division
Food with Ecosystem (health) and Climate Change (waste)
Lifestyle Approaches with the Transport Unit (currently takes the form of checking factsheets)
Collaboration With Agencies Outside UN Environment
Green Growth Knowledge Platform with Global Green Growth Institute and OECD
Resource Efficiency and Cleaner Production Program together with UNIDO
Greener Cities Partnership with UN Habitat
Partnership for Action on Green Economy (PAGE) with 5 UN agencies
UNESCO through the Sustainable Lifestyles project

Table 5: Projects with Integrated Components

Integration Work with Communications Division: Discussions with relevant staff in the Communications Division and Paris-based staff confirmed a collaborative approach between work on lifestyles approaches and the recent Beat Pollution campaign during UNEA 3. Although it is not easy to bring together staff from very different sectors and such collaboration takes an investment of time, there are substantive benefits to be gained

from this effort. UN Environment's communications work is founded on scientific knowledge: 'we sell science' and the solid baseline material that was provided by the sustainable lifestyles approaches enabled the communications team to mobilise the campaign quickly and develop well-targeted and effective messaging. This campaign resulted in 2 million pledges to environmental action and was recognized as the most successful campaign of the year by the UN Foundation. Follow up work is being continued to convert these pledges into action.

Collaborative Work on Education with UNESCO, the Ecosystems Division and Economy Division
From the Economy Branch, the Sustainable Lifestyles team works in partnership with UNESCO to incorporate technical and evidence-based information on sustainable consumption and production and sustainable lifestyles into educational materials at the school level, including the preparation of youth guides. They also contribute to various working groups associated to UNESCO's Global Action Plan for Education on Sustainable Development. Despite being located in the Consumption and Production Unit, information is drawn from across the Economy Division and UN Environment. There is also a long-standing Unit – Environmental Education and Training - that is managed under the Ecosystems Division and which takes knowledge from across the house and translates it into an educational format in partnership with academic experts and bodies. It focuses on environment, education and sustainability issues. The Unit targets the tertiary level, which complements the role of UNESCO vis-à-vis school level support. Through tertiary institutions, the work of the Unit extends to youth by engaging in peer to peer outreach activities. The Global University Partnership on Environment and Sustainability (GUPES) and the Higher Education Sustainability Initiative (HESI) which is internal to the UN (UNDESA, UNSECO, UN Environment and UN Habitat), are examples of initiatives undertaken within this unit. The Sustainable Lifestyles team works cooperatively with the Environmental Education and Training Unit, sometimes representing the Unit at events in Paris.

Integration Work with Transport Unit, Ecosystem Division:

The Transport Unit under the Ecosystem Management Sub-Programme has, in the past, reviewed Factsheets on behalf of the Sustainable Lifestyles Unit in the Resource Efficiency Sub-Programme. However, there is a limit to that amount of staff-time that can be allocated to such collaboration when staff posts are funded through bi-lateral agreements against specific workplans.

170. Moving the integration agenda forward into the 2030s seems to be an important topic for the Sub-Programme. Aligning the '3Ds' – Decoupling, Decarbonizing and Detoxifying – better and bringing them into the global discussion is essential. Recently for instance, the importance of eliminating hard hitting pollutants was stressed in UNEA 3 ('Towards a Pollution-free Planet'). A focus on the Science-Policy interface (as described in chapter 3) is a key factor for further integration. There will always be opportunities for a variety of projects, but the science-policy interface is what can bind them together.

171. Opportunities for integration are also provided by the Resource Efficiency Sub-Programme through the relatively recent creation of 'hubs', specifically the Inclusive Green Economy Hub and a Cities Hub. These hubs bring together information and actors from a range of internal and external locations to better apply the combined resources to defined issues of common interest. The hubs, which include regional offices, have the potential to be more responsive to identified needs and therefore to enable the Resource Efficiency Sub-Programme to become more sensitive to the demand side.

Validation and Verification

172. The verification of data is an intrinsic part of the data collection process and it is also based on interpersonal exchanges, questioning and the interrogation of details and sources of information. This is often a lengthy process made more difficult by the fact that UN Environment relies on its partnership model to reach implementation levels. Only in cases where contact with partners has been maintained after UN Environment has played its role, are Focal Points able to ask for evidence of implementation from these colleagues.

173. Focal Points consistently reported a 'best-practice' approach to verifying results, for example: checking that the country is taking part in the project; confirming the sequencing of events and overall timing is consistent; assessing whether the links between the project and the action are reasonable and checking a wide range of sources of information for confirmation (e.g. social media platforms, websites and grey literature).

174. The Sub-Programme Coordinator plays the lead role in collecting and collating data from various sources, recording it in an excel-based system and uploading backing documents on to the Project Information Management System. More recently the backing documents that are uploaded are stored in such a way that they can be attributed to individual indicators. As one example, under indicator a(i) which counts countries and cities that have 'developed and integrated' relevant policies, a four-step series of states has been identified to better capture the progression of change. Only countries that have reached steps 3 and 4 are counted as 'results' against this Expected Accomplishment.

- Step 1: Completed an assessment of Policy Options and discussed with stakeholders;
- Step 2: Started to design a related policy/policy adjustment/plan/ instrument;
- Step 3: Adopted a related policy/policy adjustment/plan/ Instrument or integrated measures into national Plans/Policies and
- Step 4: Initiated related policy implementation.

175. While there are still limitations to this system (e.g. once a country is counted at stage 3 there is no way to reflect deeper implementation at stage 4 against the same indicator as it cannot be double-counted²⁵ - this is amended in the PoW 2018-19 by counting only stage 4 countries), the system has a strong advantage of being open to interrogation.

176. The final data are submitted to the Monitoring Officer in the Nairobi Office. A healthy amount of 'push and pull' was reported during this process of validation as the Monitoring Officer has maintained a strong demand for third party evidence to support reports²⁶. The Monitoring Officer also follows up to check whether an achievement being reported by an institution is actually an activity funded under a Small Scale Funding Agreement and excludes such counts. In some instances Focal Points felt that their detailed work and technical specialism was being disregarded or overturned. On the other hand, the Monitoring Officer is the only staff member removed from the activities being reported on, or outside the line management structure of project implementation, to check the validity of evidence. Cases where no consensus can be reached are decided by the Director, Strategic

²⁵ It is noted that in the 2018-19 Programme of Work only countries reaching stage 4 will be counted.

²⁶ Documentary evidence stored under PIMS, but not found to be strong enough to justify inclusion under a result indicator, also supports the fact that a critical process of assessing evidence to support results reporting is being applied.

Programme and Policy Division, although this role could be called into question as this Division now also has responsibility for the implementation of one of the sub-programmes.

177. The 2016 Internal Audit of the Resource Efficiency Sub-Programme made a recommendation on validation: 'Require validation of the data relating to project performance recorded in the Project Information Management System and reported in the related project reports'. In response to this recommendation, UN Environment requires Heads of Unit to 'sign off' the six-monthly PIMS reports. However, during the course of interviews several staff members noted that given the volume of projects that a Head of Unit is required to validate, that this has become a ritualistic 'signing off' process rather than a mechanism that validates reporting. It remains, however, an important aspect of accountability.

178. Based on interviews it appears that a great deal of time and energy is spent in two main areas: a) ensuring that quantitative data is not double-counted and b) providing third-party evidence to support reports. Both of these reflect a professional approach and best-practice. However, in some cases multiple 'counts' against an indicator may suggest a positive, deeper effect (for example, a country or sector may be demonstrating both an approach and an effect that suggest deeper institutionalisation; a country that adopts more than one substantive²⁷ policy could be considered to have achieved greater level of progress). However, such multi-faceted change is likely to only be evidenced through qualitative evaluation techniques.

179. In the last quarter of 2017, the incorporation of the Resource Efficiency Sub-Programme Coordinator role into the Economy Division staffing structure was announced. This change has several implications: i) it raises the potential perception of compromised impartiality (the Sub-Programme Coordinator has his first report within the substantive division where the Sub-Programme results are primarily generated²⁸); ii) as the Resource Efficiency Sub-Programme maps to a large extent²⁹ onto the Economy Division (and within that almost solely on the work in the Resources and Markets Branch), the implication is that the corporate level results reporting will be devolved to a divisional level and iii) this structure lessens the likelihood of the collating of monitoring data across the sub-programmes, or any corporate level monitoring, as the team of Sub-Programme Coordinators will no longer operate under the same line manager (i.e. have a common First Reporting Officer and a clear team identity).

180. While there is evidence of extensive efforts being made to verify and validate the results before they are reported, and to gather third-party evidence, as the reporting process is not exposed to external assessment, independence of the reporting is still difficult to establish. The Evaluation Office of UN Environment plays no part in evaluating impact at a Sub-Programme or institutional level and only reviews corporate level reporting during Sub-Programme evaluations, such as this one.

181. As part of this evaluation, and in support of the 2016 audit recommendation mentioned above, the results reporting was interrogated from a country perspective. From an initial list of eight

²⁷ It is noted that 'counting numbers of policies' adopted by countries as an indicator of more substantive change may not be a reliable or desirable method as it may encourage a fragmentation of policy formulation (i.e. numerous partial or disaggregated policies or sub-policies).

²⁸ The Economy Division Director is the First Reporting Officer for the SP coordinator. The Second Reporting Officer is the Deputy Executive Director, and an Additional Reporting Officer is the Head of the Strategic Policy Division.

²⁹ Several projects under the Resource Efficiency Sub-Programme are managed by regional offices, the Communications Division or Science Division.

(8) countries that were suggested by the Sub-Programme Coordinator and Monitoring Officer to have a sufficiently strong presence in the results reporting, three (3) were selected on the basis of diversity of data sources. These were India, Kenya and Mongolia. Details of the evidence considered are outlined in Annex II.

182. Combining the evidence from the Programme Performance Review reports, the Indicator Tracking System, the documentation uploaded in Project Information Management System and reflections from well-informed country respondents, the results reported for all three countries are confirmed. However, discussions with country-based respondents emphasised that the results reported at the Expected Accomplishment level can only indicate achievements at a 'product' level whereas the formal adoption of these products (e.g. policies, national strategies etc) only mark the beginning of long and often complex change processes that are expected, ultimately, to achieve the positive impact among the target beneficiaries. As discussed in chapter 3 under the normative function, more needs to be done to prepare for the uptake of action while the enabling environment is being created (e.g. engaging appropriate stakeholders/agents of change to take the work forwards; forming an explicit exit strategy; anticipating the products that will be needed beyond policy adoption etc).

Attribution

183. In an ideal world one would be able to isolate the effects of a planned intervention from changes that occur over time and those that take place in the wider context due to external factors. This would allow measured results to be accurately 'attributed' to a specific scope of work and envelope of resources. Failing that, it is desirable to be able to make a compelling case for a project having made a substantive 'contribution' to recorded results and, if that is not possible, to at least be able to establish a 'credible association' between the intervention and observed effects.

184. A combination of two narratives can be used to establish a claim of 'contribution' or 'credible association': a) articulation of a holistic change process and how an intervention is expected to contribute to the process and b) 'thick, rich description' of the chronological change process that has taken place both within the institution and globally (this forms an 'institutional narrative' or, in more robust cases, provides the groundwork for an influence study).

185. In the case of UN Environment, attribution is difficult to achieve at the higher-level results because the places where change is expected to occur are widespread and without clear boundaries (e.g. countries, cities, business sectors etc). Typically, UN Environment aims to drive change processes that require cooperation between different actors or entities. In some instances, the work of UN Environment is making the actions of others more visible, which can lead to further change or a multiplier effect. In other cases, it is expected that a policy change at a country level will have a knock-on effect in other parts of the economy. Equally, the work that UN Environment does at a global level such as supporting the implementation of Multilateral Environmental Agreements or contributing to UNEA, influences the broader environmental context. UN Environment does not return to intervention sites to carry out impact evaluations after some time has lapsed. Some knowledge platforms, such as the Green Growth Knowledge Platform, carry out surveys that elicit responses from users on the 'usefulness' of the information provided, which may provide a means of quantifying an implied effect of project outputs.

186. Committee of Permanent Representative members noted that two types of information could help them to better assess whether the effort and resources that UN Environment has directed

towards each of the stated results are consistent with the results achieved. These are a) the Programme Frameworks³⁰ that make it clear which interventions are expected to drive the achievement of results and b) the levels of funding that have been directed, through all funding sources, towards the stated results.

187. Financial information is limited at the sub-programme level. This evaluation has had access to information for both budget and expenditure by funding source, but no information appears to be available to connect financial expenditure with achieved results. The Programme Performance Review also contains financial expenditure at a sub-programme level, only by funding source. Without being able to analyse the funds allocated to the Sub-Programme level results or Expected Accomplishments it is especially difficult to support claims of attribution of effects.

Situation in the Medium-Term Strategy 2018-21

188. As noted above, the MTS 2018-21 is designed around 10 rather than five indicators and this gives the potential for more homogeneity in each count (i.e. key sectors can be reported on individually). The units of measure have been defined more discretely and for greater disaggregation of counted units (e.g. city level units being counted separately from country units etc). Several challenges are noted:

- i) While units of measure have been made explicit there is still the potential for overlap at a conceptual level between some indicators. For example, an organization that qualifies under the general indicator of EA b iv) 'Increase in the number of companies that report sustainable management practices they have adopted' might conceivably also be eligible under the more specific indicator EA B ii) 'Increase in the number of public and private finance stakeholders that adopt sustainable finance principles, processes and frameworks'.
- ii) The four-stage process of assessment, design, adoption and implementation is still present in the Programme of Work 2018/19 and it is a good attempt to break down the process of policy formulation and enactment. However, some of the vocabulary used in indicators and units of measure (e.g. 'mainstream' and 'formulate') still need to be mapped to these four stages.
- iii) The approach to counting units only once when they enter the counting system does not allow for the depth of adoption or implementation to be represented. One could argue that relevant changes across multiple sectors, or among more businesses within a single sector, are both signs of more extensive and sustainable change and should be captured through a 'dosage' effect. This requires more detailed monitoring and data collection.
- iv) The indicator on communications, Expected Accomplishment (c ii) will also need further classification in order to be able to compare and group similar activities (e.g. nature and size of audiences for different media forms; prominence of the messages and saturation of the dissemination etc)
- v) Terms such as 'sustainable management practices' will need to be further explored and agreements reached on what constitutes a sustainable practice.

³⁰ The evaluation was advised that the 2018 Programme Frameworks have been provided to the Committee of Permanent Representatives.

189. The Medium-Term Strategy 2018-21 includes an Outcome Map (figure 5, page 35) that charts the progression from the current Expected Accomplishments through to relevant Sustainable Development Goals in 2030. While this is a positive start to aligning the sub-programme's work with a common results framework with global indicators, the intervening steps are not yet articulated and there is no apparent timeframe for the transition. To be able to report a contribution to the SDGs in 12 years' time, the sub-programme will need to articulate its alignment as soon as possible and develop methods of measuring its effect that are in line with SDG indicators. It is noted that Outcome Maps are not intended to be static and are expected to be adjusted and further refined for each Programme of Work period. However, there is a considerable gap to be closed within this Outcome Map.

Custodian of SDG 12 Indicators

190. UN Environment is the custodian for 26 of the SDG indicators³¹. The role of custodian includes: developing a data collection methodology and getting it approved (for a Tier III indicator); collecting data globally; validating and reporting on these data and providing quality control. The work across the 26 indicators is coordinated and supported technically by the SDG Unit under the Science Division. The Unit draws on information from projects under the Resource Efficiency Sub-Programme/Economy Division (Green Growth Knowledge Platform, International Resource Panel and 10YFP) as well as from other sources.

191. Amongst all the UN Environment sub-programmes the Resource Efficiency Sub-Programme has the closest alignment to a SDG indicator. This is likely to be due to the fact that UN Environment was instrumental in formulating and lobbying for adoption of the SDG 12. Out of the 13 indicators for SDG 12, UN Environment is the custodian for 10 of them and, because of this concentration, is also coordinating the response for the whole of SDG 12.

192. Resource Efficiency Sub-Programme projects and their associated staff members are currently contributing to the development of results' tracking methodologies and/or to the data collection for the majority of these 10 indicators. In only one area, indicator 12c on fossil-fuel subsidies does UN Environment not have a funded project that can directly contribute to the SDG target. A summary of current progress is included as Annex III.

193. This evaluation notes that UN Environment has been mandated with a significant responsibility for results tracking under SDG 12. SDG 12 is quite unique: all other SDGs require resources and will have trade-offs, but 12 is directly about decoupling and is the only one saving resources. However, SDG 12 is also the overall lowest funded of all goals (Dalberg, 2017)³², and has the highest proportion of external funding. The Environment Fund resources available to support work in this area do not match the goal of increasing resource efficiency and transforming the economy towards sustainable consumption and production and inclusive green economies. The work being done to date is either

³¹ The SDG Framework contains 17 goals, 169 targets and 244 indicators. Of relevance to the environment there are 16 goals, 72 targets and 93 indicators. UN Environment is the custodian agency for 6 of these goals, 23 targets and 26 indicators. UN Environment is also the custodian of the most indicators without methodology (referred to as 'Tier III' indicators).

³² https://www.un.org/ecosoc/sites/www.un.org.ecosoc/files/files/en/qcpr/sg-report-dalberg_unds-outline-of-functions-and-capacities-june-2017.pdf

additional to the existing roles of project staff and Unit heads or is based on limited and insecure funding, as in the case of the SDG Unit itself.

7. Regional Aspects of the Sub-Programme

Introduction

194. Data for this line of inquiry were collected during interviews carried out in-person in the Paris and Geneva offices of the substantive division as well as through in-person visits to the Regional Offices of Europe, Africa, Asia Pacific and Latin America³³. While it is recognised that reforms to operationalise the policy on 'Strengthened UNEP Strategic Regional Presence'³⁴ are ongoing, this evaluation of the Resource Efficiency Sub-Programme does not aim to capture all details of this changing context.

195. The responses on issues related to the regional office structure and operations were extremely wide-ranging and varied. This is not unexpected given that: the structure and priorities of regional offices develop in response to the needs of the geographic areas they serve; regional funding opportunities vary in volume and value; regional office staffing structures have varied histories and concentrations of expertise and the implementation of the Strengthened Strategic Regional Presence Policy is still relatively new.

196. The level of variation suggests that no 'one-size-fits-all' approach will be effective and that adaptation to local conditions will always be essential. However, a thorough understanding of the ways in which regional and sub-regional offices contribute to a common change model will make interventions more effective.

197. During the course of this evaluation 2016 workplans were obtained for each regional office. Although the plans vary in detail and emphasis, the scope of work of the regional offices can be captured under several main headings: strengthening UN Environment's regional presence; coordination, management and implementation of Programme of Work projects; regional, sub-regional and national representation, political engagement and analysis; communication and outreach; resource mobilization; strategic partnerships; delivering as One UN; promoting the 2030 agenda for sustainable development and the SDGs and supporting the UN Environment Assembly conference and other key events led by UN Environment.

198. Several regional offices manage projects with high-value budgets. For example, SWITCH Asia (USD 11.5m) is managed from Bangkok; SWITCH Africa Green (USD 22.5m) from Nairobi; SWITCH Med (USD 3.4m) from Paris. The EaP Green project, managed by the Europe regional office has a total budget of USD 2m for UN Environment and is part of a wider initiative with a total value of USD 12.5m and implemented in conjunction with the OECD, UNECE and UNIDO.

199. A number of respondents reflected on the nature of UN Environment's country offices. Some country offices do play a lead management role in implementing projects, such as the project on Sustainable Consumption and Production managed by the Brazil Office. Others, like the China office, take on an ambassadorial role very well. Respondents noted that it is important that positive experiences that are derived from projects are operationalised at a country level. However, they noted that for UN Environment to launch a range of projects in-country similar to the approach of UNDP, would be unrealistic. Full support of the One UN Reform process is seen as a possible way forward. The partnership approach followed by the Partnership for Action on Green Economy (PAGE), which

³³ These were selected based on pre-existing travel opportunities.

³⁴ Strengthened Regional Strategic Presence Policy, June 2015, UN Environment.

brings five UN agencies together in a common initiative was also noted as a positive model. Further, wider engagement with Non Governmental Organisations and the private sector was put forward as another way of deepening the take up of proven good practise at a country level.

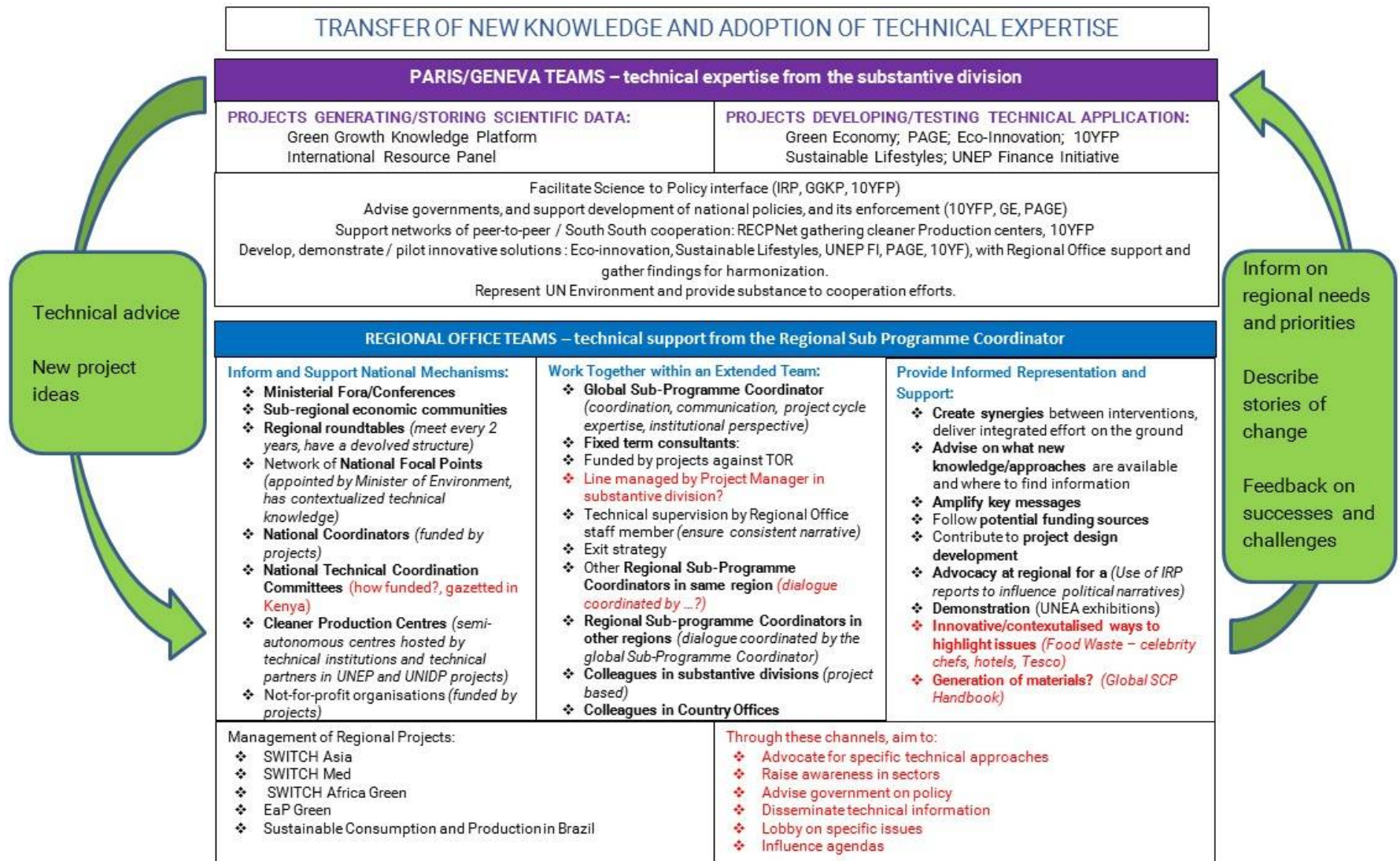
200. A single, well-informed respondent suggested that local partnerships between countries and regional offices have not proven particularly useful, and are unlikely to be able to deliver beyond a certain point. The respondent suggests a more strategic approach of identifying one or two countries where the Resource Efficiency Sub-Programme can substantially benefit from direct engagement with the country's policy makers, particularly in the context of transition management and disruptive change. Country offices within these strategically selected countries could then be more adequately resourced (perhaps in partnership) for proof-of-concept pilot projects etc. This feedback contributes to the recommendation #7 below that the sub-programme's approach to work at regional level be documented in more detail.

201. Without further clarity on the expected roles of sub-regional and country offices, beyond supporting projects where country-level support costs are covered, it is difficult to make generalised conclusions about their level of resourcing. However, the interviews during this sub-programme evaluations suggest that sub-regional and country offices are poorly resourced at even a day-to-day operations level and yet they have a wide range of opportunities to take part in relevant consultations. Their limited access to resources for travel and communications (e.g. video conferencing facilities) significantly limits the scope of their representation, project support and communication roles.

202. The regional workplans (para 196) are helpful documents that provide insight into the ways in which UN Environment's regional presence is achieved. These workplans do not, however, appear to be centrally stored and made widely available. These workplans can be used for better coordination within the Sub-Programme and for increasing synergy across sub-programmes and divisions during the implementation of projects.

203. The level of variation in responses poses a challenge for presenting the material in a coherent and useful manner and in relation to the performance of the sub-programme being evaluated. Viewed from the Sub-Programme perspective a productive relationship between the substantive division and regional offices is critical for the sub-programme's intended results to be achieved. **This symbiotic relationship supports the transfer and application of new scientific knowledge and technological approaches as well as supporting a strengthened regional strategic presence.** Respondents alluded to features of this relationship and the elements and basic shape of this dynamic has been depicted in the diagram below, see figure 7, next page. The diagram is used as a structure to discuss the evaluation insights.

Figure 7: Diagrammatic Representation of the Roles Played by Staff in Substantive and Regional Offices



Discussion of Findings

204. There appears to be a common understanding that, at a regional level, methodologies and tools that have been developed in a substantive division are adapted to localized needs and applied as appropriate or necessary. Further, a **'regional project'** is defined as one that has a regional governance structure, funding specific for the region and/or a Project Manager based in the region. Regional projects are implemented and managed by the regional office, with the Regional Director being accountable for its delivery. Regional Sub-programme Coordinators are staff members of the regional office with a second reporting line to the global Sub-Programme Coordinator and also play a project management role.

205. More recently regional offices have begun designing projects for their region and to be managed from the Regional Office (see para 197 above). Alternatively (and most frequently), regional offices carry out a workplan agreed with the substantive division and funded through a 'sub-allotment' of resources. There is some tension around the sub-allotment of funds with recipients seeing themselves cast in a highly dependant role and those who retain the accountability for these resources feeling at risk. The influence of the Regional Office on the design and development of global projects is still limited and this lack of involvement in longer term planning and design can result in a strong 'activity-delivery' focus in regional workplans. A stronger strategic approach can only be achieved with greater involvement of regional representatives, especially the Regional Sub-Programme Coordinators³⁵, at the project design stage.

206. There is also widespread agreement that one of the features of UN Environment that are most highly valued by stakeholders, including countries, is their **technical expertise** and the high quality of their technical products (albeit adapted to localized needs). As the source of technical expertise is teams in the substantive divisions the diagram above can be interrogated from the perspective of how technical expertise flows from the substantive division to the beneficiaries at a country level. At the same time UN Environment needs to be more responsive to the demand side.

207. Issues that were raised in relation to this 'flow' were:

- both technical expertise within the substantive divisions and regional expertise within the regional offices need to be funded adequately;
- the roles played by the substantive division and regional, sub-regional and country office staff are dependent on project-level resources: multi-region projects may not be big enough to sustain technical staff in all regional offices, which calls for a central technical function; large implementation projects that can support greater staff numbers tend to be designed with a strong national component and staff in substantive divisions currently play both technical and project management roles.
- regional office staff need support to develop their capacity in project management and Results Based Management to respond to the opportunities for a strengthened regional delivery. In addition, in some regional offices there are gaps in knowledge about internal resources such as the Programme Manual and the WeCollaborate platform. Given the new delegation of authority to divisional and regional levels, it is important that all offices are equipped to play the quality assurance role that is now expected of them.

³⁵ Ensuring that regional perspectives are incorporated in the design of new projects is part of the Terms of Reference for these posts.

- fixed term consultants are often hired under projects and located in regional offices to provide technical assistance at country level. Consultants may be dividing their time to support several projects at the same time. They play a key role in keeping other regional staff informed about project progress and are typically supervised by regional office staff against agreed Terms of Reference. However, ensuring that consultants are applying UN Environment's latest methods may be an area that requires further strengthening;

- although regional consultation is said to be improving, emphasis still needs to be put on projects being designed with regional office inputs and with more stakeholder engagement. At present projects are often seen as 'UN Environment' projects, rather than being nationally owned (i.e. supply rather than demand driven).

208. Within the organisation, **internal communication** is seen as being primarily dependent on informal networks and there is very little informational exchange between regions. While the recruitment of global Sub-Programme Coordinators improved the flow of information, there are mixed opinions on whether their integration into substantive divisions will improve or impede the flow of information.

209. Staff in regional offices note that they frequently receive requests for information, either on specific countries, to contribute to results reporting or during evaluations etc and that these requests come together at peak times. However, they note receiving little feedback on the information they provide or follow up on what the information has been used for.

210. From the perspective of more outward-looking communications to support initiatives, it is noted that regional offices have no independent communications budgets and depend on funds from projects to support such activities. One respondent highlighted the need for UN Environment communications focus to shift from the promotion of 'project deliverables' to awareness raising around key issues.

211. Regional offices see their '**added value**' in this exchange as providing integrated thinking and taking a synthesized approach to addressing the needs of countries. Regional Office staff see themselves as being in a strong position to consider the needs of a country or sector holistically, to work in a multi-sectoral way and to draw from the many resources UN Environment provides to then present a tailored response to the country or sector. One example given was the combination of promoting organic agricultural products with sustainable public procurement tools.

212. A key element of the regional office contribution is the **development of partnerships**. It was noted that although this is a very important area, stakeholder participation and partner engagement is given a low priority at the design stage of projects. Regional offices are also well placed to engage with a diverse range of partners such as the private sector and financial institutions. Some respondents raised concerns that UN Environment focuses on the signing of Memoranda of Understanding but then fails to move forwards with partnerships to achieve a positive outcome. These reflections (lack of priority given to stakeholder engagement at design and lack of impetus in moving forwards with partners after agreements for collaboration have been reached) may shed light on the low ratings given on stakeholder engagement and participation in project evaluations, see Chapter 8). At the country level UN Environment channels cooperation primarily through the Environmental Ministries. As these ministries do not have decision-making power over all the sectors needed to drive change, the possibilities of results and impact can be limited unless other strategic ministerial and sectoral mobilisation is initiated. It is important that all those groups who are expected to take work forwards are included at the beginning of the planning process and through implementation (e.g. other government departments, key bodies, the private sector and NGOs etc). PAGE addresses this through partnerships which can involve other ministries. Formal channels, for instance through the

Executive Director's office, can make Environmental Ministers more effective at the country's Cabinet table.

213. An accurate understanding of this symbiotic relationship and the parts played by staff in substantive divisions as well as regional office staff and staff members on consultancy contracts is necessary for effective initiatives to be designed and implemented as well as for resources to be allocated for optimal results.

8. Synthesized Analysis of Project Evaluations in Resource Efficiency Sub-Programme Portfolio

Analysis Framework

214. There are 51 projects registered in the UN Environment's Programme Information and Management System (PIMS) that have been classified as belonging to the Resource Efficiency Sub-Programme and which were either ongoing at, or have started since, January 2010. An itemised list of the Sub-Programme project portfolio is provided in Annex IV and an overview of the sample of evaluated projects in Annex V.

215. The analysis of the project level performance primarily covers a desk-based and systematic review of the findings based on 25 project evaluations completed between January 2010 and June 2017. A comparison of key features of the project confirmed that the 25 evaluated projects, with regard to Managing Division / Regional Office, topic focus areas and geographical focus, can stand as an appropriate representation of the full list of 51 projects.

216. The analysis of the project level performance consists of two main elements:

a) Aggregated analysis of evaluation ratings across 25 Resource Efficiency project evaluations. As part of this analysis trends in the project evaluation findings have been analysed against the standard evaluation criteria used by the Evaluation Office: Evaluation Criteria: Strategic relevance; Achievement of Outputs; Effectiveness; Sustainability and Replication; Efficiency; Factors affecting performance; and Monitoring and Evaluation.

b) A synthesis of evaluation recommendations findings for a) the evaluation criteria and b) key cross-cutting issues: Key Cross-Cutting Issues: Project Designs; Gender Equality; Financial Management; Monitoring and Evaluation; and Approaches to taken to Replication, Scaling-up, Catalytic Effects.

The cross-cutting themes were selected because these are important for successful project planning and delivery but are not yet prominently represented in the evaluation criteria used by the Evaluation Office in past years. The standard evaluation criteria have recently been revised to support more detailed coverage of these cross-cutting themes. This sub-programme evaluation provides an opportunity to analyse previous evaluation work against these themes.

Aggregation and Analysis of Overall Evaluation Ratings

217. The Evaluation Office applies a six-point rating scale ranging from Highly Unsatisfactory through to Highly Satisfactory³⁶ on each evaluation criterion and for the Overall Project Rating. The benchmark for successful project performances is either Satisfactory (S) or Highly Satisfactory (HS). An overview of project performance ratings of the evaluated projects is presented in 7, below.

218. A high proportion (83% of evaluated projects) have Overall Project Ratings of Satisfactory or Highly Satisfactory (S-HS). 74% of there were rated Satisfactory and 9% Highly Satisfactory.

³⁶ A six-point rating scale is used: Highly Unsatisfactory (HU); Unsatisfactory (U); Moderately Unsatisfactory (MU); Moderately Satisfactory (MS); Satisfactory (S) and Highly Satisfactory (HS). The word 'satisfactory' is replaced with 'likely' for assessments of the Likelihood of Impact.

The average overall project rating of 25 projects is 4.85, just below a 'Satisfactory' rating. Isolating more recent projects (i.e. those projects evaluated since 2016), raises this average to just above the Satisfactory point (5.06), suggesting improvements over time.

The highest performing criteria are Strategic Relevance (71% Highly Satisfactory); Achievement of Outputs (63% Satisfactory); Efficiency (57% Satisfactory and Sustainability and Replication (52% Satisfactory).

Mixed performances are indicated under Effectiveness (46% Satisfactory and 46% Moderately Satisfactory); Factors Affecting Performance (45% Satisfactory and 36% Moderately Satisfactory).

The lowest performing criterion is Monitoring and Evaluation (17% Satisfactory).

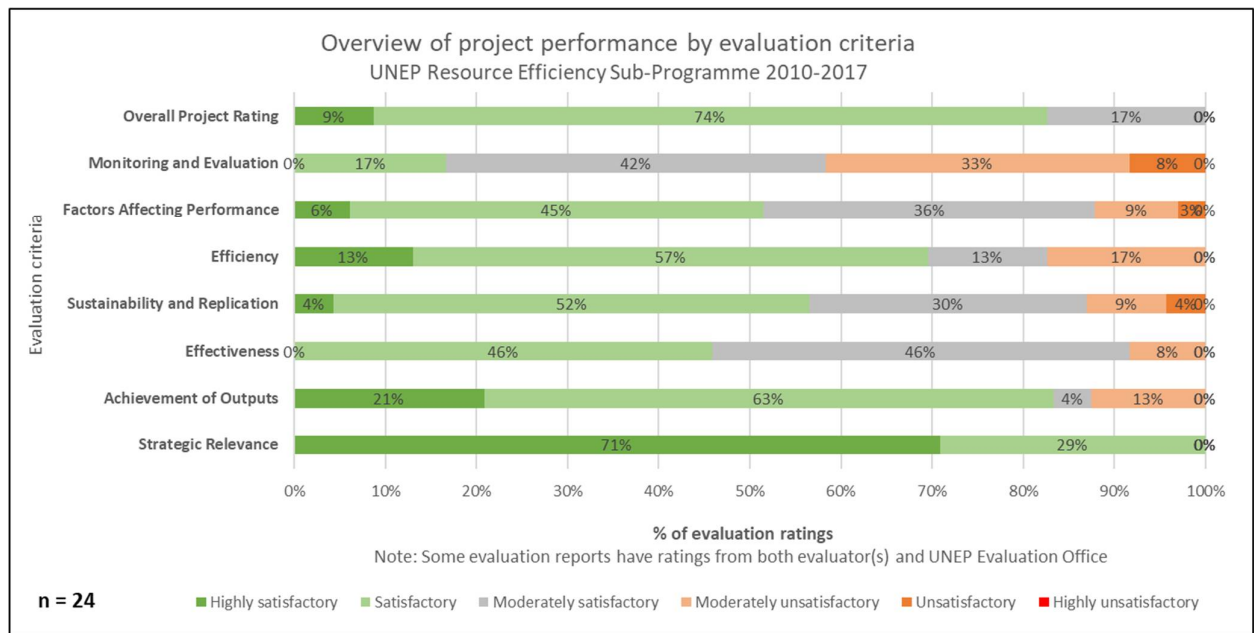


Figure 8: Overview of Project Performance

219. Illustrated another way, figure 9 below shows the average rating by evaluation criterion and the range. For example, 'Strategic Relevance' shows both a high average and a narrow range suggesting consistency across projects. 'Sustainability' shows an average at the S-MS level but the widest range suggesting high variability across projects.

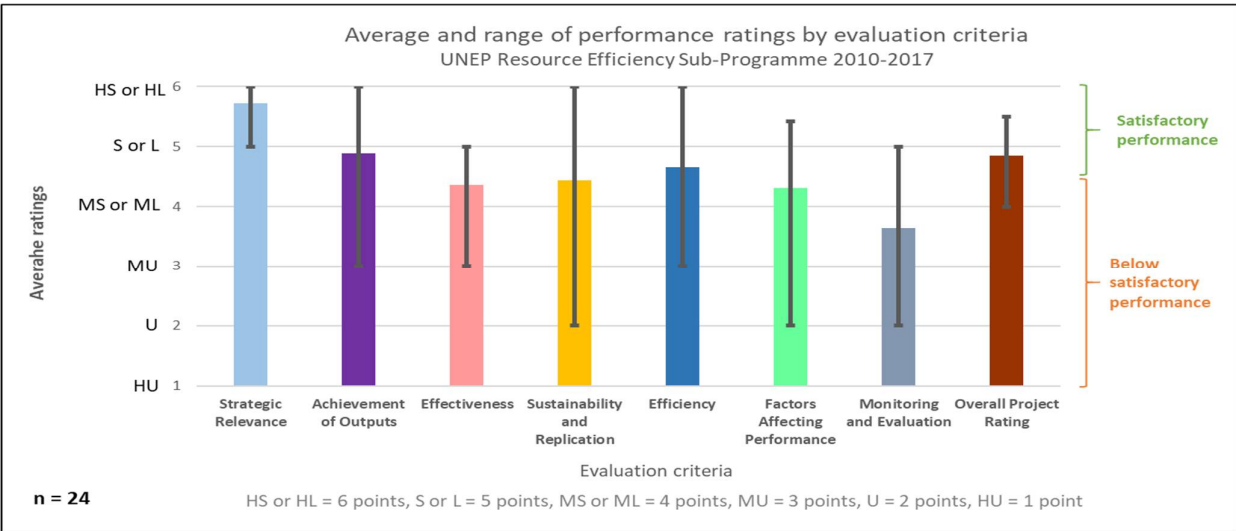


Figure 9: Average and Range of Performance Ratings

Aggregation and Analysis of Evaluation Ratings

220. A summary of key findings for each criterion is provided below (graphs of evaluation criterion with sub-categories are available in Annex VI):

Strategic Relevance³⁷: The predominance of Satisfactory ratings on Strategic Relevance confirms that projects approved by the Project Review Committee and entered in the Project Information Management System for this sub-programme are well-aligned to UN Environment’s high-level results (i.e. the Expected Accomplishments). This evaluation criterion does not provide an assessment of the actual contributions made by projects to strategic objectives.

Delivery of Outputs: 83% of evaluated projects have S or HS ratings for Achievement of Outputs while 13% of evaluated projects have MU or U rating. This reflects the strong focus of attention at the Output level during project implementation.

Effectiveness: UN Environment evaluations hold projects to account for the achievement of Direct Outcomes and assesses whether there is evidence that the contributing conditions for achieving longer term impact have been initiated. These two criteria (Achievement of Outcomes and Likelihood of Impact) are combined to make the Effectiveness criterion. Based on this synthesised analysis, projects are less effective in achieving substantive changes (results) with the S-HS rating dropping from 83% (Output level) to 53% (Outcome level) and 29% (Likelihood of Impact). See Figure 10 below.

Sustainability: There are a large proportion of S-HS ratings for Environmental Sustainability (82%) as well as for Socio-Political Sustainability and Catalytic Role and Replication (both with 68% S-HS ratings). Financial Sustainability (55% S-HS ratings) is often interpreted as the extent to which future funding has been secured, which is a limited understanding of this criterion. There is a lower proportion of S-HS ratings for Institutional Sustainability

(45%) although many projects include a capacity development component, which one would expect to make a positive contribution to institutional sustainability.

Efficiency: Across the house, evaluations suffer from a lack of information on expenditure in relation to the delivery of outputs, which makes efficiency a weak area of assessment. The Evaluation Office also recognises that Evaluation Consultants vary in the way they assess this criterion. New guidelines were developed during 2017 to promote consistency. 70% of evaluated projects have S or HS ratings for Efficiency while 17% are rated towards the other end of the scale at MU or U.

Factors Affecting Performance:

- In the majority of sub-criteria more than 50% of evaluated projects scored S-HS: UN Environment Supervision and Management (81% S-HS); Country Ownership and Driven-ness (68% S-HS); Financial Planning and Management (68% S-HS); Project Implementation and Management (64% S-HS).
- It is perhaps surprising that only 50% of evaluated projects achieved S-HS on Stakeholders' Participation and Public Awareness, given UN Environment's focus on partnership. However, the Evaluation Office notes that UN Environment lacks a robust definition of 'stakeholder' resulting in different interpretations by different respondents and evaluators.
- Only 35% of evaluated projects scored S-HS on Preparation and Readiness. Preparation and Readiness refers to the time taken to move from an approved document to an operational funded initiative. The score is affected by the time it takes to recruit staff and sign legal agreements.

Monitoring and Evaluation: A narrow definition of monitoring prevails across the institution. It is limited to the biannual reporting by the Project Manager against indicators in the project frameworks held in the Project Information Management System. A broader understanding of using a robust and planned monitoring system to track progress against the project plans and to inform management decision-making is not frequently evident. At its most extreme 'empty' entries such as 'not applicable' or simply ' – ' can generate a 'green light' in the Project Information Management System.

A further challenge exists in that these project frameworks do not always accurately reflect the body of work that is being implemented under this identity (instead closely-related donor-funded projects are implemented and their achievements used to report against the indicators in the system) or several interventions are implemented under these 'project place holders' in the Project Information Management System. A certain amount of 'retrofitting' has to take place to report against the project framework held in the Project Information Management System.

In addition, where there is a difference between the results frameworks held in the Project Information Management System and agreed with a donor(s), the reporting load is increased and evaluation methods become more complex.

The proportion of projects with S-HS performance for Monitoring and Evaluation is only 18% overall. All Monitoring and Evaluation sub-criteria have very large proportions of Unsatisfactory and Moderately Satisfactory performances. An over-reliance on the reporting under the Project Information Management System to serve as a basis for 'monitoring' seems one of the reasons for low performance ratings for Monitoring and Evaluation.

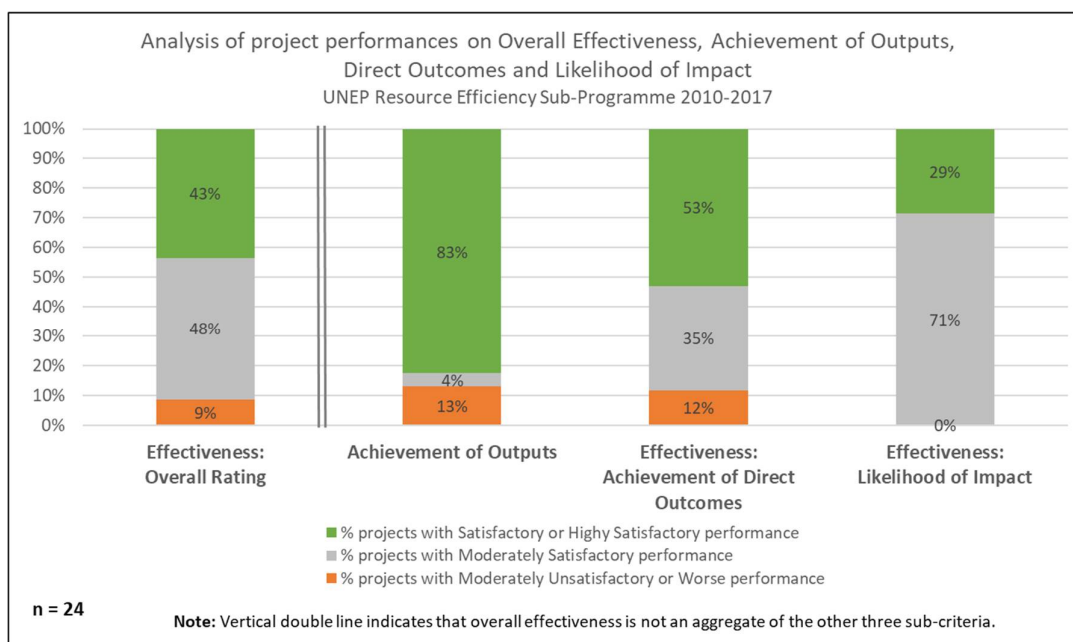


Figure 10: Analysis on Moving from Outputs to Outcomes to Impact

Synthesis of Evaluation Recommendations and Lessons Learned

221. Figure 11 presents the results of linking evaluation recommendations to the rating criteria. The figure shows that by far, formal recommendations made in evaluation reports are strongly linked to Factors Affecting Performance (39%) and Sustainability and Replication (29%).

222. Given M&E has lowest performance ratings, one would have expected more evaluation recommendations (8%) to address M&E issues.

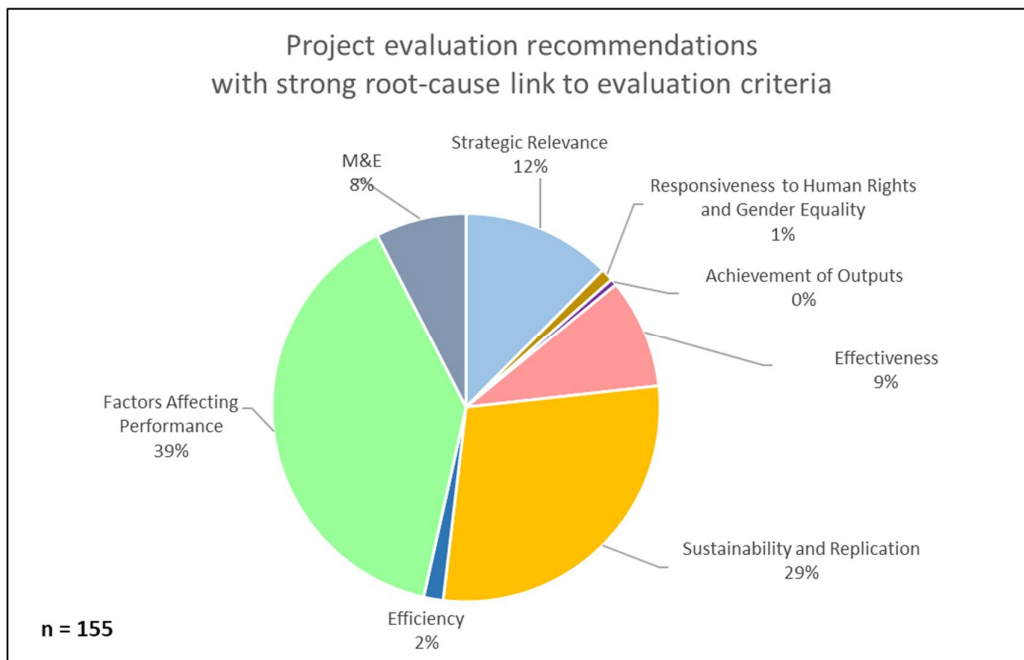


Figure 11: Linking Evaluation Recommendations to Rating Criteria

223. After analysing all evaluation recommendations and lessons learned outlined in the 25 evaluation reports, the following key underpinning issues were identified. Key issues are those which are based on at least 3 recommendations in 2 or more different projects. The recommendations are listed in order of highest frequency first. Note that the text of these recommendations are derived from the findings of evaluation reports and have not been edited further.

Strategic Relevance - common recommendations

- Need to establish stronger alignment of projects with SDGs;
- UN Environment needs to clearly define, review and communicate its strategic and niche position (e.g. Green Economy, UNEP Finance Initiative, Life Cycle Initiative, Africa 10YFP);
- Need to create further linkages and synergies between different Resource Efficiency, Sustainable Consumption and Production and related topics (e.g. Climate Change, Green Economy, Sustainable Lifestyles);
- More integration is needed with targeted outcomes of UN Environment programme and development of regional approaches.

Effectiveness - common recommendations

- Need for more focus on use and implementation of developed project outputs and outcomes, including supporting outreach strategy;
- Strengthen Theories of Change and causal pathways to project outcomes;
- Need to strengthen and expand collaborations with influential ministries, private sector and change agents.

Sustainability and Replication - common recommendations

- Need to develop clear continuation strategy during project, including consolidation of these with key leveraging points in closing event;
- Ensure secure project management, retention of staff and geographic balance for ongoing (international) initiatives;
- Need for national partners to take ownership, institutionalise and mainstream RE, SCP, GE in their organisations;
- Further strategic long-term partnerships are needed which create added-value to partners, end-users and stakeholders;
- Increase focus on mainstreaming and build capacities at national level to promote and mainstream SCP;
- Need for stronger focus to work with change agents in influential ministries and private sector;
- Need to better understand baseline performances, success cases and overview existing projects to effectively focus on sustainability and replication;
- Funding mobilization and diversification beyond "environmental window of donors" is needed, supported by donor funding strategy;
- Need for UN Environment to leverage their 'brand' and e-learning capabilities to help project partners gain government support in replication activities;
- Use developed demonstration projects to leverage additional investments from national stakeholders;
- Need to assure and replicate positive linkages and collaboration between global, national and local (city) level activities (e.g. capacity development, mobilize resources).

Efficiency - common recommendations

- Need for UN Environment and EU to define boundaries between projects to establish clear collaboration, operational linkages, complementariness and staff responsibilities.

Factors Affecting Performance – common recommendations (see chapter 9)

Monitoring and Evaluation – common recommendations

- Need to strengthen design, implementation and budgeting of M&E processes;
- Strengthening of result-oriented monitoring and progress reporting is needed.









Synthesis of Strengths and Weaknesses for Cross-cutting Themes



224. The following sub-sections provide the key strengths and weaknesses for each of the selected cross-cutting themes. Key strengths and weaknesses are those which are based on at least 4 different project evaluation reports. Examples of good practice at project level in addressing these cross-cutting themes are found in Annex VII.

225. There is naturally a considerable amount of duplication through 'mirror-imaging' in looking at recommendations in this way (i.e. the same issues may be formulated as 'do more' or 'do less'). This repetition has been maintained in order to show the intensity of some areas of recommended change or action.

Table 6: Recommendations from Project Level Analysis - by cross-cutting theme

Recommendations per cross-cutting theme
Strengthening Project Designs

Recommendations per cross-cutting theme	
Do more 	Ensure project objectives, strategies, activities and quality project design provide a solid basis for project implementation.
	Design project in close collaboration with leading project partners, countries and donor to ensure ownership and driven-ness.
	Develop a clear logical framework and Theory of Change.
	Clearly describe project roles and responsibilities of UN Environment and its project partners in the project document.
	Clearly describe stakeholders, problem, and situational, risk analysis in the project document.
	Ensure that lessons from previous projects and activities help to inform and improve project design.
Do less 	Causal pathways and implementation strategies are not sufficiently logically defined or incomplete in project document.
	Project design does not include SMART criteria at outcome and objective level, or insufficient detail on baseline/performance targets.
	Unrealistic timeline, budget, objectives in project document, resulting in delays, budget overruns, and false stakeholder expectations.
	Lack of involvement and consultation with relevant project partners to ensure successful project design, planning and implementation.
	Lack of sufficiently detailed problem, situational, stakeholder (capacity), assumptions and risk analysis in project document.
	Project design does not sufficiently build on pre-existing projects, initiatives, partnerships or describe synergies in sufficient detail.
Strengthening Gender Equality	
Do more 	Achieve gender equality in project activities, events, capacity building, committees, authoring teams.
	Deliver project outputs/reports/webpage which specifically address or discuss gender aspects.
Do less 	Sufficiently address gender equality in project document (e.g., gender analysis, relevance).
	Topic of gender equality is not discussed in any detail in evaluation report.
	Gender aspects have been poorly included in the project overall and its outputs lacked gender opportunities.
	Lack of strategic approach to gender equality in the project implementation.
	Project outputs, reports do not sufficiently address gender issues or gender disaggregated information.
Lack of addressing gender aspects in the project design and Theory of Change, indicators and monitoring.	
Strengthening Financial Management	
Do more 	Ensure that financial planning and management are suitable and aligned with UN Environment standards as international organisation.
	Together with project partners, mobilise additional financial and in-kind funds for new projects and activities.
Do less 	Challenges associated with mismatch between UN Environment, donor's and project partners' financial budgeting, accounting, monitoring, and reporting requirements, including US\$-Euro exchange rate fluctuations.
	Picture of overall project budgeting and expenditures is not clear and need for project to improve financial reporting per project activity/component/countries.
	Migration of the financial administration to Umoja caused serious impacts, delays, inefficiencies on project implementation and effective financial management.
	UN complex rules and regulations combined with inflexible admin systems sometimes impede a smooth implementation of project activities or do not allow non-standard project situations.
Strengthening Monitoring and Evaluation	
Do more 	Tracking of results and adaptation of (sub-)project management was done informally and continuously, still leading to positive examples of satisfactory project reporting and monitoring.
	Develop, monitor and report on sufficiently detailed output indicators and impacts, including the SDGs.
	Ensure M&E design is of good quality, based on log-frame with outcome level indicators, baseline, targets, and verification.
Do less 	Ensure timely and efficient delivery of project progress reports, in collaboration with project partners.
	No or poor reporting on project results and impacts, too much focus on activity reporting.
	Poor or no M&E design in project document.
	No dedicated or insufficient budget for monitoring and project evaluations/reviews.
	The project lacked in operational monitoring and evaluation system that consistently tracked performance and results vis-à-vis indicators, context analysis, identified lessons learned and guided adaptive management.

Recommendations per cross-cutting theme	
	No operative M&E design, no budgeting for M&E, no M&E plan.
Strengthening	Replication, Scaling-up, Catalytic Effects
Do more 	<p>Initiate replication efforts through collaborations and networks with(in) other (inter)national organisations and projects.</p> <p>Ensure application of successful project methodologies and results occur in other locations/countries.</p> <p>Initiate replication efforts through networking events, and thereby creating interest of governments and institutions.</p> <p>Initiate replication efforts through information generation and knowledge sharing.</p> <p>Ensure that key people within UN Environment, project partners are acting as champions to replicate RE/SCP/GE within their and other organisations.</p> <p>Ensure that policy makers include RE/SCP/GE in policy documents and action plans as a result of UN Environment projects.</p>
Do less 	<p>No, limited or gaps in strategic approach to replication and few replication efforts have been taking place as part of the project.</p> <p>Lack of broad and in-depth stakeholder involvement to ensure replication of results (e.g. industries, non-environment ministries).</p> <p>The bottleneck in replication is the lack in investment capacity and lack in financial incentives.</p> <p>It is not possible to tell if created information and capacities to support countries is enough to allow countries to implement these RE/SCP/GE strategies themselves.</p>

9. Factors Affecting Performance

226. In this chapter the insights provided by respondents are synthesized under the topics of: organisation, coordination and management arrangements; human and financial resources management; stakeholder cooperation and partnership; monitoring, reporting and evaluation; gender equality and human rights and communication.

Organisation, Coordination and Management Arrangements

227. The evaluation has assessed the efficiency and effectiveness of the sub-programme level **organization, coordination and management arrangements**, taking the change from a divisional coordination structure to a thematic coordination structure in 2010 into account. The majority of projects within this sub-programme have been delivered through the Economy Division during this period, along with a number of projects managed by regional/country offices, two projects managed by the Communications Division and single projects run by the Ecosystems, Law and Science Divisions. The Economy Division has staff based in two operational offices in Europe (Geneva and Paris), while the Division Director is based in UN Environment headquarters in Nairobi, as is the Resource Efficiency Sub-Programme Coordinator.

228. During interviews respondents reflected mostly on changes in management arrangements that have affected them since the last quarter of 2017. This includes changes in the reporting line of the Resource Efficiency Sub-Programme Coordinator and changes in the structure of the Branches within the Economy Division.

229. Since the last quarter of 2017³⁸ the Resource Efficiency Sub-Programme Coordinator has reported directly to the Division Director of the Economy Division. Prior to this all Sub-Programme Coordinators reported, in the first instance, to the Director of the Strategic Programme and Policy Division. Many members of the Economy Division see this change in line management³⁹, and closer integration within the Division's management structure, as a positive step as it is expected to bring even closer alignment between the sub-programme and the substantive division. However, this move is not in line with findings from the Office of Internal Oversight Services nor the 2017 Review of the Sub-Programme Coordination Function. Other implications are discussed above in para 178.

230. Overall, the coordination and management of the Resource Efficiency Sub-Programme is assessed as gradually getting stronger over the reporting years. A key factor that was frequently mentioned as having contributed to this improvement is the positive and constructive role of the Sub-Programme Coordinator and the efforts the Coordinator has made to align and support the Sub-Programme activities, building stronger links with the Regional Sub-Programme Coordinators, creating synergies between the projects within the Sub-Programme, building capacity on project cycle management and supporting the Project Managers as much as possible as well as working collaboratively with other sub-programmes. More recently the Sub-Programme Coordinator has taken on a project coordination role in relation to the SWITCH projects, but the early indications are that this is less compatible with the Sub-Programme Coordination role as it requires constant attention, which may conflict with periods of intense sub-programme work.

³⁸ The current Resource Efficiency Sub-Programme Coordinator was, in 2014, the first person to be recruited in this role and, prior to 2018, had the Director of the Strategic Programme and Policy Division as his First Reporting Officer and the Division Director of the Economy Division as his Second Reporting Officer.

³⁹ The implications of different line management configurations are analysed in the Sub-Programme Coordination Function Review, March 2017.

231. Also in the last quarter of 2017 the organisational structure of the Economy Division has been realigned such that almost all of the Resource Efficiency Sub-Programme portfolio is delivered from within one Branch – Resources and Markets. As one branch is now delivering and coordinating a large part of the activities for the Sub-Programme, some respondents expect coordination to become more direct and transparent. Transaction costs are also expected to be lower than in coordinating a significant part of the Sub-Programme over more branches or even divisions. This is likely to be derived from the potential for joint planning exercises and common reporting systems. However, it is also noted that as the Branch staff are physically housed in two different European offices there are high transaction costs associated with face-to-face and group meetings among Branch staff. In addition, there is some apprehension amongst staff that rather than being integrated, their work and roles will be subsumed under what they perceive to be the 'original' economic work of the Branch. Effort will be needed to build a coherent team. Along the same lines, the Cities Unit, now under the Climate and Energy Branch, has most of its work in the Resource Efficiency Sub-Programme, and delivers to three Sub-Programmes. It requires consistent effort and capacity to stay integrated into the Sub-Programme.

232. Since the merging of the different Units under the Resources and Markets Branch there is reported to be stronger cooperation between the projects working in different areas, such as Green Economy, Sustainable Consumption and Production and Resource Efficiency. However, there is a broad consensus that there needs to be more alignment and integration between the individual Resource Efficiency Sub-Programme projects to be able to contribute more effectively to the transition to sustainable consumption and production patterns, which are at the core of inclusive and green economies. This integration could be driven by changes in future Programmes of Work, although the current Outcome Map (2018-30) for the Sub-Programme is still structured around the three pillars of work that have characterised this Sub-Programme since 2010.

233. In conjunction with the recognised need for, and benefits of, greater integration, the need for a common narrative was highlighted in the 2017 Resources and Markets Branch retreat. An output from this retreat was a commitment to develop a 'jargon free' technical narrative, anchored in the framework of the 2030 Agenda and SGDs. A first proposal for this has already been done in the Branch discussion paper "Building Circularity into Tomorrow's Economy – A Proposal for Joined up Delivery". (see also chapter 5 on Institutional Narrative). The concept of circular economy can be a new area of breakthrough to unify efforts across the Sub-Programme and create impact.

234. With regard to conveying unified messages about the work of the Sub-Programme, there needs to be a clear view on the terminology used in relation to the needs and perspective of recipient countries and taking into account the language countries are already using or what attracts the most attention from country partners.

Human and Financial Resources and Management

235. The Evaluation has considered the adequacy of **human and financial resources** available for the planning and implementation of sub-programme activities as well as the quality of the **financial management and administration**.

236. The Sub-Programme has, during this evaluation period, relied heavily on project-funded staff, both for the work in the substantive Division in Geneva and Paris, and in the technical and platform assistance at country level. Amongst all the sub-programmes Resource Efficiency has

the highest proportion of bilateral funding⁴⁰, representing 69% of its expenditures across 2014-17. The strong focus on securing external funds for projects has implications for the evolution of the Sub-Programme (donor influences) and on the integration of projects (more complex project proposal and subsequent reporting requirements). Typically, project management teams have to become heavily involved in resource mobilisation half-way through an ongoing project, which reduces the time for the ongoing projects.

237. There is now a management commitment to increase the proportion of UN Environment's unrestricted funding (e.g. the Environment Fund) that is directed towards Regional Offices. This is part of the strategy to implement the 2016 Strengthening Regional Strategic Presence policy⁴¹. Increased secure funding would support the continuity of regional efforts and help to sustain initiatives in the regions either during funding gaps or when project funding ends. However, teams in the substantive division also need funding to continue providing the necessary technical assistance. Funding allocations should be carried out in a strategic way with a clear understanding of the inter-dependency between the technical expertise that is provided by the substantive division and the regional application of the products from the substantive divisions (see table in Chapter 7, Regional Aspects of the Sub-Programme). Respondents to this evaluation consistently ranked technical expertise as UN Environment's strongest comparative advantage.

238. Two lines of thought were shared by several respondents: i) internal budget allocations should be based on the institution's priority results coupled with an understanding of the complementarity between what can be funded under unrestricted funding and what donors are willing to finance, instead of in the more 'ad hoc' manner that is currently perceived to dominate; ii) in order to support strategic funding allocations, the design of the Programme of Work needs to orchestrate the needs of the countries and regions, as identified through the consultative work of regional offices, instead of applying Sub-Programme/Division-centric decision-making.

239. Current possibilities to acquire funding from the private sector, which would be natural funding partners as they can profit from the transition to inclusive green economies, are limited and are usually for much smaller amounts than bilateral donor funding. This form of resource mobilisation has, therefore, higher relative transaction costs. A well-defined strategy to work with a small, dedicated selection of the large corporations could remediate this situation and increase private funding.

240. Another suggestion made was that several major initiatives could be put together from across sub-programmes and presented as an interesting proposal to a range of funding sources, including the private sector. An example of this can be funding centered around sustainable city or sustainable infrastructure approaches. It was also noted that the Resource Efficiency Sub-Programme does not present proposals to funders such as the GEF or GCF and that this might be an oversight.

241. An example of a different way of internal resource mobilisation and allocation can be seen in the Partnership for Action on the Green Economy. The platform mobilizes resources for other UN Environment units based on the requirements from the country it is working with. PAGE involves technical experts from other units.

⁴⁰ Other sub-programmes had the following levels of extra-budgetary expenditure (identified as Trust and Earmarked Funds) during 2014-17: Disasters and Conflict 65%; Climate Change 56%; Ecosystem Management 56%; Harmful Substances 39%; Environment Under Review 23% and Ecosystem Management 19%.

⁴¹ Strengthened UNEP Strategic Regional Presence: Contributing to The Future We Want (Operational Guidance Note), May 2016.

242. During this evaluation period the first phase of the Umoja system was introduced, covering the administrative (travel, leave, recruitment etc) and finance components (financial transactions, objects of expenditure). Many respondents referred voluntarily to their experiences to-date with the Umoja system. Although it is a relatively new system, the Umoja administrative and financial system was reported to be cumbersome in use, not user-friendly and ill-suited to donor reporting requirements. These views will encompass the initial challenges when Umoja was introduced and cover personal use (administrative) as well as project use (financial).

243. It was also noted that staff in the regional offices require further training in the use of the Umoja system, especially as more regional projects, which will be fully managed by teams, are expected to be designed and implemented.

244. In order to gain more insight into the usefulness of the Umoja system from a project management perspective, the Evaluation Team also interviewed a Project Manager⁴² who was identified by staff in the Strategic Programme and Policy Division as being knowledgeable and experienced in using Umoja. This member of staff has undertaken a range of training opportunities available to project staff (week-long internal training course, online courses and short trainings in Business Intelligence). The Project Manager also makes a point of using the Umoja system regularly in order not to lose their familiarity with the system. Despite this effort the staff member concludes that the system, although relatively new, is out-dated, is not intuitive or user-friendly and has a slow interface that discourages its use. This staff member advocates, however, for all Project Managers to develop their understanding of financial management to work more effectively with the Fund Management Officer and, vice versa, for the Fund Management Officer to understand some key project concepts, processes and terminologies.

245. Fund Management Officers noted that training on Umoja was significantly delayed for those based in the Geneva and Paris offices, which added to the challenges of working with the new system. Efforts by the substantive branch to reduce problems related to this and other administrative issues are ongoing and include pro-active peer-to-peer sharing and learning among Fund Management Officers. Some staff reported their experiences with Umoja to be improving, although it is not possible to discern whether this is due to actual improvements in the system or greater familiarity with its use.

246. The Business Intelligence module has the potential to address some of the reporting needs of project staff, but has not yet become fully accessible or been fully exploited. One suggestion was that template reports for major donors could be developed and shared in the Umoja Business Intelligence Module so they can be semi-automated and produced easily by Finance Assistants. Equally, examples where harmonized reporting formats have been adopted effectively (e.g. Partnership for Action on Green Economy) should be discussed with donors along with requests for more frequent rationalisation of reporting formats. The usefulness of the Module depends on the suitability of its reporting formats and the nature and extent of the data that the Module can access. Further training on this module, including for project staff, was promoted as a priority. It was noted that senior management within the Divisions decide who attends training that is offered.

247. The next upgrade of Umoja is scheduled for September 2018, (Umoja 2.0) and will integrate the administrative and financial features of the current Umoja system with the project information and management system. It is deemed important that all existing project data quickly become available in the new system⁴³. It is also important that staff are adequately trained in a

⁴² The Project Manager was an experienced member of staff from outside the Resource Efficiency Sub-Programme.

⁴³ Access to specific 'data cubes' has to be authorized by the New York office.

timely manner, both in the Headquarters as well as in the Paris and Geneva sites and in Regional Offices.

248. Staff members are currently involved in the planning for the Umoja 2 update and extension, led from New York and expected to be launched at the end of 2018 – beginning of 2019. This extension will support the integration of financial and project data, which addresses the current challenge that information cannot be shared between the Umoja and PIMS systems. Also relevant is whether all existing data (for instance in PIMS) will be made available also in the new system. It is expected additional training will be necessary for many of the (new) users. Although the experience with Umoja has got better overtime because of staff training and adaptation to the system, the expectation is that working with Umoja 2.0 will again need time to calibrate the system and adjust to its use.

249. Based on responses during this evaluation the institution's current financial management mechanisms are not found to be accessible or agile enough for either adaptive project management or accountability to funding partners. It remains to be seen whether Umoja 2.0 addresses these limitations.

250. During the 2017 Resources and Markets Branch staff retreat, a special team was set up to review bureaucracy and cumbersome administrative processes and detailed actions were proposed to address identified issues in finance, procurement, travel and hire of consultants. The expectation is that the current climate is conducive for this, in light of the reform agendas of the UN Secretary General and UN Environment's Executive Director to make the UN more effective, transparent and responsive. The Evaluation Team therefore trusts these issues are dealt with adequately and does not engage further in this discussion with this evaluation report.

Stakeholder Cooperation

251. The Evaluation assessed the effectiveness of mechanisms for information sharing and **cooperation** with other UN Environment sub-programmes, external **stakeholders and partners**. The Evaluation explored cooperation and collaboration at several levels. It is noted that the term 'stakeholders' represents a wide range of groups and different working relationships from funding to implementing partners and from government officials to target beneficiaries.

252. In the synthesis of project-level evaluation findings (see Chapter 8), stakeholder participation was seen to perform poorly with only 50% evaluated projects with 'Satisfactory' to 'Highly Satisfactory' ratings. This is surprising given UN Environment's focus on partnerships and the centrality of effective partnerships in the institution's Theory of Change. However, at the Sub-Programme level, stakeholder involvement is assessed as being a high priority and is considered to be well-developed. This is consistent with the strong attention given to external funding partner relationships, for which a well-developed stakeholder involvement strategy is essential. Also, the high attention given to secretarial functions, platforms and partnerships such as PAGE, 10YFP, and the multi-stakeholders knowledge platforms Life Cycle Initiative, International Resource Panel and Green Growth Knowledge Platform requires intensive communication and collaboration with multiple stakeholders.

253. As an example, PAGE is implemented by 5 UN institutions and 8 funding partners. Further, PAGE partners with other entities at the country level when it starts its involvement. The project's core knowledge is on macroeconomic tools and models, but it relies heavily on additional models and approaches from partners, which are then managed as well. PAGE coordinates with the UN Country Team and the Office of the Resident Coordinator and they also reach out to the development banks involved. As already mentioned, PAGE involves and funds other UN

Environment units for technical assistance in their projects, and finally hands over to other entities, for instance UNDP.

254. From a regional perspective the translation of global projects under the Resource Efficiency Sub-Programme into regional and local projects, and their subsequent implementation, are not optimal. Staff members identify a lack of systematic processes to involve partners in the planning of projects at the regional and local level as a challenge and perceive decision-making to be determined by 'ad-hoc choices'⁴⁴. As an exception, the European Regional Office partnerships are perceived to be well-developed and managed, possibly in part due to the proximity of the substantive division offices.

Monitoring and Reporting

255. The Evaluation has assessed how well the Sub-Programme activities and achievements have been **monitored and reported**. Matters concerning the clear definition of roles and responsibilities for data collection, analysis and information-sharing are dealt with in chapter 6 on higher level results reporting. This section focuses on the systems that support effective monitoring and reporting at a project level.

256. When UN Environment adopted a strong 'project' approach in 2010, existing projects were assembled under 'umbrella' identities in the Project Information Management System. The Resource Efficiency Sub-Programme, with a high proportion of its funding coming from bi-lateral sources, had a particularly high number of umbrella projects in its portfolio and these are gradually maturing through the project management cycle. This can have something of an 'iceberg' effect with multiple fully-fledged initiatives sitting beneath a single Project Information Management System entity. It is hoped that these large and only loosely connected project constructs, represented for example by the Green Economy Initiative with 16 sub-projects, are being phased out. However, as a large proportion of the Resource Efficiency Sub-Programme funding comes from bi-lateral sources, the disconnect between Project Information Management System project entities and funded sub-projects is, regrettably, likely to continue.

257. The main challenges that this disconnect presents are: a) inefficiency in that results have to be reported in two different ways to UN Environment and the donor(s) - although there is a mechanism for the PIMS results frameworks to be revised following the signing of donor agreements, this is rarely done; b) further inefficiency in that evaluation processes become overly complex and disputed when multiple results frameworks exist and c) weak accountability in performance assessment and results' reporting as the stated and approved project design may not match the actual work delivered. Project evaluations may include a spot-check of the consistency between project reports to donors and details recorded in PIMS. However, the disconnect between the results frameworks in PIMS and sub-project level (donor-agreed) results frameworks makes this difficult at any detailed level.

258. In the feedback of respondents to the existing project approval and project reporting systems, critiques of both the Project Review Committee and Project Information Management System were repeated.

259. Respondents find the project documentation (ProDocs) that have to be submitted to the Project Review Committee to be too long and time consuming to prepare and review. Such ProDocs may be in addition to a donor project proposal document. The Project Review Committee asserts that donor proposals can be submitted with supplementary material to cover

⁴⁴ This reflection is not specific to only the Resource Efficiency Sub-Programme and is reported to apply across the institution.

any areas of UN Environment's ProDoc that are missing from the donor's proposal template. It is noted that proposals that already have secured funding are rarely, if ever, rejected by the Project Review Committee⁴⁵. More recently, in 2016, a Concept Review process was initiated whereby the results framework and Theory of Change is reviewed and approved so that donor discussions can continue. One reflection was that the timeframe for the project review process is fixed and known (3 days' response to a proposal; PRC committee scheduled within 10 days), whereas the time taken for recommendations from the Project Review Committee (on the logframe) to be addressed can be unpredictable and long. This implies that the latter response process should be streamlined and, possibly, guided by a timeframe.

260. For the reasons given above, the Project Information Management System is, for this Sub-Programme, a largely artificial structure. Project Managers find it time consuming to maintain without any clear advantages as a management and monitoring instrument. Project Managers must submit the information every six months, but cannot extract it for monitoring, planning or evaluative purposes. At the same time, other staff rely on the Project Information Management System for other reporting and evaluation functions and staff who are Focal Points for reporting, note that the information in this system is inaccurate and often incomplete.

261. A related monitoring issue is that the UN Environment Resource Efficiency Sub-Programme needs to look at its activities as broadly as possible (for instance PAGE is a 5 UN agencies cooperation, 10YFP has 600 partners, IRP is co-hosted, etc.) but PIMS only looks at the direct UN Environment related funding and contribution.

262. A certain level of 'mark your own homework' is identified in the framework of monitoring. Divisions have already been made responsible for the decision of whether to take up the recommendations from the Project Review Committee or not. The same trend is now expected to be adopted for the reporting of the results, with the Sub-Programme Coordinator located inside the substantive division. This way, there will be little separation between implementation and reporting to the Committee of Permanent Representatives through the Programme Performance Report.

Gender Equality and Human Rights

263. The evaluation notes that the Sub-Programme has not been actively applying the UN Common Understanding on the Human Rights Based Approach and the UN Declaration on the Rights of Indigenous People during this evaluation period. The Sub-Programme has also not yet actively pursued the UN Environment's Policy and Strategy for Gender Equality and the Environment, including the incorporation of gender-related issues into the design and delivery of sub-programme outputs.

264. The evaluation could not find cases where the Sub-Programme actively identified and implemented actions and/or applied adaptive management to ensure that Gender Equity and Human Rights are adequately taken into account. The only example noted was the requirement within the Cities Unit's projects that a gender expert is included in the multi-disciplinary project teams. Activities in these areas are generally weak and no knowledge or services are generally provided in the projects, platforms and regional and country work.

265. This is also the case for the broader social angle of Resource Efficiency Sub-Programme, which only came in relatively recently via the concept of 'inclusiveness', especially in relation to the

⁴⁵ The Project Review Committee aims to have 80% of projects fully aligned with the Programme of Work.

green economy, Also, the social angle is sometimes present in the SCP/Eco-innovation projects, as part of the broader Sustainability context that the projects deal with.

266. More in-depth discussions of gender equality were found at the level of Regional Offices. For instance, in the case of the Europe Regional Office, staff struggle with the fact that women's representation at the political level is relatively high, but not in the business sector. In the Africa Regional Office there is a focus on women and youth with work in Ghana on electronic waste and in Kenya on using fruit peelings for biogas, in conjunction with Del Monte.

Communication

267. Communications can be discussed from the perspective of internal communications or external relationships as well as in relation to specific projects.

268. Since the Sub-Programme Coordinator was recruited in 2014, the internal communication on the Sub-Programme has been intensified and streamlined. Information is more widely distributed and there is more transparency. The Regional Offices are better informed and more actively engaged in communication, especially when the region is involved directly in the work. Regions have an Information Officer who produces monthly regional newsletters.

269. Information tends to flow from the Division in more formal terms. Across thematic areas there is more informal communication such as sharing websites, newsletters, reports, press releases and in direct meetings and calls.

270. There is a difference in the quality of communications with external audiences which is well developed and planned, while internal communications are more 'ad hoc' and fragmented.

271. During the 2017 Branch retreat a key action was to create a coherent communication master plan for the entire branch, as well as the establishment of a monthly internal newsletter to keep all Units abreast of recent development, helping to create a more cohesive and aware team.

272. There is still a need for an information system or database that brings together the regional and country information with the thematic information. Now, there is no one place where this can be found. This will help with identifying gaps in delivery and the opportunities for synergy.

10. Conclusions and Recommendations

273. The Evaluation considers the extent to which, in the period under review, UN Environment was able to meet its objective as stated in the Medium-Term Strategy (2014-17): 'to promote a transition in which goods and services are increasingly produced, processed and consumed in a sustainable way that decouples economic growth from resource use and environmental impact while improving human well-being'.

274. Based on the findings of the six inquiries of this evaluation, the following aggregated conclusions are drawn, and a set of actionable recommendations is proposed.

Conclusions

Driving Change at Sub-Programme Level

275. New pathways often have a hard time competing with the existing mainstream systems. That is certainly the case for the Sub-Programme, which advocates for break-through societal changes. Transition management advocating disruptive strategies for change can play a role in this setting, as part of the business model to catalyse effort at the beginning of a 'steep learning curve' and steward the work until a 'take-off' stage reached. Comparative advantages of UN Environment such as technical expertise and its normative set-up can support these approaches. However, this normative function presents challenges to its operational role, but it can and should be identified, set up and managed in a similar way as transition and application processes.

Theory of Change at the Sub-Programme Level

276. The reconstructed Theory of Change for the period 2014-17 of the Sub-Programme shows that insight into the causal pathways can be improved. A connection to the 2030 SDGs is formulated in the Outcome Map of the Medium-Term Strategy 2018-21 and is implied in the Sub-Programme Theory of Change for 2018-19. However, the formulation of longer-term results is not compatible in these two frameworks (see para 121) and the descriptions used in both the Sub-Programme Theory of Change and the Outcome Map could be better aligned with the 2030 global goals. Because of this, and the availability of detailed TOCs at project level, the Sub-Programme TOC has a limited functionality in practice. Analysis of eight (8) major projects of the Sub-Programme shows a clear alignment with the overall TOC, the substantive contributions to the causal logic of the Sub-Programme TOC being variable in strength across the projects. The allocation of resources towards optimal delivery of the Sub-Programme's higher level results in this context can be strengthened. For instance, causal pathway 3 on enabling conditions for sustainable consumption and lifestyles shows almost no individual project contributions during this evaluation period.

Institutional Narrative on influencing Global Change Processes

277. The institutional narrative shows the Sub-Programme has substantial influence on initiating new concepts in global processes such as G7 and G20, as well as on stewarding broad alliances in the follow-up stages. Two 'snapshots' of influential bodies of work - Green Economy Initiative and work on Sustainable Finance (Finance Initiative and the Inquiry), show a more disruptive model of action. Both have an internal champion (UN Environment's Executive Director) and show influential, disruptive key publications with fast first-responding groups of countries. The other two, Resource Efficiency (represented by the International Resource Panel) and Sustainable Consumption and Production, represent an evolutionary model of action, focused on

stewardship of the work until it can be handed over to partners previously engaged, and in strong alignment with, SDG12 and others. The two models fit within the UN Environment Business Model to first catalyse efforts in the steep learning curve. After the initial action, the initiatives are then embedded in platform initiatives to continue implementation in platforms such as PAGE, IRP, GGKP, 10YFP and Finance Initiative.

Higher Level Results Reporting

278. The Sub-Programme has made considerable progress in developing a robust and transparent results reporting system. The reported results are evidence-based and consistent with external information sources. However, a deeper insight into, and evidence of, change processes is absent. There is no mechanism for impact evaluation. This contributes to a disconnect between the existing results reporting and the level of understanding and confirmation of effectiveness needed for the strategic development of the Sub-Programme. A connected issue is the tension between the normative function and operational role UN Environment plays; results reporting is falling short of providing strategic insight and the knowledge of results that are achieved during the operationalisation of normative initiatives is held by implementing partners.

279. Integration and collaboration are important topics in the Sub-Programme, but are hard to capture within the current results framework. Evidence was found for integration and collaboration between bodies of work within and between divisions, and outside UN Environment. Moving the integration agenda forward into the 2030 is found to be a key topic, aligning the 3Ds – Decoupling, Decarbonizing and Detoxifying – and bringing them into the global discussion. In relation to this, with regard to integrated change processes, attribution of positive effects is difficult to achieve.

280. The incorporation of the Sub-Programme Coordinator into the Economy Division increases the potential perception of compromised impartiality in terms of high-level results reporting and requires that a strong, independent monitoring function remains in place. This staff movement implies that corporate level results will be devolved to a divisional level and lessens the likelihood of monitoring across Sub-Programmes or at the corporate level.

Regional Aspects of the Sub-Programme

281. Regional offices can support integration of project activities of the Sub-Programme by providing information on countries needs and thus tailor approaches for countries or sectors. The development of local partnerships is a key activity these offices can perform along with providing up-to-date regional/country knowledge and political advice etc. Given the new delegation of authority to the regions, there is a need to adequately equip the offices for their new role.

Synthesized Project Evaluation Findings

282. A high proportion of the 25 reviewed project evaluations show a 'Satisfactory' overall project rating, with Strategic Relevance and Delivery of Outputs showing the highest scores, indicating good alignment with UN Environment's Expected Accomplishments. Effectiveness ratings are dropping from output to outcome to impact, with Institutional Sustainability showing lower ratings, indicating less attention and focus on these aspects. Efficiency shows mixed scores, but is seen as an unstable area of assessment as project evaluations frequently lack detailed financial data. Monitoring and Evaluation is the lowest scoring criterion. An overreliance on the reporting in the Project Information Management System to serve as a basis for 'monitoring' of the project, for which it is not adequate, seems to be one of the reasons for this.

Factors Affecting Performance

283. The organisation, coordination and management arrangements of the Sub-Programme are getting stronger, and integration of the Sub-Programme coordination function in the Division as well as integration of most of the work into one branch (Resources and Markets) potentially brings closer alignment and lower transaction costs. The positive role of the Sub-Programme Coordinator in this process is well noted. Cooperation between projects in the Sub-Programme appears to be increasing, but there is a clear need for more alignment and integration between the projects to be able to contribute more effectively to the objectives of the Sub-Programme. Integration is necessary on different levels: within the substantive division; across sub-programmes within a region; and integration across regions for the sub-programme - this is one of the weakest areas at present.

284. The current Umoja administrative and financial system is reported to be cumbersome to use, although it is noted that this evaluation period covers the challenging time when Umoja was introduced and also that comments may have been in reference to both the administrative (travel, leave, recruitment etc) as well as the financial components of the system. There is the potential for the Business Intelligence Module to be of greater usefulness (e.g. shared templates for reporting to major donors) and further staff training is seen as a priority. Improvements in the upcoming Umoja 2 will depend on the way it is set up and implemented. The Project Information Management System is widely viewed as a largely artificial structure and consequently the system does not fulfil the required functions for results reporting, both internally and externally for the donors.

285. The Resource Efficiency Sub-Programme has the highest proportion of external funding of all Sub-Programmes. The resulting focus on securing funds causes some duplication of effort in project proposal writing and reporting due to institutional and donor requirements and hinders integration. Although secure funding is being increased at the regional level, the same is necessary for the substantive division as these entities operate in a co-dependent relationship. Uncertain funding streams are a major impediment to improving the performance of the sub-programme.

286. The Sub-Programme has not been actively applying the UN approaches on Human Rights, Rights of Indigenous People and Gender Equality. More discussion and attention to these issues was given at the level of Regional Offices. Also, the broader social angle of Sustainability has not received the attention required.

Recommendations

287. Based on the findings and conclusions of this Evaluation, the following table 7 gives an overview of actionable **recommendations**, grouped per topic and with allocation to responsible persons/units. The first table gives an overview of recommendations specific to the sub-programme and the second covers recommendations to the house as a whole.

Table 7. Overview of Actionable Recommendations

DIRECTED TO THE SUB-PROGRAMME

Line of Inquiry		Overall recommendation	Directed to
Theory of Change	1	Strengthen the Theory of Change of the Sub-Programme so that it can better inform strategic thinking and operational planning: a) Making longer term results levels in the TOC consistent with levels in the Outcome Mapping b) Continue to establish strong alignment/links with SDGs c) Ensure causal pathway on science-policy interface is well represented d) Incorporate thinking on disruptive innovation approaches e) Include communication and capacity development within the TOC	Senior Management Economy Division Policy and Programme Division Sub-Programme Coordinator
Longer Term Impact and Results Reporting	2	a) Continue working to keep resource efficiency issues on the G7 and G20 agendas b) Work with Science Division and SDG Unit to identify ways of recording longer-term country level effects	Senior Management Economy and Science Divisions a.) Including specific projects such as the International Resource Panel Board (for material flow science) and Green Growth Knowledge Platform) b.) SDG Unit
Strengthen Sub-Programme Portfolio of Projects	3	a) Continue to develop strong common narrative for the Sub-Programme b) Define strategic niche of projects and create strong integration, linkages and synergies with related topics c) Experiment with limited number of transition arenas (alliances, frontrunners etc) d) Strengthen causal pathway 3 (sustainable consumption and lifestyle initiatives)	Senior Management Economy Divisions Heads of Unit Resource Efficiency Sub-Programme Coordinator
Strengthen Project Designs	4	In the areas of: a) Sustainability (clear continuation strategies) b) Effectiveness (beyond delivery of outputs, strengthen outreach c) Human Rights, Social Issues and Gender (pro-active approach in design, document/share successes)	Senior Management Economy Division Regional Directors Heads of Unit

Donor Relations and Report Formats	5	<p>a) Ask for rationalization of donor reports and use successful examples as leverage (PAGE, 10YFP etc)</p> <p>b) Proactively propose pooled funding approaches</p>	Heads of Unit
Work Closely with Regional Offices	6	<p>a) Document in more detail Sub-Programme approach to working with regional, sub-regional and country offices</p> <p>b) Continue to increase involvement of regions at design stage</p> <p>c) Promote enhanced connectivity and team building between global and regional offices</p>	<p>Senior Management Economy Division</p> <p>Directors, Regional Offices</p> <p>Sub-Programme Coordinator</p> <p>Regional Sub-Programme Coordinators</p>

DIRECTED TO THE HOUSE

Line of Inquiry		Overall recommendation	Directed to
Develop and Articulate a Stronger Change Narrative at Institutional Level	1	<p>Embed long-term results (Expected Accomplishments and beyond) within a stronger integrated narrative that reflects more strategic thinking and global level processes such as influence over dialogues and pivotal decisions, contributions to key events, engagement with major agents of change, campaigns etc</p> <p>This narrative should reflect UN Environment's comparative advantages and normative function. It could be supported by an institutional (rather than sub-programme) Theory of Change and/or Outcome Mapping.</p>	<p>Director Policy and Programme Division</p> <p>Deputy Executive Director</p> <p>Division/Regional Directors</p> <p>Sub-Programme Coordinator</p>
Allocate Internal Budget Strategically	2	<p>a) Internal budget allocations, such as environment fund and regular budget, should be based on strategic priorities coupled with profound insights on what donors are willing to fund, and including consideration of the effects of high donor dependency. Priorities should be set in close consultation with the substantive division as well as the regional offices. In conjunction to this, based on these strategic choices, proposals on related topics from across Sub-Programmes should be combined and presented jointly to funding sources, including the private sector.</p>	<p>Corporate Services Division (budget committee)</p> <p>Deputy Executive Director</p> <p>Senior Management Economy Division</p>
Strengthen Project Design	3	<p>a) Increase capacity in a coordinated way to strengthen project design at both project review stage but also during revisions/mid-point assessments.</p> <p>b) Ensure that the design of project objectives, Theories of Change and logframes, design of activities and project roles of UN Environment and partners provide a solid basis for good project implementation.</p>	<p>Director, Policy and Programme Division/</p> <p>Deputy Executive Director</p> <p>Division/Regional Directors</p> <p>Quality Assurance Service</p> <p>Umoja 2.0 team⁴⁶</p>

⁴⁶ It is hoped that the Project and Portfolio Management component of Umoja 2.0 will enable several processes, such as tracking whether projects have reached their mid-point and had a mid-term assessment, to be automated. This would make prompting for revisions a more manageable task.

Maximise Umoja 2.0:	4	<p>a) Ensure that the potential for Umoja 2.0 to allow for data to be interrogated and compiled at country and regional levels is fully realised.</p> <p>b) Ensure that useful and appropriate report templates are configured centrally in the Business Intelligence module to support the reporting functions of all staff.</p> <p>c) The Business Intelligence Module should support the alignment of the needs of UN Environment, donors and implementation partners. The system should be flexible and pragmatic to financial and resource requirements internally within UN and should be adaptable over time to changes in project evolution, project structures and regional/country needs. Further internal discussions are needed on donor reporting to ensure that reporting needs are clearly understood and the system's potential is directed fully toward meeting those identified needs.</p> <p>d) Access to, and use of, the system for all Project Managers is essential, for this they need to receive adequate training.</p>	<p>Corporate Services/ Administration Unit/ Information, Communication and Technical Services (in terms of providing enough high quality training) Heads of Unit (in terms of their training needs and putting forward appropriate members of staff for training)</p>
Strengthened Regional Strategic Presence	5	<p>a) Extend documents that articulate UN Environment's partnership model to include a considered approach to partnering for county impact, such that achievements can be replicated to strengthen the organisation's regional presence.</p> <p>b) Promote a demand-driven approach to planning and project design.</p> <p>c) Share and circulate the regional office workplans, which provide an overview by sub-programme, and other regional documents, more widely within the organization and make them available through the Intranet.</p>	<p>a) ? b) Deputy Executive Director, Division and Regional Directors c) Executive Office/ We Collaborate team</p>

ANNEX I: Summary of the Expected Accomplishments and Programme of Work Indicators Over Time

Medium Term Strategy 2014-2017	Expected Accomplishments	Programme Of Work 2014-2015 Indicators
<p>To promote a transition in which goods and services are increasingly produced, processed and consumed in a sustainable way that decouples economic growth from resource use and environmental impact, while improving human well-being.</p>	<p>(a) Cross-sectoral scientific assessments, research and tools for sustainable consumption and production and green economy are developed, shared and applied by policymakers, including in urban practices in the context of sustainable development and poverty eradication</p> <p>(b) Uptake of sustainable consumption and production and green economy instruments and management practices in sectoral policies and in business and financial operations across global supply chains is increased, in the context of sustainable development and poverty eradication;</p> <p>(c) Enabling conditions for promoting more sustainable consumption choices and lifestyles are enhanced.</p>	<p>a) (i) Increase in number of countries, including cities, that develop and integrate green economy in the context of sustainable development and poverty eradication and sustainable consumption and production approaches and tools in policies as a result of UNEP assistance.</p> <p>(a) (ii) Increase in number of references by governments, companies and academics to UNEP assessments and reports in relevant documents</p> <p>(b) (i) Increase in number of stakeholders reporting improved management practices and adoption of more resource efficient tools and instruments in sectoral policies with the assistance of UNEP</p> <p>(c) (i) Increase in number of public institutions and private sector organizations that develop and put into place policies and measures conducive of more sustainable consumption patterns with the assistance of UNEP</p> <p>(c) (ii) Increase in number of projects initiated by stakeholders to promote more sustainable lifestyles that are catalyzed by UNEP</p> <hr/> <p>Programme Of Work 2016-2017 Indicators</p> <p>(a) Increase in the number of UNEP-supported regional, national and local institutions that make progress in the development and integration of the green economy in the context of sustainable development and poverty eradication and sustainable consumption and production approaches and tools in their policies</p> <p>(a) (ii) and (b) Increase in the number of references to UNEP resource efficiency assessments and reports in policy and strategic documents by global and regional forums, national institutions, business organizations and academia</p> <p>(b) Increase in the number of stakeholders reporting progress in their improved management practices and use of more resource-efficient tools and instruments in sectoral policies with the assistance of UNEP and its partners</p> <p>(c)(i) Increase in the number of stakeholders reporting progress in the development and use of tools conducive to more sustainable consumption patterns with the assistance of UNEP and its partners</p> <p>(c)(ii) Increase in the number of projects initiated by stakeholders to promote more sustainable consumption and lifestyles that are catalysed by UNEP</p>

Medium Term Strategy 2018-2021	Expected Accomplishments	Programme Of Work 2018-2019 Indicators (10)	Units of measure (17)
Countries transition to sustainable development through multiple pathways, including inclusive green economy and trade, and the adoption of sustainable consumption and production patterns increasingly involves decoupling economic growth from unsustainable resource use and environmental impacts while improving human well-being	(a) Science-based approaches that support the transition to sustainable development through multiple pathways, including inclusive green economy and sustainable trade, and the adoption of sustainable consumption and production patterns at all levels	(i) Increase in the number of countries transitioning to sustainable development through multiple pathways, including through implementing inclusive green economy, sustainable consumption and production, and sustainable trade policies	(a) Number of countries transitioning to sustainable development through multiple pathways, including by implementing inclusive green economy, sustainable consumption and production, and sustainable trade policies
		(ii) Increase in the number of local governments and cities that measure their resource profiles and report on the sustainable management of resources on the basis of global frameworks	(a) Number of local governments and cities that adopt systems to measure sustainability based on indicator frameworks developed by or with UNEP (b) Number of local governments and cities that publish their resource profiles (c) Number of local governments and cities linking local progress with global indicators towards reaching Sustainable
	(b) Public, private and financial sectors increasingly adopt and implement sustainable management frameworks and practices	(i) Increase in the number of public and private stakeholders that base their decision-making on life cycle approaches	(a) Number of public and private stakeholders that formulate sustainable consumption and production policies based on life cycle approaches
		(ii) Increase in the number of public and private finance stakeholders that adopt sustainable finance principles, processes and frameworks	(a) Number of financial institutions that are members of the UNEP Finance Initiative (b) Number of insurance companies implementing the principles for sustainable insurance (c) Number of countries in which national processes and frameworks mainstream sustainable finance
		(iii) Increase in the number of countries and businesses that implement sustainable tourism policies	(a) Number of countries that implement sustainable tourism policies (b) Number of businesses that implement sustainable tourism policies

		(iv) Increase in the number of companies that report sustainable management practices they have adopted	(a) Number of companies that report the adoption of sustainable management practices
		(v) Increase in the number of countries and private sector stakeholders that implement sustainable consumption and production policies in the building and construction sector	(a) Number of countries that implement sustainable consumption and production policies in the building and construction sector (b) Number of private sector stakeholders that implement sustainable consumption and production policies in the building and construction sector
	(c) Public and private sectors increasingly aware of and support the adoption of sustainable lifestyles and sustainable consumption patterns	i) Increase in the number of countries implementing sustainable public procurement policies	(a) Number of countries implementing sustainable public procurement policies
		(ii) Increase in the number of countries that implement campaigns, awareness-raising, advocacy and educational initiatives that promote sustainable lifestyles, consumption and production, including gender equality	(a) Number of countries that implement campaigns, awareness-raising, advocacy and educational initiatives that demonstrate the benefits of sustainable lifestyles, consumption and production (b) Increase in the number of countries reporting inclusion of sustainable development and lifestyles topics in formal education curricula
		(iii) Increase in the number of countries that measure food waste at national level using the Food Loss and Waste Protocol	(c) Number of countries that measure food waste at the national level using the Food Loss and Waste Protocol

ANNEX II: Country Level Cases: India, Kenya and Mongolia

A list of eight potentially information-rich countries was compiled based on consultation with the Resource Efficiency Sub-Programme Coordinator and the Monitoring Officer. All eight countries were contacted and a group of three countries provided sufficient responses to make a brief case report possible. (Please note the distinction between details that are 'recorded' in the Sub-Programme 'Indicator Tracking Sheet' and data that is 'counted' and reported as a result against an indicator. Generally, more information is recorded than is counted).

India

4.25 India is recorded under three indicators in the 2014 Programme Performance Review:

- a) In the first instance it is listed as one of the 14 countries UN Environment engaged with in 2014 in its work to support the development of Sustainable Public Procurement strategy development and implementation at the national level. The intention is to stimulate demand for, and the supply of, sustainable products.
- b) In the second instance India is mentioned under indicator b i) for its progress in the buildings and construction sector. Specifically, a social housing developer involved in a slum re-development project adopted sustainable design standards. These standards increase the energy efficiency of the dwellings.
- c) The third reference to India is for the city of Kashipur where life cycle approaches were successfully incorporated in the management practices and internal Life Cycle Management manual of a company in the chemicals sector. (This is also mentioned in the 2015 Annual Report)

4.26 In the Indicator Tracking System India is recorded (but not counted) under four indicators:

Expected Accomplishment a i). Unit measure: 'Number of governments and local authorities that have developed or begun implementing new policies, regulations or economic instruments promoting resource efficiency and sustainable consumption and production'

- India was recorded in June 2015 at Step 2⁴⁷ for results achieved under the SWITCH Asia project.

Expected Accomplishment b i). Unit measure 'Number of governments, local authorities, companies and organizations reporting changes in their management practices, in their sectoral policies or strategies or in their corporate and industrial processes through UNEP partners and technical networks'

- India was recorded in 2014 for results achieved under the SUSHI housing project, SEED (Supporting Entrepreneurs for Sustainable Development) project and the UNEP Financial Initiative.

Expected Accomplishment c i). Unit measure 'Number of Governments, companies and organizations that report changes in their policies and strategies towards more sustainable consumption patterns and lifestyles'

- India was counted in 2014 under Life Cycle approaches based on the achievements of two organisations (Glycols Ltd and PolygentaTechnologies Ltd)

⁴⁷ Step 2: Started to design a related policy/policy adjustment/plan/ instrument

- India was also counted under Sustainable Public Procurement in 2014 at the level of Step 1⁴⁸.

Expected Accomplishment c ii). Unit measure 'Number of projects initiated by stakeholders Governments, companies and organizations to promote more sustainable lifestyles'

- Four initiatives in India are reported since 2015

Combining the evidence from the Programme Performance Review, the Indicator Tracking System, the documentation uploaded in the Project Information Management System and reflections from well-informed country respondents, the results reported for India appear to be consistent. Documentary evidence is stored centrally by UN Environment to support these results. Factors of interest raised include: UN Environment has recently opened a country office in India; the EC is well-established in the country and some of UN Environment's work (namely SWITCH Asia) has been funded by them; state level interventions can play a strong role in the change process and mainstreaming change requires a multi-sectoral approach.

Mongolia

4.28 Mongolia is also mentioned under three indicators in the 2014 Programme Performance Review:

- In the first instance it is listed as one of the 12 additional countries and cities that, in 2014, had developed or started implementing sustainable consumption and production and green economy policies with UN Environment's support.
- Secondly, it is listed as one of the total, 33 countries and cities that have adopted or started the implementation of sustainable consumption and production and green economy pathways as a result of UNEP's assistance since 2010.
- In the third instance Mongolia is mentioned as a country that has adopted a Green Development Strategy with UN Environment's assistance under the Partnership for Action on Green Economy (PAGE) project. (This is also mentioned in the 2015 Annual Report).

4.30 In the Indicator Tracking System Mongolia is counted under three indicators:

Expected Accomplishment a i). Unit measure: 'Number of governments and local authorities that have developed or begun implementing new policies, regulations or economic instruments promoting resource efficiency and sustainable consumption and production'

- Mongolia was counted in June 2015 at Step 3⁴⁹ for results achieved under PAGE project. It was recorded at Step 4⁵⁰ in June 2016 as having implemented further action under PAGE, but was not counted again against this indicator.

Expected Accomplishment b i). Unit measure 'Number of governments, local authorities, companies and organizations reporting changes in their management practices, in their sectoral policies or strategies or in their corporate and industrial processes through UNEP partners and technical networks'

⁴⁸ Step 1: Project launch and governance establishment (i.e. submission of letter of interest by the recipient ministry; signature of legal instrument; organization of inception workshop and establishment of Steering Committee; adoption of implementation plan)

⁴⁹ Step 3: Adopted a related policy/policy adjustment/plan/ Instrument or integrated measures into national Plans/Policies

⁵⁰ Step 4: Initiated related policy implementation

- Mongolia was counted once in 2016 for results in 'Policy in Progress' in the building and construction sector and for work associated with the UNEP Financial Initiative.

Expected Accomplishment c i). Unit measure 'Number of Governments, companies and organizations that report changes in their policies and strategies towards more sustainable consumption patterns and lifestyles'

- Mongolia was counted in June 2015 at the level of Step 2⁵¹ under Sustainable Public Procurement.

4.29 The documentary evidence uploaded in the PIMS is the 2017 Sustainable Public Procurement Action Plan. The Action Plan has the PAGE logo on the front and the contribution made by the PAGE project, and more specifically UN Environment, is highlighted in the acknowledgements.

Combining the evidence from the Programme Performance Review, the Indicator Tracking System, the documentation uploaded in PIMS and reflections from two well-informed country respondents, the results reported for Mongolia appear to be consistent. Documentary evidence is stored centrally by UN Environment to support these results. It appears, however, that the progress in Mongolia that could be associated with UN Environment's engagement could be under-reported because the take up has involved ministries beyond the Ministry of Environment; other major players are present and active, including the IFC and UNDP and implementation is only evident after long periods of time, potentially after the end of projects that may have initiated the change process.

Kenya

4.31 Kenya is mentioned under two indicators in the 2014 Programme Performance Review:

- In the first instance Kenya is listed as one of the 12 additional countries and cities that, in 2014, had developed or started implementing sustainable consumption and production and green economy policies with UN Environment's support.
- Secondly, it is listed as one of the total, 33 countries and cities that have adopted or started the implementation of sustainable consumption and production and green economy pathways as a result of UNEP's assistance since 2010.

In the Indicator Tracking System Kenya is counted under two indicators:

Expected Accomplishment a i). Unit measure: 'Number of governments and local authorities that have developed or begun implementing new policies, regulations or economic instruments promoting resource efficiency and sustainable consumption and production'

- Kenya was recorded in 2012-13 at Step 1⁵² for having carried out a green economy policy options and developing policy related recommendations. It was counted at Step 3⁵³ in 2014 for work under Green Economy Initiative and the Economy and Trade Branch and again in June 2017 for work at city level. It has only been counted once based on its entry in 2012-13

⁵¹ Step 2: Preliminary studies (i.e. review of legal framework related to public procurement; prioritization of sustainable products to be included in the SPP Action Plan; market study)

⁵² Step 1: Completed an assessment of Policy Options and discussed with stakeholders

⁵³ Step 3: Adopted a related policy/policy adjustment/plan/ Instrument or integrated measures into national Plans/Policies

Expected Accomplishment b i). Unit measure 'Number of governments, local authorities, companies and organizations reporting changes in their management practices, in their sectoral policies or strategies or in their corporate and industrial processes through UNEP partners and technical networks'

- Kenya was counted in 2014 for results in 'Technical Work in Progress' and 'Policy in Progress' for work under the SWITCH Africa Green and Eco-Innovation projects. It is recorded again in 2015 for work on with RECP and UNEP Finance Initiative projects. It has only been counted once under this indicator since its entry in 2014.

The documentary evidence uploaded in PIMS includes:

- a link to the Kenya National Networking Forum 27th July 2017, which documents the launch of the Green Economy Strategy Implementation Plan. In the article the connection with the SWITCH Africa Green project is mentioned, supported by the European Commission. UN Environment is mentioned indirectly through a quotation from the Resource Efficiency Sub-Programme Coordinator.
- the 2017/18 Annual Development Plans for Mombasa and Nakuru. While there is no immediately evident reference to support from UN Environment in the Mombasa Development Plan, the Nakuru document makes specific reference to the inclusion of Green Economy Plans, the support provided by UN Environment as one of its named partners and the connection between this Action Plan and the Green Economy Strategy Implementation Plan, as above. The Mombasa document was not accepted as sufficient evidence to attribute this work to UN Environment because it had no specific references to Green Economy.

Combining the evidence from the Programme Performance Review, the Indicator Tracking System, the documentation uploaded in PIMS and reflections from two well-informed country respondents, the results reported for Kenya appear to be consistent. Documentary evidence is stored centrally by UN Environment to support these results. It appears that the role UN Environment has played in Kenya as an enabler (technical expertise; partnership with UN Environment inspires confidence; reassures donors etc) is stronger and/or easier to identify than its role in implementation and further uptake, which, according to UN Environment's business model, should be done through building effective partnerships.

ANNEX III: UN Environment's Custodianship of SDG 12 Indicators

Goal 12. Ensure sustainable consumption and production patterns		Project/Focal Point	Status
12.1 Implement the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries	UN Environment Custodian 12.1.1 Number of countries with sustainable consumption and production (SCP) national action plans or SCP mainstreamed as a priority or a target into national policies	10YFP (Cecilia Lopez Y Royo): - Use of the 10YFP self-assessment survey administered to 150 country-level Focal Points - Response rate currently at 71 out of 193 countries	Methodology approved and upgraded to Tier II Formulation of indicators will be reviewed in 2019 and revisions circulated in 2020 (Through the surveys, UN Environment can aim for greater alignment with indicators of POW and suggest that Green Economy be included under SCP action plans/policies)
12.2 By 2030, achieve the sustainable management and efficient use of natural resources	UN Environment Custodian 12.2.1 Material footprint, material footprint per capita, and material footprint per GDP 12.2.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP	International Resource Panel (Christina Bodouroglou) - IRP developed first global database for material flow with data from EU countries and Japan and estimates established for other countries ⁵⁴ - Have developed a manual with technical guidance on to countries for establishing material flow accounts which will improve consistency and quality of counting	Manual setting out methods for establishing material flow accounts created Manual tested in 4 countries Requires capacity development Requires verification and validation
12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses	UN Environment Custodian (with FAO) 12.3.1 Global food loss index	Sustainable Food (James Lomax) - FAO working on food loss index (method exists) - UNEP working on food waste index, (based on food loss index approach and avoiding double counting)	Approach due for testing in April 2018.

⁵⁴ The database currently has data for the EU and Japan supplied by those countries, but the other countries are all estimates developed by the IRP. UN Environment has developed a manual with guidance for national statistics' offices to establish national material flow accounts, so that they could measure their own material footprint and Domestic Material Consumption. Where no data is available, methodology to develop estimates is provided, so countries would provide their own data or estimates for some materials, rather than depend on the IRP estimates.

12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment	UN Environment Custodian 12.4.1 Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement	Conventions (Tatiana Terekhova) - Using MEA 5-yearly reports - Measurements are complex and hard to track -	This methodology has been in use for a long time and builds on existing databases, including data on material flow
	UN Environment Custodian 12.4.2 Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment	BRS MEAs (Tatiana Terekhova) - Methodology under development (working closely with UN Habitat as Custodian of Indicator 11.6.1 on Municipal Solid Waste)	Methodology for both being examined together. Exploring the possibility of using data on material consumption to estimate waste generation rather than attempting to measuring waste collected or land filled. The methodological work is expected to be ready to be tested during the first half of 2018.
12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse	UN Environment Custodian 12.5.1 National recycling rate, tons of material recycled	BRS MEAs (Tatiana Terekhova) - Methodology under development (working closely with UN Habitat as Custodian of Indicator 11.6.1 on Municipal Solid Waste)	
12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle	UN Environment Custodian (with UNCTAD) 12.6.1 Number of companies publishing sustainability reports	Consumption and Production Unit (Elisa Tonda) - Developing a 'minimum' standards basis for a sustainability report that includes indicators and requirements for disclosure - Will also develop 'comprehensive' standard - Will need to differentiate between SMEs and larger company standards - Using UNCTAD tool and network as a basis	Draft due end March 2018 Testing in several countries in conjunction with the Friends of Para 47 Due to be presented at end May at the International System of Accounting Records/Reports meeting Innovative platform for data capture (text-based/scanning) being developed under an MoU between UN Environment and ADEC Innovations

12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities	UN Environment Custodian 12.7.1 Number of countries implementing sustainable public procurement policies and action plans	Sustainable Public Procurement (Farid Yaker) - the SPP project is under the 10YFP and is using stakeholders to validate a methodology	Methodology to be documented by end April 2018
12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature	UNESCO Custodian 12.8.1 Extent to which (i) global citizenship education and (ii) education for sustainable development (including climate change education) are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment	Lifestyles and Sustainable Consumption (Garrette Clark and Fabienne Pierre) - these projects have worked closely with UNESCO on mainstreaming into education systems	UNESCO led the development of the methodology and the Indicator is now Tier II. They have asked UN Environment to contribute to the follow-up of this and other relevant indicators.
12.a Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production	No custodian agency yet identified, could be UN Environment 12.a.1 Amount of support to developing countries on research and development for sustainable consumption and production and environmentally sound technologies	Agency to be determined (several possible custodian currently listed: UNESCO, UNEP, OECD, World Bank) Links with SDG 17 on funding for technologies	No action taken as yet – the names agencies to meet in April during an inter-agency meeting
12.b Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products	World Tourism Organization (UNWTO) custodian 12.b.1 Number of sustainable tourism strategies or policies and implemented action plans with agreed monitoring and evaluation tools	Sustainable Tourism (Helena Rey) - UN Environment contributes	
12.c Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances,	UN Environment custodians 12.c.1 Amount of fossil-fuel subsidies per unit of GDP (production and consumption) and as a	- UNEP Finance Initiative - (Joy Kim) Different methodologies have been in use (OECD, IMF, IEA) but result in different figures	Detailed methodology note is being peer reviewed Approach has been tested in India, Egypt and South Africa

<p>including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities</p>	<p>proportion of total national expenditure on fossil fuels</p>	<p>- Challenges around differentiating the nature of subsidies (direct, indirect, tax/revenues foregone etc)</p>	
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ANNEX IV: Projects under the Resource Efficiency Sub-Programme

1. Resource Efficiency Sub-Programme Project portfolio

1.1 There are 51 projects registered in the UN Environment's Programme Information and Management System (PIMS) that have been classified as belonging to the Resource Efficiency Sub-Programme and which were either ongoing at, or have started since, 1 January 2010. Among the 51 projects:

- 19 projects are still ongoing at the time of this evaluation;
- 1 project, Sustainable United Nations, was classified as part of the Environmental Governance Sub-Programme from 2014, and will only be considered within the scope of this evaluation as is relevant up to that year;
- 15 (predominantly older) projects are classified as "non-Project Review Committee (PRC) approved projects" and no formal approval document is available for these initiatives in PIMS. Most of these projects, with one exception, do not indicate their start date, but were running at least partially during the period under evaluation. 1 project is classified as "other". For these older projects the PIMS system does not indicate to which Expected Accomplishment and Programme of Work output they intend to contribute and no Programme Framework identification number is provided.

Some projects are marked as 'non-PRC approved'. This is because the PIMS was launched in July 2010 and the process of populating projects and documents in the system depended on the files that were available, all of which were located in United Nations Office in Nairobi (UNON). Information on these projects was imported from the Internal Management Information System (IMIS), although many did not have any documentation. Therefore, any project that had no supporting minutes /project document to show that it had gone through the project approval body has been marked as 'non-PRC approved'.

It should also be noted that during the period covered by the evaluation, Division Directors had delegated authority to approve projects with a planned budget below 500,000 USD and these were below the funding threshold to require a formal review process. However, as the table indicates, there were exceptions: 6 of the non-PRC approved projects had a planned budget of over 500,000 USD and one had a planned budget of less than 500,000 USD but secured more than 500,000 USD.

The Programme Framework 2014-17 indicates how each project intends to contribute to a given PoW output under each of the EAs. Each PoW output is expected to be delivered by at least one project, while some are delivered by more than one project. As noted in the Formative Evaluation of the UN Environment Medium Term Strategy 2014-17, 'this is rarely true, as projects usually deliver more than one product or service.' Additionally, and also as previously noted in the Formative Evaluation, it is not always clear why certain projects are linked to a specific EA rather than another. In some cases, projects have been allowed to contribute to several indicators, even if these are spread across different EAs.

The Resource Efficiency Sub-Programme hosts a number of secretariats, including the Secretariat of the 10 Year Framework for Production and Consumption, the UN Environment Finance Initiative, the Partnership for Action on Green Economy, the International Resource Panel, the Green Growth Knowledge Platform and the Life Cycle initiative. At the same time, the Secretariats and UN Environment also assume a delivery/implementation role within the very same initiatives.

The following types of projects in the Resource Efficiency Sub-Programme and UN Environment system can be defined⁵⁵:

⁵⁵ Project type definitions provided by the UN Environment Evaluation Office, November 2017.

- 'Project': UN Environment Evaluation Office identifies those planned interventions that have a defined scope of work and associated budget and are allocated an identification number in the Project Information Management system, as 'projects'. This also applies to interventions agreed with GEF and given a GEF identification number. These projects are approved by Project Review Committee.
- 'Sub-project': In some cases, a planned intervention (ie. project) is identified in the Project Information Management System and more than one donor-funded intervention is associated with it. In such cases, the individual donor-funded interventions are referred to as 'sub-projects'. These sub-projects are not subject to Project Review Committee approval.

Projects highlighted in purple are considered 'umbrella' projects; projects highlighted in aquamarine were never presented to the Project Review Committee

PF ID	Title	Actual start date	End date	Evaluation report?
Ongoing projects				
Programme of Work 2016-2017				
616.1	Resource Efficient Cities and Lifestyles	2016-03-16	2018-08-31	
634.1	Regeneration: Encouraging a New Generation of Conscious Citizens	2016-02-18	2017-12-31	
611.1	Science-policy Interface in Support of Resource Efficiency: The International Resource Panel	2016-01-01	2019-11-30	Yes (TE on phase 1)
Programme of Work 2014-2015				
623.2	Inquiry into the Design of a Sustainable Financial System: Policy Innovations for a Green Economy	09-01-2014	31-12-2017	
2014/15: 615.3 and 2016/17: 614.6	Sustainable Consumption and Production in Brazil	19-03-2014	31-12-2017	Yes (MTR)
624.1	Sustainable Buildings and Construction	04-07-2014	31-12-2017	
2014/15: 615.2 and 2016/17: 614.5	Operationalizing Green Economy Transition in Africa	2014-06-09	2018-03-30	
614.1	Partnership for Action on Green Economy (PAGE)	2014-01-15	2017-12-31	Yes (MTE)
621.1	Advancing Resource Efficiency in business practices	2014-02-28	2018-09-30	Yes (TE of sub-project)
633.1	Internationally recognized sustainability information tools to enable individual and institutional consumers to make informed choices	2014-03-27	2017-12-31	Yes (MTR of sub-project)
2014/15: 622.1 and 2016/17: 621.2	SWITCH Africa Green	2014-07-01	2017-12-31	Not yet
613.1	Secretariat Services and Functions for the 10YFP Implementation	2014-07-03	2017-12-31	Yes (TE of sub-project)
625.1	Sustainable food systems for food and nutrition security	2014-07-14	2017-12-31	
2014/15: 615.1 and 2016/17: 614.4	Greening Economies and implementing Sustainable Consumption and Production in Eastern Europe Caucasus and Central Asia	2014-07-16	2017-12-31	
614.2	Mainstreaming resource efficiency aspects into sustainable development planning, policies and regulatory frameworks	2014-05-05	2016-12-31	Yes (TE of sub-project)
612.2	Enhancing Knowledge and Capacity for Inclusive Green Economies	2015-01-21	2016-12-31	
Programme of Work 2012-2013				
612.1	Green Growth Knowledge Platform	2013-11-20	2017-12-31	Yes (TE)
632.1	63-P1: Delivering sustainable development and enabling the transition to greener economies through sustainable public procurement (Formerly Using pricing tools and purchasing criteria)	2013-06-26	2017-12-31	
626.1	{61-P10} Capacity building for promoting sustainable tourism policies, strategies and management tools on resources efficiency and consumer choices (Formerly: Management tools at the enterprise level- Promoting production through increased resource efficiency and pollution reduction)	2013-06-26	2018-08-31	
Completed projects				
Programme of Work 2006-2007				

PF ID	Title	Actual start date	End date	Evaluation report?
611.1	(61-P1)-Science policy interface in support of Resource Efficiency. {FORMERLY Scientific assessments and reports on resource flows at macro, meso and micro level - a sustainable resource management and life cycle approach.}	2006-09-03	2015-12-31	Yes (TE)
	Supporting the African 10 Year Framework Programme(10-YPP) on Sustainable Consumption and Production	2007-01-01	2014-06-30	Yes (TE)
Programme of Work 2008-2009				
622.2	(CP70300901) - SEED Initiative - Supporting Entrepreneurs for Sustainable Development: Scaling up local delivery of Sustainable Development.	2009-04-16	2015-12-31	
Programme of Work 2010-2011				
623.1	(62-P2)-Mobilising the financial sector and capital markets to catalyse financing and investment opportunities for resource efficient technologies and business practices	25-11-2010	31-12-2016	Yes (TE)
614.3	(61-P3)-Policy, macro-economic assessments and instruments to empower governments and business to advance resource efficiency and move towards a Green Economy	2010-04-12	2014-12-31	Yes, including 7 case studies
61-P8	(61-P8)-Policies and Tools at the City Level - Best practices to improve waste management, water & sanitation and energy efficiency for sustainable urban development	2010-06-10	2014-06-30	Yes (TR of sub-project)
61-P2	(61-P2)-Assessing vital signs, pressures and impacts of resource flows and scarcities to inform policy making and improve knowledge management.	2010-08-13	2013-12-31	
61-P7	(61-P7)-Policies and tools at the national level - Mainstreaming resource efficiency aspects into national economic and development planning	2010-06-24	2013-12-31	
61-P9	(61-P9)-Policies and tools outside cities – New approaches and management tools for efficient use of natural resources in rural areas.	2010-06-24	2013-12-31	
61-P6	(61-P6)-Policies in the Regions - Developing a recognised Framework and piloting new policy and management approaches through the Marrakech Process	2010-09-17	2013-12-31	
61-P556	(61-P5)-Law and regulatory regimes to support resource efficiency, sustainable consumption and production and greening of national economies	2010	2013-12-31	
62-P3	(62-P3)-Building SME network and technical support for scaling up investment in resource efficient, cleaner and safer production	2010-02-10	2013-12-31	
62-P4	(62-P4)-Partnership opportunities - Growing multi-stakeholder partnerships and initiatives advancing RE investments and practices along global value chains	2010-05-10	2013-12-31	
63-P257	(63-P2)-Internationally recognised information tools - standards, labels, reporting - to enable individual and institutional consumers to make informed choices	2010	2013-12-31	
63-P3	(63-P3)-Promote Resource Efficiency and Mainstream Sustainable Lifestyles	2010-10-14	2013-12-31	
61-P4	(61-P4)-Technology assessments, technology policy and environmentally sound technologies to empower public and private organisations to advance resource efficiency	2010-07-27	2012-12-31	
62-P1	(62-P1)-Developing the business case for scaling up investment in resource efficient, cleaner and safer technologies	2010-04-08	2011-12-31	
	(MD50100912) - Sustainable Tourism for rural Development -Serbia	2010*	2012-11-30	
	(CP40200912) - Better Integrating the Environment in Cities Alliance Activities	2010*	2012-04-01	
	(MD40200909) - National Cleaner Production Programme for Albania (NCP - Albania)	2010*	2011-12-01	
	(CP40200703) - Enabling Developing Countries to seize eco-label opportunities - Capacity building and technical assistance for industries and governments in developing countries	2010*	2011-07-31	Yes (TE)
	(NF40300805)-Sustainable Urban Social Housing Initiative (SUSHI)	2010*	2011-06-30	Yes (TR)
	(CP40200901) - Implementing the Sustainable Public Procurement Approach Developed by the Marrakech Task Force on Sustainable Public Procurement	2010*	2011-01-01	
	(CP40500503) - Integrated Assessment of Agricultural Trade-related Policies Including their Impact on Biological Diversity	2010*	2010-12-31	

⁵⁶ No start date available, but inserted in the Programme Framework for EA (a) 2010-2011 as "new project" so presumably started in 2010.

⁵⁷ No start date available, but PIMS reporting starts in June 2010 and indicates that it was inserted in the PoW 2010-2011.

PF ID	Title	Actual start date	End date	Evaluation report?
	(CP40100802) - Waste Management: Converting Problems into Opportunities to Improve Resources Efficiency (CORE Project)	2010*	2010-12-31	
	(CP40200805) - Increasing Resource Efficiency and Decreasing Carbon Footprints of Small and Medium-Sized Enterprises (SME) Climate Change and SME in Developing Countries and Emerging Economies.	2010*	2010-12-31	
	(SE40200607) - Swedish Task Force on Sustainable Lifestyles (Marrakech Process);Sweden-UNEP MOU	2010*	2010-12-31	
	Technical Cooperation Trust Fund for the Implementation of Activities by the United Nations fund for international partnership (UNFIP)	2010*	2010-12-31	
	(MD50100817) - Uruguay B: Technical Assistance for the Design of Sustainable Production and Employment Promotion Policies	2010*	2010-10-01	
	(NF40500803) - Green Economy.	2010*	2010-08-31	
	(CP40200702) - Sustainable Consumption and Production Roundtables in South Africa and Brazil and Follow-up expert Meetings in India and China (SCP-SAB/IC)	2007	2010-07-31	
	(GP30000701) - Improving Municipal Wastewater Management in Coastal Cities in ACP Countries	2010*	2010-04-30	Yes (TE)
51 projects				23 evaluations received

Table 8: Listing of Projects under UN Environment Resource Efficiency Sub-Programme 2010-17

ANNEX V: Sample of Project Evaluations Used in this Sub-Programme Evaluation

#	Short project title	Evaluation reports		Project type		Managing Division / RO	
		Type	Year	Project (PRC approved)	Sub-project (not PRC approved)	Economy Division	Other Divisions/Regional Office
1	Policy, macro-economic assessments and instruments for RE and GE (Green Economy)	TE	2017	X		X	
2	Advance Caribbean SD agenda through GE (ACSSD-GE)	Rating tables	2016		X	X	
3	GE and entrepreneurship Africa (GE Africa)	Rating tables	2016		X	X	
4	GE joint programme (GEJP)	Rating tables	2016		X	X	
5	GE and trade opportunities (GE-TOP)	Rating tables	2016		X	X	
6	Enhancing low carbon development (LCD) by GE	Rating tables	2016		X	X	
7	Measuring GE transformation	Rating tables	2016		X	X	
8	Enhancing south-south cooperation (Multiple pathways)	Rating tables	2016		X	X	
9	EU international cooperation on SCP ⁵⁸	SE	2017	N/A	N/A	X	Africa Regional Office
10	Global platform for action on SCP (10YFP)	TE	2017		X	X	
11	Green growth knowledge platform (GGKP)	TE	2017	X		X	
12	Resource Efficiency and eco-innovation in developing and transition economies (Eco-Innovation)	TE	2017		X	X	
13	SWITCH Asia regional policy support component (RPSC)	TE	2017		X	X	
14	Partnership for Action on Green Economy (PAGE)	MTE	2017	X		X	
15	UNEP Finance Initiative (UNEP FI)	TE	2016	X		X	
16	Science policy interface to support Resource Efficiency (IRP)	TE	2016	X		X	
17	Sustainable urban social housing initiative (SUSHI)	TR	2016	X		X	
18	UNEP SETAC LCI	SE	2016		X	X	
19	SCP in Brazil	MTR	2016	X			Latin America Regional Office
20	Sustainable energy planning in Eastern Europe and South Caucasus	TR	2015		X		Europe Regional Office
21	Enabling developing countries to seize eco-label opportunities	TE	2012	X		X	
22	Wastewater management coastal cities in ACP	TE	2012	X			Ecosystem Division
23	International panel for sustainable resource management	TE	2011	X		X	
24	Demonstrating ESTs for building waste reduction in Indonesia (DEBRI)	TE	2010	X		X	
25	Supporting African 10-YFP on SCP	TE	2010	X			Africa Regional Office
			Totals	12	12	21	5

⁵⁸ The evaluation of EU international cooperation on Sustainable Consumption and Production (#9 in table above) does not include ratings for evaluation criteria, and this EU evaluation covers a range of UN Environment and non-UN Environment Sustainable Consumption and Production related projects. Therefore, this EC evaluation is included in the qualitative synthesis, but not in the analysis of evaluation ratings.

Table 9: Summary of Evaluated Resource Efficiency Sub-Programme Projects

ANNEX VI: Analysis of Evaluation Criteria with Sub-Categories

This section contains an analysis of evaluation criteria that have sub-categories: Effectiveness, Sustainability, Factors Affecting Performance and Monitoring and Evaluation.

Effectiveness Ratings

Strengths:	About half of all evaluated projects have S rating for Achievement of Direct Outcomes and Achievement of Planned Objectives.
Weaknesses:	71% of evaluated projects show a MS performance on Likelihood of Impact, with only 29% of projects showing S or HS performance in this sub-criterion.
Of note:	The Achievement of Planned Objectives is not necessarily a good indicator for Effectiveness, as objectives are often written as outputs in Project Documents.

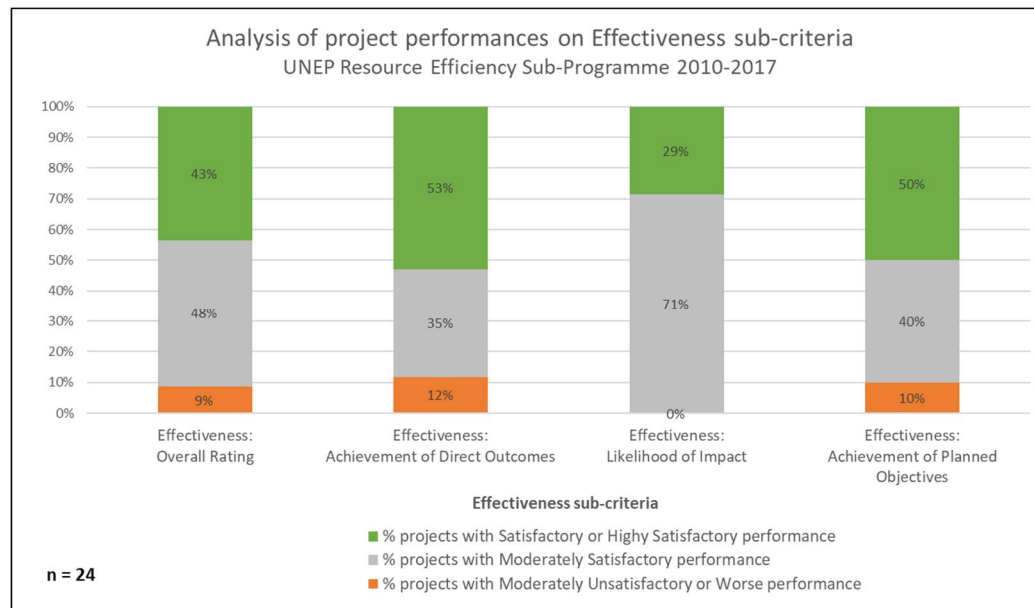


Figure12: Analysis of Effectiveness ratings

Sustainability Ratings

Strengths:	Large proportion of S-HS ratings for Environmental Sustainability (82%) and Catalytic Role and Replication (68%).
Weaknesses:	Lower proportion of S-HS ratings for Institutional Sustainability (45%). 9 to 14% MU-U ratings for Overall, Financial, Socio-political and Institutional Sustainability.
Of note:	Socio-political sustainability appears to be split with 68% S-HS rating but also 14% MU or worse.

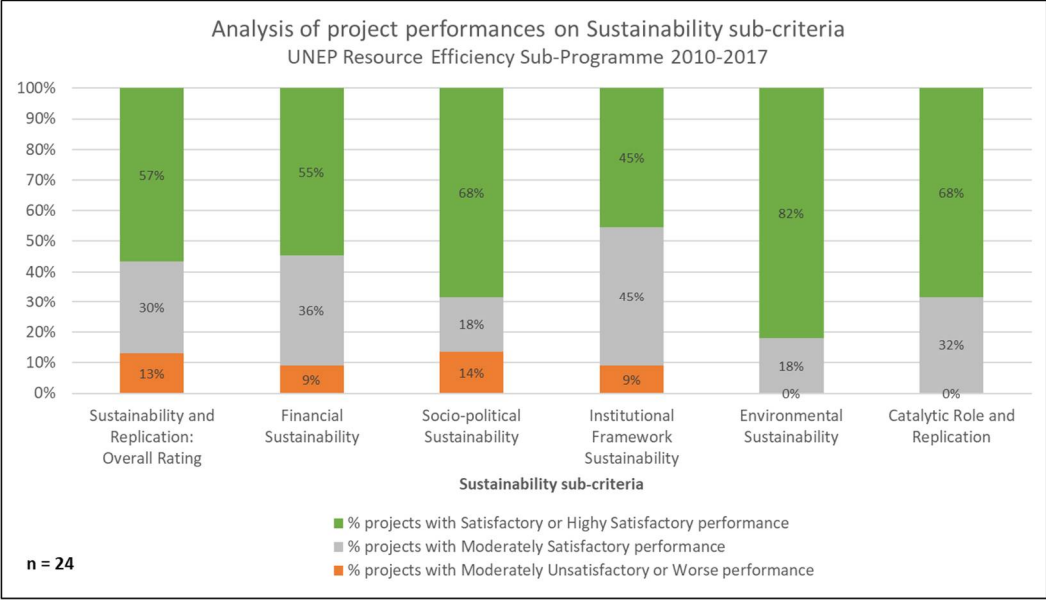


Figure 13: Analysis of Sustainability ratings

Factors Affecting Performance Ratings

Strengths:	High proportion of S-HS ratings for UN Environment supervision and management (81%).
Weaknesses:	High proportion of U (17%) and MU (26%) ratings for overall ratings on Factors Affecting Performance. Low proportion of S-HS ratings for Preparation and Readiness (35%).
Of note:	Given UN Environment's focus on partnerships, Stakeholders Participation is poor at only 50% evaluated projects with S-HS rating.

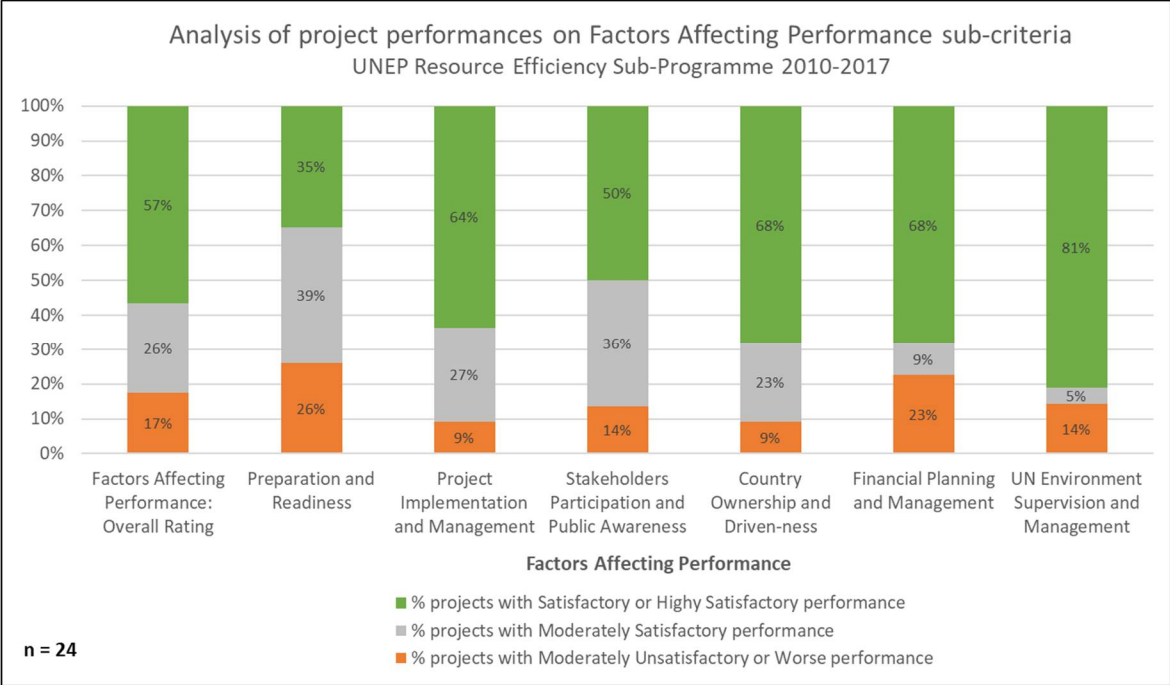


Figure 14: Analysis of Factors Affecting Performance ratings

Monitoring and Evaluation Ratings

Strengths:	Not applicable.
Weaknesses:	All M&E sub-criteria have very large proportions of Unsatisfactory and Moderately Satisfactory performances. Proportion of projects with S-HS performance for M&E is only 18% overall.
Of note:	Overreliance on PIMS reporting system to serve as a basis for 'monitoring' seems one of the reasons for low performance ratings for M&E.

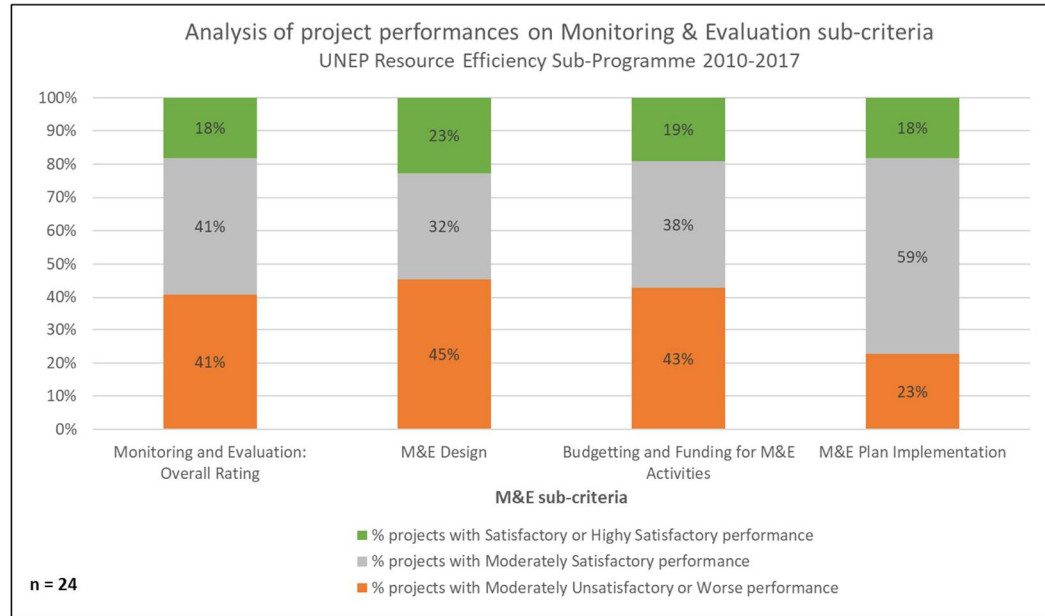


Figure 15: Analysis of Monitoring and Evaluation ratings

ANNEX VII: Examples of Good Practice at Project Level in the Cross-Cutting Themes

UN Environment project examples with good practices in Project Design, as noted in the evaluation reports:

- GE joint programme (GEJP): The open and flexible design of this sub-project was done to ensure a high degree of country driven-ness because all activities were discussed with the countries and defined jointly. Ownership was increased through execution by national partners.
- Sustainable energy planning in Eastern Europe and South Caucasus:
 - Much of the success of the project can be attributed to a pragmatic and easy-to-follow project design. The project had very clear objectives and was straightforward in its design and formulation.
 - The project Logframe provided a comprehensive scope for the project intervention logic by defining objectively verifiable indicators and means of their verification for each of the activities, and assumptions.
 - The project document contained relevant information on the needs and priorities of each city and its formulation was clear and realistic to ensure effective and efficient implementation. Likewise, the partners have been properly identified and their roles and responsibilities as well as the partnership coordination and synergies with on-going UN Environment initiatives were adequately identified and described in the project document.
- RE and eco-innovation in developing and transition economies:
 - By design, the use of partnership agreements & joint implementation, as opposed to transactional contracting, enlarged the pool of available resources by drawing on substantial in-kind contributions, which also functioned to build local ownership.
 - The Project Document contains an adequate problem analysis based on moving from regulatory-driven compliance to inspiring action based on long-term sustainability thinking and shifting from 1st generation innovation efforts focused on resource efficiency to 2nd generation linked to the need and opportunity for action. The situation analysis was well-encapsulated in the project justification, linked to globalization challenges and the need for a targeted intervention to build a foundation for transformation.
 - The criteria put forward in the design phase for the selection of countries for national implementation served the Project well in that decisions were steered towards assuring country ownership and driven-ness, which is increasingly seen as a key factor for sustaining project results beyond closure.

UN Environment project examples with good practices in Gender Equality, as noted in the evaluation reports:

- Sustainable energy planning in Eastern Europe and South Caucasus: The equal participation of, both, women and men were deliberately envisioned and ensured in all of the project activities as well as in all of its decision-making processes.
- Global platform for action on SCP (10YFP): The project produced a well drafted report on SCP and Gender (but it is not clear how this report is being used).

- Green growth knowledge platform (GGKP): The project produced dedicated webpage on Gender and Green Growth which links to 32 relevant studies and papers, links to "best practices", "projects", "insight blogs", and the relevant SDGs. The inclusion of Gender as a theme on the GGKP website and establishment of a page on Gender has contributed to single out and aggregate relevant knowledge on this topic.
- RE and eco-innovation in developing and transition economies: The Eco-Innovation Manual produced is leveraging new business processes/structures that ensure gender-balance to increase productivity and technical capacity and embracing international labour standards.
- Partnership for action on green economy (PAGE): The topics covered by project trainings and events has a strong gender dimension (e.g. plenary session was entirely dedicated to gender equality in greener economies and most of resource persons included a gender dimension into the different topics).
- Policy, macro-economic assessments and instruments for RE and GE: The project document included a clear gender analysis and outlined how the project is relevance to gender equity.
- RE and eco-innovation in developing and transition economies: The project's design addressed the gender dimension by:
 - Mentioning that its key target (SMEs) have a major bearing on gender equality and poverty alleviation.
 - Foregrounding the idea that women and indigenous communities should be specifically considered. An easily-achievable quantitative target was set that at least 1 company per pilot country should be selected on the basis of demonstrated contributions to addressing gender equity and/or poverty alleviation.
- RE and eco-innovation in developing and transition economies: The project explicitly favoured working with local implementing partners that demonstrated gender balance in their teams. The project had a really high participation of women in the staff of implementing partners, as the management consultants and teachers of eco-innovation.
- SCP in Brazil: For gender goals, the Women's Leader Network for Sustainability (Forum) is now a reality and success case for UN Environment in Brazil.

UN Environment project examples with good practices in Financial Management, as noted in the evaluation reports:

- RE and eco-innovation in developing and transition economies:
 - Suitable project management arrangements, financial management mechanisms, monitoring through progress reporting, and capable and committed supervision were put in place within UN Environment and in the pilot countries to advance activities towards results.
 - The Project leveraged additional resources through substantial unquantified in-kind contributions provided by the local partners in the context of their Partnership Agreements which implied joint implementation.
 - The Project Officer had a close working relationship with the Financial Administrator which featured collaboration, regular information exchange, and the provision and use of bi-weekly expenditure reports.
- Supporting African 10-YFP on SCP: Realistic financial planning together with reporting on project activities and on financial development directly related to project activities would contribute to implementing the project as foreseen and as agreed with the funding organizations.

- RE and eco-innovation in developing and transition economies: Green Economy and trade opportunities (GE-TOP): In financial reporting and troubleshooting administrative delays for payments, support has been provided at both Branch and Division levels.
- Wastewater management coastal cities in ACP: To reduce the administrative burden on UN Environment and project partners, an SSFA was made with national institutions covering all the course deliveries they would be responsible for. This reduced the number of SSFA from 46 to 18 (Final Narrative Report).
- Policy, macro-economic assessments and instruments for RE and GE: Flexibility of UN Environment management and willingness of donors to jointly plan activities of different sub-projects in the same country and even merge funds for activities, helped to have more financial and human capacity available and achieve a much larger than originally planned amounts of products.
- Science policy interface to support RE: In reflecting the project's output categories, this budgeting format gives a more results-oriented approach to financial planning and budgeting.

UN Environment project examples with good practices in Monitoring and Evaluation, as noted in the evaluation reports:

- Global platform for action on SCP (10YFP): The Project was actively involved in the development of SCP indicators for the SDGs and produced some very good reports to this effect.
- Green growth knowledge platform (GGKP): GGKP has made extensive efforts to monitor the impacts of the initiative, which were reported to move beyond any other UN Environment projects, including:
 - Large surveys of users of the platform;
 - Surveys of participants engaging in GGKP activities;
 - Interviews with key GGKP participants (e.g. research committee co-Chairs);
 - Extensive and detailed quarterly and annual web and social analytic reports;
 - Publicly available Annual Reports and Impact Reports
- Science policy interface to support RE: The project contracted an external review of impacts. The review was ongoing at time of evaluation. This review will likely have valuable lessons for the Resource Efficiency Sub-Programme and its projects.
- Sustainable energy planning in Eastern Europe and South Caucasus: The project Logframe provided objectively verifiable indicators, the means of verification and the assumptions for the project objectives, outcomes and outputs. The indicators are specific, measurable, achievable, relevant and time-bound.
- GE joint programme (GEJP): The project established regular monitoring of project implementation by the Project Steering Committee evaluating the results through half-year meetings. This worked well, considering adequate adaptation of activities and flexibility of sub-project implementation.
- Measuring GE transformation: In terms of uptake and usage of the global knowledge products developed under this project; UN Environment was able to track how this fed into the work of other countries (China, Mongolia and Peru).
- Enhancing south-south cooperation (Multiple pathways): Stakeholders surveys were a positive exercise to measure capacities and awareness. UN Environment conducted participant surveys

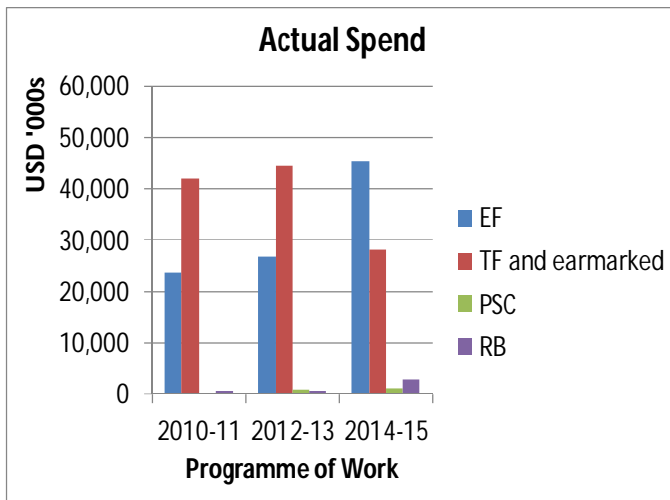
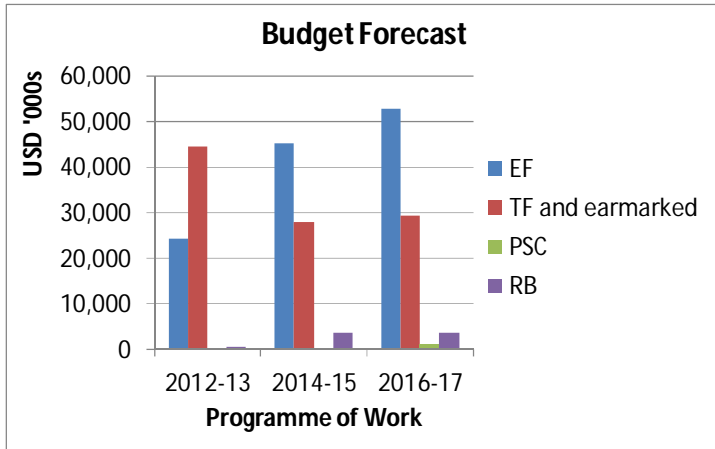
after the first two sub-project events to gather feedback about the effectiveness of the events. The results were summarized in an "impact summary" which was provided to the donor in addition to the formal sub-project reporting documents.

- Sustainable energy planning in Eastern Europe and South Caucasus: Online meetings every two months between Project Coordination Unit and Project Focal Points were the most constructive, effective and adequate way of providing feedback and take necessary actions based on the joint decision making.

UN Environment project examples with good practices in Replication, Scaling-up, Catalytic Effects, as noted in the evaluation reports:

- UNEP Finance Initiative: UNEP FI has highlighted the importance of interaction with government institutions to raise their awareness and the need for establishing a formal body including both private and public stakeholders in order to create an enabling environment for the scaling-up of UNEP FI activities. Such change was reflected by the degree of engagement with the private sector as noted at COP21. A regulatory only approach has not worked. A collaborative engagement with the private sector is leading to changed policies and practices.
- SWITCH Asia regional policy support component (RPSC): RPSC included a focus on the development of change agents across Asia through its capacity building events (e.g. SCP Winterschool, Youth Ambassadors Program).
- RE and eco-innovation in developing and transition economies:
 - The project's catalytic role is embodied in its novel approach (combining business model innovation, life cycle and value chain thinking and promoting collaboration, together with building a conducive policy environment to foster RECP eco-innovation adoption), which offers an operational means to engage the business sector's proactive response to environmental issues.
 - The project's activities managed to bring the sustainability aspect of innovation to other policy frameworks, such as industrial policies and Science, Technology, and Innovation, which are traditionally not covered by UN Environment.
- Policy, macro-economic assessments and instruments for RE and GE:
 - Up-scaling is explicitly included in the goal of the GE Project and the underlying ToC of the project is based on pilot experiences that are replicated and scaled-up to national level (Impact Pathway 2). Therefore, the approach of the project to stimulate replication and up-scaling is implicitly embedded in the project strategies.
 - GE Project triggered discussion and further analysis. This is positive, because a complex concept that affects economy, society and the environment at different scales requires continuous critical thinking and counter-movements do have arguments that need to be considered seriously and included in adaptive management.
- Science policy interface to support RE: The media in its many forms is considered as one important target group for IRP's work. The media can influence on policy-makers and industry and through catalysing/mobilising civil society as advocates on resource issues. The IRP report launches and events are opportunities to engage with media and to engage existing and new audiences.

ANNEX VIII: Sub-Programme Financial Information



Evaluation of the UN Environment Sub-Programme on Resource Efficiency⁵⁹

Background

1.1. Resource Efficiency

International scientific assessments⁶⁰ make it increasingly evident that the world cannot sustain economic growth, and the development and human welfare gains to which it contributes, based on current consumption and production patterns as well as underlying economic paradigms. Significant development of enabling policy frameworks that allow for a transition to inclusive green economies are needed as well as innovation in both the supply (production) and demand (consumption) sides of the market. At the same time, a large share of the world population is still consuming too little to meet even their basic needs.

Responding to this dual challenge of unsustainable mass production and consumption patterns and persistent poverty, a combination of new policies, redirected investment, application of environmentally sound technologies, international cooperation, and capacity development to reshape national economies as well as the global economy and sustainable lifestyles are required. The overall goal and objective of the subprogramme is to promote and support the transition towards Inclusive Green Economies for Sustainable Development, decoupling economic growth from unsustainable resource use and environmental impact while improving human well-being.

UN Environment has developed a working definition of a green economy as one that ‘results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities’ (Green Economy Report, 2011). A green economy is one whose growth in income and employment is driven by public and private investments that reduce carbon emissions and pollution, enhance energy and resource efficiency, and prevent the loss of biodiversity and ecosystem services. These investments need to be catalyzed and supported by targeted public expenditure, policy reforms and regulation changes. This development path should maintain, enhance and, where necessary, rebuild natural capital as a critical economic asset and source of public benefits, especially for poor people whose livelihoods and security depend strongly on nature.

An ‘Inclusive Green Economy’ is an alternative to today’s dominant economic model, which generates widespread environmental and health risks, encourages wasteful consumption and production, drives ecological and resource scarcities and deepens inequality. Promoting inclusive green economies is an opportunity to advance both sustainability and social equity as functions of a stable and prosperous financial system within the contours of a finite and fragile planet (Inclusive Green Economy Report, 2015). Decoupling economic growth from resource use and environmental degradation and creating the ‘space’ for poor people to meet their basic needs requires producers to change design and production processes and marketing activities. Consumers also need to consider environmental and social concerns – in addition to price, convenience and quality – in their consumption decisions.

Sustainable consumption and production (SCP) is defined as ‘the use of services and related products, which respond to basic needs and bring a better quality of life while minimising the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as

⁵⁹ This is the commonly used name of the sub-programme up to, and including, the 2014-17 Medium Term Strategy. More recently this has been shortened to the ‘Resource Efficiency Sub-Programme’.

⁶⁰ Contemporary international scientific assessments include the Millennium Ecosystem Assessment, the Global Environmental Outlook and the 4th Assessment Report of the Intergovernmental Panel on Climate Change,

not to jeopardise the needs of future generations.' (Norwegian Ministry of Environment, Oslo Symposium, 1994). Sustainable consumption and production is about promoting resource and energy efficiency and sustainable infrastructure, and providing access to basic services, green and decent jobs and a better quality of life for all. Promoting sustainable consumption and production as an integrated approach aims to help achieve overall planned development, reduce future economic, environmental and social costs, strengthen economic competitiveness and reduce poverty.

By transforming their economies into drivers of sustainability, countries are expected to take on the major challenges of the twenty-first century - from urbanization and resource scarcity to climate change and economic volatility.

1.2. The UN Environment Resource Efficiency Sub-Programme (2010-2016)

Strategic Overview

Since the Medium Term Strategy 2010-2013, UN Environment's resource efficiency-related activities have been coordinated under the Resource Efficiency Sub-programme (RESP). Over time there has been a progression within the sub-programme from a focus on the environmentally sustainable use of natural resources (production, processing and consumption) to the de-coupling of economic growth from the use of natural resources. The evolution of the strategy, as reflected in the stated intentions under each Programme of Work, is presented in Table 1 in the separate file, Annex 1.

In 2010, The UN Environment objective for this sub-programme was that 'natural resources are produced, processed and consumed in a more environmentally sustainable way'. In order to better integrate the economic transition element of this expected change, the objective was reformulated in the 2012-2013 Programme of Work (PoW) to incorporate the notion of decoupling economic growth from environmental impact and the 2014-2017⁶¹ Medium Term Strategy (MTS) presents the reformulated objective as: 'to promote a transition in which goods and services are increasingly produced, processed and consumed in a sustainable way that decouples economic growth from resource use and environmental impact while improving human well-being'. Although the results statements have evolved over time⁶², the work undertaken within the Sub-Programme is consistently intended to contribute to three areas of results:

- **'Enabling policy environment'**, supporting countries in creating policies to facilitate the transition to an inclusive green economy that is resource efficient, low carbon and that adopts sustainable patterns of consumption and production;
- **'Sectors and supply'**, enhancing the ability of governments, businesses and other stakeholders to adopt sustainable business strategies and production practices across global supply chains in key sectors; and
- **'Lifestyles and consumption'**, enhancing the ability of countries, businesses, civil society and individual consumers to make informed choices for sustainable consumption and lifestyles'

(Source: Programme Performance Reports, 2016)

⁶¹ In the upcoming Medium Term Strategy (2018-21) the objective is slightly reformulated as: 'to support the transition towards sustainable consumption and production, decoupling economic growth from unsustainable resource use and negative environmental impact while improving human wellbeing'.

⁶² The Programme Performance Reports 2014, 15 and 16 show the progression of ideas under these three areas.

Similarly, strategic documents (Medium-Term Strategies and Programmes of Work) for this sub-programme are predominantly organised around three expected accomplishments⁶³ (EA) over the period 2010-2016, with the exception of the biennium 2012-2013, during which an additional EA was added in the PoW. Indicators have changed, but an element of comparability, at least within any given Medium Term strategy period, has been intended to be maintained. Table 2 in the separate file, Annex 1 provides a detailed overview of the objectives (MTS), expected accomplishments (MTS and PoW), indicators (PoW) and strategy (PoW) for the Resource Efficiency Sub Programme over the period 2010-2016.

Project Portfolio

There are 51 projects registered in the UN Environment's Programme Information and Management System (PIMS) that have been classified as belonging to the Resource Efficiency Sub-Programme and which were either ongoing at, or have started since, 1 January 2010. An overview of all these projects is presented in Table 3 in the separate file, Annex 1. Among the 51 projects:

- 19 projects are still ongoing at the time of this evaluation;
- 1 project, Sustainable United Nations, was classified as part of the Environmental Governance Sub-Programme from 2014, and will only be considered within the scope of this evaluation as is relevant up to that year;
- 15 projects are classified as "non-Project Review Committee (PRC) approved projects" and no formal approval document is available for these initiatives in PIMS. Most of these projects, with one exception, do not indicate their start date, but were running at least partially during the period under evaluation. 1 project is classified as "other". The PIMS system does not indicate which EA and PoW output they intend to contribute to. No Programme Framework identification number is provided. (Note: this needs to be confirmed in case some files have not been uploaded into PIMS).

The lack of PRC approval or revision can be explained by the fact that PIMS was launched in July 2010 and the process of populating projects and documents in the system depended on the files that were available, all of which were located in United Nations Office in Nairobi (UNON). Most of these projects did not have any documentation or in some cases no documents were available apart from the information that could be imported from the Internal Management Information System (IMIS). Therefore any project that had no supporting minutes /project document to show that it had gone through the project approval body has been marked as 'non-PRC approved'. It should also be noted that during the period covered by the evaluation, Division Directors had delegated authority to approve projects with a planned budget below 500,000 USD and these were below the funding threshold to require a formal review process. However, as the table indicates, there were exceptions: 6 of the non-PRC approved projects had a planned budget of over 500,000 USD and one had a planned budget of less than 500,000 USD but secured more than 500,000 USD.

The Programme Framework 2014-2017 indicates how each project intends to contribute to a given PoW output under each of the EAs. Each PoW output is expected to be delivered by at least one project, while some are delivered by more than one project. As noted in the Formative Evaluation of the UN Environment MTS 2014-2017, 'this is rarely true, as projects usually deliver more than one product or service.' Additionally, and also as previously noted in the Formative Evaluation, it is not always clear why certain projects are linked

⁶³ Each Medium-Term Strategy (MTS) spans four years. Expected Accomplishments articulate the nature of the achievements against MTS objectives. Two Programmes of Work (each lasting two years) are designed to deliver each MTS. Programmes of Work have stated objectives, some of which are the same as the stated Expected Accomplishments. The achievement of the objectives set out in the Programmes of Work are measured against Output Indicators.

to a specific EA rather than another. In some cases projects have been allowed to contribute to several indicators, even if these are spread across different EAs.

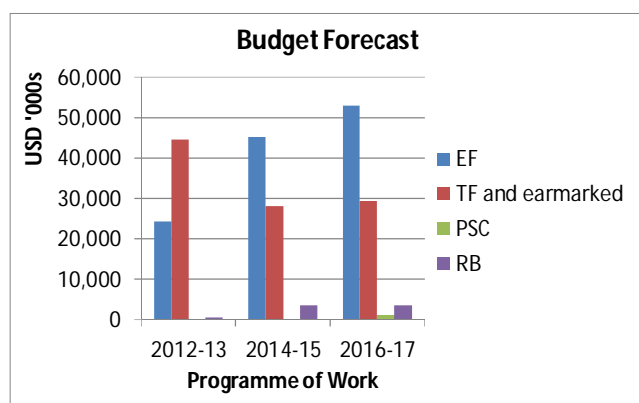
The potential contributions of projects to PoW outputs is further complicated by the fact that several of the interventions identified as PoW projects (and listed in the table above) effectively operate as ‘umbrella’ projects. This means that they were created as ‘placeholders’ or ‘envelopes’ for a number of sub-projects being implemented in one thematic area, in several cases with differing start and end dates from the umbrella project. These sub-projects often, but not always, have their own logical frameworks, based on specific donor requirements and formats. It is not always the case that the logical frameworks of sub-projects are aligned to the results framework of the umbrella project. The causal pathways from sub-project outputs to PoW project outcome are not always clearly described or obvious (Evaluation of the Green Economy Initiative, 2017). Two examples of umbrella projects and their associated sub-projects (61-P3 - Policy, macro-economic assessments and instruments to empower governments and business to advance resource efficiency and move towards a Green Economy and 633.1 - Internationally recognized sustainability information tools to enable individual and institutional consumers to make informed choices) are presented as Table 6 and Figure 1 in the separate file, Annex 1.

The RE sub-programme hosts a number of secretariats, including the Secretariat of the 10 Year Framework for Production and Consumption, the UN Environment Finance Initiative, the Partnership for Action on Green Economy, the International Resource Panel, the Green Growth Knowledge Platform and the Life Cycle initiative. At the same time the Secretariats and UN Environment also assume a delivery/implementation role within the very same initiatives.

Sub Programme Financing

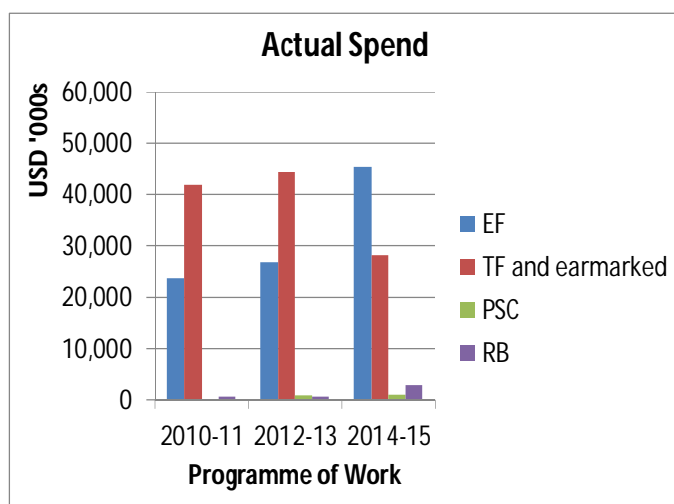
The following tables present an overview of the budget forecasts for the RE sub-programme by PoW⁶⁴ (Figure 1) and an overview of actual secured funds, also by PoW. (Figure 2). It should be noted that the sub-programme does not receive any contributions from the Global Environment Facility (GEF).

Figure 1: Budget (USD 000s) forecasts by PoW and source (EF = Environment Fund; TF and earmarked = Trust Fund; PSC = Project Support Costs and RB = Regular Budget)



⁶⁴ 2010-11 forecasts are not presented as the budget for the biennium was not prepared by sub programme. Estimates for EF and extra-budgetary allocations are presented in the SF document for EAa, while estimates for TF and earmarked contributions are presented in the PoW.

Figure 2: Actuals (USD 000s) as presented in the Programme of Work, by source



UN Environment Institutional Arrangements

The bulk of RE work is carried out by the Economy Division, although all UN Environment Divisions have some involvement in RE-related activities. UN Environment Regional Offices are managing or contributing to a number of sub-regional and country-level RE projects. It should be noted that over the period covered by the evaluation, regional offices have led the implementation of only 6 projects, however they often contribute to one or more component(s) or sub-project (s) of a given PoW project. The Communication Division has managed one RE project in the past and is now managing two, while supporting the delivery of a series of outputs related to communication. Table 4 in the separate file, Annex 1, summarises the implementation of projects by Division and Regional Offices.

The Sub-Programme project portfolio includes projects delivered by Branches/Units located either in Paris or Geneva.

Main UN Environment Partners

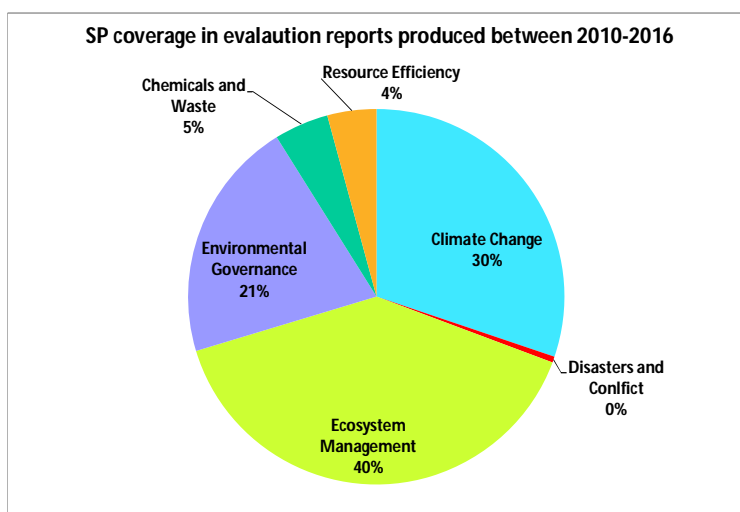
A wide range of organizations and institutions work in the area of resource efficiency and encouraging partnerships is at the core of UN Environment mission statement. However, partnerships are not extensively described at either Medium Term Strategy or Programme Framework level. The Medium Term Strategy mentions that, at the country level, UN Environment works with and through national governments and other agencies on all national activities. Civil society and private sectors are also identified as important partners. Projects within the RE Sub-Programme work in numerous partnerships with the private sector, including the Finance Initiative, Life Cycle Initiative etc. More details, but still mostly limited to a list, are provided in the relevant RE sections in the Programme of Work documents and Table 5 in the separate file, Annex , presents a summary of key highlighted partnerships.

Evaluation Evidence

The RE sub programme has, to date, been one of UN Environment's more under- evaluated sub-programmes. This is due to multiple reasons, including the absence of evaluation budgets, the low number/absence of GEF funded projects, for which evaluations are mandatory, and a general lack of awareness of evaluation requirements in Paris and Geneva, which has, in the past, led to projects being closed without evaluation. An

overview of the status of the evaluation of projects within the Sub-Programme portfolio is attached in the separate file, Annex 2.

Figure 3: Evaluation coverage by Sub Programme (2010-2016)



In recent years, the Evaluation Office has increased the number of evaluations of RE projects (and sub-projects) and this evaluation will, as far as possible, build on available evidence. A full list of available evaluations is presented in a separate Excel file.

The Evaluation

1.3. Evaluation Audience

The Evaluation is expected to help UN Environment identify key lessons on strategic positioning, portfolio planning, management arrangements and programme implementation that will provide a useful basis for improved sub-programme design, coordination and delivery.

The immediate and priority users of the Evaluation include: UN Environment senior management (including Division and Regional Directors), sub-programme coordinators and all UN Environment units and staff involved in the RE sub-programme, the UN Environment Committee of Permanent Representatives and the UN Environment Assembly.

Interest in the Evaluation is likely to be shown by other stakeholders and partners, including: the UN Secretariat, UN or other international bodies working in the area of RE, commissions and committees, NGOs and civil society groups, research centres and academia, et cetera.

1.4. Objectives and Scope of the Evaluation

The Evaluation will review UN Environment work related to RE from 1 January 2010 up to end of 2016 (PoW 2010/11, 2012/13, 2014/2015 and first half of 2016/2017) against standard evaluation criteria (relevance, efficiency, effectiveness, sustainability and impact). The evaluation will fulfil two main purposes: a) supporting accountability by analysing, at a meta level, the performance of all those sub-programme projects evaluated during the evaluation period and b) contributing to institutional learning by providing formative reflections based on further analysis of the sub-programme's effectiveness as a coherent and coordinated unit within UN Environment's results framework.

The Evaluation will consider the extent to which, in the period under review, UN Environment was able to meet its objective as stated in the Medium Term Strategy (2014-17): ‘to promote a transition in which goods and services are increasingly produced, processed and consumed in a sustainable way that decouples economic growth from resource use and environmental impact while improving human well-being’.

Broadly, the evaluation will follow three lines of inquiry to provide a holistic review combining both ‘bottom-up’ (i.e. aggregating project-level findings) and ‘top-down’ (i.e. analysing the evidence informing results reporting in the Programme Performance Report) perspectives, (see also Section D. Evaluation Approach and Methods):

1) **Project level performance:** a desk-based, systematic review of the findings from 23⁶⁵ project-level evaluation exercises undertaken between January 2010 and June 2017. The analysis will provide aggregated scores against standard evaluation criteria and identify and discuss trends in the factors contributing to particularly high or low performance. It will include an assessment of the sample of project evaluations in terms of how they represent the sub-programme as a whole.

2) **Exploration of key Theories of Change:** Theories of Change will be reconstructed around the three main results areas⁶⁶ (see para 8, above) in order to explore how projects are expected to have a collective or aggregated effect at the level Programme of Work results. (Expected Accomplishments). Projects that are recognised as key drivers to these causal pathways will be identified and used to provide country-level case study sites. The effective implementation of the three TOCs will be evaluated through these case study sites. This analysis will focus heavily on the effectiveness and sustainability of the sub-programme efforts.

3) **Contribution to higher level results and global change processes:** drawing on the three reconstructed Theories of Change, but also considering flagship projects and key areas of investment, an analysis will be undertaken to establish the extent and nature of UN Environment’s contribution to changes at sectoral and global levels, including the use of the various platforms and secretariats that are hosted by the sub-programme. The methods used to aggregate project level achievements and compile results presented in the Programme Performance Report will be explored. This analysis aims to also identify areas of work that would be suited to deeper impact evaluation in the longer term.

1.5. Evaluation Areas of Focus

Strategic Relevance of the Sub-Programme

The Evaluation will assess the relevance of the sub-programme objectives and strategy in the context of the growing international recognition of the global challenges posed by RE and UN Environment’s evolving mandate and capacity in this area. The analysis will address the main question of whether the sub-programme objectives and strategy are relevant to, and aligned with: a) the global challenges posed by the rapid and unsustainable depletion of natural resources, b) global, regional and country needs, c) the international response and d) UN Environment’s evolving mandate and capacity in this area? The evaluation will also consider the adequacy and appropriateness of the geographical scope of the sub-programme and the strategy behind country selection. The analysis will consider the question of relevance and alignment

⁶⁵ These include: 9 completed Terminal Evaluations, 2 Terminal Evaluations due to complete before June 2017, 7 substantive case studies with their own ratings tables, 1 Mid-Term Evaluation, 2 Terminal Reviews and 2 Mid-Term Reviews.

⁶⁶ The three theories of change will be reconstructed at the level of sub-programme results that has the greatest potential explanatory power (e.g. results statements in a selected Programme Performance Report; Expected Accomplishments in a selected Programme of Work etc). The appropriate level will be agreed with the Sub-Programme Coordinator and Head of the Strategic Programme and Policy Division.

from the perspectives of the three main intervention areas: (i) sustainable consumption and production; (ii) green economy; (iii) consumer choice.

Sub-Programme Design and Structure

The evaluation will assess the extent to which the overall performance of the RE SP has been affected (in terms of effectiveness and efficiency) by the way it is designed and structured. The Evaluation will consider the internal coherence and logic between Expected Accomplishments, Programme of Work outputs and project outcomes. Particular attention will be paid to how well the sub-programme's results are formulated and logically organized, including the appropriateness of performance indicators to measure progress towards planned achievements. With reference to the Theory of Change for the sub-programme the evaluation will assess the extent to which the intermediate states, drivers and assumptions underlying the sub-programme change process have been well thought through and articulated.

Overall the evaluation will consider whether the establishment of a dedicated sub-programme on RE has helped to better define and coordinate UN Environment's activities in addressing the challenges posed by the inefficient use of resources.

Overall Sub-Programme Performance

The Evaluation will assess the effectiveness, likelihood of impact, sustainability of results, efficiency, and potential for large-scale effects of the RE sub-programme during the evaluation period. Two perspectives will be explored:

a) Based on the findings of all (23) the project-level evaluations undertaken during the evaluation period, conclusions will be drawn about the performance of the Resource Efficiency Sub-Programme project portfolio against each of UN Environment's standard evaluation criteria: strategic relevance; achievement of outputs; effectiveness (achievement of project objectives and results); sustainability and replication; efficiency and factors affecting performance (preparation and readiness; project implementation and management; stakeholder participation; communications and public awareness; country ownership; financial management; UNEP supervision and technical guidance and monitoring and evaluation).

b) At the level of the sub-programme itself (i.e. as a vehicle for the delivery of UN Environment higher level results) the evaluation will assess the effectiveness and sustainability of the sub-programme's efforts against three Theories of Change reconstructed at the level of Expected Accomplishments and against the results reported in the Programme Performance Report.

Given the global nature of UN Environment's mandate and the challenges it aims to address, particular attention will be given, at all levels, to the approach taken within this sub-programme to replication, scaling-up and the achievement of catalytic effects. All of these relate to the maximisation of effectiveness (i.e. instances of positive results being multiplied).

The evaluation will assess the likelihood that results achieved by the sub-programme either have, or will in the future, contribute to long-term impact on environmental benefits and sustainable development

Factors Affecting Sub-Programme Performance

Sub-Programme Organization and Management

The Evaluation will look at the efficiency and effectiveness of the sub-programme organization, coordination and management arrangements, taking the change from a divisional coordination structure to a thematic coordination structure in 2010 into account. For example, the Evaluation will consider whether internal lessons can be derived from the experiences of different functional units within the sub-programme and how the use of 'umbrella projects' has affected identification and reporting of sub-programme results.

Sub-programme Human and Financial Resources Administration and Efficiency

The Evaluation will consider the adequacy of human and financial resources available for the planning and implementation of sub-programme activities. The Evaluation will assess, among other things:

- Human Resources: the adequacy in terms of number and competencies of staff managing SP activities; personnel turn-over rates and the balance between continuity and new staff in the SP; the ability of managers to plan, coordinate and delegate work, communicate effectively, motivate and reward staff; factors influencing the morale of staff and the degree of satisfaction in the management of their daily activities and working in teams with colleagues from other functional units in UN Environment and with partners;
- Financial Resources: the distribution of funding according to funding source and the adequacy and stability of the funding base for the achievement of sub-programme objectives; the success of the different areas of intervention and functional units in securing funds for sub-programme activities; allocation of funds and expenditure rate by each type of intervention and by the different functional units in UN Environment;
- Financial Management and Administration: the quality, transparency and effectiveness of the systems and processes used for financial management of HQ, regional and country operations; the link between financial and programme management and the degree of financial responsibility that sub-programme staff have and any other administrative processes facilitating or inhibiting the fluid execution of sub-programme activities, including the use of extensions and the promotion of synergies among sub-programme components.

Cooperation and Partnerships

The Evaluation will assess the effectiveness of mechanisms for information sharing and cooperation with other UN Environment sub-programmes, external stakeholders and partners. The Evaluation will explore cooperation and collaboration at several levels, between a) different functional units involved in the sub-programme; different sub-programmes within UN Environment; Headquarters and regional or out-posted offices; Un Environment and other UN agencies as well as with inter-governmental organisations, regional bodies, the private sector and technical/scientific institutions etc.

Areas of consideration will include whether key stakeholders and partners are regularly involved at critical stages of the sub-programme's planning, decision-making, implementation and reporting processes. The evaluation will also assess whether mechanisms are in place and in use to ensure that

complementarities are sought, synergies optimized and duplications avoided at all levels of the sub-programme's planning and delivery. Positive examples of collaboration and the resulting benefits will be recorded where possible.

Monitoring and Reporting

The Evaluation will assess how well sub-programme activities and achievements have been monitored, reported and evaluated. This will include a review of whether there is a clear definition of roles and responsibilities for data collection, analysis and information-sharing as well as adequate resources to support these functions.

- Monitoring: The evaluation will consider whether an effective monitoring system is in place that ensures that monitoring data are captured at appropriate levels and used to enhance sub-programme performance through established and widely-known processes.
- Reporting: The arrangements for reporting in ways that support the accurate and reliable reporting of sub-programme results will be reviewed. With regard to projects within the sub-programme the evaluation will consider how well results that contribute to sub-programme

outputs are captured and aggregated. The quality, comprehensiveness and regularity of reporting on sub-programme outputs, outcomes and impact will be assessed as well as whether quality assurance processes are in place to ensure the reliability and accuracy of reporting at the higher results levels.

- Evaluation: The extent to which sub-programme activities are structured in a way that facilitates evaluation and have been independently evaluated will be examined. The evaluation will also assess whether adequate resources are routinely allocated to this purpose and secured until the end of the evaluation process.

Human Rights and Gender

The evaluation will ascertain to what extent the sub-programme has applied the UN Common Understanding on the human rights based approach (HRBA) and the UN Declaration on the Rights of Indigenous People. Within this human rights context the evaluation will assess to what extent the sub-programme adheres to UN Environment's Policy and Strategy for Gender Equality and the Environment, including the incorporation of gender-related issues into the design and delivery of sub-programme outputs. The report should present the extent to which the sub-programme, following an adequate gender analysis at design stage, has implemented the identified actions and/or applied adaptive management to ensure that Gender Equity and Human Rights are adequately taken into account.

Communication

The evaluation will assess the effectiveness of communication between the units responsible for the implementation of the sub-programme and the coordinator, senior management and relevant UN Environment divisions and departments. It will also assess the extent to which clear communication was established with partners and donors, with a view to assessing the extent to which communication has been contributing to the effective implementation of the sub-programme, establishment of synergies and limitation of duplication of efforts. For example, the evaluation may consider whether sub-programme activities related to communication and knowledge management are planned and whether adequate effort has been given to follow-up and dissemination of information, concepts, approaches and tools generated by the sub-programme. The evaluation will also consider the Resource Efficiency Sub-Programme efforts to communicate with external audiences as part of an outreach strategy in order to exert influence and support advocacy efforts in the relevant sectors.

1.6. Evaluation Approach and Methods

The Evaluation will be conducted under the overall responsibility of the UN Environment Evaluation Office (EO). It will be an in-depth study using a participatory approach whereby the Sub-Programme Coordinator, Division Directors, Regional Directors, Project Managers, Head of the Strategic Programme and Policy Division and other relevant staff are kept informed and regularly consulted throughout the process.

The Evaluation will remain an independent exercise. The Evaluation Team will benefit from the leadership and contributions of two independent consultants, supported by Evaluation Office staff, who will liaise with the EO on any logistic and/or methodological issue to properly conduct the assessment in as independent way as possible, given the circumstances and resources provided.

Evaluation findings and judgments will be based on sound evidence and analysis, clearly documented in the evaluation report. Information will be triangulated (i.e. verified from different sources) to the greatest extent possible⁶⁷. Analysis leading to evaluative judgments will be clearly spelled out.

⁶⁷ Individuals will not be mentioned by name if anonymity needs to be preserved.

The Evaluation will use different methods and tools to assess the sub-programme, including: desk-based review of UN Environment strategic documents; meta-analysis of the ratings of previously evaluated projects; trend analysis of evaluation findings and interviews and field visits in the reconstruction and exploration of Theories of Change and in analysis the contributions of the sub-programme to higher level results. Survey(s) may be considered if appropriate.

Table 1: Evaluation Methods

Type of Activity	Description
Desk Based Review	Reading of thematic and strategic documents to situate the Sub-Programme evaluation within global and sectoral contexts and to articulate UN Environment's position and efforts within the Resource Efficiency sector.
Interviews/Survey	Exploration and analysis of the factors affecting sub-programme performance.
Systematic Review of Findings from 23 Project Evaluations	<p>Aggregation and analysis of the ratings across 23 Resource Efficiency project evaluations.</p> <p>Analysis of trends in the evaluation findings against the standard evaluation criteria used by the Evaluation Office.</p> <ul style="list-style-type: none"> • Strategic Relevance • Achievement of Outputs • Effectiveness (Achievement of Project Objectives and Results) • Sustainability and Replication • Efficiency • Factors Affecting Performance <p>In-depth exploration of key criteria including:</p> <ul style="list-style-type: none"> • Project Designs⁶⁸ (under Preparation and Readiness) • Gender Equality (under Strategic Relevance) • Financial Management (under Factors Affecting Performance) • Monitoring and Evaluation (under Factors Affecting Performance) • Compliance with evaluation recommendations <p>Analysis of this sample of project evaluations as a representation of the sub-programme itself (i.e. magnitude and nature of the evaluation coverage of the sub-programme)</p>
Reconstructed Theories of Change	<p>Reconstruction of three Theories of Change⁶⁹, one per sub-programme results area.</p> <p>X country-level case studies, based on field visits and interviews and selected as examples of implementation sites from key projects expected to drive change.</p> <p>Analysis of the coherence between the three reconstructed Theories of Change and the TOCs of critical projects within the sub-programme.</p>
Contributions to Higher Level Results	Analysis of the 'contribution' made by the Sub-Programme to high level sectoral or global change (using TOCs and stakeholder analysis).

⁶⁸ Using the EO template for the Assessment of the Quality of Project Design, which is prepared during all project evaluations.

⁶⁹ These TOCs may or may not reflect either the overall TOC for the sub-programme or TOC(s) from key projects.

	<p>Exploration of the way in which sub-programme results are compiled and reported.</p> <p>Country-level case studies of 2 countries that are reported as part of the achievement of all results in the PPR.</p>
Regional Delivery of the Sub-Programme	Exploration of how the sub-programme is articulated and delivered at regional level.

The desk review will include:

- Relevant background documentation on the scientific, socio-economic and environmental dimensions of RE, and on current policies, strategies, multilateral agreements, approaches used in RE;
- Background documentation on UN Environment's strategy and engagement in RE in the areas of sustainable consumption and production, green economy and consumer information, including: PoW documents (from 2010 onwards); Programme Framework documents; the UN Environment Medium Term Strategy 2010-13 and 2014-2017, project design documents;
- Background documentation on UN Environment partnerships with key actors in the area of RE; and
- Sub-programme reports and monitoring data including: Sub-programme performance reports, project progress and final reports, financial reports, entries into PIMS, etc.

The systematic review of 23 previous evaluations of projects related to RE will draw heavily on the evaluation ratings scoring and analysis contained within existing project evaluation reports. Evaluations by the EO but also by the independent evaluation functions of UN Environment partners (UN and non-UN) and donors will be considered;

Visits are expected to Nairobi, Kenya (where UN Environment Economy Division headquarters and the Regional Office for Africa is located), Paris and Geneva (where significant branches of the Division working on the RE sub programme implementation are located, along with the Regional Office for Europe), the Regional Office for Latin America and the Caribbean and at least X countries selected as case studies.

Interviews are expected to be held with UN Environment management and other staff involved in the planning and implementation of the sub-programme, including: the Executive Director, Division Directors, Regional Directors, the Sub-programme Coordinator, project managers and divisional staff, staff from the Strategic Programme and Planning Division and others as relevant. In addition, interviews and, if appropriate, surveys will be conducted with key partners and stakeholders, including selected representatives of UN and other external partners; other UN agencies active in promoting RE (e.g. UNDP, UNIDO, ILO, WB, etc.) and funding mechanisms (e.g. UN Environment – EC Strategic Cooperation Agreements); Ministries of Environment; Bilateral donors; civil society and major groups such as NGOs, local authorities, academia as well as the private sector.

1.7. Evaluation Deliverables

An **Inception Report** will be prepared by the Evaluation Team before it engages in external interviews, surveys and regional office or project visits. The Inception Report will include: (i) most of the background desk review; (ii) three draft theories of change at the level of the sub-programme's Expected Accomplishments (iii) a

detailed description of the methods and analytical tools that the Evaluation will use; (iv) an annotated table of contents for the evaluation report; and (v) distribution of roles and responsibilities related to data collection and analysis and reporting among the Evaluation Team members. The Inception Report will be shared first with the Evaluation Office for review. It will then be shared by the Evaluation Office with the Sub-programme Coordinator, senior management and heads of functional units for comments.

Following field visits, **Preliminary Findings** will be prepared in powerpoint and presented to the Evaluation Reference Group through Skype.

The **Main Evaluation Report** will present synthesised findings from the evaluation. Detailed material arising from any case or country studies will be annexed. It will be relatively brief (no longer than 50 pages – excluding the executive summary and annexes), to the point and written in plain English. It must explain the purpose of the Evaluation, exactly what was evaluated and the methods used (with their limitations). The report will present evidence-based and balanced findings covering all the evaluation criteria, consequent conclusions, lessons and recommendations, which will be cross-referenced to each other. The report should be presented in a way that makes the information accessible and comprehensible.

The draft report shall be submitted to the Director of the Evaluation Office. The Evaluation Office will review the report for clarity and comprehensiveness. When found acceptable, the Director of Evaluation will share the report with the Sub-programme Coordinator and Lead Director, who will review the report and provide feedback on any factual errors. Once these have been addressed, the report will be circulated to Division and Regional Directors, the Strategic Programme and Policy Division, the Office for Operations, senior managers, and key external stakeholders for review and consultation. They may provide feedback on any errors of fact and highlight the significance of such errors in any conclusions. The Evaluation Office will then collate all review comments and provide them to the Evaluation Team for consideration in preparing the final version of the report. The Team will draft a response to any comments that contradict its own findings and could therefore not be accommodated in the final report. This response will be shared by the Evaluation Office with the interested stakeholders to ensure full transparency.

The final report shall be submitted by email to:

Michael Spilsbury, Director
UN Environment Evaluation Office
Email: michael.spilsbury@unep.org

The Sub-programme Coordinator, assisted by the Evaluation Office, will facilitate the preparation of a Recommendations Implementation Plan in consultation with the relevant offices and functional units in UN Environment. The plan should specify the level of priority of the recommendations and actions to be undertaken to implement them. It should also indicate who will be responsible for implementing the recommendations and the schedule for their implementation. The Sub-programme Coordinator will then be responsible for reporting through the Evaluation Office to the Executive Office on the status of implementations of evaluation recommendations on a six-monthly basis, until the latest deadline in the implementation schedule has been reached.

After the Recommendations Implementation Plan has been agreed upon, the final evaluation report will be widely shared with partners and stakeholders. Innovative ways of disseminating evaluation findings and recommendations (e.g. the organization of a workshop where the Team illustrates the content of its analysis to UN Environment target audience) will be sought to reach as wide a range of stakeholders as possible. The final evaluation report will be published on the Evaluation Office web-site www.unep.org/evaluation and may be printed in hard copy.

Consistent with standard Quality Assurance processes, the Evaluation Office will prepare quality assessments of the draft and final reports, which are tools for providing structured feedback to the evaluation consultants. The quality of the draft evaluation report will be assessed by the Evaluation Office and rated against UN Environment criteria.

1.8. Management Arrangements of the Evaluation

The Evaluation will be managed by the Evaluation Office of UN Environment. The Evaluation Manager will provide guidance on the overall evaluation approach and quality assure the evaluation deliverables. (S)he will ensure coordination and liaison with all concerned units and other key agencies and stakeholders. The Evaluation Office will be ultimately responsible for the final evaluation report and for its formal presentation to the UN Environment audience.

The core Evaluation Team will consist of two external Evaluation Consultants and two Evaluation Office staff members, (one of whom will be the Evaluation Manager). The Evaluation Team will be responsible for the development, research, drafting and finalization of the Evaluation, in close consultation with the Evaluation Manager. Additional short-term consultants may be requested to provide specialist inputs. Detailed roles and responsibilities related to data collection and analysis and reporting will be agreed upon within the Team, and specified in the Inception Report and will draw on the list of roles below.

Specific Responsibilities for Team Leader:

The Team Leader will be responsible, in close consultation with the Evaluation Manager, for overall management of the evaluation and timely delivery of its outputs, described above in Section 11 Evaluation Deliverables. Roles will include:

Inception phase of the evaluation, including:

- preliminary desk review and introductory interviews with project staff;
- draft the reconstructed Theory of Change of the project;
- prepare the evaluation framework;
- develop the desk review and interview protocols;
- draft the survey protocols (if relevant);
- develop and present criteria for country and/or site selection for the evaluation mission;
- plan the evaluation schedule;
- prepare the Inception Report, incorporating comments until approved by the Evaluation Manager

Data collection and analysis phase of the evaluation, including:

- conduct further desk review and in-depth interviews with project implementing and executing agencies, project partners and project stakeholders;
- (where appropriate and agreed) conduct an evaluation mission(s) to selected countries, visit the project locations, interview project partners and stakeholders, including a good representation of local communities. Ensure independence of the evaluation and confidentiality of evaluation interviews.
- regularly report back to the Evaluation Manager on progress and inform of any possible problems or issues encountered and;
- keep the Evaluation Manager informed of the evaluation progress and engage the Head of the Resources and Markets Branch and the Resource Efficiency Sub-Programme Coordinator in discussions on emerging findings throughout the evaluation process.

Reporting phase, including:

- draft the Main Evaluation Report, ensuring that the evaluation report is complete, coherent and consistent with the Evaluation Manager guidelines both in substance and style;
- liaise with the Evaluation Manager on comments received and finalize the Main Evaluation Report, ensuring that comments are taken into account until approved by the Evaluation Manager
- prepare a Response to Comments annex for the main report, listing those comments not accepted by the Evaluation Consultant and indicating the reason for the rejection;

Managing relations, including:

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

Specific Responsibilities for the Supporting Consultant:

The Supporting Consultant will carry out the Systematic Review of existing project evaluations from the sub-programme.

The Evaluation Office staff members assigned to the Evaluation Team will bring additional substantive expertise. (S)he may also be tasked with making field visits, carrying out interviews and drafting selected sections of the main report in agreement with the two Evaluation Consultants and the Evaluation Manager.

An Evaluation Reference Group (ERG). The ERG members will provide strategic direction to the evaluation - based on their own experiences and contextual knowledge - and boost buy-in to, and the credibility and legitimacy of, the evaluation process across the range of evaluation stakeholders. The ERG will be composed of: Deputy Division Director and/or Economy Division Director, the Sub-Programme Coordinator, the Head and a representative from the Strategic Programme and Policy Division, a selection of Branch/Unit Heads and up to three representatives from relevant technical institutions.

The Evaluation Consultants will have an in-depth understanding of, and familiarity with, evaluation methods and techniques and documented experience in conducting high-level evaluations of large environment-related organizations and programmes. They will possess excellent writing skills in English. They will combine advanced knowledge and experience in the following fields:

- Resource efficiency (including SCP, GE and consumer information);
- UN policy work and country support and cooperation with the private sector;
- The UN system, in particular UN Environment and partner agencies of the RE sub-programme;
- Programme and project management;
- Partnerships development, including with the private sector and knowledge management.

The Evaluation will be conducted during the period June 2017 – June 2018. The Evaluation Office will present a first draft evaluation report tentatively by the end of March 2018 to the Sub-Programme Coordinator. In May 2018 (tentative date) a completion workshop will be held to discuss evaluation findings and recommendations with key stakeholders. Publication of the final evaluation report is also expected by mid-2018. The report will be discussed with UN Environment's Senior Management Team. The tentative schedule for the Evaluation is presented below. Consultants will be hired within the period 1 June 2017 to 30 June 2018.

All consultant contracts will be individual Special Service Agreements (SSA) on a fee-only basis. Air tickets will be purchased by UN Environment and 75% of the Daily Subsistence Allowance for each authorised travel mission will be paid up front. Local in-country travel will only be reimbursed where agreed in advance with the Evaluation Office and on the production of acceptable receipts. Terminal expenses and residual DSA entitlements (25%) will be paid after mission completion. By signing the service contract with UN Environment/UNON, the consultant(s) certify that they have not been associated with the design and implementation of the project in any way which may jeopardize their independence and impartiality towards project achievements and project partner performance. In addition, they will not have any future interests

(within six months after completion of the contract) with the project's executing or implementing units. All consultants are required to sign the Code of Conduct Agreement Form.

Payment schedule: The Evaluation Consultants will receive 30% of their agreed fee upon completion of the Inception Report; and 40% upon delivery of a draft main report that is deemed complete and of acceptable quality to the EO. The remaining 30% will be paid upon satisfactory completion of the work.

In case the consultants are not able to provide the deliverables in accordance with these TORs, in line with the expected quality standards by the UN Environment Evaluation Office, payment may be withheld at the discretion of the Director of the Evaluation Office until the consultants have improved the deliverables to meet UN Environment's quality standards. The Team Leader will advise the Evaluation Office whether the Supporting Consultant has provided satisfactory inputs in the evaluation.

If the consultants fail to submit satisfactory products in a timely manner, the Evaluation Office reserves the right to employ additional human resources to finalize their products on schedule, and to reduce the consultants' fees by an amount equal to the additional costs borne by the Evaluation Office to bring the report up to standard.

Tentative schedule for the evaluation:

Phase	Milestone/deliverable	Timeframe
Inception	TORs	May 2017
	Consultant contracts	June 2017
	Inception Report	30 September 2017
Data collection & analysis	Further Desk Review	30 October 2017
	Telephone Interviews	30 October 2017
	In-country/regional site visits	30 November 2017
	Surveys	30 November 2017
	Country papers/case studies	31 December 2017
Reporting Phase	Draft report to EO	30 January 2018
	Draft report shared with ERG	28 February 2018
	Draft Report for comment by partners	15 March 2018
	Comments by partners	31 March 2018
	Completion Workshop (Nairobi)	May 2018
	Final Report to EO	30 June 2018
	Milestone/deliverable	Timeframe

Annex 1. Allocation of Roles (draft)

Consultant 1	Consultant 2	Consultant 3 (In-country Consultant)	Consultant 4 (Economist)	UN Environment Evaluation Office
Travel: 2 Europe trips (Geneva/Paris)	Travel: 2 Europe trips (Geneva/Paris)	Travel: Trips to 2 countries	Travel: 1 Europe trip (Geneva/Paris)	Travel: 2 Europe trips (Geneva/Paris) Trips to 2 Regional Offices
<p>Overall task leadership and representation:</p> <p>Leadership and facilitation of a participatory process involving UN Environment staff in the Resource Efficiency sub-programme (co-creation). These staff members are largely based in Geneva and Paris.</p> <p>Integration of all contributions from team members into a coherent and concise document. A structure of the final document will be prepared during the Inception Phase.</p>	<p>Project level performance:</p> <p>A desk-based, systematic review of the findings from 23⁷⁰ project-level evaluation exercises undertaken between January 2010 and June 2017.</p> <p>The analysis will provide aggregated scores against standard evaluation criteria and identify and discuss trends in the factors contributing to particularly high or low performance.</p> <p>It will include as assessment of the sample of project evaluations in terms of how they represent the sub-programme as a whole.</p>	<p>In-country travel to support of any of the following:</p> <ul style="list-style-type: none"> -Exploration of key Theories of Change -Contribution to global change processes -Regional delivery of the sub-programme <p>This travel could be done by another member of the team.</p>	<p>Short-term facilitation and technical inputs at key points in the process.</p>	<p>Contribution to higher level results:</p> <p>The methods used to aggregate project level achievements and compile results presented in the Programme Performance Report will be explored.</p> <p>This analysis aims to also identify areas of work that would be suited to deeper impact evaluation in the longer term.</p>
<p>Exploration of key Theories of Change:</p> <p>Theories of Change (TOC) will be reconstructed around the three main results areas⁷¹ in order to explore how</p>				<p>Regional delivery of the sub-programme:</p> <p>Two case studies of how the sub-programme is</p>

⁷⁰ These include: 9 completed Terminal Evaluations, 2 Terminal Evaluations due to complete before June 2017, 7 substantive case studies with their own ratings tables, 1 Mid-Term Evaluation, 2 Terminal Reviews and 2 Mid-Term Reviews.

⁷¹ The three theories of change will be reconstructed at the level of sub-programme results that has the greatest potential explanatory power (e.g. results statements in a selected Programme Performance Report; Expected Accomplishments in a selected Programme of Work etc). The appropriate level will be agreed with the Sub-Programme Coordinator and Head of the Strategic Programme and Policy Division.

<p>projects are expected to have a collective or aggregated effect at the level Programme of Work results (Expected Accomplishments). A TOC for the whole sub-programme currently exists.</p> <p>A specific question is how the sustainable consumption and production and green economy streams of work can be delivered in an integrated or complementary way. This analysis could look at transition models, circular economies, complex systems and/or consider how the comparative advantage of new approaches is established etc.</p> <p>Projects that are recognised as key drivers to these causal pathways will be identified and used to provide case studies of the strength of the TOCs. (Unless we decide a country visit is necessary, this will be done using existing project evaluations and project TOCs where available, supplemented with Skype interviews with key respondents).</p>				<p>articulated and delivered at a regional level (one on sustainable consumption and production and one on green economy).</p>
<p>Contribution to global change processes:</p> <p>Influence analysis aiming to explore (and demonstrate) the claim of a credible association between UN Environment's Resource Efficiency work and the G7 and G20 agendas and actions. This may include the roles played by various UN Environment platforms and secretariats that are hosted by the sub-programme.</p>				

ANNEX X: People Interviewed

EVALUATION REFERENCE GROUP:	
Mark Halle	
Alica Kaudia	Kenya
S Vijay Kumar	India
Oyun Sanjaasuren	Mongolia
UN ENVIRONMENT STAFF	
Economy Division:	
Ligia Noronha	Director, Economy Division
Tim Kasten	Deputy Director, Economy Division
Steven Stone	Head of Branch, Resources and Markets
Dirk Wagener	Resource Efficiency Sub-Programme Coordinator
Resources and Markets Branch	
Charles Arden-Clarke	Head, 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns
Peder Jensen	Head, International Resource Panel
Llorenc Milas I Canals	Life-Cycle Initiative
Anja von Moltke	Head, Environment and Trade Unit
Asad Naqvi	Acting Head, Partnership for Action on Green Economy
Fulai Sheng	Economic and Fiscal Policy Unit
Ben Simmons	Head, Green Growth Knowledge Platform
Elisa Tonda	Head, Consumption and Production Unit
Sandra Averous-Monnelly	Consumption and Production Unit
Garrette Clark	Consumption and Production Unit
Sharon Gil	Cities Unit
Kim Joy	Economic and Fiscal Policy Unit
Luc Reuter	SWITCH Projects
Helena Rey	Consumption and Production Unit
Janet Salem	SWITCH Projects
Vera Weick	Partnership for Action on Green Economy
Yuki Yasui	Finance Initiative
Energy and Climate Branch	
Martina Otto	Head, Cities Unit, Energy and Climate Branch
James Lomax	Sustainable Food Systems, Cities Unit
Regional Office for Europe:	
Jan Dusik	Regional Director
Sylvie Motard	Deputy Regional Director
Rie Tsutsumi	Regional Sub-Programme Coordinator, Resource Efficiency
Regional Office for Africa:	
Frank Turytanga	Deputy Director
Patrick Mwesigye	Regional Sub-Programme Coordinator, Resource Efficiency
Rhoda Wachira	SWITCH Africa Green
Regional Office for Asia and the Pacific:	
Dechin Tsering	Regional Director
Isabelle Louis	Deputy Regional Director
Mushtaq Memon	Regional Sub-Programme Coordinator, Resource Efficiency

Satwant Kaur	Regional Information Officer
Wyn Ellis	Coordinator, Sustainable Rice Platform
Lea Las Pinas	Communicaitons and Member Liaison Officer
Mohamed Elhariti	Fund Management Officer
Regional Office for Latin America and the Caribbean:	
Leo Heileman	Regional Director
Adriana Zacarias	Regional Sub-Programme Coordinator, Resource Efficiency
Vincent Sweeney	Head, Caribbean Sub-Regional Office
Alexandra Karekaho	Caribbean Sub-Regional Office
Regina Cavini	Brazil Country Office
Camila Cavallari	Brazil Country Office
UN Environment Staff Members of other Departments:	
Monika MacDevette	Acting Director, Ecosystems Division
Rob de Jong	Head, Transport Unit, Ecosystems Division
Sheila Aggarwal Kahn	Chief, Programme Coordination, Policy and Programme Division
Oli Brown	Sub-Programme Coordinator, Disasters and Conflict
Tessa Goverse	Sub-Programme Coordinator, Environment Under Review
Niklas Hagelberg	Sub-Programme Coordinator, Ecosystems Management
Maria Zuniga	Quality Assurance Services
Sari Sherman	Monitoring Officer
Elisa Calcaterra	Strategy Analyst
Clarice Wilson	Senior Programme Officer, Policy Unit
Dan Cooney	Head, Communications
Samantha Le Royal	Communications Division
Lowrie Rees	SDG Unit
Julian Blanc	Project Manager
Moses Tefula	Director, Information, Communication and Technology Services
Siaful Ridwan	Information, Communication and Technology Services
Yuko Ikuta	Fund Management Officer
Fuaad Alkizim	Fund Management Officer
Ardeshir Zamani	Fund Management Officer
EXTERNAL RESPONDENTS:	
Achim Steiner	Executive Director, UNDP (former Executive Director, UN Environment)
Joel Hansen	Committee of Permanent Representatives Member, USA
Sebastian Gill	Committee of Permanent Representatives Member, Europe
Representatives from the Permanent Mission of the People's Republic of China to the UN Environment Programme	Committee of Permanent Representatives Member, China
Guri Sandberg	Committee of Permanent Representatives Member, Norway
Webster Chiyngwa	Committee of Permanent Representatives Member, Zimbabwe
Ruth Kitonyi	Committee of Permanent Representatives Member, Kenya

Stephen Sicars	UNIDO
Hugo-Maria Schally	European Commission representative
Thibaut Portevin	European Commission representative
Patrick Breard	Independent Evaluator of Green Growth Knowledge Platform project
Andy Rowe	Independent Evaluator of International Resource Panel project

ANNEX XI: Documents Reviewed

Documents
01. Terms Of Reference for the Resource Efficiency Sub-Programme Evaluation, version 19-10-2017 (see Annex IX) 01a. Summary Table of Deliverables.
02. UN Environment Evaluation Office (2017). - Evolution of UN Environment's Strategy Towards Resource Efficiency (Programme of Works 2010-2017). - Overview of strategic planning for Resource Efficiency (2010-2016). - Summary of Resource Efficiency projects 2010-2016 - Overview of Resource Efficiency Sub-Programme Strategic Partnerships for the Period 2010-2016 - From Budget lines to sub-projects for Programme Of Work 61-P3 - Relation of sub-projects to Programme Of Work projects in the case of Programme Of Work project 633.1 - Annexed material to TOR for Resource Efficiency Sub-Programme evaluation.
03. Resource Efficiency Sub-Programme Evaluation. Inception report for analysis of project level performance. Draft 3, 6 September 2017. Dick van Beers.
04. Resource Efficiency Sub-Programme Evaluation. Analysis of Project level Performance: Preliminary Findings and Observations. Version 3 October 2017. Dick van Beers. Powerpoint version.
05. UNEP Evaluation Office (2016). Evaluation synthesis report 2014-2015.
06. Audit of Resource Efficiency Sub-Programme. Internal Audit Division UN Environment, report 2016/130 (2016)
07. Strengthening UNEP Strategic Regional Presence. UNEP Policy Paper (2015)
08. Evaluation Report of EU International Cooperation on SCP. Final Draft Report August 2017. With Annexes.
09. Organigram Economy Division Un Environment, version April 2017.
10. List of Contact Persons for Resource Efficiency Sub-Programme Evaluation
11. Note on "Building RE and Circularity into tomorrow's economies: Scaling up impact to deliver on the SDGs. Internal Note - Resources and Markets Branch UN Environment, version October 2017.
12. Mid-term Evaluation of UNEP Medium-Term Strategy 2010-2013. Evaluation Office (2013)
13. UNEP Medium-Term Strategy 2014-2017
14. Formative Evaluation of UNEP Medium-Term Strategy 2014-2017. Evaluation Office (2015)
15. Un Environment Medium-Term Strategy 2018-2021
16. UN Environment Proposed Programme of Work and Budget 2010-2011
17. UN Environment Proposed Programme of Work and Budget 2012-2013
18. UN Environment Proposed Programme of Work and Budget 2014-2015
19. UN Environment Proposed Programme of Work and Budget 2016-2017
20. UN Environment Proposed Programme of Work and Budget 2018 - 2019
21. Programme Framework for Resource Efficiency Sub-Programme 2010-2013
22. Programme Framework for Resource Efficiency Sub-Programme 2014-2017
23. Programme Framework for Resource Efficiency Sub-Programme 2018-2021
24. Review of the Sub-Programme Coordination Function of UN Environment. Final Review report, February 2017. Evaluation Office.
25. Resource Efficiency Sub-Programme Expected Accomplishment Performance Measurement Framework 2016-2017, with indicator tracking
26. Inception Report UN Environment Resource Efficiency Sub-Programme Sub-Programme Evaluation. M. Crul, November 2017
27. Environmental Statistics and Accounting 2018-2030: Vision – Programme – Partnership. L. Coppens, Data and Information Unit Un Environment, December 2017 (PPT)
28. Metadata SDG 12.1.1. 10YFP UN Environment, 2017.
29. Roadmap for a Sustainable Financial System. Executive Summary. (UN Environment Inquiry). November 2017.
30. Resource Efficiency: Potential and Economic Implications. Summary for Policy Makers. International Resource Panel, 2016. Ekins, P, Hughes N. et al.
31. Towards a Green Economy – Pathways to Sustainable Development and Poverty Eradication. A Synthesis for Policy Makers. UNEP 2011.
32. Geels, F. (2002), Technological transitions as evolutionary reconfiguration processes: a multi-level perspective and a case-study, Research Policy, Volume 31, Issues 8–9
33. Joore, JP, Brezet JC (2015), A Multilevel Design Model – The Mutual Relationship between Product-Service System Development and Societal Change Processes, Journal of Cleaner Production, Volume 97, 15 June 2015, Pages 92-105

Documents
34. Rotmans, J and D. Loorbach. (2009), Complexity and Transition Management. Journal of Industrial Ecology, Volume 13, Issue 2.
35. M. Crul and P. Joore. Summary Report Workshop Transition Management UN Environment Resource Efficiency Sub-Programme. Geneva, February 6 2018. NHL Stenden University of Applied Sciences.
36. Evaluation of EU International Cooperation on Sustainable Consumption and Production. Europe Aid/137211/DH/SER/Multi Lot 1. Final Report (Main Report plus Annexes). R. Zavatta. April 2018. European Commission, DG DEVCO.
37. Independent terminal evaluation. Joint UNIDO-UNEP Resource Efficient and Cleaner Production (RECP) Programme for developing and transition countries (UE/GLO/11/035 - 100050). February 2018. A. Zazueta, M. Crul and J.R. Jones. UNIDO Vienna.
38. Principles for the Development of Integrated Transformational Projects in Climate Change and Chemicals & Waste. A Report Prepared for the Scientific and Technical Advisory Panel of the Global Environment Facility. Washington D.C., USA Aaron E. Zazueta. October, 2017.
Project Evaluation reports Resource Efficiency Sub-Programme
1. Hofstede R. (2017). Terminal Evaluation of UNEP project: "Policy, macro-economic assessments and instruments to empower governments and business to advance resource efficiency and move towards a Green Economy" (61-P3). UNEP Evaluation Office. Final report January 2017.
2. Hofstede R. (2017). Terminal Evaluation of UNEP project: "Policy, macro-economic assessments and instruments to empower governments and business to advance resource efficiency and move towards a Green Economy" (61-P3). Annex 4, Evaluation of the Sub-project: "Advancing Caribbean States' Sustainable Development Agenda through Green Economy (ACSSD-GE)". August 2016.
3. Hofstede R. (2017). Terminal Evaluation of UNEP project: "Policy, macro-economic assessments and instruments to empower governments and business to advance resource efficiency and move towards a Green Economy" (61-P3). Annex 5, Evaluation of the Sub-Project: "Green Economy and Social and Environmental Entrepreneurship Development in Africa" (GE Africa). August 2016.
4. Hofstede R. (2017). Terminal Evaluation of UNEP project: "Policy, macro-economic assessments and instruments to empower governments and business to advance resource efficiency and move towards a Green Economy" (61-P3). Annex 7, Evaluation of the Sub-project: Supporting a Green Economy Transition in Developing Countries and LDCs: Building Towards Rio+20 and Beyond / Green Economy Joint Programme (GEJP). August 2016.
5. Hofstede R. (2017). Terminal Evaluation of UNEP project: "Policy, macro-economic assessments and instruments to empower governments and business to advance resource efficiency and move towards a Green Economy" (61-P3). Annex 2, Evaluation of the Sub Project: "Green Economy and Trade Opportunities Project, Phases I & II" (GE-TOP). August 2016.
6. Hofstede R. (2017). Terminal Evaluation of UNEP project: "Policy, macro-economic assessments and instruments to empower governments and business to advance resource efficiency and move towards a Green Economy" (61-P3). Annex 6, Evaluation of the Sub Project: Enhancing Low-Carbon Development (LCD) by greening the economy: Policy dialogue, advisory services, tracking progress (GIZ). August 2016.
7. Hofstede R. (2017). Terminal Evaluation of UNEP project: "Policy, macro-economic assessments and instruments to empower governments and business to advance resource efficiency and move towards a Green Economy" (61-P3). Annex 3, Evaluation of the Sub Project: Measuring a green economy transformation. August 2016.
8. Hofstede R. (2017). Terminal Evaluation of UNEP project: "Policy, macro-economic assessments and instruments to empower governments and business to advance resource efficiency and move towards a Green Economy" (61-P3). Annex 8, Evaluation of the Sub-Project: Enhancing South-South Cooperation – Building the Capacity of Developing Countries to Promote Green Economies (Multiple Pathways). August 2016.
9. De Goys M., Lederer S. (2017). Terminal Evaluation of the UN Environment Project: Global Platform for Action on Sustainable Consumption and Production (SCP): Supporting the Implementation of the 10 Year Framework of Programmes on SCP (10YFP). UNEP Evaluation Office. Final draft report March 2017.
10. Breard P. (2017). Evaluation of the UN Environment project: "Green Growth Knowledge Platform". UNEP Evaluation Office. Second draft report July 2017.
11. Miller J. (2017). Terminal Evaluation of the UN Environment Project "Resource Efficiency and Eco-Innovation in Developing and Transition Economies". UNEP Evaluation Office. Draft report July 2017.
12. Van Beers D., Rowe A. (2017). Terminal Evaluation of UNEP Project: "SWITCH to Sustainable Policies and Innovation for Resource Efficiency in Asia - Regional Policy Support Component" (SWITCH Asia RPSC). UNEP Evaluation Office. Final report January 2017.
13. Bann C. (2017). Mid-term Evaluation (MTE) of the UN Environment-ILO-UNDP-UNIDO-UNITAR project 'Partnership for Action on Green Economy (PAGE). UNEP Evaluation Office. Final report April 2017.
14. Long A.D., Siddy D. (2016). Evaluation of the UNEP Finance Initiative (UNEP FI). UNEP Evaluation Office. Final report June 2016.
15. Rowe A., Toikka S. (2016). Terminal Evaluation of the UNEP Project: "Science policy interface in support of Resource Efficiency" (PIMS 00684). UNEP Evaluation Office. Final report November 2016.

Documents
16. De Rosa E. (2016). Review of the SUSHI II project. Final review report.
17. Miller J. (2016). Report on strategic evaluation of UNEP/SETAC Life Cycle Initiative. Working draft document September 2016.
18. Dionísio de Souza M. (2016). Mid-term Evaluation of the Project "Sustainable Consumption and Production in Brazil". UNEP Evaluation Office. Final report December 2016.
19. Radnaaragchaa S. (2015). Terminal Review of the Project "Sustainable Energy Planning in Eastern Europe and South Caucasus – towards the Covenant of Mayors – Moldova, Ukraine and Azerbaijan". Main review report. UNEP Evaluation Office. Final report December 2015.
20. Russillo A. (2012). Terminal Evaluation of UNEP Project: Enabling developing countries to seize eco-label opportunities - Capacity building and technical assistance for industries and governments in developing economies. UNEP Evaluation Office. Final report April 2012.
21. Bjerre J. (2012). Terminal Evaluation of the UNEP and UNDP project Improving Wastewater Management in Coastal Cities in ACP Countries. UNEP Evaluation Office. Final report May 2012.
22. Mazijn B. (2011). Terminal Evaluation of UNEP Project CP/4020-06-06 (3985). Within the Context of the International Panel for Sustainable Resource Management-Initiative (Period 2006-2009). UNEP Evaluation Office. Final report January 2011.
23. Coad A, Niggebrugge J. (2010). Terminal Evaluation of the UNEP project "Demonstrating Application of Environmentally Sound Technologies (ESTs) for Building Waste Reduction in Indonesia (DEBRI)". UNEP Evaluation Office. Final report November 2010.
24. Schelleman F. (2010). Terminal evaluation of the UNEP project: Supporting the 10 Year Framework Program for Africa on Sustainable Consumption and Production, 2007-2008. UNEP Evaluation Office. Final report June 2010.
25. Terminal evaluation of SWITCH Africa Green
26. Terminal evaluation of Sub Project Switch Med

ANNEX XII: Comments from Respondents (only partially resolved within the main body of this report)

Comment Received	Evaluation Team Response	Evaluation Office Response
<p>On regional aspects: local partnerships between countries and regional offices have not proven particularly useful, and are unlikely to be able to deliver beyond a point. It may be possible to also identify one or two countries where the Resource Efficiency Sub-Programme can substantially benefit from direct engagement with the country's policy makers, particularly in the context of transition management and disruptive change. Country offices here may be adequately resourced (perhaps in partnership) for proof-of-concept pilot projects etc.</p>	<p>Incorporated as a single source – para. 198.</p>	<p>Address in revisions to the Regional Aspects section.</p>
<p>On regional aspects: we do not see the same level of effectiveness in Resource Efficiency programmes managed by regional offices as in programmes managed by the Economy Division. Differences have been striking in a few cases.</p>	<p>Are we able to triangulate this with other evidence from this evaluation? Otherwise should we reflect it as a single source view?</p> <p>Addition made in para 16</p>	<p>This does triangulate with other evidence - make a qualified addition to the text.</p>
<p>Remark on UN Environment being politically independent (para 9) Except at the moment the Sub-Programme hosts the most “politically sensitive” and contested initiative, i.e. the greening of the Belt and Road – which recently led to suggestions that UN Environment is taking a political stance by supporting the efforts of one country to impose economic dominance over others.</p>	<p>We do not think with this project UN Environment ‘supports’ the efforts of China towards dominance. It fits into the overall objectives of Resource Efficiency and Sustainable Consumption and Production, and is an important, though not uncontested economic initiative.</p>	<p>No revision to text required.</p>
<p>Remark on double counting (para 173): This is possible and it was done in UN REDD, EA SP1, by means of changing the indicator and the baseline, what is not possible is to count the same country twice under the same indicator if it, for example, has two projects on the same topic</p>	<p>Text to be checked</p>	<p>Edit the phrase to include ‘against the same indicator’ (para 174).</p>
<p>On para 24: “The results (i.e. Expected Accomplishments) are largely formulated at an output level and their indicators are, necessarily, ‘counts’ of deliverables.”</p> <p>“I still disagree with this statement. When we for example count/measure the countries that have adopted and started</p>	<p>The evaluation team recognizes the strengthening of the reporting methodology from 2015 onwards and acknowledges this effort in the footnotes. “Under Expected Accomplishment a i) four states of</p>	<p>To be checked and examples given.</p> <p>Reword bullet point to be more specific.</p>

<p>implementing green economy policies, we are clearly talking about an outcome. Same for a number of other indicators, e.g. businesses adopting sustainable management practices.</p> <p>This statement is factually not correct taking the definition of outputs and outcomes into account.</p>	<p>change are outlined and the fourth step 'initiated related policy implementation' attempts to record change at an outcome level."</p> <p>However, EA a ii) indicator is 'number of references' EA b i) examples of 'policy in progress' include: signing a common statement and forming a national alliance (Dec 2016) EA c i) issuing (7) National Action Plans, guidelines and sustainability criteria. Chile does have documentary evidence of 'results of a workshop' EA c ii) examples of 'projects initiated by stakeholders' include conferences and workshops, several of which are managed by external parties e.g. UNICEF, UNDP, OECD, SIDA and UNESCO. (2017)</p>	
<p>The report does not mention that the SPC function is completely under supported. Huge expectations and workload but there is no support for the role. One G staff member is supporting with basic administrative tasks and a shared UNV post is currently being followed.</p>	<p>Can we triangulate this with other evidence from the evaluation?</p>	<p>Reference to the findings of the Sub-Programme Coordination Function Review, February 2017, has been included in para 45.</p>
<p>Umoja should not adjust to donors, but donors should harmonize their requirements to reduce unnecessary transaction cost. If you look into the world of aid effectiveness a completely different approach is taken by the entire world for the past 15 years (since the Paris declaration on aid effectiveness); donors are asked to harmonize to reduce transaction cost. Why can't donors accept harmonized reporting formats? They are forced to do so at country level and I have seen in practice in 4 different countries how well this works.</p>	<p>Any recommendation about donor behaviour would be limited to the role UN Environment can play in encouraging donors otherwise there would be no compliance element.</p>	<p>Recommendation 6.1 has been qualified.</p>

<p>On Donor vs. PoW projects: related to previous bullets. There is one 'outlier' in the portfolio that actually demonstrates how well a harmonized approach can work: PAGE. One ProDoc, 5 UN Agencies, more than 10 donors, one report, one funding mechanism (MPTFO). This is the most successful project in the portfolio and donors call us and make huge contributions – without us even asking for them. EC recently mailed and said they would add another EUR 10 and the Swedes also want to make similar contribution, over and above very solid contributions already received. So why is the rest of the house focusing on relatively small grants and contributions that come with huge transaction costs and then want Umoja to honor the reporting templates from 50 different donors?</p>	<p>While the point is acknowledged we note that there may be other reasons why the Partnership Action for Green Economy is able to attract and influence donors (e.g. due to the success of Circular Economy approach).</p>	<p>A portfolio of projects is typically varied and certain delivery mechanisms suit different initiatives and attract different funding sources etc.</p>
<p>Outlook on indicators / reference to SDG indicators; for example, Science Division is working with UN Habitat under the Greener Cities Partnership on methodologies under 11 and 12, which both deal with waste.</p>		<p>Confirmed, Greener Cities Partnership mentioned on page 56 and UN habitat mentioned in the SDG table, indicators 12.4.2 and 12.5.1 (refers to 11.6.1).</p>
<p>On Recommendation 1.1: disruptive innovation approaches in the area of sustainable consumption and lifestyles – can we be specific on the next breakthrough areas?</p>	<p>Yes the evaluation team can provide ideas, but the data and analysis were not within the framework of this evaluation. Upcoming breakthrough areas with large sustainability impacts would typically be:</p> <ul style="list-style-type: none"> - circular products (plastics and others) - sustainable energy products and (related) transportation systems and products - artificial intelligence in products and systems - health products and systems - and <u>perhaps</u> transitions in food products away from animal products. 	<p>As the question was not addressed in the evaluation framework, the evaluation team will provide direct feedback to the respondent. The comment can remain in this table.</p>

<p>On Recommendations 3.1, 3.2 and 4.1</p> <p>3.1 more emphasis on consumption) Isn't this putting the cart before the horse? We don't yet know the main causal pathways. Don't get me wrong, I am a big fan of the consumption and lifestyles work but we should determine priorities for funding based on the causal pathways not based on an external evaluation which is retrospective and a reflection of today's reality rather than the future.</p> <p>3.2. (disruptive action on consumption) Again, I find this is overly prescriptive and focused on one potential pathway at this stage in time. We should allow the process of defining the causal pathways determine the priorities.</p> <p>4.1. (New topics) Same comments as above – overly prescriptive at this stage in time. We do not yet know what the potential new focus areas should be .</p>	<p>We disagree. The recommendation is indeed based on this retrospective evaluation but it is also a triangulated finding, confirmed for instance in Recommendation 5 of the the EC "Evaluation of EU International cooperation on Sustainable Consumption and Production" (Europe Aid / 137211 / DH / SER / Multilot 1 – April 2018). Also, it is already in the causal pathways which are established for the coming period 2018-2021</p>	<p>Include reference to the EC evaluation.</p>
<p>Recommendations 5.1 and 9.1 could be merged since they overlap</p>	<p>True, but recommendation 5 comes from the findings on results and asks for embedding results within a stronger integrated narrative, while recommendation 9 comes from organization & management asking for integration between projects. We have also (in response to a comment) added reference to circularity as a focus for new projects in recommendation 9. We propose to keep them apart.</p>	<p>Agreed – we'll keep the recommendations apart in the Evaluation Report and during the completion of the Recommendation Implementation Plan we can combine them at the activity level. Let's ensure that the same people are responsible for recommendations 5 and 9.</p>

ANNEX XIII: Acronyms Used in this Evaluation

10YFP	10 Year Framework of Programmes on Sustainable Consumption and Production Patterns (One Planet Network)
EC	European Commission
EA	Expected Accomplishment
GE	Green Economy
M&E	Monitoring and Evaluation
MTE	Mid Term Evaluation
MTR	Mid Term Review
MTS	Medium Term Strategy
NGO	Non-Governmental Organisation
PAGE	Partnership for Action on Green Economy
PIMS	Project Information Management System
POW	Programme of Work
PRC	Project Review Committee (reviews project design documents and makes recommendations for clarification or strengthening)
ProDoc	Project Document (project design document submitted to the UN Environment Project Review Committee for review and approved by the managing division director before any project can be undertaken)
RE	Resource Efficiency
SCP	Sustainable Consumption and Production
SDG	Sustainable Development Goal
SME	Small and Medium Enterprise
SP	Sustainable Production
TE	Terminal Evaluation
TOC	Theory of Change
ToR	Terms of Reference
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organisation
UNODC	United Nations Office on Drugs and Crime

ANNEX XIV: Evaluation Consultants Short Biographies

Dr Marcel Crul, Associate Professor at NHL University of Applied Science

2003 PhD in Design Engineering, Delft University of Technology, The Netherlands
1983 MSc in Ecology, Radboud University, Nijmegen, The Netherlands
1983 MSc level certificate, Communication sciences, University Wageningen, Netherlands

Assoc. Prof. dr. Marcel Crul is currently working on Circular Design and Circular Plastics topics at NHL Stenden University of Applied Sciences, The Netherlands. He has over 30 year of experience in multi- and interdisciplinary societal, research and technological projects and programmes in the area of circular design, social innovation, climate innovation, sustainable production and consumption, circular business development, RECP, sustainable energy, and in general sustainability, environmental and societal research projects. He has acted as (lead) expert for UN Environment, UNIDO, Worldbank and EU, as expert and evaluator for climate innovation, RECP, Ecodesign, CSR and sustainable/eco innovation programmes and projects.

Dr Dick Van Beers, Independent and International Sustainability Engineer

2009 PhD in Resources and Environment, Curtin University of Technology, Perth, Western Australia
2000 MSc in Applied Science, University of Cape Town, Cape Town, South Africa
1998 BSc in Industrial Engineering, University of Professional Education, Tilbury, The Netherlands

Dick van Beers has 20 years international work and applied research experience in various sectors, including manufacturing, resource processing, waste processing, government. He is passionate about working with companies, government agencies, and development organisations to improve their economic, environmental, societal performance and scale up their innovations. Dick's work experience covers Africa (e.g. South Africa, Ghana, Kenya), Asia (e.g. Thailand, Vietnam, India, China), Europe (e.g. Germany, Georgia, Moldova, Belarus, Austria), Americas (e.g. USA, Peru, Colombia) and Australia. His areas of expertise include sustainable production and resource efficiency, eco-industrial parks, circular economy and industrial ecology, business models for sustainability and eco-innovation, independent evaluations and project management.

Dr Derek Eaton, Senior Consultant and Economist, Technopolis Group

2013 PhD Economics, Wageningen School of Social Sciences, Wageningen University, The Netherlands
1993 MSc Environmental & Resource Economics, University College London (University of London), UK
1990 Graduate Diploma, International Development & Cooperation, University of Ottawa, Canada
1989 BSc Economics (Quantitative Methods), Minor in Political Science, University of Toronto, Canada,

Derek Eaton is a senior consultant and economist with Technopolis Group, focusing on strategy and evaluation, with a particular expertise in green economy and green growth. He has played a leading role in the development of the international agenda on these topics with the UN and the Green Growth Knowledge Platform, overseeing and contributing to the production of flagship publications and also contributing to advisory services with governments in both policy formulation and evaluation. He has provided strategic advice, including the formulation of results frameworks, on the integration of natural capital and nature-based solutions to a multi-stakeholder initiative coordinated by the Green Economy Coalition with participation of international organizations, business and civil society. A considerable portion of this experience has concentrated on analysing conditions for innovation and economic development in the regions of Sub-Saharan Africa, South and Southeast Asia and China. Derek was the lead economist in a study for the World Bank on the impacts of intellectual property rights in the agricultural sector, and has received special recognition for research on incorporating sustainability concerns into international trade regimes. Aside from a range of national governments, other clients have included the FAO, UNECE, South Pole Group, Oxfam, WWF International, and the World Business Council for Sustainable Development.