United Nations Environment Programme

# Terminal Evaluation of the project GFL-2328-2720-4B17 Reducing the Carbon Footprint of Major Sporting Events, FIFA 2010 and the Green Goal

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## ACRONYNS

| | |
|---|---|
| CC | Climate Change |
| CO2 | Carbon Dioxide |
| CoTMM | City of Tshwane Metropolitan Municipality |
| CoJMM | City of Johannesburg Metropolitan Municipality |
| CTMM | Cape Town Metropolitan Municipality |
| DEA | Department of Environmental Affairs |
| DEAT | Department of Environmental Affairs and Tourism |
| IEIA | Independent Environmental Impact Assessment |
| FIFA | Fédération Internationale de Football Association |
| GEF | Global Environment Facility |
| GHG | Greenhouse Gas |
| IDP | Integrated Development Plan |
| LOC | Local Organising Committee |
| MMM | Mangaung Metropolitan Municipality |
| MTS | Medium Term Strategy |
| NMMM | Nelson Mandela Metropolitan Municipality |
| PIR | Project Implementation Review |
| PLM | Polokwane Local Municipality |
| ROtI | Review of Outcomes to Impacts |
| RLM | Rustenburg Local Municipality |
| RToC | Reconstructed Theory of Change |
| tCO2 | Tonnes Carbon Dioxide |
| tCO2e | Tonnes Carbon Dioxide equivalent |
| UNEP | United Nations Environment Programme |
| WSSD | World Summit on Sustainable Development |

## PROJECT IDENTIFICATION TABLE

| | | | |
|---|---|---|---|
| **Project Title:** | Reducing the Carbon Footprint of Major Sporting Events, FIFA 2010 and the Green Goal | | |
| **Project Type:** | MSP | | |
| **Project Numbers** (GEF, IMIS and PMS) | GEF: 3948<br>IMIS: GFL-2328-2720-4B17<br>PMS: GF/7030-10-01DA/9999-06-02 | | |
| **Focal Area(s):** | Climate Change | | |
| **GEF Strategic Priority/Objective:** | GEF-4 Strategic Objective 1, which seeks to promote the energy efficient technologies and practices in the residential and commercial buildings | | |
| **GEF and UNEP approval date:** | 26 August 2009 | **Planned Duration:** | 09 months, extended to 14 months |
| **Commencement Date:** | 15 December 2009 | **Actual or Expected Completion Date** | 03 March 2011 |
| **Geographical Scope** | South Africa | **Project Executing Agency:** | Department of Environment Affairs, South Africa |
| **GEF Allocation:** | US$ 1,000,000 | **Expected MSP/FSP Co-financing*:** | US$ 8,613,411 |
| **Total Cost:** | US$ 9,613,411 | | |

# EXECUTIVE SUMMARY

## INTRODUCTION

1 The overall development goal of "Reducing the Carbon Footprint of Major Sporting Events, FIFA 2010 and the Green Goal" project is to showcase best practice carbon offset energy efficient projects in order to promote and build awareness of renewable energy and its application on eco-friendly technologies and increase its use globally. In so doing the project's main objective is to use the 2010 FIFA World Cup in South Africa to demonstrate to the decision-makers and the general public the importance of low carbon technologies at major sporting events.

2 The project had three stated outcomes, corresponding with its three components, namely:

- **Component 1:** Demonstration of green technologies, including solar technology by the end of the 2010 FIFA World Cup;
- **Component 2:** Raise awareness of visitors to the 2010 FIFA World Cup and the hospitality sector of the benefits of greening major sports events;
- **Component 3:** Evaluation and dissemination of lessons learnt from 2010 FIFA World Cup for greening future major sports events.

## RESULTS OF THE EVALUATION

### Achievement of Outputs and Activities

3 The outputs and activities associated with Component 1 were largely achieved but there were challenges associated with security and retro-fitting the billboards and timing. The Green Passport related activities associated with Component 2 were completed as was the programme aimed at informing hospitality establishments of the benefits of implemented measures aimed at reducing their carbon foot print. An Independent Environmental Impact Assessment (IEIA) was undertaken as part of Component 3 by Richard Mokua (2011). The Assessment forms the basis for the South Africa 2010 Report produced by UNEP in 2012[1]. The Mokua Report was disseminated to relevant stakeholders, including representatives from the Host Cities. However, the project design did not provide for the results to be actively disseminated through workshops or other means, or discussed with the Host Cities.

### Relevance

4 The project was aligned with a number of key national policies and strategies that address energy efficiency and climate change and sustainable development in South Africa. In addition, the project was aligned with the host city municipality Greening plans, DEA's National Greening 2010 Framework and the Guidelines for Greening of Large Sport Events with an emphasis on the FIFA World Cup, and the LOC 2010 FIFA Green Goal programme. The project was also relevant

[1] Richard Mokua was the author of the South Africa 2010 Report published by UNEP in 2012. The National Legacy Report for the Greening of the 2010 FIFA World Cup was prepared by the South African Department of Environment Affairs. Much of the information contained in the two reports is similar. However, the Terminal Evaluation is based predominantly on the findings contained in the UNEP 2012 Report.

to and consistent with sub-regional environmental issues and needs and a number of UNEP and GEF policies, focal areas and strategic priorities. These include the Bali Strategic Plan, UNEP's Mid-term Strategy 2010-2013 and GEF-4 and 5.

**Effectiveness**

5 The activities and output targets as set out in the logframe associated with Component 1 were largely achieved. However, the effectiveness of the project in moving towards raising the awareness of low carbon technologies amongst local authorities, event organizers and the general public was limited by the relatively small scale of the project, lack of involvement of key departments in some of the host cities (such as the Electrical and Financial Departments), lack of commitment from the South African Football Association (SAFA) and the Local Organising Committee (LOC) to greening initiatives and the project, and cost and technological barriers. The project also lacked the support of and buy-in from the event hosts, namely FIFA.

6 Although 100 000 copies of the Green Passport were distributed this did not translate into raised awareness of visitors to the benefits associated with greening large sports events as confirmed by the findings of a visitor survey conducted by DEA, which found that the majority of respondents were not aware of the FIFA Green Goal, the Green Passport Programme, and or other greening programmes linked to the 2010 World Cup. However, the survey did find that the majority of respondents agreed with statements that the 2010 World Cup would result in environmental impacts, such as higher energy and water consumption. The Green Passport documents also contained limited information as to how visitors could make environmentally responsible holiday choices. In addition, the logframe does not identify indicators to assess if this initiative enabled visitors to make environmentally responsible holiday choices.

7 A total of 62 hospitality establishments implemented measures to reduce their carbon foot print during the tournament. The output indicator target (60) for the involvement of the hospitality sector was therefore met.

8 For Component 3, an Independent Environmental Impact Assessment of the Green Goal Project was undertaken[2]. However, there was limited follow up by UNEP and DEA after the closure of the 2010 World Cup in July 2010, and no provision in the project design or budget was allocated to ensure that the lessons learnt from the 2010 World Cup were taken forward and used to inform the planning, design and implementation of future sports events in South Africa and the host cities involved in the study. According to DEA, some lessons learnt from the 2010 World Cup were, however, used to inform the greening of the INFCCC COP 17 MOP7 held in Durban, South Africa in December 2011.

9 The section on Lessons Learnt (Section 14.1) of the South Africa 2010 Report (UNEP, 2012), indicates that "Environmental Guidelines should be clear and legally binding. Specific benchmarks must be non-negotiable, measurable and backed by law". The majority of Minimum Environmental Standards for Green Goal 2010 contained in the South Africa 2010 Report (UNEP, 2012) do not provide sufficient detail to effectively inform the planning, design and

[2] Mokua, R.L, 2011. Independent Environmental Assessment, FIFA World Cup 2010

implementation of future large sports events so as to enable them to be more environmentally sustainable.

### Efficiency

10 The project was completed within budget. The actual expenditure reflected in the Final PIR was US$ 825,561.00 on 30 June 2012 compared to the US$ 1 million originally planned/budgeted. The cost effectiveness of the project was enhanced by the lessons learnt from similar initiatives implemented for other large sporting events and the appointment of a selected number of service providers to undertake the activities associated with Component 1. However, green technology options available in South Africa were limited compared to the 2006 FIFA Green Goal held in Germany. This limited the opportunities for cost savings. In terms of implementation, the project was under intense time pressure and was executed at a time when the attention of many project counterparts in the Host Cities was taken up by FIFA preparations.

### Sustainability and up-scaling

11 There was a high level of ownership by the then Department of Environmental Affairs and Tourism (DEAT), now known as the National Department of Environmental Affairs (DEA) and local stakeholders (Host Cities). However, there was limited ownership by the LOC and FIFA. Barriers to entry in the South-African market do exist for green technologies and these are linked to the cost and efficiency of green technology alternatives. In addition staff capacity, specifically in the smaller Host Cities, was an issue.

12 For Component 1, the continuation of the project results and eventual impact of the project is not critically dependent upon continued financial support. However, the wide-spread adoption of low carbon technologies for major sports events will largely depend on the cost of such technologies and improved efficiencies, and associated support for their implementation from international (e.g. FIFA), national and local authorities.

13 For Component 2, there are a number of existing greening initiatives in the hospitality and tourism sector, both within South Africa and internationally. The continued long-term, project-derived results and impacts associated with Component 2 will benefit from these initiatives and are therefore not dependent upon additional funding.

14 For Component 3, no funding was made available as part of the project to present and disseminate the findings of the Independent Environmental Assessment (Mokua, 2011) and South Africa 2010 Report (UNEP, 2012) via a series of workshops. The findings from the assessment were meant to be a major driver for the sustenance of the project results and the onwards progress towards impact.

15 Despite the well-developed institutional, policy and legal framework there are a number of potential risks, including capacity constraints and lack of commitment to environmental issues.

16 Many renewable energy technologies remain expensive compared to conventional energy supplies and there is a general lack of consumer awareness on benefits and opportunities of renewable energy. In addition environmental criteria did not form a significant part of the Host City agreements or any other legal obligations made to FIFA in terms of the hosting of the World Cup.

17 Due to the relatively small scale of the project, the potential to create effective economic and market based incentives was limited. The potential to up-scale at an international level (other major sporting events) is also largely dependent on the quality and dissemination efforts of the guidelines produced as part of Component 3. The majority of Minimum Environmental Standards for Green Goal 2010 contained in South Africa 2010 Report (UNEP, 2012) also lack the detail required to enable them to effectively inform the planning, design and implementation of future large sports events. The Minimum Environmental Standards formed part of the National Greening Framework 2010 prepared by DEA.

18 The replication and up-scaling potential of the project was hampered by the relatively small scale and short duration of the project. The potential for replication and up-scaling would also have been enhanced by the dissemination through workshops and other means of the findings of the Independent Environmental Assessment (Mokua, 2011) and South Africa 2010 Report (UNEP, 2012)(Component 3) and ensuring that these findings were incorporated into the design, construction and management of future major sporting events. However, as indicated earlier, the majority of Minimum Environmental Standards contained in South Africa 2010 Report (UNEP, 2012) lack the detail required to effectively inform the planning, design and implementation of future large sports events. In addition, the Checklist for Environmental Performance provided in Appendix 4 of the UNEP 2012 Report, makes no reference to the requirements for a key project phase in terms of ensuring environmental performance, namely the Design Phase.

**Processes affecting attainment of project results**

19 The design of the project and its implementation was guided by experiences from Green Goal 2006 and UNEP's Green Passport initiative. The project was also informed by experiences from other major sporting events, including the summer Olympics in Beijing (2008) and Sydney (2000). The representatives from the Host Cities interviewed indicated that there was limited negotiation regarding their roles and responsibilities.

20 There were a number of challenges encountered during the project. These were linked to tight timeframes, availability of data, changes in the focal point at UNEP, communication problems regarding the procedures for appointment of service providers and payment procedures. Due to the short time frame of the project there was limited scope for the project to adapt to changing conditions.

21 The Project Document identified and outlined the engagement of a wide range of target groups including UNEP, UNDP, DEA, the South African Department of Energy (DoE), LOC, various host cities, ESKOM, the tourism sector and Tourism Grading Council of South Africa. Public awareness activities were largely linked to Component 2 of the project and the dissemination of the Green Passport. However, issues were raised by the Host Cities regarding content of the Green Passport and lack of co-ordination with FIFA.

22 While the project was aligned with national and municipal policies and plans, reciprocity and interaction with FIFA and the LOC was weak.

23 The feedback from the UNEP Fund Management Officer (FMO) indicates that the required UNEP internal financial controls were implemented and met. These controls include audits of projects and the allocation of funds as per the approved project budget. There was no evidence of any variations in the allocations as set

out in the original project budget. There were initial delays in the payment of the first disbursements which were only paid in May 2010.

24 Considering the tight timeframe and the intense pressure that many of the project counterparts were under, the project was well managed and executed. But there were some challenges due to changes in the focal point at UNEP. In addition, there was limited project-specific follow up by UNEP and DEA after the closure of the 2010 World Cup in July 2010, and no mechanisms or budget was allocated to ensuring that the lessons learnt from the 2010 World Cup were taken forward and used to inform the planning, design and implementation of future sports events. The DEA did, however, follow up and consult with Host Cities during the preparation of the National Legacy Report for the Greening of the 2010 FIFA World Cup. The DEA also initiated the National Greening Framework aimed at supporting the delivery of the FIFA 2010 Green Goal initiative. Both of these initiatives provided an opportunity to discuss the lessons learnt from the 2010 World Cup.

25 The project followed UNEP standard monitoring, reporting and evaluation processes and procedures. The responsibilities for M&E were clearly defined in the Project Document. However, the logframe did not list indicators for assessing the progress of the project towards achieving outcomes. Baseline data on current energy consumption and the potential savings associated with low carbon technologies was absent in all six of the host cities.

26 The budget allocated to M&E was sufficient. However, the final budget for the Terminal Evaluation was reduced.

27 Progress Implementation Review (PIR) reports were produced during the project. The information contained in the reports and comments were sufficiently detailed and accurate. There was no information in the Project Document or reference to or details on a training component for the M&E programme. Likewise no budget was allocated to training.

**Complementarities with the UNEP strategies and programmes**

28 The project design did not specifically foster the exchange of resources, technology and knowledge between the South-South partner countries. However, exchanges did take place between DEA and representatives from the Brazilian Embassy in South Africa. At a city level, the City of Cape Town, Johannesburg and eThekwini also interacted with Brazilian cities. There is no evidence of consideration of gender during the project design or implementation, nor were gender disaggregated indicators tracked. However, there was consideration of gender issues in DEAs National Volunteer Programme implemented during the FIFA 2010 World Cup.

**Table 1: Summary of Ratings based on Performance Criteria**

| *Criterion* | *Rating* |
|---|---|
| *A. Attainment of project objectives and results* | *Moderately Unsatisfactory* |
| *1. Effectiveness* | *Moderately Unsatisfactory* |
| *2. Relevance* | *Highly Satisfactory* |
| *3. Efficiency* | *Moderately Satisfactory* |
| *B. Sustainability of project outcomes (See B1)* | *Moderately Unlikely* |
| *1. Financial* | *Moderately Unlikely* |
| *2. Socio-political* | *Moderately Unlikely* |
| *3. Institutional framework* | *Moderately Unlikely* |
| *4. Environmental* | *Moderately Likely* |
| *C. Catalytic role (See B2)* | *Moderately Unsatisfactory* |
| *D. Stakeholders involvement (See C3)* | *Moderately Unsatisfactory* |
| *E. Country ownership / driven-ness (See C4)* | *Satisfactory* |
| *F. Achievement of outputs and activities (See A)* | *Moderately Satisfactory* |
| *G. Preparation and readiness (See C1)* | *Moderately Satisfactory* |
| *H. Implementation approach (See C2)* | *Moderately Satisfactory* |
| *I. Financial planning and management (See C5)* | *Moderately Satisfactory* |
| *J. Monitoring and Evaluation (See C7)* | *Unsatisfactory* |
| *1. M&E Design* | *Unsatisfactory* |
| *2. M&E Plan Implementation* | *Moderately Unsatisfactory* |
| *3. Budgeting and funding for M&E activities* | *Moderately Satisfactory* |
| *K. UNEP Supervision and backstopping (See C6)* | *Moderately Satisfactory** |

**) This criterion was rated moderately unsatisfactory (MU) by the evaluation consultant.*

## LESSONS LEARNT

29 The *"Reducing the Carbon Footprint of Major Sporting Events, FIFA 2010 and the Green Goal"* project was implemented over the final 6 months leading up to 2010 FIFA World Cup at a time when government officials at all levels were under pressure and capacity constraints existed. Tourism bodies would also have been under pressure during the period. The project would have been more successful if it had been started one year or at least six months earlier and was linked to existing FIFA endorsed guidelines and initiatives.

30 Funding for greening initiatives should be secured well in advance of implementation in order to increase the chances of success.

31 The opportunities to showcase best practice carbon offset energy efficient projects are likely to be significantly greater if the technology is incorporated into the design and planning phase. The key opportunities and benefits associated with showcasing low carbon technologies for large sports events are linked to the stadiums themselves, especially in design and construction phase. The project relied solely on retro-fitting to showcase low carbon technology which is not as effective. In addition, the visibility of green technologies used for lights and billboards was limited to the general public, due to the absence of signs to attract the public's attention to the fact that green technologies were being used.

32 Environmental standards and guidelines should be clear and sufficiently detailed so as to enable them to effectively inform the planning, design and implementation of large events, including sports events.

33 The involvement and commitment of key stakeholders is critical to the success of the project. The Independent Environmental Assessment (Mokua, 2011) found that The LOC and key government departments were not fully committed to the FIFA 2010 Green Goal Project. The tourism initiative and Green Passport component of the project would have benefitted from being part of and endorsed by FIFA. Future projects of this nature would benefit from the involvement of and close co-operation with the event organizer (FIFA, IOC etc.).

34 Closure and follow up are critical to ensuring that the lessons learnt from the project are identified and used to ensure that the overall objectives of the project are met. Project design must ensure that adequate measures and budget are provided to ensure that the lessons learnt are recorded, and in the case of this project, used to inform the planning, design and implementation of future major sports events.

## RECOMMENDATIONS

35 UNEP should prepare more detailed guidelines with key recommendations for greening large sports (and other) events that can be used to effectively inform the planning, design and implementation of such events.

36 UNEP should also ensure that these guidelines and key findings of the IEIA of the World Cup 2010 Green Goal Programme are effectively communicated to key organisations, such as FIFA and the IOC, and made available to countries and cities planning and hosting large events.

37 DEA should create opportunities with host cities to discuss the lessons learnt from the project, to identify the measures needed to reduce the carbon footprint of major sporting (and other) events and to determine how to implement these measures effectively.

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# I EVALUATION BACKGROUND

## A Context

38 Throughout the world, it is now fully recognised that large sporting events have a global environmental impact. Large numbers of spectators travel to and from these events, consume resources and generate waste. These impacts have raised concerns about the environmental footprint of such events, particularly with respect to carbon emissions, water, energy, waste and transport. These concerns should be translated into responsible action to minimize and mitigate the impacts of such large events, and additionally, build awareness among host communities and visitors about why it is necessary to reduce the impact of these events on the environment. Event greening is therefore about contemplating the environmental and social consequences of the choices made when hosting large events. As a result the world has seen the emergence of efforts to reduce carbon footprints of large events including the 2002 Commonwealth Games, 2000 Summer Olympics, 2006 Winter Olympics, 2006 FIFA World Cup, and now the 2010 FIFA World Cup in South Africa.

39 The Green Goal initiative of the 2006 FIFA World Cup represented the first time in the history of football that environmental considerations were placed at the forefront of activities. The aim of this initiative was to reduce the overall environmental impact of the event, including the Greenhouse gas (GHG) contribution. A study commissioned by the South African Department of Environment Affairs and Tourism (DEAT) with support from NORAD (Norwegian Agency for Development Cooperation) indicated that the FIFA 2010 World Cup will have the largest carbon footprint of any major event. The findings of the study estimated the carbon footprint of the 2010 FIFA World Cup at 896,611 tonnes of carbon dioxide or an equivalent of 1, 896, 589 $tCO_2e$ contributed by international travel to the event. Secondly, energy use in accommodation is estimated at 340,128 $tCO_2e$ or 12 %, while the third emmission drawn from stadia and stadia precint use of energy is estimated at 16,637 $tCO_2e$.

40 South Africa's hosting of the FIFA 2010 World Cup was one of the most important global events to take place in the African Continent. The South African Government developed a broad National Greening 2010 Framework in order to support the delivery of the FIFA 2010 World Cup Green Goal initiative, which was developed by the national Department of Environmental Affairs (DEA). The primary objective of the DEA in developing a Greening Framework was to minimize negative environmental impacts while using resources in a judicious manner. Through this event, the DEA's National Greening 2010 Framework was anticipated to spur national capacity to host green events in the future, and disseminate environmental best practices to South African institutions and the public.

41 The Framework mandated the South African Local Organising Committee for the FIFA 2010 World Cup to respond to the National Greening 2010 Framework by developing Minimum Environmental Standards under each of its themes, and to implement the FIFA Green Goal 2010 programme. In addition, it mandated the host cities to manage the process and prioritize greening projects based on their capacity to implement.

42 The Framework focused on the following six key areas, namely:

- **Transport:** Maximise use of efficient public and non-motorized transport, with the emphasis on reducing carbon emissions:
- **Energy:** Initiate energy efficiency and saving programmes;
- **Waste**: Initiate waste reduction and processing programmes;

- **Water:** Introduce efficient water use practices, savings and minimize water contamination;
- **Biodiversity:** Conserve and enhance biodiversity, in line with the 2010 International Year of Biodiversity;
- **Tourism:** Promote responsible tourism.

43 The GEF funded Medium Sized project - *Reducing the Carbon Footprint of Major Sporting Events, FIFA 2010 and the Green Goal* - was meant to assist host cities to achieve some of the objectives contained in the National Greening 2010 Framework.

44 The GEF funding was utilized to implement energy reduction projects in six host cities, namely, i) City of Tshwane (Pretoria) Metropolitan Municipality( TMM), ii) City of Johannesburg Metropolitan Municipality (CoJMM), iii) Nelson Mandela Metropolitan Municipality (NMMM), iv) Manguang Metropoitan Municipality[3] (MMM), v) Polokwane Local Municipality (PLM), and vi) Rustenburg Local Municipality(RLM).

45 In particular, the GEF funding assisted the host cities to reduce their energy consumption by retrofitting public street lights, traffic lights and billboards in and around the stadia with energy efficient appliances and solar panels. The long-term benefits of this initiative for host cities and other municipalities in particular, will be to help to reduce the cost of maintenance and the cost of energy purchased from the main electricity generator, Eskom. The benefits of the use of renewable energy and energy efficiency upon the environment are self-evident. These benefits are of particular relevance, as South Africa remains one of the highest emitters of the GHG $CO_2$ per capita in the world.

46 The second source of carbon emissions was energy consumption sources from accommodation and the hospitality industry. The activation of the UNEP's Green Passport served to inform visitors on ways in which they could reduce their own carbon footprint during their stay at various hospitality facilities.

## B The Project

### Rationale

47 The Green Goal initiative of the 2006 FIFA World Cup represented the first time in the history of football that environmental considerations were placed at the forefront of activities. This initiative reduced the overall environmental impact of the 2006 FIFA World Cup event, including the GHG contribution. This was achieved through, among other things, implementing energy-efficiency measures, using renewable energy sources and environmentally friendly transportation.

48 The 2010 FIFA World Cup will result in both positive and negative environmental impacts for South Africa associated with such a major sporting event. Greening of the 2010 FIFA World Cup entails the incorporation of sustainable development principles into the planning, execution, reporting and monitoring of the event. The proposed project components are designed and aligned to complement the government of South Africa's initiatives aimed at ensuring that South Africa hosted a carbon neutral event in 2010. The project will add to the efforts by host cities who, through their greening plans, have implemented measures to reduce their carbon footprint associated with the construction

[3] The City of Cape Town Metropolitan Municipality (CTMM) was originally identified as one of the six host cities. However, the CTMM had already received funding for retrofitting of street and traffic lights and was therefore replaced by the MMM.

of the infrastructure required to host the tournament, including but not limited to the efficient use of energy.

**Objectives**

49 The overall development goal of "Reducing the Carbon Footprint of Major Sporting Events, FIFA 2010 and the Green Goal" project is to showcase best practice carbon offset energy efficient projects in order to promote and build awareness of renewable energy and its application on eco-friendly technologies and increase its use globally. In so doing the projects main objective is to use the 2010 FIFA World Cup in South Africa to demonstrate to the decision-makers and the general public the importance of low carbon technologies at major sporting events.

**Components**

50 The project had three components as presented in Table 2.

**Table 2: Project Components**

| | **Component outcome** | **Expected outputs/activities** |
|---|---|---|
| **Component 1** | Demonstration of green technologies, including solar technology, by the end of the 2010 FIFA World Cup | Install and/or retrofit public street lights, traffic intersections and billboards at the ports of entry, leading up to the stadia, key traffic intersections of the stadia and strategic billboards at airports with energy efficient technologies |
| **Component 2** | Raise awareness of visitors to the 2010 FIFA World Cup and the hospitality sector of the benefits of greening major sports events | Activate the 2010 Green Passport Initiative which will provide visitors with information on how to promote responsible tourism during major sporting events. In addition this component also seeks to establish a national accreditation system for the tourism/hospitality sector with activities designed to provide information materials showing the hospitality industry how to implement simple changes to manage and reduce their consumption of energy, water and reduce generation of waste. |
| **Component 3** | Ensure that the lessons learnt from FIFA 2010 World Cup in South Africa are incorporated into the design, planning and implementation of future large sports events | Collate and formalize the greening experiences and lessons learned during the 2010 FIFA World Cup for use in future sporting events. This will entail a critical analysis of greening projects to identify what has worked and what were the challenges and their causes. A set of guidelines and practices will also be developed for dissemination as well as posted on relevant websites and used at future major events. |

**Intervention areas and target groups**

51 The project intervention areas were green technologies that could be used to showcase the benefits for major sports events associated with best practice carbon offset energy efficient projects for major sporting events. The target groups were government decision-makers at a national and local authority level and the general public and spectators attending the 2010 FIFA World Cup in South Africa.

52 Component 2 also sought to target the tourism and hospitality sector with the aim of reducing generation of waste and consumption of energy and water. The Project Document does not specifically indicate that these objectives involve the use or introduction of green technologies for the hospitality sector.

**Milestones in design**

53 The project was in response to a study commissioned by the South African Department of Environment Affairs and Tourism with support from NORAD (Norwegian Agency for Development Cooperation) which indicated that the FIFA 2010 World Cup would have the largest carbon footprint of any major event, and Green Goal initiative of the 2006 FIFA World Cup. The focal area of the project was Climate Change, with specific focus on GEF-4 Strategic Objective 1, which seeks to promote the energy efficient technologies and practices in the residential and commercial buildings.

**Implementation and completion**

54 The GEF and UNEP approval date for the project was 26 August 2009. The project commenced on 15 December 2009 and the last Steering Committee meeting was held on 16 May 2011. The planned duration was initially 9 months, but this was extended to 14 months.

**Implementation arrangements and main partners**

28 UNEP acting as the Implementing Agency (IA) with the responsibility for project management, overview, monitoring and liaison with, and reporting, to GEF. The UNDP were project partners together with UNEP and were responsible for payments to service providers. The South African Department of Environmental Affairs and Tourism (DEAT) was the lead Executing Agency (EA), with the responsibility for providing the appropriate managerial, administrative and financial procedures to ensure proper execution of the project. In addition, a Project Steering Committee (PSC) was established to provide guidance and ensure coordination of activities. The PSC was made up of representatives from UNEP/GEF, the FIFA 2010 World Cup Local Organizing Committee (LOC), DEA and the six host cities.

55 A Project Management Unit (PMU), consisting of the Project Coordinator and an Administrator was established. The Project Coordinator was responsible for the day-to-day project operations, financial accounts, periodic reporting to UNEP and for allocation of the GEF grant according to the quarterly work plans and budgets in coordination with UNEP.

### Financing

56 The Project Budget was developed in 2009. The GEF provided US$1,000,000 of external financing. A further US$ 8,613,411.00 in co-financing was made available to DEA&T.

**Table 3: Project costs per component and financing source**

| Component | Co-financing (US$) | GEF (US$) | TOTAL (US$) | % |
|---|---|---|---|---|
| Component I: | 2,681,510.00 | 540,000.00 | 3,221,510.00 | 33.5 |
| Component II: | 2,681,510.00 | 280,000.00 | 2,961,510.00 | 30.8 |
| Component III: | 3,250,391.00 | 180,000.00 | 3,430,391.00 | 35.7 |
| **Total Project Financing** | **8,613,411.00** | **1,000,000.00** | **9,613,411.00** | **100** |

*Source: Project Document*

### Modifications to design before and during implementation

57 The planned project duration was 9 months, which was extended to 14 months (see above). No cost extensions were required.

## C The Evaluation

58 Section C reviews the evaluation's purpose, evaluation criteria and key questions, approach and evaluation timeframe, data collection and analysis instruments used, places visited, types of stakeholders interviewed, and limitations of the evaluation within the Terms of Reference (ToR) of the evaluation.

### Purpose

59 The terminal evaluation of the Project "*Reducing the Carbon Footprint of Major Sporting Events, FIFA 2010 and* the *Green Goal*" has two primary purposes, namely:

(i) To provide evidence of results to meet accountability requirements; and,
(ii) To promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP, the South African Department of Environmental Affairs and Tourism (DEAT), the GEF and their partners.

29 The full ToR for the project is included in Annex A.

### Criteria and key questions

60 The aim of the evaluation is to identify lessons of operational relevance for future project formulation and implementation. In so doing it focused on the following key questions linked to the 3 Components of the project:

- How successful was the project in demonstrating green technologies, in the areas of solar and energy efficiency by the end of the 2010 World Cup?
- How successful was the project in promoting the adoption of the Green tourism initiative, in the six (6) host cities by the end of the 2010 World Cup?
- To what extent have the lessons learnt and best practices from the project so far contributed to changes in practices and behaviour in sporting events, with regards to greening efforts?

- Overall, how successful has the project been in popularising low carbon technologies amongst decision makers and the general public?

**Timeframe, approach, data collected and limitations**

61 The evaluation took place between February and June 2013. The approach included:

- A desk review of relevant project documents and reports (Annex E);
- Development and circulation of a questionnaire to key stakeholders including representatives from UNEP, DEA, ESKOM and the local host cities involved in the project. The questions contained in the questionnaire were informed by the key evaluation categories contained in the ToR for the evaluation. Annex C contains a copy of the questionnaire;
- Site visits to the 5 host cities listed in the ToR, namely, Rustenburg, Pretoria (Tshwane), Johannesburg[4], Polokwane and Cape Town. Interviews with key stakeholders involved in the project, including representatives from DEA, ESKOM and the local host cities involved in the project. A list of people interviewed is contained in Annex D;
- Analysis of the responses to the information collected from interviews and the questions contained in the questionnaire;
- Preparation of the Inception Report for comment;
- Preparation of a Draft Evaluation Report for comment;
- Incorporation of comments into Final Evaluation Report.

62 An important analytical tool used in this evaluation is the Review of Outcomes to Impacts (ROtI) tool which was used to inform assessment of progress towards impact, including analyses of intermediate states, impact drivers and assumptions.

63 In terms of limitations, the UNDP and UNEP representatives who were involved in the project in South Africa had left the respective organisations. While efforts were made to secure contact numbers, they could not be contacted.

64 The majority of the activities associated with the project were undertaken during the period January to July 2010. The interviews associated with the terminal evaluation were undertaken in February and March of 2013, two and half years after the project was undertaken. The representatives from a number of local host cities indicated that the lapse in time was an issue of concern. In addition, as indicated earlier, the representatives from the City of Johannesburg who were involved in the project no longer worked for the City and could not be traced. It was therefore not possible to interview representatives from the City of Johannesburg. However, despite this, it is the opinion of the author that the issues raised by the representatives from the other Host Cities interviewed provided sufficient information to undertake the evaluation.

[4] The representatives from the City of Johannesburg who were involved in the 2010 Green Goal Project are no longer employed at the City and could not be contacted.

# II PROJECT PERFORMANCE AND IMPACT

65 Part II of the terminal evaluation report provides the main findings of the evaluation, with specific focus on the outcomes and impacts. The section is organised according to the four categories of evaluation criteria, namely attainment of objectives and planned results, sustainability and catalytic role, processes affecting attainment of project results, and complementarities with the UNEP Medium Term Strategy and Programme of Work (POW).

66 The analysis is based on a desk review of relevant documentation, questionnaire feedback and interviews with key participants. Information used in the evaluation is evidence-based and efforts have been made to triangulate information and opinions from interviews.

## A ATTAINMENT OF OBJECTIVES AND PLANNED RESULTS

67 The following section considers the extent to which the projects key objectives were effectively and efficiently achieved and the likelihood of impact.

### Reconstructed Theory of Change of the project

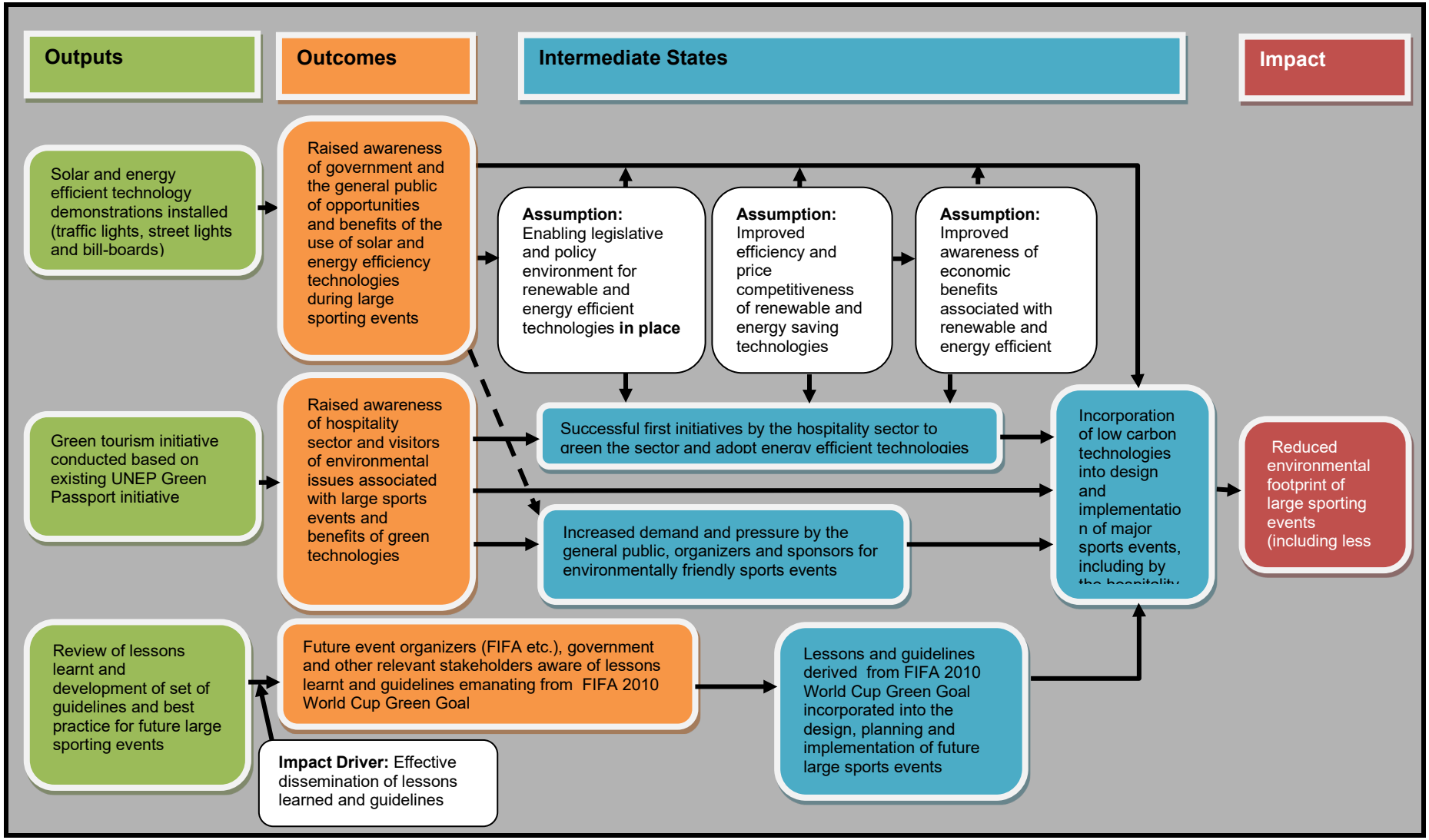
68 The project logframe specifies the overall objective and three component "outcomes" of the project (see Table 2, page 3). Figure 1 (overleaf) illustrates the Reconstructed Theory of Change (RToC) derived by the evaluation of the project logframe, the design narrative and interviews held during the evaluation. The RToC depicts the causal pathways from outputs over outcomes and intermediate states towards overall impact of the project as interpreted by the evaluation. Some results statements from the original logframe have been rephrased or moved up or down the causal pathways, for better clarity, realism and logic[5].

69 According to the RToC, the expected impact from the project is that future, large sporting events have a reduced environmental footprint, including less $CO_2$ emissions. In order to achieve this impact, the project was expected to contribute to the achievement of an Intermediate State, where low carbon technologies are incorporated into the design and implementation of major sports events, including the hospitality sector. The project was expected to contribute in reaching this Intermediate State through three distinct outcomes:

i. Raised awareness of government and the general public of opportunities and benefits of the use of solar and energy efficiency technologies during large sporting events;
ii. Raised awareness of hospitality sector and visitors of environmental issues associated with large sports events and benefits of green technologies; and
iii. Knowledge by future event organizers (FIFA etc.), government and other relevant stakeholders of the lessons learnt and guidelines emanating from the FIFA 2010 World Cup Green Goal project.

[5] Because of resource and evaluation timing constraints, this has mainly been a desk based exercise without explicit project stakeholder involvement as should ideally have been the case.

**Figure 1: Schematic overview of the Theory of Change of the project**



70 The first “outcome” in the original logframe (see Table 2, page 3) is in fact a project output (installation of demonstrations). The RToC considers that the real outcome expected from these demonstrations was a raised awareness of government and the general public of the opportunities and benefits of the use of solar and energy efficiency technologies during large sporting events. The second outcome in the RToC is identical to the original outcome of component 2, but adds the dimension of raised awareness of the hospitality sector and visitors with regard to environmental issues associated with large sporting events. The original logframe outcome for component 3 is considered an expected result beyond the scope of the project, at the intermediate state level rather than the outcome level. To achieve this Intermediate State, the project needed to ensure that future event organizers (FIFA etc.), government and other relevant stakeholders were fully aware of the lessons learnt and guidelines emanating from the project, which was considered a more realistic outcome for component 3.

71 There is a direct causal relationship between the three outcomes and the incorporation of low carbon technologies into the design and implementation of major sports events. However, as can be seen in Figure 1, there are also alternative pathways linking the second outcome (b) to that Intermediate State, passing through earlier Intermediate States. First, it might be necessary for the hospitality sector to implement a series of successful pilot initiatives in adopting green technologies, before achieving wide-spread adoption of low carbon technologies by the sector. Second, it might be essential to create sufficient demand and pressure by the general public, event organizers and sponsors for environmentally friendly sports events, before low carbon technologies are incorporated at large into the design and implementation of major sports events, including by the hospitality sector. It is worth noting that there is some overlap between the first and second outcome in the RToC, in that both outcomes include raised awareness of the general public (visitors) about the benefits of the use of solar and energy efficiency technologies during large sporting events. Thus, the first outcome should also contribute to increasing demand and pressure by the general public for environmentally friendly sports events (see dotted arrow in Figure 1).

72 For the first two outcomes (a and b) to lead to incorporation of low carbon technologies into design and implementation of major sports events, a number of key assumptions needed to be valid (i.e. a number of factors need to be in place that are beyond the project’s efforts and influence), namely: (i) an enabling legislative and policy environment for renewable and energy efficient technologies should be in place; (ii) efficiency and price competitiveness of renewable and energy saving technologies should be improved; and (iii) awareness of the economic benefits associated with renewable and energy efficient technology should be improved.

73 For the third outcome (c) to be achieved, a key impact driver needed to be supported by the project: lessons learned and guidelines should have been effectively disseminated to the relevant target audiences.

**Achievement of Outputs and Activities**

74 The Project Document lists 3 Outputs and associated activities:

75 **Output 1:** Demonstration of green technologies in the areas of solar and energy efficiency by the end of the World Cup.

76 **Activity 1**: This component entailed the appointment of a consultant(s)/company to oversee the installation/retrofit of the energy efficient technologies at public street lights, traffic junctions and billboards at the port of entry leading up to the stadia, key traffic junctions of the stadia and strategic billboards at airports where international and

domestic visitors travel through to watch games, respectively. A key component of the installation/retrofit included the collation of data on baseline energy consumption prior to the installation/retrofit and calculate savings post the installation/retrofit. It was estimated that each host city will have at least 100 public street lighting installed/retrofitted, about 60 retrofitted traffic lights and 2 energy efficient billboards, one at the airport and stadia.

77 In terms of the project target, 78 solar powered, retrofitted energy efficient streetlights were installed in five (5) of six (6) host cities against the total target of 100. Traffic lights – 352 individual traffic lights retrofitted with energy efficient lights in 6 (six) major traffic intersections in six (6) cities against a target of 60. Billboards – 8 billboards installed against the target of 12. The host cities of Nelson Mandela Bay and the MMM (Bloemfontein) did not secure billboards on which to install solar power units (Mokua, 2011).

78 The outputs and activities associated with Output 1 listed in the Project Document were largely achieved. However, the Independent Environmental Impact Assessment (IEIA) of the FIFA 2010 World Cup[6] notes that the installation of the majority of the solar powered street lights was not completed before the start of the 2010 FIFA World Cup in June 2010. There were also challenges associated with the retro-fitting the billboards due the fact that they were privately owned and there were concerns from the owners that the level of illumination provided by the solar powered bulbs would not meet client expectations. In addition, problems with vandalism and theft were encountered in some of the Host Cities, specifically with the solar panels and batteries associated with the billboards and traffic lights.

79 **Output 2:** Green tourism initiative which will build on the existing UNEP's Green Passport initiative,will be adopted for promotion by six (6) host cities by the end of the World Cup.

80 **Activitiy 2.1:** This activity entailed the 2010 Green Passport Initiative. The channels of dissemination and distribution of the 2010 Green Passport was through the Host City tourism offices, hospitality industry partners, lodges and B&B associations, tour operators and participating website partners (SA Tourism, UNEP, Host Cities visitor information centres, DEA, etc.).

81 **Activity 2.2**: This activity was aimed at linking in with the National Minimum Standards for Responsible Tourism (NMSRT), which aims to establish a national accreditation system for the tourism/hospitality sector.

82 The output indicator target of 100 000 copies of the Green Passport printed and distributed was achieved. Distribution of the Green Passport took place primarily at airports, shopping malls, tourist information centres and sites and involved environmental volunteers in all 9 Provinces. The aim of the Green Passport initiative was to raise awareness of visitors to the 2010 World Cup of their potential to contribute towards sustainable development by making responsible holiday choices. A review of the Green Passport document found that the bulk of the information contained in the document focused on information about the various host cities and venues. The information under the heading "green visit suggestions" refers largely to places of environmental interest, as opposed to country and host city specific information on how visitors can reduce the impact of their trip. In this regard the document does not include a list of relevant contact numbers or organisations (hospitality sector, waste management, recycling etc.) involved in the sustainability sector.

[6] Mokua, R.L, 2011. Independent Environmental Impact Assessment, FIFA World Cup 2010

83 Copies of the Green Passport could also be downloaded from a website (www.greenpassport.co.za). The logframe did not set a target for the number of green passports to be activated on the website. However, the PIR indicated that only 57 green passports were activated on the website. The PIR does not provide any information as to why so few passports were downloaded. However, the findings of this evaluation found that there was limited co-ordination between the project and FIFA. It is likely that more Green Passports would have been downloaded if the document was endorsed by FIFA and linked to the official FIFA website.

84 Representatives from some of the Host Cities indicated that there was a lack of coordination between DEA&T and the Host Cities with regards to arrangements for the distribution of Green Passports and there were problems with the content. There were also delays in delivering the Green Passports to all of the Host Cities. There was limited input from the Host Cities in the preparation and design of the Green Passports and they were not endorsed by FIFA or linked to the official FIFA 2010 World Cup programme. There was therefore potential for confusion between the official FIFA brochures and the Green Passport.

85 At least 62 hospitality establishments were involved in an environmental awareness raising programme. The City of Cape Town did develop the Green Stay SA rating for accommodation as part of its Green Goal Programme. The funding for the initiative was provided by the British High Commission (2010 Legacy Report). The Green Stay SA accreditation scheme was promoted by the City of Tshwane in May 2009. The City of Polokwane distributed questionnaires to tourist establishments in the city and trained ~ 200 tourist guides.

86 The Final PIR indicates that post 2010, 62 out of 100 tourist establishments received training in energy and water efficiency and integrated waste management. This initiative was driven between DEA and DEFRA-UK. The PIR indicates that National Department of Tourism, in partnership with ESKOM and DEA conducted a series of workshops with the tourism sector aimed at ensuring that the initiative was sustained beyond the 2010 FIFA World Cup. In this regard three national workshops were facilitated by DEA in 2011.

87 The output indicator target (60) for the involvement of the hospitality sector was therefore met.

88 Energy efficiency adverts were placed in taxis in 8 of the 9 provinces and other awareness raising initiatives took place in 4 (Cape Town, Durban, Johannesburg and Tshwane) of the 9 hosting cities.

89 The activities associated with Green Passport initiative were achieved.

90 **Output 3**: Using sports events to change practices and behaviour demonstrated, and development of a set of practices and best practice for future sporting events developed.

91 **Activity 3.1:** This activity entailed the review of how key environmental issues have been addressed against the original environment commitments as presented in the South African Bid document to FIFA.

92 An Independent Environmental Assessment of the FIFA 2010 World Cup was undertaken and completed in 2011[7] and the report was disseminated to representatives from the Host Cities. However, while copies of the final report were circulated, the representatives from the Host Cities indicated that the findings of the assessment were not discussed, for instance through workshops, with the Host Cities. In addition, the

[7] Mokua, R.L, 2011. Independent Environmental Impact Assessment, FIFA World Cup 2010

review does not contain an effective set off guidelines that can be used to inform future large sports events. The Independent Environmental Assessment provided the basis for the South Africa 2010 Report produced by UNEP in 2012.

93 The outputs and activities associated with Component 1 were largely achieved. However, the outputs and activities associated with Component 2 and 3 were not full achieved. The overall rating on delivery of outputs and activities is therefore rated a **moderately satisfactory**.

**Relevance**

94 The overall project goal was to showcase best practice carbon reduction by demonstration projects and drive awareness on climate change and carbon offsetting through messaging in the tourism sector.

95 The findings of the review indicate that the project objectives are in line with and support South Africa's national and local strategies and needs in terms of environmental sustainability and energy policies.

- The South African policy and legal framework is sufficiently well developed to establish the required intermediate stages and support the project in achieving its intended impacts. In this regard the achievement of impacts is supported by various pieces of South African legislation, including the National Energy Act (2008)
- National White Paper on Renewable Energy (2003);
- National Greening Framework 2010;

96 One of the key objectives of the National Energy Act was to promote diversity in energy supply and its sources. In this regard, the objectives of the Act, as stated in the preamble, make direct reference to facilitating the "increased generation and consumption of renewable resources".

97 The White Paper on Renewable Energy supplements the *White Paper on Energy Policy* (1998), which recognized the significant medium and long-term potential of renewable energy. The 2003 White Paper sets out the South African Government's vision, policy principles, strategic goals and objectives for promoting and implementing renewable energy in South Africa. As signatory to the Kyoto Protocol the South African Government is determined to achieve it statement commitment to reducing greenhouse gas emissions. To this purpose, Government has committed itself to the development of a framework in which a national renewable energy framework can be established and operated.

98 The key objectives of the National Greening Framework for the FIFA 2010 World Cup prepared by the South African Department of Environment and Tourism include:

- The creation of a model for hosting international sporting events and conferences and events in an environmentally sustainable manner in developing countries;
- Minimise the negative environmental impact of events associated with the 2010 FIFA World Cup by reducing resource consumption and waste production;
- Build national capacity to host green events and translate this capacity into new economic opportunities and livelihoods for South Africans;
- Improve environmental management performance by upgrading infrastructure used during 2010 FIFA World Cup events;
- Raise awareness about environmental best practice in all sectors involved in planning and hosting the 2010 FIFA World Cup;
- Raise awareness about sustainable development in South Africa.

99 The project is also relevant to and consistent with sub-regional environmental issues and needs and a number of UNEP and GEF policies, focal areas and strategic priorities. These include the Bali Strategic Plan, UNEP's Mid-term Strategy 2010-2013 and GEF-4 and 5. The complementarity with UNEP and GEF polices and strategies are discussed under Section D of Part II.

100 The overall rating on relevance is **highly satisfactory**

**Effectiveness**

101 The following section assesses to what extent the project achieved its expected outcomes, as derived by the evaluation team from the project logframe, design narrative and interviews (see Theory of Change of the project, paragraphs 66-71).

102 **Outcome 1: Raised awareness of government and the general public of opportunities and benefits of the use of solar and energy efficiency technologies during large sporting events.** The activities and output targets as set out in the Logframe associated with component 1 were largely achieved. However, effectiveness of the project in moving towards raising the awareness of low carbon technologies amongst local authorities, event organizers and the general public was likely to be limited by the relatively small scale of the project, the lack of involvement of key departments in some of the host cities (such as the Electrical Department), lack of commitment from the South African Football Association (SAFA) and the Local Organising Committee (LOC) to greening initiatives and the project, and cost and technological barriers. The project also lacked the support of and buy-in from the event hosts, namely FIFA.

103 The limited effectiveness of the project in terms of raising the awareness of the general public was confirmed by the findings of a visitor survey conducted by DEA as part of the 2010 National Volunteer Programme, which found that the majority of respondents were not aware of the FIFA Green Goal, the Green Passport Programme, and or other greening programmes linked to the 2010 World Cup.

104 Representatives from the host cities also reported problems with security. A number of solar panels and batteries associated with solar powered traffic lights were stolen. Concerns regarding security impacted negatively on the support for carbon technologies by some host cities post the FIFA 2010 World Cup.

105 The relatively small scale of the project limited the exposure of low carbon technologies to the general public. In addition, in the absence of signage fixed to or in the vicinity of the retro-fitted street and traffic lights it was not necessarily possible for the public to tell the difference between normal and low-carbon technology interventions. Appropriate signage could have increased the visibility and effectiveness of the intervention. The effectiveness of this intervention in terms of achieving the stated outcome was therefore limited.

106 Solar powered billboards were used to advertise products or events. The public's attention is therefore likely to have been on the product or event as opposed to the power source. The effectiveness of this intervention in terms of achieving the stated outcome was therefore likely to have been very limited.

107 However, in the case of Polokwane Local Municipality (PLM) the Green Goal project was identified as a key catalyst in terms of implementing green technologies and other resource saving measures as part of the towns' development strategy.

108 **Outcome 2: Raised awareness of hospitality sector and visitors of environmental issues associated with large sports events and benefits of green technologies.** Although 100 000 copies of the Green Passport were distributed this did

not seem to translate into raised awareness of visitors to the benefits associated with greening large sports events, as confirmed by the findings of a visitor survey conducted by DEA as part of the 2010 National Volunteer Programme (see paragraph 102). However, the survey also found that the majority of respondents agreed with statements that the 2010 World Cup would result in environmental impacts, such as higher energy and water consumption. In addition, the Project Document and Project Implementation Review (PIR) do not refer to or identify the need for a visitor survey aimed at assessing the success of the Green Passport initiative. In this regard, the logframe does not list indicators to assess if the programme enabled visitors to make environmentally responsible holiday choices. As indicated in Section C, Monitoring and Evaluation, the logframe does not identify indicators to measure the achievement of project outcomes. In the absence of follow up initiatives the Green Passport initiative on its own is unlikely to have had a significant impact in terms of the achieving the stated outcome of raising the awareness of visitors to the 2010 FIFA World Cup.

109 The output indicator target for the involvement of the hospitality sector was met. However, the Independent Environmental Assessment (Mokua, 2011) found that green rating for hotels was not done and there were no green criteria for choosing venues. As such, discerning tourists were not provided with the required information on accommodation options (Section 5.9, Promoting Responsible Tourism, p 83). In addition, the FIFA's hospitality wing, MATCH, does not include environmental criteria as a requirement for accommodation establishments that wish to be accredited by FIFA.

110 The 2010 Legacy Report indicates that there is a dedicated core of sustainable tourism proponents both within the public and private sector in South Africa. Consequently South Africa has been an important player in the area of sustainable tourism for a number of years and there are a number of private sector accreditation schemes in place. The achievement of the stated outcome of raising the awareness of hospitality sector of the benefits of greening major sports events is therefore likely to have benefitted from the existing awareness of the hospitality sector of environmental issues.

111 **Outcome 3: Knowledge by future event organizers (FIFA etc.), government and other relevant stakeholders of the lessons learnt and guidelines emanating from the FIFA 2010 World Cup Green Goal project.** The output for Component 3, namely the completion of a comprehensive independent evaluation and assessment of the lessons learnt was completed in 2011. Copies of the final report were distributed to the Host Cities. However, the Final Report was not discussed in workshops with relevant representatives from the Host Cities. Representatives from the Host Cities indicated that they received no feedback or had any contact with UNEP once the project had ended. The guidelines contained in the review also lack the detail required to make them effective.

112 The findings of the evaluation also indicate that there was limited follow up by UNEP and DEA after the closure of the 2010 World Cup in July 2010, and no mechanisms, structures or budget was allocated as part of this project to ensure that the lessons learnt from the 2010 World Cup were implemented by future event organizers (FIFA etc.), government and other relevant stakeholders. The absence of the impact driver has significantly reduced the effectiveness and ability of the project to achieve even the more realistic, reformulated expected outcome of component 3, which is a necessary step towards the original expected outcome of component 3 that the "lessons learnt from the FIFA 2010 World Cup Green Goal project are incorporated into the design, planning and implementation of future large sports events". The lessons learnt from the 2010 World Cup were, however, used by DEA to inform the greening of the INFCCC COP 17 MOP7 held in Durban, South Africa, in December 2011. In addition, the DEA did follow up and

consult with Host Cities during the preparation of the National Legacy Report for the Greening of the 2010 FIFA World Cup. The DEA also initiated the National Greening Framework aimed at supporting the delivery of the FIFA 2010 Green Goal initiative. Both of these initiatives provided an opportunity to discuss the lessons learnt from the 2010 World Cup.

113 Due to the lack of budget and specific measures identified as part of this project to ensure that the lessons learnt from the 2010 World Cup were implemented, the overall rating on the effectiveness of the project is **moderately unsatisfactory.**

## Efficiency

### *Cost Effectiveness*

114 The cost effectiveness of the project was enhanced by the lessons learnt from similar initiatives implemented for other large sporting events, including the 2006 FIFA World Cup in Germany (FIFA Green Goal 2006) and the 2000 and 2008 summer Olympic Games in Sydney and Beijing respectively. The project was also supported by initiatives associated with the National Greening Framework for the 2010 FIFA World Cup. However, the IEIA (Mokua, 2011) notes that the green technology options available in South Africa were limited compared to the 2006 FIFA Green Goal held in Germany. This would have limited the opportunities for cost savings.

115 The cost effectiveness of the project was enhanced by the appointment of a three service providers to undertake the activities associated with Component 1 in all of the Host Cities, namely one for the retrofitting of streetlights, one for traffic lights and one for the installation of solar panels for billboards. The appointment a service provider for each component would have reduced administrative and time costs associated with dealing with different service providers in each Host City. However, this centralised approach did limit the opportunities for local skills development and support for local suppliers in the host cities, specifically the smaller Host Cities, such as Rustenburg and Polokwane. The PIR also notes that concerns were raised by the service provider regarding price fluctuations. These fluctuations were linked to the distances between the various host cities not being adequately taken into account during budgeting and costing. This would have resulted in increased transportation costs and may have contributed to the concerns raised by the service provider.

116 The design and conceptualization of the Green Passport component of the project benefitted from other Green Passport initiatives undertaken by UNEP. This is likely to have resulted in opportunities for cost savings due to ability to use existing templates, concepts and designs. However, as mentioned earlier, some of the representatives from the Host Cities interviewed indicated that they had limited input into the design and content of the Green Passports.

117 As indicated earlier, there are a number of private sector accreditation schemes in place in the South African hospitality and tourism sector, including the Green Stay SA scheme developed by the City of Cape Town. The cost effectiveness of the project would have been improved if the development of a national accreditation scheme had been based on an existing/s scheme.

118 The project was completed within budget. The allocated budget was US$ 1 million and the actual expenditure reflected in the Final PIR was US$ 825 561.00 on 30 June 2012. This is a disbursement rate of 82.5 per cent.

### *Timeliness of Execution*

119 The project was approved by UNEP on 26 August 2009, with the official announcement being made on 15 December 2009. The planned duration of the project was 14 months. The programme commenced in April 2010 and the final Steering Committee meeting was held on 16 May 2011. The majority of the effort was concentrated from April 2010 to the start of the FIFA 2010 World Cup on 10 June 2010.

120 Based on the feedback from representatives from the host cities and comments in the PIR, it is evident that the project was under intense time pressure and was executed at a time when the attention of many project counterparts in the host cities was taken up by FIFA preparations. This created capacity and time related challenges for the project. The IEIA (Mokua, 2011) indicated that the majority of the outputs associated with Component 1 were only installed after the 2010 FIFA World Cup commenced. There were also delays in distributing copies of the Green Passport to some of the host cities. As a result, copies of the Green Passport were in some instances delivered 2 weeks after the 2010 World Cup had commenced.

121 The overall rating on efficiency is **moderately satisfactory** due to the delays associated with the delivery of the outputs under Component 1 and 2. However, as indicated earlier, DEA and the Host Cities were under extreme pressure in the 6 months leading up to the hosting of the FIFA 2010 World Cup.

### Review of Outcomes to Impacts

122 The following paragraphs examine progress made towards project impacts using a Review of Outcomes to Impacts (ROtI) analysis. A desk based ROtI approach was used due to time constraints.

123 Table 3 illustrates the results of the Review of Outcomes to Impact (ROtI). The assessed overall likelihood of impact achievement at this stage in the project is rated on a six-point scale as **moderately unlikely (CC).** This rating is based on the following observations:

- The rating on outcomes is C. Some of the project's intended outcomes have been achieved. While the component outcomes were designed to feed into a continuing process, due to the limited scale of the project, the magnitude of change at the outcome level remains limited. Moreover, a key outcome, namely that future event organizer's (FIFA etc.), government and other relevant stakeholders are aware of familiar with the lessons learnt and guidelines emanating from the project, has not been achieved. In addition, there has been no prior allocation of responsibilities after project funding.
- The C rating on intermediate states reflects that some of the measures designed to move toward intermediate states have started but have not yet produced results. These measures include support for low carbon technologies and greening of the hospitality sector. In South-Africa, the creation of an enabling legislative and policy environment for renewable and energy efficient technologies is making steady progress, but renewable and energy saving technologies remain relatively less competitive than the traditional energy technologies and general consumer awareness regarding the benefits and opportunities of green energy sources is still low (see also under financial sustainability – paragraph 137).
- Impact: A rating for achievement of increased environmental efficiencies is not applicable at this stage since it is too early to have had any scale for GEB impact.

**Table 4: Rating result sheet for the outcome and progress towards "intermediate states"**

| **Results of rating for:** | | **Reducing the Carbon Footprint of Major Sporting Events, FIFA 2010 and the Green Goal** | | | | | |
|---|---|---|---|---|---|---|---|
| **Outputs** | **Outcomes** | **Rating (D-A)** | **Intermediary States** | **Rating (D-A)** | **Impact** | **Rating** | **Overall** |
| 1. Solar and energy efficient technologies (traffic lights, street lights and bill-boards) installed | Raised awareness of government and the general public of opportunities and benefits of the use of solar and energy efficiency technologies during large sporting events | **C** | Enabling legislative and policy environment for renewable and energy efficient technologies in place<br><br>Improved efficiency and price competitiveness of renewable and energy saving technologies<br><br>Improved awareness of economic benefits associated with renewable and energy efficient | **C** | Reduced environmental footprint of large sporting events (including less CO2 emissions) | | **CC** |
| 2. Green tourism initiative implemented based on existing UNEP Green Passport initiative and interaction with hospitality sector | Raised awareness of hospitality sector and visitors of environmental issues associated with large sports events and benefits of green technologies | | Successful initiatives by the hospitality sector to green the sector and adopt energy efficient technologies<br><br>Increased demand and pressure by the general public, organizers and sponsors for environmentally friendly sports events | | | | |
| 3. Review of lessons learnt and development of set of guidelines and best practice for future large sporting events | Future event organizers (FIFA etc.), government and other relevant stakeholders aware of lessons learnt and guidelines emanating from FIFA 2010 World Cup Green Goal | | Lessons and guidelines derived from FIFA 2010 World Cup Green Goal incorporated into the design, planning and implementation of future large sports events | | | | |
| The majority of the outputs associated with the three components of the study were delivered | Some of the project's intended outcomes were delivered, however, they were not designed to feed into a continuing process after project funding | | The measures designed to move toward intermediate states have started but have not yet produced results. | | A rating for achievement of increased environmental efficiencies is not applicable at this stage since it is too early to have had any scale for GEB impact | | |

## B SUSTAINABILITY AND CATALYTIC ROLE

### *B1. Sustainability*

124 Sustainability is understood as the probability of continued long-term project-derived results and impacts after the external project funding and assistance end. The ROtI analysis was utilized to assess sustainability and identify the key conditions or factors that are likely to undermine or contribute to the persistence of benefits.

125 The ability of the project to achieve the outcomes for component 1 and 2 is closely linked to the ability of the project to raise awareness over the 1 month period during which the 2010 World Cup was hosted in South Africa. The lessons learnt from the activities associated with Component 1 and 2 form the focus of Component 3, which in turn has significant implications for greening of future major sports events. The factors affecting the probability of continued long-term project-derived results and impacts after the external project funding and assistance ended therefore differ for each of the outcomes.

**Socio-political sustainability**

126 Based on the review of project documentation and discussions with host city representatives there are no significant social or political factors that would influence the achievement of the project results and progress towards impacts.

127 There was a high level of ownership by main national (DEA) and local stakeholders (Host Cities). However, there was limited ownership by the LOC and FIFA. At a national level there is a high level of government and stakeholder awareness and interest in green technology in general, specifically in the larger Host Cities, such as the City of Cape Town and Durban. The level of awareness of the need for and benefits of energy saving technologies was also heightened by the capacity problems experienced by ESKOM in 2009 and the resulting rolling blackouts. However, barriers to entry do exist for green technologies and these are linked to the cost and efficiency of green technology alternatives. In addition capacity, specifically in the smaller host cities is an issue.

128 The 2010 Legacy Report does however indicate that the greening of the 2010 FIFA World Cup presented a number of major challenges to the Host Cities, as well as to national and provincial government bodies involved in the process. Some of the challenges faced included:

- Limited existing infrastructure, systems and experience, not to mention the change in public mind-set, required to achieve significant sustainability outcomes. While to some extent these present clear legacy opportunities (i.e. more space for improvement), it also imposes certain limitations in terms of what can be achieved in the short term;
- The lack of reliable systems at local municipality level to measure and collect data on sustainability related indicators. This made it extremely difficult to gather quantitative data on progress made in relation to sustainability targets for waste, water and carbon emissions.

129 The rating on this dimension of sustainability is rated as **moderately unlikely** given the potential challenges identified in the IEIA (Mokua, 2011) and capacity challenges faced by many local authorities in South Africa.

**Financial Sustainability**

130 For Component 1, the continuation of the project results and eventual impact of the project is not critically dependent upon continued financial support. However, the wide-spread adoption of low carbon technologies for major sports events will largely depend on the cost of such technologies and improved efficiencies, and associated support for their implementation from national and local authorities. In this regard the Project Document identifies a number of barriers (financial risks) affecting the implementation of renewable energy technologies that would need to be addressed for the project to achieve its expected results. These include:

- Many renewable energy technologies remain expensive, on account of higher capital costs, compared to conventional energy technologies for bulk energy supply to urban areas or major industries;
- Implementation of renewable energy technologies needs significant initial investment and may need support for relatively long periods before reaching profitability.
- There is a lack of consumer awareness on benefits and opportunities of renewable energy;
- The economic and social system of energy services is based on centralised development around conventional sources of energy, specifically electricity generation, gas supplies and, to some extent, liquid fuel provision;
- Financial, legal, regulatory and organisational barriers need to be overcome in order to implement renewable energy technologies and develop markets; and
- There is a lack of non-discriminatory open access to key energy infrastructure such as the national electricity grid, certain liquid fuels and gas infrastructure.

131 For Component 2, there are a number of existing greening initiatives in the hospitality and tourism sector, both within South Africa and internationally. These initiatives are independent of FIFA and pre-date the 2010 World Cup. While major sporting events provide an opportunity to showcase the benefits of greening the hospitality and tourism sector, the support for these initiatives is largely driven by a growing awareness of environmental issues by tourists. The continued long-term project-derived results and impacts associated with Component 2 will benefit from these initiatives and are therefore not dependent upon additional funding.

132 Component 3 aims to highlight the lessons learnt from the activities associated with Component 1 and 2. While the final report of the independent assessment undertaken as part of the project was made available to representatives from the Host Cities who participated in the project, no funding was foreseen to further discuss the findings of the report with them or with a larger group of interested parties. This represents a key omission by the project designers that poses a risk to the sustenance of the project results and the onwards progress towards impact. The continued long-term, project-derived results and impacts would benefit significantly from additional funding aimed at ensuring that the key lessons from the 2010 World Cup are carried forward and used to inform the planning, design, construction and running of large sports events in the future.

133 Because of the financial obstacles to the wide-spread adoption of energy efficient technologies and the lack of funding to ensure that the lessons learnt from the project are more effectively disseminated, financial sustainability is rated as **moderately unlikely.**

**Institutional, policy and legal framework**

134 The South African institutional and legal framework is sufficiently well developed to support the project in achieving its intended impacts. However, the 2010 Legacy Report indicates that the greening of the 2010 FIFA World Cup presented a number of major challenges to the Host Cities, as well as to national and provincial government bodies involved in the process. The multifunctional body responsible for all things organisational and concerning the staging and hosting of the event was the Local Organising Committee (LOC). The LOC included representatives from FIFA, the South African Football Association (SAFA), the SA Government, Host Cities, labour and business. As official hosts of the FIFA World Cup, SAFA and SA Government were signatories to the Hosting Agreement and List of Requirements, containing seventeen explicit and legally binding guarantees. These agreements committed South Africa to ensuring that the event would meet the necessary standards set by FIFA, in all regards, for the successful hosting of the tournament. Despite the extensive scope of these agreements, environmental obligations played only a minor role in terms of the legal requirements imposed by FIFA on the host nation. Collaboration with FIFA could therefore have been a key driver for the project.

135 The IEIA (Mokua, 2011) notes that environmental criteria did not form a significant part of the Host City agreements or any other legal obligations made to FIFA in terms of the hosting of the World Cup. As the environment is not one of the guarantees required by FIFA from South Africa for the 2010 FIFA World Cup, environmental issues were not seriously addresses. The main focus of the organizers was on meeting the 17 guarantees that South Africa gave to FIFA (Section 4, Lessons learnt through Green Goal 2010). Arguably, this led to environmental issues being seen to some extent as “optional” and afforded lower priority compared to other areas that were related to legally binding obligations, such as logistics and security.

136 Linked to the above, the Independent Environmental Impact Assessment (Mokua, 2011) also notes that successful implementation of greening plans requires commitment from the involved institutional leadership. In Germany the Local Organizing Committee led the process with full support from the government and other stakeholders. In South Africa there was a general lack of leadership and funds for driving the Green Goal process. The review found that the lack of genuine commitment from the LOC, the government and the event’s stakeholders made it impossible to achieve the all of the goals and targets of the 2010 Green Goal programme (Section 6, Lessons Learnt through Green Goal 2010, p 94). However, DEA and the Host Cities played a crucial role in ensuring the development of the National Greening 2010 Framework for the 2010 World Cup.

137 The Independent Environmental Impact Assessment (Mokua, 2011) also found that FIFA’s 2010 Green Goal programme performed better in two host cities, Cape Town and Durban, due to the fact that these two cities already had adequate structures for managing the environment in place. The rest of the host cities struggled with the processes eventually prioritizing on those areas that were a requirement for hosting the event, and therefore contributing minimally to the Green Goal 2010 objectives (Section 6, Lessons Learnt through Green Goal 2010).

138 Despite the well-developed institutional, policy and legal framework, there are a number of potential risks, including capacity constraints. As a result this aspect of sustainability is rated as **moderately unlikely.**

**Environmental sustainability**

139 The project involved the installation and/or retrofitting of public street lights, traffic intersections and billboards in existing, disturbed urban environments, printing and distribution of Green Passport and an environmental review of the FIFA 2010 World Cup. None of the activities and outputs associated with resulted in environmental deterioration/damage or stimulated unsustainable use of environmental resources .In addition, there are no environmental factors that are likely to influence either positively or negatively the sustenance of the projects achievements.

140 The sustainability of this dimension is rated **moderately likely**.

### *B2. Catalytic Role and Replication*

### *Catalytic Role*

141 In theory the project created an opportunity to support activities to upscale new approaches to a local, regional and national level. However, due to the relatively small scale of the project the catalytic role of the project was limited. The catalytic role was also constrained by the appointment centralised services providers which limited the involvement of key departments in the Host Cities, such as the Electricity Departments, in the retro-fitting programme. These key departments were therefore unable to play the role of potential drivers.

142 The potential to up-scale at an international level (other major sporting events) is largely dependent on the quality of the guidelines produced as part of Component 3. However, as indicated earlier, the findings of the review were not work-shopped with the Host Cities and the Minimum Environmental Standards contained in South Africa 2010 Report (UNEP, 2012) lack the detail required to effectively inform the planning, design and implementation of large sports events. In addition, the Checklist for Environmental Performance appended to the UNEP 2012 Report, there is no reference to the requirements for the Design Phase, which is arguably the most important phase of a project in terms of ensuring environmental performance.

143 The activities and outputs associated with Component 1, which involved the retrofitting of traffic and street lights and the installation of solar panels for billboards, did create the opportunity to result in behavioural and institutional changes in the host cities. In the case of Polokwane Local Municipality (PLM) the FIFA 2010 Green Goal project was identified as a key catalyst in terms of implementing green technologies and other resource saving measures as part of the towns' development strategy. The interventions identified included retrofitting all light switches in municipal buildings with energy saving switches, replacing air conditioning units with energy efficient heat pumps, harvesting rain water at the Peter Mokaba Stadium and mainstreaming recycling for all major sports events at the stadium. New public parks have also been designed to be water efficient, dry parks, with limited watering, using water efficient, indigenous plants.

144 The PLM also appointed a service provider to manage environmental aspects of 2010 related to Green Goal. The ToR for the service provider were to ensure that the benefits from 2010 Green Goal project were carried forward for the PLM. In this regard the lessons from 2010 were reflected in the review of the PLM Integrated Development Plan (IDP), which sets out the town's development goals, opportunities and constraints for the next five years. The 2010 Green Goal Project therefore played a key role in assisting the PLM to raise awareness of the benefits of green technologies and mainstream environmental issues. One of the key reasons identified by the representatives from the PLM for the success of the Green Goal Project was the support and buy-in for the project from senior officials in the PLM and the involvement of

representatives from different departments, including the Electricity Department. Support for the Green Goal Project by senior officials was also identified as a key factor by representatives from the City of Tshwane and Cape Town.

145 In contrast, representatives from the Rustenburg Local Municipality (RLM) indicated that there was a general lack of support for and recognition of the Green Goal Project and as a result there has been limited follow up post the 2010 World Cup.

146 In terms of incentives, the relatively small scale of the project and limited geographical extent limited the potential for the creation of effective economic and market based incentives. The financial and technology barriers affecting the widespread implementation of renewable energy technologies identified in the Project Document therefore still persist.

147 The relatively small scale of the project and short duration of the project also limited the potential catalytic role of the project in terms of its contribution to institutional and policy changes. This was hampered by the lack of a formal project closure strategy. However, as mentioned earlier, South Africa's policy and legislative framework does support energy efficiency and low carbon technologies.

148 The relatively small scale and short duration of the project further limited the potential opportunities for individuals and or institutions (champions) to catalyse change. However, as indicated earlier, the project was identified as a key catalyst by the stakeholders in the PLM. The use of a centralised service provider was also identified as a constraint to the catalytic role played by the project. The absence of locally based service providers in the smaller host cities, such as Rustenburg and Polokwane, reduced the potential for the private sector to lobby local authorities and make them aware of the benefits of green technologies and, in so doing, act as potential impact drivers.

### *Replication and up-scaling*

149 The overall development goal of "Reducing the Carbon Footprint of Major Sporting Events, FIFA 2010 and the Green Goal" project is to showcase best practice carbon offset energy efficient projects in order to promote and build awareness of renewable energy and its application on eco-friendly technologies and increase its use globally. The replication potential of the project was therefore very significant. The replication potential was to be enhanced by the evaluation and dissemination of lessons learnt from 2010 FIFA World Cup Project for greening major sports events (Component 3) and South Africa's commitment to support green technologies and renewable energy.

150 However, as indicated earlier, the replication potential of the project was hampered by the relatively small scale and short duration of the project. The approach to the project as set out in the Project Document and logframe did not specifically make reference to or indicate how the project would be replicated or up-scaled, besides the preparation and dissemination of a lessons learned document with guidelines by Component 3.

151 Due to the relatively small-scale of the project, specifically Component 1, the exposure of low carbon technologies to the key target groups was likely to be limited. The target groups were government decision-makers at a national and local authority level and the general public and spectators attending the 2010 FIFA World Cup. In the case of government descion-makers, the findings of the evaluation indicate that the majority of government decision makers were under exterme pressure in the 6 months leading up to the hosting of the 2010 FIFA World Cup. The timing of the project was therefore not ideal and would have placed addition pressure on officials, which in turn, is likely to have limited its success in terms of raising awareness. In addition, a number of key departments in some of the Host Cities were not involved in the project, such as the Electricity Department and Finance Departments. This reduced the ability of the project

to showcase the benefits of low carbon technologies and the associated potential for replication.

152 Due to the relatively small scale of the project the majority spectators and general public attending the 2010 FIFA World Cup are unlikely to have been aware of the green technology components associated with Component 1. The expected outcome in terms of raising the awareness of spectators of the benefits of low carbon technologies was therefore, in the opinion of the reviewer, only achieved at a very limited scale. This was confirmed by the findings of a visitor survey conducted by DEA as part of the 2010 National Volunteer Programme, which found that the majority of respondents were not aware of the FIFA Green Goal, the Green Passport Programme, and or other greening programmes linked to the 2010 World Cup. The visibility of the green energy technologies used for public street lights, traffic lights and billboards was very limited and a number of these devices were also located in areas that were not necessarily associated with the 2010 FIFA World Cup. Ideally the devices should have been located at the stadiums or in close proximity to the stadiums and fitted with signs indicating the use of green energy technology. .

153 As mentioned under sustainability, paragraphs 132-133, as official hosts of the FIFA World Cup, SAFA and SA Government were signatories to the Hosting Agreement and List of Requirements set by FIFA. Environmental obligations play only a minor role in the requirements imposed by FIFA on the host nation. Collaboration with FIFA, to possibly in future strengthen the environmental requirements built in the List of Requirements set by FIFA, would have been a major opportunity to scale up project results. Also, if energy efficiency was one of the criteria used in the design of the stadiums, the potential to showcase best practice carbon offset energy efficient projects in order to promote and build awareness of renewable energy and its benefits for major sports events would have been maximised. This was not possible given the late timing (commenced April 2010) and focus (retro-fitting of street lights, traffic intersections and bill boards) of the project.

154 The potential for replication and up-scaling would be enhanced by the disseminating of the findings of the evaluation (Component 3) and ensuring that these were incorporated into the design, construction and management of future major sporting events. Based on the findings of this evaluation there is limited evidence that the key findings of the Independent Environmental Impact Assessment (Mokua, 2011) and South Africa 2010 Report (UNEP, 2012) have been taken up by the organizers of other large events, including sports events, in both South Africa and internationally. For instance, according to the representatives from the Host Cities interviewed there was limited evidence of the key lessons from the 2010 Green Goal Programme being taken into account by the organizers of the African Cup of Nations held in South Africa in February 2013 (two and half years after the 2010 World Cup). Also, as indicated earlier, the Minimum Environmental Standards contained in the South Africa 2010 Report (UNEP, 2012) lack sufficient detail to make them effective. The DEA, in partnership with the Danish Government, did undertake a review of the three main stadia to assess environmental performance. Although the review falls outside the scope of the evaluated project, the data from the review would be of benefit to the design and construction of future stadiums.

155 Due to financial and technology barriers affecting the widespread implementation of renewable energy technologies and the relatively small scale of the project, the rating on catalytic role and replication is **moderately unsatisfactory**.

## C PROCESSES AFFECTING ATTAINMENT OF PROJECT RESULTS

### *C1. Preparation and Readiness*

156 The Project Document included a detailed description of roles and responsibilities for each of the project partners, including implementation arrangements and overall project coordination. The operational structure of the project is outlined in the organizational chart contained in Appendix 10 of the Project Document. The Project Document also identified potential challenges facing the successful implementation of the project. These included:

- Limited capacity in some of the smaller host city municipalities as well as the Local Organising Committee (LOC) to implement the greening 2010 action plans;
- Lack of technical capacity in the host city municipalities to implement and manage the renewable energy interventions.

157 The representatives from the Host Cities who were interviewed indicated that there was limited negotiation regarding their roles and responsibilities. Their key role appeared to be the identification of sites for retro-fitting street and traffic lights. This is understandable given the timing and time constraints faced by the project.

158 The design of the project and its implementation was guided by experiences from Green Goal 2006 and UNEP's Green Passport initiative. The project was also informed by experiences from other major sporting events, including the summer Olympics in Beijing (2008) and Sydney (2000). The selection of DEA as the lead Executing Agency was informed by its role in the development of the National 2010 Greening Framework.

159 Appendix 5 of the Project Document provides a detailed work plan and timetable for the project, including reference to Inception Workshop, Inception Report and Steering Committee Meetings etc. The timetable does not, however, make any provision for or allocate a budget for work-shopping the project review with the Host Cities.

160 The project was hampered by the late timing of implementation (last 2 months leading up to the 2010 World Cup and limited involvement of FIFA as a key potential partner for up-scaling. These issues were not adequately addressed in the preparation and planning for the project.

161 The rating on preparedness and readiness is **moderately satisfactory**.

### *C2. Implementation approach and adaptive management*

162 The timeframe for the implementation of the project was relatively short, with the project meetings commencing in February 2010 while the first game of the 2010 FIFA World Cup took place on 11 June 2010. Project implementation in terms of project related activities, such as retro-fitting of street lights etc., only commenced in May 2010, less than 6 weeks before the opening game of the 2010 World Cup. The PIRs note that the project was under intense time pressure and was executed at a time when FIFA preparations were absorbing the attention of many project counterparts, making it challenging to execute the project in a timely manner.

163 Due to the short time frame of the project there was limited scope for the project to adapt to changing conditions. The Final PIR lists a number of management problems encountered during the project. These include constant changes in the focal point at UNEP, which impacted on reporting, misunderstanding of the process followed for the appointment of services providers appointed to install the low carbon technology associated with Component 1, and requests for payments without due consideration of the quality of deliverables.

164 The PIR indicates that actions were taken to address these problems, however, from the dates reflected in the PIR these actions were taken after the end of the 2010 World Cup (August 2010-January 2011). It is unclear how this affected the implementation of the project and attainment of project results.

165 Representatives from the Host Cities also identified the lack of commitment of the LOC and SAFA to greening and the Green Goal project as a problem. A greening manager was appointed as part of the LOC. The comments from some of the Host Cities indicate that the person appointed was not very effective. However, details in this regard were not provided.

166 No provision was made to hold a closure workshop to discuss the overall outcome of the project and the lessons learnt etc. The representatives from the Host Cities indicated that once the components of the project had been implemented (retro-fitted street and traffic lights, bill-boards etc.) contact with UNEP effectively ended.

167 The rating on implementation and adaptive management is **moderately satisfactory**.

### *C3. Stakeholder Participation and Public Awareness*

#### Engagement of Stakeholders

168 The Project Document identified and outlined the engagement of a wide range of target groups including UNEP, UNDP, DEA, the South African Department of Energy (DoE), LOC, various host cities, ESKOM, the tourism sector and Tourism Grading Council of South Africa. Consultation between the various stakeholders was undertaken within the context of the management of the project. In this regard the focus of the engagement and consultative process was between UNEP, UNDP, DEA and the representatives from the host cities. However, collaboration with FIFA and the LOC was weak. There was no formal agreement in place with FIFA with regards to support for the project or using the project as a pilot for reducing the environmental footprint of all FIFA-organised competitions.

#### Public Awareness Activities

169 Public awareness activities were largely linked to Component 2 of the project and the dissemination of the Green Passport. The PIR indicates that 100 000 copies of the Green Passport were distributed and at least 62 hospitality establishment were involved in implementing measures to reduce their carbon footprints. The City of Polokwane distributed questionnaires to tourist establishments in the city and also trained ~ 200 tourist guides. However, the effectiveness of the Green Passport initiative cannot be gauged simply by considering the number of passports distributed. Some of the representatives from the host cities interviewed also indicated that there had been limited opportunity to contribute to the content of the passports and copies were delivered after the Word Cup had started. In addition, there was nothing on the main cover of the passport specifically linking it with the 2010 World Cup in South Africa. The Green Passport concept was a good idea, however, better thought and more time should have been allocated to the design of the document, specifically the cover page. In this regard the cover design needs to be appropriate to the event and location.

170 There was also the potential for a clash between the Green Passport and official FIFA brochures for the 2010 World Cup. The success of the public awareness component could have been significantly improved if there was better co-ordination between the project and FIFA with regards to Green Passport initiative.

171 Public awareness activities also included placement of energy efficiency advertisements on taxis in 8 of the 9 host cities, and awareness raising campaigns in the hospitality sector in 4 of the 9 host cities. This was undertaken with co-funding.

172 The overall rating on stakeholder engagement is considered to be **moderately unsatisfactory** due to the problems associated with Green Passport initiative and weak engagement with FIFA and the LOC.

### *C4. Country Ownership and Drivenness*

173 As indicated earlier, the proposed project is aligned with a number of key national policies and strategies that address energy efficiency and climate change and sustainable development in South Africa. In addition, the project is aligned with the host city municipality Greening plans, DEA's National Greening 2010 Framework and the Guidelines for Greening of Large Sport Events with an emphasis on the FIFA World Cup, and the LOC 2010 FIFA Green Goal programme. The Green Goal project also acted as a catalyst for greening in the PLM. The South African institutional and legal framework is therefore conducive to project performance and the achievement of the intended outcomes and impacts. The role of and support for the project by the LOC was however identified as an issue. A number of representatives interviewed indicated that the LOC could and should have played a stronger role in the project.

174 The Independent Environmental Impact Assessment (Mokua, 2011) notes that there "was no close working relationship between the Government, the LOC and the Host Cities" (Section 5.1, Delivery of the Green Goal, p 66). The review also found that "there was a general lack of commitment from the LOC towards meeting its own targets for the Green Goal" (Section 5, Green Goal 2010 Outlook, p66). While these findings apply to the overall FIFA Green Goal 2010 progamme, the lack of co-operation and commitment from the LOC would have had implications for this project, namely "*Reducing the Carbon Footprint of Major Sporting Events, FIFA 2010 and the Green Goal*".

175 The support for and participation of communities and non-government organisations was limited. The involvement of local communities and non-government organisations would have been enhanced if the project had been started earlier.

176 The rating on country ownership and driven-ness is **satisfactory** based on the support for and key role played in the project by DEA and the Host Cities.

### *C5. Financial Planning and Management*

177 In terms of budget, the project is classified by the GEF as a medium sized project. Table 1, Annex F provides a breakdown of the budget. A review of the financial records indicates that the budget was allocated as per the items and activities listed in the ToR for the project. There is no evidence of any variations in the allocations as set out in the original project budget. There were initial delays in the payment of the first disbursements which were only paid in May 2010. However, this did not prevent the retrofitting of traffic and street lights and installation of solar panels. There was also initial uncertainty between UNEP, UNDP and DEA regarding the appointment and payment to the service providers contracted to undertake the retrofitting of street and traffic lights and installation of solar panels. Requests for payments were also made without due consideration of quality of deliverables.

178 The feedback from the UNEP Fund Management Officer (FMO) indicated that all of the required UNEP internal financial controls were implemented and met. These controls

include audits of projects and the allocation of funds as per the approved project budget. Annex F contains a summary of the expenditure breakdown.

179 An additional US$ 8,613,411.00 in funding was obtained for the National Greening 2010 Framework. Table 2, Annex F provides a breakdown of the funding and sources. The majority of this was funding was from the South African Government in the form of a National Treasury Grant. The full list of funders is provided below:

- South African National Treasury Grant: US$ 4 774 399;
- DEFRA, Bilateral Grant: US$ 289 000;
- DANIDA, Bilateral Grant: US$ 3 359 998;
- NORAD, Bilateral Grant: US$ 86 666.00;
- GTZ, Bilateral Grant: US$ 33 333.00;
- INWENT, Bilateral Grant: US$ 36 682.00;
- KfW, Bilateral Grant: US$ 33 333.00.

180 While all of the required UNEP internal financial controls were allegedly implemented and met, given the issues linked to delay in initial payments and authorization from DEA for payments, the rating on financial planning and management is rated **moderately satisfactory**.

### *C6. UNEP Supervision and Backstopping*

181 The Project Document and initial SC meeting established the roles and responsibilities of the key stakeholders involved in the project, including those of UNEP, DEA and UNDP, as well as the overall management and administration. The project was developed together with project partners. The initial SC meetings outlined contractual and administrative requirements of the project, together with timeframes and operational requirements. The roles and responsibilities were therefore set out and discussed at the outset of the project.

182 Representatives from the Host Cities indicated that given the tight timeframe and the intense pressure that many of the project counterparts were under, the project was well managed and executed. However the PIR notes that there were constant changes in the focal point at UNEP. Despite these changes progress reporting remained with UNEP. However, after the project management team had left reporting was taken over by DEA.

183 In terms of supervision and backstopping, the focus appears to have been on achieving the outputs associated with Component 1 (demonstration of green technologies). The Host Cities indicated that contact with UNEP ended as soon as the World Cup was over. There was limited follow up by UNEP after the closure of the 2010 World Cup in July 2010, and no mechanisms or structures or budget was allocated as part of this project to ensure that the lessons learnt from the 2010 World Cup were taken forwards and used to inform the planning, design and implementation of future sports and other large events in South Africa and the host cities involved in the study.

184 The quality of the PIRs was found to be adequate. The comments were accurate and candid.

185 Due the constant changes in focal point at UNEP and limited attention in the project design to closure and follow up with the Host Cities the rating for supervision and backstopping is **moderately satisfactory**[8].

### *C7. Monitoring and Evaluation*

### *M&E Design*

186 The Project Document indicates that the project will follow UNEP standard monitoring, reporting and evaluation processes and procedures. The substantive and financial project reporting requirements are summarized in Appendix 8 of the Project Document.

187 The Project Document was not clear on the distinction between output and outcomes (see reconstructed Theory of Change of the project, paragraphs 66-71, which creates problems with the identification of appropriate monitoring indicators and targets. The project M&E plan was consistent with the GEF Monitoring and Evaluation policy. The Project Results Framework (Appendix 4 of the Project Document) lists the indicators for each expected output. The indicators in the logframe are specific to each output, measurable, attainable and relevant. In this regard the logframe provides a set of effective and measurable indicators and targets for the outputs that can be monitored and evaluated.

188 The logframe does not provide indicators of monitoring the success of the project in terms of the outcome and intermediate states towards impact, such as increased awareness of key stakeholders, increased efforts to green major sporting events, and, finally, reduced environmental footprint of major sporting events. This is a major short coming of the logframe and the M&E design.

189 Baseline data on current energy consumption and the potential savings associated with low carbon technologies was absent in all six of the host cities. The project was therefore not in a position to evaluate the energy and financial savings associated with the retrofitting of street and traffic lights and installation of solar panels for bill boards.

190 The responsibilities for M&E are clearly defined in the Project Document. The Document notes that the Steering Committee will receive periodic reports on progress and will make recommendations to UNEP with regard to revising aspects of the Results Framework and the M&E plan. The Project Document also makes reference to a mid-term management review or evaluation to be undertaken in September 2010. A copy of this report was not available at the time of preparing this Draft Report. The frequency of monitoring was adequate given the relatively short time-frame of the project.

191 Due to the flaws in the results framework and the absence baselines and indicators to assess the success of the project in terms of achieving its intended outcomes and intermediate states towards impact, the rating on M&E design and arrangements is rated as **unsatisfactory.**

### Budgeting and funding for M&E activities

192 Appendix 7 in the Project Document provides information on the means of verification and the costs associated with obtaining the information to track the indicators, including the budget for the Terminal Evaluation. The Project Document notes that the other M&E related costs are fully integrated in the overall project budget. The budget allocated to M&E was sufficient. However, the final budget for the Terminal Evaluation was reduced

[8] The evaluation consultant rated UNEP supervision and backstopping moderately unsatisfactory.

from US$ 20 000 to US$ 15 300.00. This reduced the time available in the field interviewing representatives from the Host Cities.

193 The rating on budgeting and funding is **moderately satisfactory.**

### *M&E Implementation*

194 Progress Implementation Review (PIR) Reports were produced during the project. The information contained in the reports and comments were deemed to be sufficiently detailed and accurate. The PIRs also commented on potential problems in delivering outputs, which in turn was used to inform the progress ratings. In this regard the ratings for the outputs were well justified. However, as indicated earlier, no indicators were provided to measure the success of the project in terms of achieving or moving towards project outcomes.

195 The main focus of the project was on component 1, the retrofitting of street and traffic lights and billboards. The internal monitoring of this component focused on the performance of the service provider to ensure that the outputs associated with component 1 were delivered within a tight timeframe and within the stipulated budget. Reporting channels by appointed PMU were initially directly to UNEP. Subsequently, PMU reported to DEA only with little to no oversight from UNEP and UNDP. However, due to communication problems payments were made to service providers in the absence of sign-off from DEA. The internal day-to-day monitoring of the project was therefore hampered by communication challenges.

196 The Final PIR report lists problems identified in the previous PIR report and lists the actions taken, who was responsible for taking the required action and the date when the action was taken. The problems identified were largely linked to the relationship between UNEP, UNDP and DEA with regard appointment and payment of service providers. The M&E system was therefore used during the project to improve project performance and or to adapt to changing needs. However, given the tight timeframes of the project and the pressure that Host Cities were under, the potential to make significant changes to the project were limited.

197 The project risks were regularly monitored both by project partners and UNEP. The PIR reports list the potential risks identified and comment on the significance of the risk.

198 There was no information in the Project Document or reference to or details on a training component for the M&E programme. Likewise no budget was allocated to training.

199 The rating on M&E Implementation is **moderately unsatisfactory.**

## D COMPLEMENTARITIES WITH THE UNEP STRATEGIES AND PROGRAMMES

200 The project was relevant to and aligned with a number of UNEP and GEF policies. These include the Bali Strategic Plan, UNEP's Mid-term Strategy 2010-2013 and GEF-4 and 5.

201 The UNEP Mid-term Strategy 2010-2013 and related Programme of Work (PoW) for the period 2010-2011 identifies six cross-cutting thematic priorities, of which Climate Change and Resource efficiency – sustainable consumption and production are relevant to and supported by the project. Specifically the project is expected to contribute to the following accomplishments:

- *Under the climate change objective:* policy, technology and investment choices focus on clean and renewable energy sources, energy efficiency and energy conservation;
- *Under the resource efficiency objective*: the project can continue to contribute to ensure that resource efficiency is increased.

202 The objectives of the Bali Strategic Plan that are relevant to and supported by the project are:

- To strengthen the capacity of Governments of developing countries as well as of countries with economies in transition, at all levels:
- To provide systematic, targeted, long and short-term measures for technology support and capacity-building, taking into account international agreements and based on national or regional priorities and needs;
- To enhance delivery by UNEP of technology support and capacity-building, within its mandate, to developing countries as well as to countries with economies in transition based on best practices from both within and outside UNEP, including by mainstreaming technology support and capacity-building throughout UNEP activities;

203 The relevant cross cutting issues are:

- Access to scientific and technological information, including information on state-of-the-art technologies;
- Facilitating access to and support for environmentally sound technologies and corresponding know -how;
- Promotion of sustainable consumption and production patterns, including support for cleaner production centres.

- The relevant thematic area is Renewable Energy.

204 The long term objectives and strategic programs for Climate Change in GEF-4 includes promotion of energy-efficient technologies and practices in the appliance and building sectors

205 The climate change mitigation strategy for GEF-5 consists of six objectives. The first objective focuses on technologies at the stage of market demonstration or commercialization where technology push is still critical. The second through fifth objectives focus on technologies that are commercially available but face barriers and require market pull to achieve widespread adoption and diffusion.

206 The project does not specifically foster the exchange of resources, technology and knowledge between the South-South partner countries. However, exchanges did take place between DEA and representatives from the Brazilian Embassy in South Africa. At a city level, the City of Cape Town, Johannesburg and eThekwini also interacted with Brazilian cities. The project also created an opportunity for interaction between local Host Cities in South Africa. In addition, the lessons learnt from the project (Component 3) will benefit other South countries involved in hosting large sports events, such as Brazil (World Cup 2016 and summer Olympics in 2020).

207 There is no evidence of consideration of gender during the project design or implementation, nor were gender disaggregated indicators tracked. However, the issue of gender equality was addressed as part of the DEAs National Volunteer Programme during the FIFA 2010 World Cup.

# III CONCLUSIONS AND RECOMMENDATIONS

## A. Conclusions

208 The overall development goal of *"Reducing the Carbon Footprint of Major Sporting Events, FIFA 2010 and the Green Goal"* project is to showcase best practice carbon offset energy efficient projects in order to promote and build awareness of renewable energy and the application of eco-friendly technologies and increase their use globally. In so doing the projects main objective was to use the 2010 FIFA World Cup in South Africa to demonstrate to the decision-makers and the general public the importance of low carbon technologies at major sporting events.

209 The objective of the terminal evaluation was to examine the extent and magnitude of any project impacts to date and determine the likelihood of future impacts. The evaluation also assesses the project performance and the implementation of planned project activities and planned outputs against actual results. The evaluation therefore focused on four key questions:

- How successful was the project in demonstrating green technologies, in the areas of solar and energy efficiency by the end of the 2010 World Cup?
- How successful was the project in promoting the adoption of the Green tourism initiative, in the six (6) host cities by the end of the 2010 World Cup?
- To what extent have the lessons learnt and best practices from the project so far contributed to changes in practices and behaviour in sporting events, with regards to greening efforts?
- Overall, how successful has the project been in popularising low carbon technologies amongst decision makers and the general public?

210 With regards to these key questions, the findings of the assessment indicate that the outputs and activities associated with Component 1 of the project did demonstrate green technologies. However, due to the relatively small-scale of the project, specifically Component 1, the exposure of low carbon technologies to the key target groups was limited. The target groups were government decision-makers at a national and local authority level, the general public and spectators attending the 2010 FIFA World Cup in South Africa. In the case of government descion-makers, the majority were under exterme pressure in the 6 months leading up to the hosting of the 2010 FIFA World Cup. The timing of the project was therefore not ideal and would have placed additional pressure on officials, which in turn, limited its success in terms of raising awareness. In addition, a number of key departments in some of the Host Cities were not involved in the project, such as the Electricity and Finance Departments. This reduced the ability of the project to showcase the benefits of low carbon technologies and the associated potential for replication. The limited involvement of key departments also reduced the ability of these departments to act as drivers.

211 Due to the relatively small scale of the project, the majority of the general public and spectators attending the 2010 FIFA World Cup were unlikely to have been fully aware of the green technology components associated with Component 1. In this regard it is not always possible to tell the difference between normal and retro-fitted street lights etc. A number of the outputs associated with Component 1 were also located in areas that were not closely associated with the 2010 FIFA World Cup. Ideally the outputs should have been located at the stadiums or in close proximity to the stadiums. This was not always possible.

212 The success in terms of promoting the adoption of the Green tourism initiative by the end of the 2010 World Cup was limited. The IEIA (Mokuwa, 2011) found that the tourism

sector was not effectively involved in the greening process. In addition, the project did not link up with existing tourism initiatives.

213 Although 100 000 copies of the Green Passport were distributed the success of this component in terms of raising visitor awareness appears to have been limited. In addition, the Logframe did not list indicators that could be used to assess the success of the project in terms of moving towards achieving its expected outcomes

214 The Green Passport programme would have benefited if it was linked to and endorsed by FIFA.

215 There was limited follow up by UNEP and DEA after the closure of the 2010 FIFA World Cup in July 2010, and no mechanisms, structures or budget was allocated as part of the project to ensure that the lessons learnt from the 2010 World Cup were taken forward and used to inform the planning, design and implementation of future major sports events. The continued long-term, project-derived results and impacts associated with the project would have benefitted significantly from additional funding aimed at ensuring that the key lessons from the 2010 World Cup were carried forward and used to inform the planning, design, construction and running of large events, including sports events, in the future.

216 The guidelines contained in the IEIA (Mokua, 2011) lacked the detail required to effectively inform the planning, design and management of large sports events.

217 There is limited evidence that the lessons learnt and best practices from the 2010 FIFA World Cup were implemented for large sports events in South Africa. For example, none of the lessons from 2010 FIFA World Cup appear to have been implemented for the African Cup of Nations (AFCON) 2013, which was held in South Africa in February 2013.

218 It was beyond the scope of the Evaluation to assess if the lessons learnt and guidelines have been adopted for other large, international sporting events post 2010, such as the FIFA 2014 World Cup to be held in Brazil.

219 Overall, the success of the project in terms of raising awareness of and popularising low carbon technologies amongst decision makers and the general public was limited. In addition to the reasons listed earlier, environmental criteria did not form a significant part of the Host City agreements or any other legal obligations made to FIFA in terms of the hosting of the World Cup. This led to environmental issues being seen to some extent as “optional” and afforded lower priority compared to other areas that were related to legally binding obligations, such as logistics and security.

220 The IEIA (Mokua, 2011) found that “In South Africa there was a general lack of leadership and funds for driving the Green Goal process. This lack of genuine commitment from the Local Organizing Committee, the government and the event’s stakeholders made it impossible to achieve the goals and targets the programme” (Section 6, Lessons Learnt Through the Green Goal 2010, p94). However, DEA and the Host Cities played a crucial role in ensuring the development of the National Greening 2010 Framework for the 2010 World Cup.

221 In sum, while the project was considered highly relevant and produced some interesting outputs, due to its late implementation, insufficient involvement of key stakeholders and the lack of efforts to actively disseminate lessons learned, its effectiveness and likelihood of impact and sustainability remained below expectations. **The overall rating for the project is therefore moderately unsatisfactory.**

## B. Lessons Learnt

222 The *"Reducing the Carbon Footprint of Major Sporting Events, FIFA 2010 and the Green Goal"* project was implemented over the final 6 months leading up to 2010 FIFA World Cup at a time when government officials at all levels were under pressure and capacity constraints existed. Tourism bodies would also have been under pressure during the period. The project would have been more successful if it had been started one year or at least six months earlier and was linked to existing FIFA endorsed guidelines and initiatives.

223 Funding for greening initiatives should be secured well in advance of implementation in order to increase the chances of success.

224 The opportunities to showcase best practice carbon offset energy efficient projects are likely to be significantly greater if the technology is incorporated into the design and planning phase. The key opportunities and benefits associated with showcasing low carbon technologies for large sports events are linked to the stadiums themselves, especially in design and construction phase. The project relied solely on retro-fitting to showcase low carbon technology which is not as effective. In addition, the visibility of green technologies used for lights and billboards was limited to the general public, due to the absence of signs to attract the public's attention to the fact that green technologies were being used.

225 Environmental standards and guidelines should be clear and sufficiently detailed so as to enable them to effectively inform the planning, design implementation of large events, including sports events.

226 The involvement and commitment of key stakeholders is critical to the success of the project. The Independent Environmental Assessment (Mokua, 2011) found that The LOC and key government departments were not fully committed to the FIFA 2010 Green Goal Project. The tourism initiative and Green Passport component of the project would have benefitted from being part of and endorsed by FIFA. Future projects of this nature would benefit from the involvement of and close co-operation with the event organizer (FIFA, IOC etc.).

227 Closure and follow up are critical to ensuring that the lessons learnt from the project are identified and used to ensure that the overall objectives of the project are met. Project design must ensure that adequate measures and budget are provided to ensure that the lessons learnt are recorded, and in the case of this project, used to inform the planning, design and implementation of future major sports events.

## C. Recommendations

228 UNEP should prepare more detailed guidelines with key recommendations for greening large sports (and other) events that can be used to effectively inform the planning, design and implementation of such events.

229 UNEP should also ensure that these guidelines and key findings of the IEIA of the World Cup 2010 Green Goal Programme are effectively communicated to key organisations, such as FIFA and the IOC, and made available to countries and cities planning and hosting large events.

230 DEA should create opportunities with host cities to discuss the lessons learnt from the project, to identify the measures needed to reduce the carbon footprint of major sporting (and other) events and to determine how to implement these measures effectively.

**Table 5: Summary of Ratings based on Performance Criteria described in Part II**

| Criterion | Summary Assessment | Rating |
|---|---|---|
| **A. Attainment of project objectives and results** | | MUS |
| 1. Effectiveness | The activities and outputs associated with Component 1, and 3 were largely achieved. However, there is limited evidence that the project will result in the expected outcomes. | MUS |
| 2. Relevance | The project is relevant to a number of South African policies and strategies at a national, regional and local level. | HS |
| 3. Efficiency | The project was informed by lessons learnt from similar initiatives implemented for other large sporting events, including the 2006 FIFA World Cup in Germany (FIFA Green Goal 2006) and the 2000 and 2008 summer Olympic Games in Sydney and Beijing respectively. The project was also supported by the National Greening Framework for the 2010 FIFA World Cup. | MS |
| **B. Sustainability of project outcomes***(See B1)* | *The overall rating on this criterion is based on the weakest rating for sub-criteria* | MUL |
| 1. Financial | Barriers to entry for green technologies exist linked to the cost and efficiency. There is also a lack of funding to ensure that the lessons learnt are not only disseminated, but also work-shopped. | MUL |
| 2. Socio-political | Lack of collaboration with LOC and FIFA despite high level of ownership by national (DEA) and local (Host Cities). However, barriers to entry do exist and these are linked to the cost and efficiency of green technology alternatives. In addition capacity, specifically in the smaller host cities is an issue. | MUL |
| 3. Institutional framework | Lack of collaboration with LOC and FIFA | MUL |
| 4. Environmental | The high cost of energy efficient technologies remains a potential constraint | ML |
| **C. Catalytic role** *(See B2)* | Potential is constrained by financial and technology barriers affecting the widespread implementation of renewable energy technologies. The relative small scale of the project and short duration of the project also limits potential catalytic role of the project in terms of its contribution to institutional and policy changes. | MUS |
| **D. Stakeholders involvement** *(See C3)* | Lack of collaboration with LOC and FIFA | MUS |
| **E. Country ownership / drivenness***(See C4)* | The rating on country ownership and drivenness was based on the role of DEA and the Host Cities in the project. | S |
| **F. Achievement of outputs and activities** *(See A)* | Majority of planned activities and outputs achieved. | MS |
| **G. Preparation and readiness** | The Project Document listed the roles and responsibilities and identified potential constraints. | MS |

| Criterion | Summary Assessment | Rating |
|---|---|---|
| *(See C1)* | However, impact of late timing and need to co-ordinate with FIFA not addressed. | |
| **H. Implementation approach** *(See C2)* | There were a number of challenges encountered during the project. These were linked to tight timeframes, availability of data, changes in the focal point at UNEP, communication problems regarding the procedures for appointment of service providers and payment procedures and lack of collaboration with FIFA. | MS |
| **I. Financial planning and management***(See C5)* | The required UNEP internal financial controls were largely implemented and met. However, there were problems with signing off of payment of service providers | MS |
| **J. Monitoring and Evaluation** *(See C7)* | *The overall rating on this criterion is based on rating for M&E Implementation* | US |
| 1. M&E Design | Logframe does not provide indicators to assess achievement of outcomes | US |
| 2. M&E Plan Implementation | The Final PIR report lists problems identified in the previous PIR report and lists the actions taken, who was responsible for taking the required action and the date when the action was taken | MUS |
| 3. Budgeting and funding for M&E activities | No information in the Project Document or reference to or details on a training component for the M&E programme. Likewise no budget was allocated to training.<br>Budget for TE reduced. | MS |
| **K. UNEP Supervision and backstopping** *(See C6)* | No measures taken to works-shop findings of review and guidelines | MS* |
| **Overall rating** | **While the project was considered highly relevant and produced some interesting outputs, due to its late implementation, insufficient involvement of key stakeholders and the lack of efforts to actively disseminate lessons learned, its effectiveness and likelihood of impact and sustainability remained below expectations.** | **MU** |

*) This criterion was rated moderately unsatisfactory (MU) by the evaluation consultant.

## LIST OF ANNEXES

- Terms of Reference for the Evaluation including evaluation criteria (A)
- Project Framework (B)
- Evaluation program and list of interviews (C)
- Questionnaire (D)
- Bibliography (E)
- Finance Summary (F)
- Review of project design (G)
- Brief CV of the consultant (H)

# ANNEX A: TERMS OF REFERENCE

**TERMS OF REFERENCE FOR THE EVALUATION**

**Objective and Scope of the Evaluation**

1. In line with the UNEP Evaluation Policy[9], the UNEP Evaluation Manual[10] and the Guidelines for GEF Agencies in Conducting Terminal Evaluations[11], the terminal evaluation of the Project "*Reducing the Carbon Footprint of Major Sporting Events, FIFA 2010 and the Green Goal*" is undertaken at the end of the project to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP, the Department of Environmental Affairs and Tourism (DEAT), the GEF and their partners. Therefore, the evaluation will identify lessons of operational relevance for future project formulation and implementation. It will focus on the following sets of **key questions**, based on the project's intended outcomes, which may be expanded by the consultant as deemed appropriate:

(a) How successful was the project in demonstrating green technologies, in the areas of solar and energy efficiency by the end of the 2010 World Cup?

(b) How successful was the project in promoting the adoption of the Green tourism initiative, in the six (6) host cities by the end of the 2010 World Cup?

(c) To what extent have the lessons learnt and best practices from the project so far contributed to changes in practices and behaviour in sporting events, with regards to greening efforts?

(d) Overall, how successful has the project been in popularising low carbon technologies amongst decision makers and the general public?

**Overall Approach and Methods**

2. The terminal evaluation of the Project "*Reducing the Carbon Footprint of Major Sporting Events, FIFA 2010 and the Green Goal*" will be conducted by one independent consultant under the overall responsibility and management of the UNEP Evaluation Office (Nairobi), in consultation with the UNEP GEF Coordination Office (Nairobi).

3. It will be an in-depth evaluation using a participatory approach whereby key stakeholders are kept informed and consulted throughout the evaluation process. Both quantitative and qualitative evaluation methods will be used to determine project achievements against the expected outputs, outcomes and impacts.

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

(a) A **desk review** of project documents[12] including, but not limited to:

- Relevant background documentation, inter alia UNEP and GEF policies, strategies and programmes pertaining to Climate Change and carbon offsetting, the Green Goal Initiative of 2006 FIFA World Cup and the FIFA 2010 South Africa Independent Environmental Assessment report;
- Project design documents; Annual Work Plans and Budgets or equivalent, revisions to the logical framework and project financing;
- Project reports such as progress and financial reports from countries to the EA and from the EA to UNEP; Steering Committee meeting minutes; annual Project Implementation Reviews and relevant correspondence;
- Project completion report;

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

10 http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationManual/tabid/2314/language/en-US/Default.aspx

11 http://www.thegef.org/gef/sites/thegef.org/files/documents/TE_guidelines7-31.pdf

12 Documents to be provided by the UNEP are listed in Annex 6.

- Documentation related to project outputs.

(b) **Interviews**[13] with:

- Project management and execution support;
- UNEP Task Manager and Fund Management Officer (Nairobi);
- Country lead execution partners and other relevant partners;
- Relevant staff of GEF Secretariat;
- Representatives of other multilateral agencies and other relevant organisations (e.g. DEAT, ESKOM).

(c) **Country visits.** The consultant will visit 5 of the 6 host cities in South Africa (Pretoria, Johannesburg, Cape Town, Polokwane and Rustenburg).

**Key Evaluation principles**

5. Evaluation findings and judgements should 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 extent possible, and when verification was not possible, the single source will be mentioned[14]. Analysis leading to evaluative judgements should always be clearly spelled out.

6. The evaluation will assess the project with respect to **a minimum set of evaluation criteria** grouped in four categories: (1) Attainment of objectives and planned results, which comprises the assessment of outputs achieved, relevance, effectiveness and efficiency and the review of outcomes towards impacts; (2) Sustainability and catalytic role, which focuses on financial, socio-political, institutional and ecological factors conditioning sustainability of project outcomes, and also assesses efforts and achievements in terms of replication and up-scaling of project lessons and good practices; (3) Processes affecting attainment of project results, which covers project preparation and readiness, implementation approach and management, stakeholder participation and public awareness, country ownership/driven-ness, project finance, UNEP supervision and backstopping, and project monitoring and evaluation systems; and (4) Complementarity with the UNEP strategies and programmes. The lead consultant can propose other evaluation criteria as deemed appropriate.

7. **Ratings**. All evaluation criteria will be rated on a six-point scale. However, complementarity of the project with the UNEP strategies and programmes is not rated. Annex 3 provides detailed guidance on how the different criteria should be rated and how ratings should be aggregated for the different evaluation criterion categories.

8. In attempting to attribute any outcomes and impacts to the project, the evaluators should consider the difference between **what has happened with** and **what would have happened without** the project. This implies that there should be consideration of the baseline conditions and trends in relation to the intended project outcomes and impacts. This also means that there should be plausible evidence to attribute such outcomes and impacts to the actions of the project. Sometimes, adequate information on baseline conditions and trends is lacking. In such cases this should be clearly highlighted by the evaluators, along with any simplifying assumptions that were taken to enable the evaluator to make informed judgements about project performance.

9. As this is a terminal evaluation, particular attention should be given to learning from the experience. Therefore, **the "why?" question** should be at front of the consultant's mind all through the evaluation exercise. This means that the consultant needs to go beyond the assessment of "what" the project performance was, and make a serious effort to provide a deeper understanding of "why" the performance was as it was, i.e. of processes affecting attainment of project results (criteria under category 3). This should provide the basis for the lessons that can be drawn from the project. In fact, the usefulness of the evaluation will be determined to a large extent by the capacity of the consultant to explain "why things happened" as they happened and are likely to evolve in this or that direction, which goes well beyond the mere assessment of "where things stand" today.

**Evaluation criteria**

**Attainment of Objectives and Planned Results**

10. The evaluation should assess the relevance of the project's objectives and the extent to which these were effectively and efficiently achieved or are expected to be achieved.

(a) *Achievement of Outputs and Activities:* Assess, for each component, the project's success in producing the programmed outputs as presented in Table A1.1 (Annex 1), both in quantity and

[13] Face-to-face or through any other appropriate means of communication

[14] Individuals should not be mentioned by name if anonymity needs to be preserved.

quality, as well as their usefulness and timeliness. Briefly explain the degree of success of the project in achieving its different outputs, cross-referencing as needed to more detailed explanations provided under Section 3 (which covers the processes affecting attainment of project objectives). The achievements under the regional and national demonstration projects will receive particular attention.

(b) *Relevance*: Assess, in retrospect, whether the project's objectives and implementation strategies were consistent with: i) Sub-regional environmental issues and needs; ii) the UNEP mandate and policies at the time of design and implementation; and iii) the relevant GEF focal areas, strategic priorities and operational programme(s).

(c) *Effectiveness:* Appreciate to what extent the project has achieved its main objective ***to implement initiatives that will reduce greenhouse emissions and demonstrate the emission mitigating potential of efficient public appliances and the role of renewable energy*** and its component objectives as presented in Table 2 above. To measure achievement, use as much as appropriate the indicators for achievement proposed in the Logical Framework Matrix (Logframe) of the project, adding other relevant indicators as appropriate. Briefly explain what factors affected the project's success in achieving its objectives, cross-referencing as needed to more detailed explanations provided under Section 3.

(d) *Efficiency*: Assess the cost-effectiveness and timeliness of project execution. Describe any cost- or time-saving measures put in place in attempting to bring the project to a successful conclusion within its programmed budget and (extended) time. Analyse how delays, if any, have affected project execution, costs and effectiveness. Wherever possible, compare the cost and time over results ratios of the project with that of other similar projects. Give special attention to efforts by the project teams to make use of / build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency.

(e) *Review of Outcomes to Impacts (ROtI)*: Reconstruct the logical pathways from project outputs over achieved objectives towards impacts, taking into account performance and impact drivers, assumptions and the roles and capacities of key actors and stakeholders, using the methodology presented in the GEF Evaluation Office's ROtI Practitioner's Handbook[15] (summarized in Annex 7 of the TORs). Appreciate to what extent the project has to date contributed, and is likely in the future to further contribute to changes in stakeholder behaviour as regards: i) the use of green technologies during sporting events ii) changes in personal behaviour in being more environmentally aware, and the likelihood of those leading to increased use of eco-friendly technologies globally.

**Sustainability and catalytic role**

11. **Sustainability** is understood as the probability of continued long-term project-derived results and impacts after the external project funding and assistance ends. The evaluation will identify and assess the key conditions or factors that are likely to undermine or contribute to the persistence of benefits. Some of these factors might be direct results of the project while others will include contextual circumstances or developments that are not under control of the project but that may condition sustainability of benefits. The evaluation should ascertain to what extent follow-up work has been initiated and how project results will be sustained and enhanced over time. Application of the ROtI method will assist in the evaluation of sustainability.

12. Four aspects of sustainability will be addressed:

(a) *Socio-political sustainability.* Are there any social or political factors that may influence positively or negatively the sustenance of project results and progress towards impacts? Is the level of ownership by the main national and regional stakeholders sufficient to allow for the project results to be sustained? Are there sufficient government and stakeholder awareness, interests, commitment and incentives to execute, enforce and pursue the programmes, plans, agreements, monitoring systems etc. prepared and agreed upon under the project?

(b) *Financial resources.* To what extent are the continuation of project results and the eventual impact of the project dependent on continued financial support? What is the likelihood that adequate

15 http://www.thegef.org/gef/sites/thegef.org/files/documents/Impact_Eval-Review_of_Outcomes_to_Impacts-RotI_handbook.pdf

financial resources[16] will be or will become available to implement the programmes, plans, agreements, monitoring systems etc. prepared and agreed upon under the project? Are there any financial risks that may jeopardize sustenance of project results and onward progress towards impact?

(c) *Institutional framework*. To what extent is the sustenance of the results and onward progress towards impact dependent on issues relating to institutional frameworks and governance? How robust are the institutional achievements such as governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. required to sustaining project results and to lead those to impact on human behaviour and environmental resources?

(d) *Environmental sustainability*. Are there any environmental factors, positive or negative, that can influence the future flow of project benefits? Are there any project outputs or higher level results that are likely to affect the environment, which, in turn, might affect sustainability of project benefits?

13. **Catalytic Role and Replication**. The *catalytic role* of GEF-funded interventions is embodied in their approach of supporting the creation of an enabling environment and of investing in pilot activities which are innovative and showing how new approaches can work. UNEP and the GEF also aim to support activities that upscale new approaches to a national, regional or global level, with a view to achieve sustainable global environmental benefits. The evaluation will assess the catalytic role played by this project, namely to what extent the project has:

(a) *catalyzed behavioural changes* in terms of use and application by the relevant stakeholders of: i) technologies and approaches show-cased by the demonstration projects; ii) strategic programmes and plans developed; and iii) assessment, monitoring and management systems established at a national and sub-regional level;

(b) provided *incentives* (social, economic, market based, competencies etc.) to contribute to catalyzing changes in stakeholder behaviour;

(c) contributed to *institutional changes.* An important aspect of the catalytic role of the project is its contribution to institutional uptake or mainstreaming of project-piloted approaches in the regional and national demonstration projects;

(d) contributed to *policy changes* (on paper and in implementation of policy);

(e) contributed to sustained follow-on financing (*catalytic financing*) from Governments, the GEF or other donors;

(f) created opportunities for particular individuals or institutions ("*champions*") to catalyze change (without which the project would not have achieved all of its results).

14. *Replication*, in the context of GEF projects, is defined as lessons and experiences coming out of the project that are replicated (experiences are repeated and lessons applied in different geographic areas) or scaled up (experiences are repeated and lessons applied in the same geographic area but on a much larger scale and funded by other sources). The evaluation will assess the approach adopted by the project to promote replication effects and appreciate to what extent actual replication has already occurred or is likely to occur in the near future. What are the factors that may influence replication and scaling up of project experiences and lessons?

**Processes affecting attainment of project results**

15. **Preparation and Readiness**. Were the project's objectives and components clear, practicable and feasible within its timeframe? Were the capacities of executing agencies properly considered when the project was designed? Was the project document clear and realistic to enable effective and efficient implementation? Were the partnership arrangements properly identified and the roles and responsibilities negotiated prior to project implementation? Were counterpart resources (funding, staff, and facilities) and enabling legislation assured? Were adequate project management arrangements in place? Were lessons from other relevant projects properly incorporated in the project design? Were lessons learned and recommendations from Steering Committee meetings adequately integrated in the project approach? What factors influenced the quality-at-entry of the project design, choice of partners, allocation of financial resources etc.?

[16] Those resources can be from multiple sources, such as the public and private sectors, income generating activities, other development projects etc.

16. **Implementation Approach and Adaptive Management**. This includes an analysis of approaches used by the project, its management framework, the project's adaptation to changing conditions (adaptive management), the performance of the implementation arrangements and partnerships, relevance of changes in project design, and overall performance of project management. The evaluation will:

(a) Ascertain to what extent the project implementation mechanisms outlined in the project document have been followed and were effective in delivering project outputs and outcomes. Were pertinent adaptations made to the approaches originally proposed?

(b) Assess the role and performance of the units and committees established and the project execution arrangements at all levels;

(c) Evaluate the effectiveness and efficiency of project management by the EA and how well the management was able to adapt to changes during the life of the project;

(d) Assess the extent to which project management responded to direction and guidance provided by the Steering Committee and IA supervision recommendations;

(e) Identify administrative, operational and/or technical problems and constraints that influenced the effective implementation of the project, and how the project partners tried to overcome these problems;

(f) Assess the extent to which MTE recommendations were followed in a timely manner.

17. **Stakeholder[17] Participation and Public Awareness**. The term stakeholder should be considered in the broadest sense, encompassing project partners, government institutions, private interest groups, local communities etc. The assessment will look at three related and often overlapping processes: (1) information dissemination between stakeholders, (2) consultation between stakeholders, and (3) active engagement of stakeholders in project decision making and activities. The evaluation will specifically assess:

(a) the approach(es) used to identify and engage stakeholders in project design and implementation. What were the strengths and weaknesses of these approaches with respect to the project's objectives and the stakeholders' motivations and capacities? What was the achieved degree and effectiveness of collaboration and interactions between the various project partners and stakeholders during the course of implementation of the project?

(b) the degree and effectiveness of any public awareness activities that were undertaken during the course of implementation of the project; or that are built into the assessment methods so that public awareness can be raised at the time the assessments will be conducted;

(c) how the results of the project (the use of green technologies in the world cup) engaged key stakeholders in reducing carbon emissions.

18. The ROtI analysis should assist the consultant in identifying the key stakeholders and their respective roles, capabilities and motivations in each step of the causal pathway from activities to achievement of outputs and objectives to impact.

19. **Country Ownership and Driven-ness.** The evaluation will assess the performance of the Governments of the countries involved in the project, namely:

(a) in how the Governments have assumed responsibility for the project and provided adequate support to project execution, including the degree of cooperation received from the various contact institutions in the countries involved in the project and the timeliness of provision of counter-part funding to project activities;

(b) to what extent the political and institutional framework of the participating countries has been conducive to project performance. Look, in particular, at the extent of the political commitment to enforce (sub-) regional agreements promoted under the project;

[17] Stakeholders are the individuals, groups, institutions, or other bodies that have an interest or stake in the outcome of the project. The term also applies to those potentially adversely affected by the project.

(c) to what extent the Governments have promoted the participation of communities and their non-governmental organisations in the project; and

(d) how responsive the Governments were to DEAT coordination and guidance, to UNEP supervision.

20. **Financial Planning and Management**. Evaluation of financial planning requires assessment of the quality and effectiveness of financial planning and control of financial resources throughout the project's lifetime. The assessment will look at actual project costs by activities compared to budget (variances), financial management (including disbursement issues), and co-financing. The evaluation will:

(a) Verify the application of proper standards (clarity, transparency, audit etc.) and timeliness of financial planning, management and reporting to ensure that sufficient and timely financial resources were available to the project and its partners;

(b) Appreciate other administrative processes such as recruitment of staff, procurement of goods and services (including consultants), preparation and negotiation of cooperation agreements etc. to the extent that these might have influenced project performance;

(c) Present to what extent co-financing has materialized as expected at project approval (see Table 1). Report country co-financing to the project overall, and to support project activities at the national level in particular. The evaluation will provide a breakdown of final actual costs and co-financing for the different project components (see tables in Annex 4).

(d) Describe the resources the project has leveraged since inception and indicate how these resources are contributing to the project's ultimate objective. Leveraged resources are additional resources—beyond those committed to the project itself at the time of approval—that are mobilized later as a direct result of the project. Leveraged resources can be financial or in-kind and they may be from other donors, NGO's, foundations, governments, communities or the private sector.

21. Analyse the effects on project performance of any irregularities in procurement, use of financial resources and human resource management, and assess the adequacy of measures taken by the EA or IA to prevent and/or respond to such irregularities.

22. **UNEP Supervision and Backstopping.** The purpose of supervision is to verify the quality and timeliness of project execution in terms of finances, administration and achievement of outputs and outcomes, in order to identify and recommend ways to deal with problems which arise during project execution. Such problems may be related to project management but may also involve technical/institutional substantive issues in which UNEP has a major contribution to make. The evaluators should assess the effectiveness of supervision and administrative and financial support provided by UNEP including:

(a) The adequacy of project supervision plans, inputs and processes;

(b) The emphasis given to outcome monitoring (results-based project management);

(c) The realism and candour of project reporting and ratings (i.e. are PIR ratings an accurate reflection of the project realities and risks);

(d) The quality of documentation of project supervision activities; and

(e) Financial, administrative and other fiduciary aspects of project implementation supervision.

23. **Monitoring and Evaluation**. The evaluation will include an assessment of the quality, application and effectiveness of project monitoring and evaluation plans and tools, including an assessment of risk management based on the assumptions and risks identified in the project document. The evaluation will appreciate how information generated by the M&E system during project implementation was used to adapt and improve project execution, achievement of outcomes and ensuring sustainability. M&E is assessed on three levels:

(a) *M&E Design*. Projects should have sound M&E plans to monitor results and track progress towards achieving project objectives. An M&E plan should include a baseline (including data, methodology, etc.), SMART indicators and data analysis systems, and evaluation studies at specific times to assess results. The time frame for various M&E activities and standards for outputs should have been specified. The evaluators should use the following questions to help assess the M&E design aspects:

- Quality of the project logframe as a planning and monitoring instrument; analyse/compare logframe in Project Document, revised logframe (2008) and logframe used in Project Implementation Review reports to report progress towards achieving project objectives;
- SMART-ness of indicators: Are there specific indicators in the logframe for each of the project objectives? Are the indicators measurable, attainable (realistic) and relevant to the objectives? Are the indicators time-bound?
- Adequacy of baseline information: To what extent has baseline information on performance indicators been collected and presented in a clear manner? Was the methodology for the baseline data collection explicit and reliable?
- Arrangements for monitoring: Have the responsibilities for M&E activities been clearly defined? Were the data sources and data collection instruments appropriate? Was the frequency of various monitoring activities specified and adequate? In how far were project users involved in monitoring?
- Arrangements for evaluation: Have specific targets been specified for project outputs? Has the desired level of achievement been specified for all indicators of objectives and outcomes? Were there adequate provisions in the legal instruments binding project partners to fully collaborate in evaluations?
- Budgeting and funding for M&E activities: Determine whether support for M&E was budgeted adequately and was funded in a timely fashion during implementation.

(b) *M&E Plan Implementation*. The evaluation will verify that:

- the M&E system was operational and facilitated timely tracking of results and progress towards projects objectives throughout the project implementation period;
- annual project reports and Progress Implementation Review (PIR) reports were complete, accurate and with well justified ratings;
- the information provided by the M&E system was used during the project to improve project performance and to adapt to changing needs;
- projects had an M&E system in place with proper training, instruments and resources for parties responsible for M&E.

**Complementarities with UNEP strategies and programmes**

24. UNEP aims to undertake GEF funded projects that are aligned with its own strategies. The evaluation should present a brief narrative on the following issues:

(a) *Linkage to UNEP's Expected Accomplishments and POW 2010-2011*. The UNEP MTS specifies desired results in six thematic focal areas. The desired results are termed Expected Accomplishments. Using the completed ROtI analysis, the evaluation should comment on whether the project makes a tangible contribution to any of the Expected Accomplishments specified in the UNEP MTS. The magnitude and extent of any contributions and the causal linkages should be fully described. Whilst it is recognised that UNEP GEF projects designed prior to the production of the UNEP Medium Term Strategy (MTS)[18]/ Programme of Work (POW) 2010/11 would not necessarily be aligned with the Expected Accomplishments articulated in those documents, complementarities may still exist.

(b) *Alignment with the Bali Strategic Plan (BSP)*[19]. The outcomes and achievements of the project should be briefly discussed in relation to the objectives of the UNEP BSP.

(c) *Gender*. Ascertain to what extent project design, implementation and monitoring have taken into consideration: (i) possible gender inequalities in access to and the control over natural resources; (ii) specific vulnerabilities of women and children to environmental degradation or disasters; and (iii) the role of women in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation. Appreciate whether the intervention is likely to have any lasting differential impacts on gender equality and the relationship between women and the environment. To what extent do unresolved gender inequalities affect sustainability of project benefits?

[18] http://www.unep.org/PDF/FinalMTSGCSS-X-8.pdf
[19] http://www.unep.org/GC/GC23/documents/GC23-6-add-1.pdf

(d) *South-South Cooperation*. This is regarded as the exchange of resources, technology, and knowledge between developing countries. Briefly describe any aspects of the project that could be considered as examples of South-South Cooperation.

**The Consultants' Team**

25. For this evaluation, one independent consultant will be hired. The evaluator will have the following expertise and experience:

(a) Evaluation of environmental projects

(b) Expertise in Climate Change, Renewable Energy and Environmental Impact Assessments

(c) Extensive knowledge of green technologies and sustainable development in urban areas

(d) A minimum of 10 years experience in Environment related field

(e) Good knowledge of UNEP/GEF work

26. The **Consultant** will be responsible for coordinating the data collection and analysis phase of the evaluation, and preparing the main report. (S)He will ensure that all evaluation criteria are adequately covered.

*27. By undersigning the service contract with UNEP/UNON, the consultant certifies that they have not been associated with the design and implementation of the project in any way which may jeopardize their independence and impartiality towards project achievements and project partner performance. In addition, they will not have any future interests (within six months after completion of their contract) with the project's executing or implementing units.*

**Evaluation Deliverables and Review Procedures**

28. The Consultant will prepare an **inception report** containing a thorough review of the project design quality and the evaluation framework. The review of design quality will cover the following aspects:

- Project relevance (see paragraph 28 (b));
- A desk-based Theory of Change of the project (see Annex 7 - ROtI analysis);
- Sustainability consideration (see paragraphs 29-30) and measures planned to promote replication and upscaling (see paragraph 31);
- Preparation and readiness (see paragraph 33);
- Financial planning (see paragraph 38);
- M&E design (see paragraph 41(a));
- Complementarities with UNEP strategies and programmes (see paragraph 42);
- Using the above, complete an assessment of the overall quality of the project design (see Annex 8);
- The evaluation framework should summarize the information available from project documentation against each of the main evaluation parameters. Any gaps in information should be identified and methods for additional data collection, verification and analysis should be specified. A draft schedule for the evaluation process should be presented.

The evaluation framework will present in further detail the evaluation questions under each criterion with their respective indicators and data sources. The inception report will be submitted for review by the Evaluation Office before the evaluation team conducts any field visits.

29. **The main evaluation report** should be brief (no longer than 35 pages – excluding the executive summary and annexes), to the point and written in plain English. The report will follow the annotated Table of Contents outlined in Annex 2. 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, 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. Any dissident views in response to evaluation findings will be appended in footnote or annex as appropriate.

30. **Report summary**. The consultant will prepare a 15-slide presentation summarizing the key findings, lessons learned and recommendations of the evaluation. This presentation will be made to the Task Manager and selected stakeholders via skype or other means agreed by 22 March 2013. The purpose of this presentation is to engage the main project partners in a discussion on the evaluation results.

31. **Review of the draft evaluation report**. The Consultant will submit the zero draft report latest by 1 April 2013 to the UNEP EO and revise the draft following the comments and suggestions made by the EO. The EO will then share the first draft report with the UNEP GEF Coordination Office (Nairobi) and the UNEP Division for Technology, Industry and Economics. The UNEP Task Manager will forward the first draft report to the other project stakeholders, in particular DEAT, for review and comments. Stakeholders may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions. Comments would be expected within two weeks after the draft report has been shared. Any comments or responses to the draft report will be sent to the UNEP EO for collation. The EO will provide the comments to the consultant for consideration in preparing the final draft report. The Consultant will submit the final draft report no later than 2 weeks after reception of stakeholder comments. The Consultant will prepare a **response to comments** providing a list of the comments that are in contradiction with the findings of the evaluation team and could therefore not be accommodated in the final report, with a clear explanation why. This response will be shared by the EO with the interested stakeholders to ensure full transparency.

32. Consultations will be held between the consultant, EO staff, the UNEP/GEF, UNEP/DTIE, and key members of the project execution team. These consultations will seek feedback on the proposed recommendations and lessons.

33. **Submission of the final Terminal Evaluation report**. The final report shall be submitted by Email to:

Segbedzi Norgbey, Head
UNEP Evaluation Office
Email: segbedzi.norgbey@unep.org

34. The Head of Evaluation will share the report with the following persons:

Maryam Niamir-Fuller, Director
UNEP/GEF Coordination Office
Email: maryam.niamir-fuller@unep.org

Sylvie Lemmet, Director
UNEP/DTIE
Email: Sylvie.lemmet@unep.org

Geordie Colville
UNEP, DTIE
Email: Geordie.Colville@unep.org

35. The final evaluation report will be published on the UNEP Evaluation Office web-site www.unep.org/eou and may be printed in hard copy. Subsequently, the report will be sent to the GEF Office of Evaluation for their review, appraisal and inclusion on the GEF website.

36. As per usual practice, the UNEP EO will prepare a **quality assessment** of the zero draft and final draft report, which is a tool for providing structured feedback to the evaluation consultant. The quality of the report will be assessed and rated against both GEF and UNEP criteria as presented in Annex 5.

37. The UNEP Evaluation Office will also prepare a **commentary** on the final evaluation report, which presents the EO ratings of the project based on a careful review of the evidence collated by the evaluation team and the internal consistency of the report. These ratings are the final ratings that the UNEP Evaluation Office will submit to the GEF Office of Evaluation.

**Resources and Schedule of the Evaluation**

38. This Terminal Evaluation will be undertaken by one independent evaluation consultant contracted by the UNEP Evaluation Office. The consultant will work under the overall responsibility of the UNEP Evaluation Office and will consult with the EO on any procedural and methodological matters related to the evaluation. It is, however, the consultant's individual responsibility to arrange for their travel, obtain documentary evidence, meetings with stakeholders, field visits, and any other logistical matters related to their assignment. The UNEP Task Manager, DTIE Country Offices and regional and national project staff will provide logistical support (introductions, meetings, transport, lodging etc.) for the country visits where necessary, allowing the consultant to conduct the evaluation as efficiently and independently as possible.

39. The **consultant** will be hired for 6 weeks. He will travel to South Africa and in particular will visit 5 of the 6 host cities (Pretoria, Johannesburg, Cape Town, Polokwane and Rustenburg).

40. The *tentative* schedule is presented in the table below

**Table 4: Tentative Evaluation Timeline**

| Activity | Date |
|---|---|
| Start of contract | 28 January 2013 |
| Inception report to UNEP EO | 4 February 2013 |
| Consultative meetings: Site visits in S.A* | 11-18 February 2013 |
| Consultative meetings: Task Manager, FMO at UNEP Nairobi | 25-27 February 2013 |
| Zero draft report to UNEP EO | 11 March 2013 |
| Collated comments by UNEP EO sent to consultant | 18 March 2013 |
| First draft report to UNEP EO | 25 March 2013 |
| Collated comments by UNEP EO sent to consultant | 8 April 2013 |
| Final report and response to comments to UNEP EO | 15 April 2013 |
| End of contract | 30 April 2013 |

* Wherever possible, the Consultant should make an effort to visit the National Focal Points in the countries visited while on mission

**Schedule of Payment**

41. The consultant will be hired under an individual Special Service Agreement (SSA) covering the consultant's fees but which is NOT inclusive of all expenses such as airfares, in-country travel, accommodation, incidental and terminal expenses. Air tickets will be paid separately by UNEP and 75% of the DSA for each authorised travel mission will be paid up front. Local in-country travel and communication costs will be reimbursed on the production of acceptable receipts. Terminal expenses and residual DSA entitlements (25%) will be paid after mission completion.

42. The consultant will receive 20% of the honorarium portion of his/her fee upon submission of an acceptable inception report, 40% upon acceptance of a draft report deemed complete and of acceptable quality by the EO and the remainder will be paid upon satisfactory completion of the work.

43. In case the consultant is not able to provide the deliverables in accordance with these TORs, in line with the expected quality standards by the UNEP Evaluation Office, payment may be withheld at the discretion of the Head of the Evaluation Office until the consultant has improved the deliverables to meet UNEP's quality standards.

44. If the consultant fails to submit a satisfactory final product to UNEP in a timely manner, i.e. within one month after the end date of their contract, the Evaluation Office reserves the right to employ additional human resources to finalize the report, and to reduce the consultant's fees by an amount equal to the additional costs borne by the Evaluation Office to bring the report up to standard.

**Annex 1. Project outputs**

**Table A1.1. Project components and outputs**

| Component | Outputs |
|---|---|
| Component I<br>Demonstration of Green technologies | Output 1.1: Demonstration of green technologies, in the areas of solar and energy efficiency by the end of the World Cup |
| Component II<br>Green Tourism Initiative | Output 2.1: Green tourism initiative, which builds on the existing UNEP's Green Passport initiative, is adopted for promotion by the six (6) host cities by the end of the World Cup. |
| Component III<br>Best Practice | Output 3.1: Changed practices and behaviour through use of sports events |
| | Output 3.2: A set of guidelines and best practice for future sporting events. |

**Annex 2(a): Annotated Table of Contents of the Inception Report**

| Section | Notes |
|---|---|
| 1. Introduction | Brief note of documents consulted in preparing the inception report. |
| 2. Review of Project Design | Complete the Template for assessment of the quality of project design given in Annex 5 of the Terms of Reference.<br>**Data sources:** background information on context (UNEP or GEF programme etc.), first phase of project – if any, project document, logical framework. |
| 3. Theory of Change Analysis | The section should start with a brief description of the project context.<br>The 'theory of change' should be developed using the process described in Annex 7 (Introduction to Theory of Change/Impact pathways, the ROtI Method and the ROtI results score sheet) of the TORs.<br><br>The final ToC diagram can be designed on the basis of figure 3 in Annex 7. Outputs do not necessarily occur at the beginning of the process, additional outputs may occur at different stages of the process (for example to move from one intermediate state to another). The diagram can be represented horizontally or vertically.<br>**Data sources**: project document, logical framework and a review of other project documents. |
| 4. Evaluation Process Plan | This section should include:<br>- Detailed evaluation questions (including new questions raised by review of project design and theory of change analysis).<br>- Data Sources and Indicators<br>- List of individuals to be consulted.<br>- Distribution of roles and responsibilities among evaluation consultants (in case of larger evaluation teams).<br>- Revised logistics (dates of travel and key evaluation milestones).<br>The framework can be presented as a table for ease of use, showing which data sources will be used to answer which questions.<br>**Data sources**: review of all project documents. Discussion with project team on logistics. |

**Annex 2 (b). Annotated Table of Contents of the Main Report**

| | |
|---|---|
| **Project Identification Table** | An updated version of the table in Section I.A. of these TORs |
| **Executive Summary** | Overview of the main findings, conclusions and recommendations of the evaluation. It should encapsulate the essence of the information contained in the report to facilitate dissemination and distillation of lessons. The main points for each evaluation parameter should be presented here (with a summary ratings table), as well as the most important lessons and recommendations. Maximum 4 pages. |
| **I. Evaluation Background** | |
| A. Context | A. Overview of the broader institutional and country context, in relation to the project's objectives. |
| B. The Project | B. Presentation of the project: rationale, objectives, components, intervention areas and target groups, milestones in design, implementation and completion, implementation arrangements and main partners, financing (amounts and sources), modifications to design before or during implementation. |
| C. Evaluation objectives, scope and methodology | C. Presentation of the evaluation's purpose, evaluation criteria and key questions, evaluation timeframe, data collection and analysis instruments used, places visited, types of stakeholders interviewed, and limitations of the evaluation. |
| **II. Project Performance and Impact**<br>A. Attainment of objectives and planned results<br>B. Sustainability and catalytic role<br>C. Processes affecting attainment of project results<br>D. Complementarity with UNEP, UNDP and UNIDO programmes and strategies | This section is organized according to the 4 categories of evaluation criteria (see section D of these TORs) and provides factual evidence relevant to the questions asked and sound analysis and interpretations of such evidence. This is the main substantive section of the report. Ratings are provided at the end of the assessment of each evaluation criterion. |
| **III. Conclusions and Recommendations** | |
| A. Conclusions | This section should summarize the main findings of the evaluation, told in a logical sequence from cause to effect. It is suggested to start with the positive achievements and a short explanation why these could be achieved, and, then, to present the less successful aspects of the project with a short explanation why. The conclusions section should end with the overall assessment of the project. Findings should be cross-referenced to the main text of the report (using the paragraph numbering). The overall ratings table should be inserted here (see Annex 2). |
| B. Lessons Learned | Lessons learned should be anchored in the main findings of the evaluation. In fact, no lessons should appear which are not based upon a conclusion of the evaluation. The number of lessons learned should be limited. Lessons learned are rooted in real project experiences, i.e. based on good practices and successes which could be replicated or derived from problems encountered and mistakes made which should be avoided in the future. Lessons learned must have the potential for wider application and use. Lessons should briefly describe the context from which they are derived and specify the contexts in which they may be useful. |
| C. Recommendations | As for the lessons learned, all recommendations should be anchored in the conclusions of the report, with proper cross-referencing. Recommendations are actionable proposals on how to resolve concrete problems affecting the project or the sustainability of its results. They should be feasible to implement within the timeframe and resources available (including local capacities), specific in terms of who would do what and when, and set a measurable performance target. In some cases, it might be useful to propose options, and |

| | |
|---|---|
| | briefly analyze the pros and cons of each option. |
| **Annexes** | These may include additional material deemed relevant by the evaluator but must include:<br>1. Evaluation TORs<br>2. The evaluation framework (second part of the inception report)<br>3. Evaluation program, containing the names of locations visited and the names (or functions) of people met<br>4. Bibliography<br>5. Summary co-finance information and a statement of project expenditure by activity (See annex of these TORs)<br>6. The review of project design (first part of the inception report)<br>7. Technical working paper<br>8. Brief CV of the consultant<br><br>TE reports will also include any formal response/ comments from the project management team and/ or the country focal point regarding the evaluation findings or conclusions as an annex to the report, however, such will be appended to the report by UNEP Evaluation Office. |

Examples of UNEP GEF Terminal Evaluation Reports are available at www.unep.org/eou.

**ANNEX 3. EVALUATION RATINGS**

The evaluation will provide individual ratings for the evaluation criteria described in section II.D. of these TORs. Some criteria contain sub-criteria which require separate ratings (i.e. sustainability and M&E). Furthermore, an aggregated rating will be provided for Relevance, effectiveness and efficiency under the category "Attainment of project objectives and results".

Most criteria will be rated on a six-point scale as follows: Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS);Moderately Unsatisfactory (MU); Unsatisfactory (U); Highly Unsatisfactory (HU). Sustainability is rated from Highly Likely (HL) down to Highly Unlikely (HU).

In the conclusions section of the report, ratings will be presented together in a table, with a brief justification cross-referenced to the findings in the main body of the report. Please note that the order of the evaluation criteria in the table will be slightly different from the order these are treated in the main report; this is to facilitate comparison and aggregation of ratings across GEF project evaluation reports.

| Criterion | Summary Assessment | Rating |
|---|---|---|
| **A. Attainment of project objectives and results** | | HS → HU |
| 1. Effectiveness | | HS → HU |
| 2. Relevance | | HS → HU |
| 3. Efficiency | | HS → HU |
| **B. Sustainability of project outcomes** | | HL → HU |
| 1. Financial | | HL → HU |
| 2. Socio-political | | HL → HU |
| 3. Institutional framework | | HL → HU |
| 4. Environmental | | HL → HU |
| **C. Catalytic role** | | HS → HU |
| **D. Stakeholders involvement** | | HS → HU |
| **E. Country ownership / driven-ness** | | HS → HU |
| **F. Achievement of outputs and activities** | | HS → HU |
| **G. Preparation and readiness** | | HS → HU |
| **H. Implementation approach** | | HS → HU |
| **I. Financial planning and management** | | HS → HU |
| **J. Monitoring and Evaluation** | | HS → HU |
| 1. M&E Design | | HS → HU |
| 2. M&E Plan Implementation | | HS → HU |
| 3. Budgeting and funding for M&E activities | | HS → HU |
| **K. UNEP and UNDP Supervision and backstopping** | | HS → HU |
| 1. UNEP | | HS → HU |
| 2. UNDP | | HS → HU |

**Rating of Attainment of project objectives and results.** A compound rating is given to the category based on the assessment of relevance, effectiveness and efficiency. This aggregated rating is not a simple average of the separate ratings given to the evaluation criteria, but an overall judgement by the consultant. Relevance and effectiveness, however, will be considered as critical criteria. This means that the aggregated rating for Attainment of objectives and results may not be higher than the lowest rating on either of these two criteria.

**Ratings on sustainability**. According to the GEF Office of Evaluation, all the dimensions of sustainability are deemed critical. Therefore, the overall rating for sustainability will not be higher than the lowest rating on the separate dimensions.

**Ratings of monitoring and evaluation**. The M&E system will be rated on M&E design, M&E plan implementation, and budgeting and funding for M&E activities (the latter sub-criterion is covered in the main report under M&E design) as follows:

- Highly Satisfactory (HS): There were no shortcomings in the project M&E system.
- Satisfactory(S): There were minor shortcomings in the project M&E system.
- Moderately Satisfactory (MS): There were moderate shortcomings in the project M&E system.
- Moderately Unsatisfactory (MU): There were significant shortcomings in the project M&E system.
- Unsatisfactory (U): There were major shortcomings in the project M&E system.
- Highly Unsatisfactory (HU): The Project had no M&E system.

- M&E plan implementation will be considered critical for the overall assessment of the M&E system. Thus, the overall rating for M&E will not be higher than the rating on M&E plan implementation.

**Annex 5. Quality Assessment of the Evaluation Report**

All UNEP evaluation reports are subject to a quality assessment by the Evaluation Office. The quality assessment is used as a tool for providing structured feedback to the evaluation consultant. The quality of the draft evaluation report is assessed and rated against the following criteria:

| GEF Report Quality Criteria | UNEP EO Assessment | Rating |
|---|---|---|
| A. Did the report present an assessment of relevant outcomes and achievement of project objectives in the context of the focal area program indicators if applicable? | | |
| B. Was the report consistent and the evidence complete and convincing and were the ratings substantiated when used? | | |
| C. Did the report present a sound assessment of sustainability of outcomes? | | |
| D. Were the lessons and recommendations supported by the evidence presented? | | |
| E. Did the report include the actual project costs (total and per activity) and actual co-financing used? | | |
| F. Did the report include an assessment of the quality of the project M&E system and its use for project management? | | |
| **UNEP additional Report Quality Criteria** | | |
| G. Quality of the lessons: Were lessons readily applicable in other contexts? Did they suggest prescriptive action? | | |
| H. Quality of the recommendations: Did recommendations specify the actions necessary to correct existing conditions or improve operations ('who?' 'what?' 'where?' 'when?)'. Can they be implemented? Did the recommendations specify a goal and an associated performance indicator? | | |
| I. Was the report well written? (clear English language and grammar) | | |
| J. Did the report structure follow EOU guidelines, were all requested Annexes included? | | |
| K. Were all evaluation aspects specified in the TORs adequately addressed? | | |
| L. Was the report delivered in a timely manner | | |

**Quality = (2*(0.3*(A + B) + 0.1*(C+D+E+F))+ 0.3*(G + H) + 0.1*(I+J+K+L))/3**

The Totals are rounded and converted to the scale of HS to HU

Rating system for quality of Terminal Evaluation reports: A number rating between 1 and 6 is used for each criterion: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1.

**Annex 6. Documentation list for the evaluation to be provided by the UNEP Task Manager**

- Project design documents
- Project supervision plan, with associated budget
- Correspondence related to project
- Supervision mission reports
- Steering Committee meeting documents, including agendas, meeting minutes, and any summary reports
- Project progress reports, including financial reports submitted
- Cash advance requests documenting disbursements
- Annual Project Implementation Reports (PIRs)
- Management memos related to project
- Other documentation of supervision feedback on project outputs and processes (e.g. comments on draft progress reports, etc.).
- Extension documentation. Has a project extension occurred?
- Project revision documentation.
- Budget revision documentation.
- Project Terminal Report (draft if final version not available)

## Annex 7. Introduction to Theory of Change / Impact pathways, the ROtI Method and the ROtI Results Score sheet

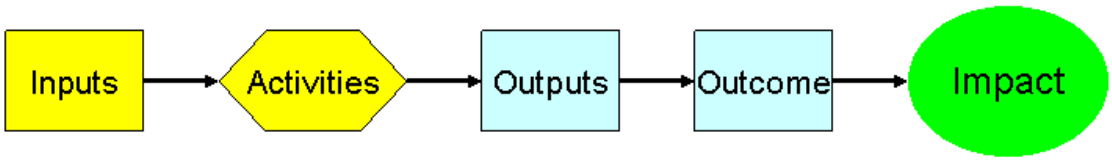
Terminal evaluations of projects are conducted at, or shortly after, project completion. At this stage it is normally possible to assess the achievement of the project's outputs. However, the possibilities for evaluation of the project's outcomes are often more limited and the feasibility of assessing project **impacts** at this time is usually severely constrained. Full impacts often accrue only after considerable time-lags, and it is common for there to be a lack of long-term baseline and monitoring information to aid their evaluation. Consequently, substantial resources are often needed to support the extensive primary field data collection required for assessing impact and there are concomitant practical difficulties because project resources are seldom available to support the assessment of such impacts when they have accrued – often several years after completion of activities and closure of the project.

Despite these difficulties, it is possible to enhance the scope and depth of information available from Terminal Evaluations on the achievement of results **through rigorous review of project progress along the pathways from outcome to impact**. Such reviews identify the sequence of conditions and factors deemed necessary for project outcomes to yield impact and assess the current status of and future prospects for results. In evaluation literature these relationships can be variously described as 'Theories of Change', Impact 'Pathways', 'Results Chains', 'Intervention logic', and 'Causal Pathways' (to name only some!).

### Theory of Change (ToC) / impact pathways

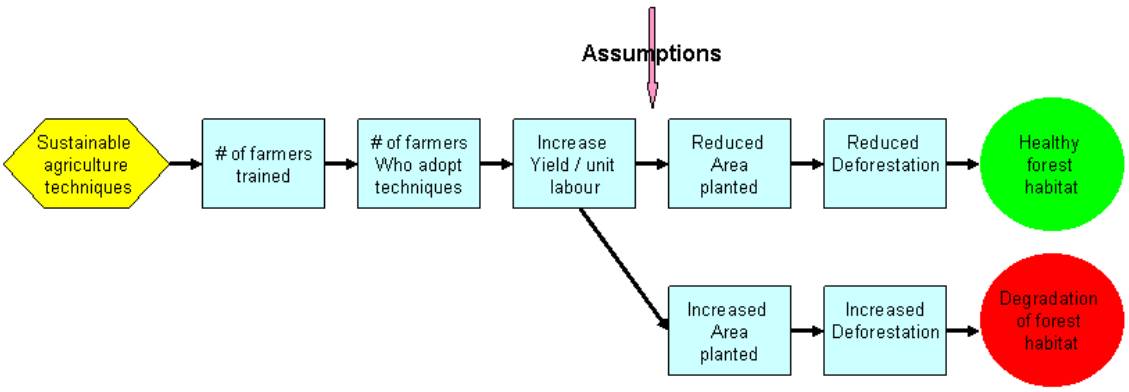
Figure 1 shows a generic impact pathway which links the standard elements of project logical frameworks in a graphical representation of causal linkages. When specified with more detail, for example including the key users of outputs, the processes (the arrows) that lead to outcomes and with details of performance indicators, analysis of impact pathways can be invaluable as a tool for both project planning and evaluation.

Figure 1. A generic results chain, which can also be termed an 'Impact Pathway' or Theory of Change.




The pathways summarise casual relationships and help identify or clarify the assumptions in the intervention logic of the project. For example, in the Figure 2 below the eventual impact depends upon the behaviour of the farmers in using the new agricultural techniques they have learnt from the training. The project design for the intervention might be based on the upper pathway assuming that the farmers can now meet their needs from more efficient management of a given area therefore reducing the need for an expansion of cultivated area and ultimately reducing pressure on nearby forest habitat, whereas the evidence gathered in the evaluation may in some locations follow the lower of the two pathways; the improved faming methods offer the possibility for increased profits and create an incentive for farmers to cultivate more land resulting in clearance or degradation of the nearby forest habitat.

Figure 2. An impact pathway / TOC for a training intervention intended to aid forest conservation.



The GEF Evaluation Office has recently developed an approach that builds on the concepts of theory of change / causal chains / impact pathways. The method is known as Review of Outcomes to Impacts (ROtI)[20] and has three distinct stages:

a. Identifying the project's intended impacts

b. Review of the project's logical framework

c. Analysis and modelling of the project's outcomes-impact pathways

The **identification of the projects intended impacts** should be possible from the 'objectives' statements specified in the official project document. The next stage is to **review the project's logical framework** to assess whether the design of the project is consistent with, and appropriate for, the delivery of the intended impact. The method requires verification of the causal logic between the different hierarchical levels of the logical framework moving 'backwards' from impacts through outcomes to the outputs; the activities level is not formally considered in the ROtI method[21]. The aim of this stage is to develop an understanding of the causal logic of the project intervention and to identify the key 'impact pathways'. In reality such process are often complex; they often involve multiple actors and decision-processes and are subject to time-lags, meaning that project impact often accrue long after the completion of project activities.

The third stage involves analysis of the 'impact pathways' that link project outcomes to impacts. The pathways are analysed in terms of the **'assumptions'** and **'impact drivers'** that underpin the processes involved in the transformation of outcomes to impacts via **intermediate states** (see Figure 3). Project outcomes are the direct intended results stemming from the outputs, and they are likely to occur either towards the end of the project or in the short term following project completion. **Intermediate states** are the transitional conditions between the project's immediate outcomes and the intended impact. They are necessary conditions for the achievement of the intended impacts and there may be more than one intermediate state between the immediate project outcome and the eventual impact.

**Impact drivers** are defined as the significant factors that if present are expected to contribute to the realization of the intended impacts and **can be influenced** by the project / project partners & stakeholders. **Assumptions** are the significant factors that if present are expected to contribute to the realization of the intended impacts but are largely **beyond the control of the project** / project partners & stakeholders. The impact drivers and assumptions are ordinarily considered in Terminal Evaluations when assessing the sustainability of the project.

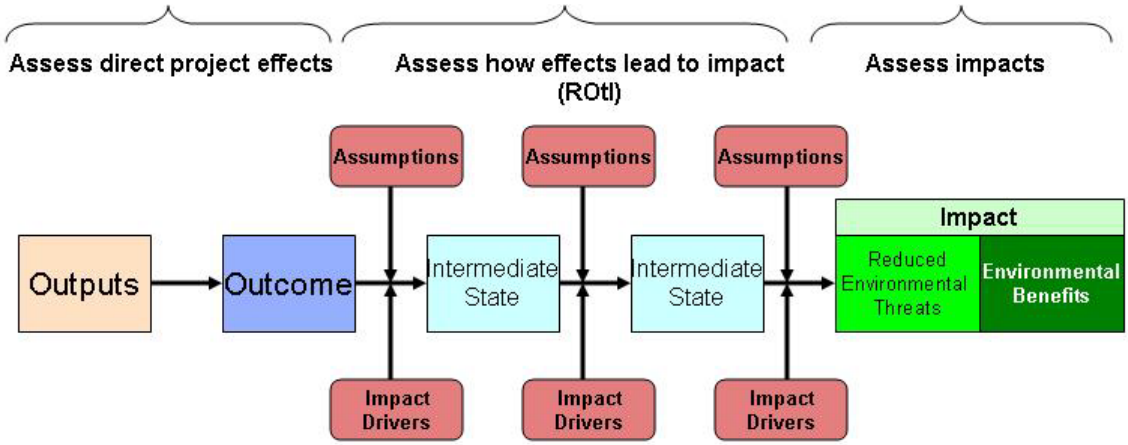
Since project logical frameworks do not often provide comprehensive information on the processes by which project outputs yield outcomes and eventually lead, via 'intermediate states' to impacts, the impact pathways need to be carefully examined and the following questions addressed:

- Are there other causal pathways that would stem from the use of project outputs by other potential user groups?
- Is (each) impact pathway complete? Are there any missing intermediate states between project outcomes and impacts?
- Have the key impact drivers and assumptions been identified for each 'step' in the impact pathway.

Figure 3. A schematic 'impact pathway' showing intermediate states, assumptions and impact drivers (adapted from GEF EO 2009).

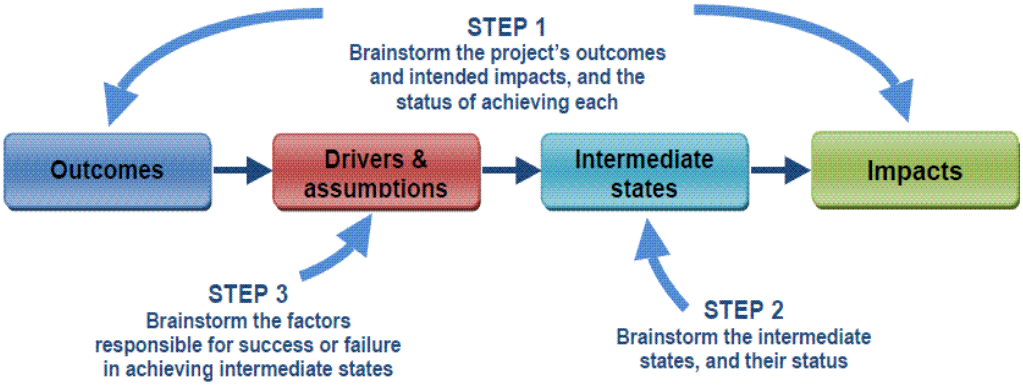
[20] GEF Evaluation Office (2009). ROtI: Review of Outcomes to Impacts Practitioners Handbook. http://www.gefweb.org/uploadedFiles/Evaluation_Office/OPS4/Roti%20Practitioners%20Handbook%2015%20June%202009.pdf

[21] Evaluation of the efficiency and effectiveness in the use of resources to generate outputs is already a major focus within UNEP Terminal Evaluations.




The process of identifying the impact pathways and specifying the impact drivers and assumptions can be done as a desk exercise by the evaluator or, preferably, as a group exercise, led by the evaluator with a cross-section of project stakeholders as part of an evaluation field mission or both. Ideally, the evaluator would have done a desk-based assessment of the project's theory of change and then use this understanding to facilitate a group exercise. The group exercise is best done through collective discussions to develop a visual model of the impact pathways using a card exercise. The component elements (outputs, outcomes, impact drivers, assumptions intended impacts etc.) of the impact pathways are written on individual cards and arranged and discussed as a group activity. Figure 4 below shows the suggested sequence of the group discussions needed to develop the ToC for the project.

Figure 4. Suggested sequencing of group discussions (from GEF EO 2009)




Once the theory of change model for the project is complete the evaluator can assess the design of the project intervention and collate evidence that will inform judgments on the extent and effectiveness of implementation, through the evaluation process. Performance judgments are made always noting that project contexts can change and that adaptive management is required during project implementation.

The ROtI method requires ratings for outcomes achieved by the project and the progress made towards the 'intermediate states' at the time of the evaluation. According the GEF guidance on the method; "*The rating system is intended to recognize project preparation and conceptualization that considers its own assumptions, and that seeks to remove barriers to future scaling up and out. Projects that are a part of a long-term process need not at all be "penalized" for not achieving impacts in the lifetime of the project: the system recognizes projects' forward thinking to eventual impacts, even if those impacts are eventually achieved by other partners and stakeholders, albeit with achievements based on present day, present project building blocks."* For example, a project receiving an "AA" rating appears likely to deliver impacts, while for a project receiving a "DD" this would seem unlikely, due to low achievement in outcomes and the limited likelihood of achieving the intermediate states needed for eventual impact (see Table 1).

Table 1. Rating scale for outcomes and progress towards 'intermediate states'

| **Outcome Rating** | **Rating on progress toward Intermediate States** |
|---|---|
| D: The project's intended outcomes were not delivered | **D:** No measures taken to move towards intermediate states. |
| C: The project's intended outcomes were delivered, but were not designed to feed into a continuing process after project funding | C: The measures designed to move towards intermediate states have started, but have not produced results. |

| | |
|---|---|
| B: The project's intended outcomes were delivered, and were designed to feed into a continuing process, but with no prior allocation of responsibilities after project funding | B: The measures designed to move towards intermediate states have started and have produced results, which give no indication that they can progress towards the intended long term impact. |
| A: The project's intended outcomes were delivered, and were designed to feed into a continuing process, with specific allocation of responsibilities after project funding. | A: The measures designed to move towards intermediate states have started and have produced results, which clearly indicate that they can progress towards the intended long term impact. |

Thus a project will end up with a two letter rating e.g. AB, CD, BB etc. In addition the rating is given a '+' notation if there is evidence of impacts accruing within the life of the project. The possible rating permutations are then translated onto the usual six point rating scale used in all UNEP project evaluations in the following way.Table 2. Shows how the ratings for 'achievement of outcomes' and 'progress towards intermediate states translate to ratings for the 'Overall likelihood of impact achievement' on a six point scale.

| Highly Likely | Likely | Moderately Likely | Moderately Unlikely | Unlikely | Highly Unlikely |
|---|---|---|---|---|---|
| AA AB BA CA BB+ CB+ DA+ DB+ | BB CB DA DB AC+ BC+ | AC BC CC+ DC+ | CC DC AD+ BD+ | AD BD CD+ DD+ | CD DD |

In addition, projects that achieve documented changes in environmental status during the project's lifetime receive a positive impact rating, indicated by a "+". The overall likelihood of achieving impacts is shown in Table 11 below (a + score above moves the double letter rating up one space in the 6-point scale).

The ROtI method provides a basis for comparisons across projects through application of a rating system that can indicate the expected impact. However it should be noted that whilst this will provide a relative scoring for all projects assessed, it does not imply that the results from projects can necessarily be aggregated. Nevertheless, since the approach yields greater clarity in the 'results metrics' for a project, opportunities where aggregation of project results might be possible can more readily be identified.

| **Results rating of project entitled:** | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Outputs** | **Outcomes** | **Rating (D – A)** | **Intermediary** | **Rating (D – A)** | **Impact (GEBs)** | **Rating (+)** | **Overall** |
| 1. | 1. | | 1. | | 1. | | |
| 2. | 2. | | 2. | | 2. | | |
| 3. | 3. | | 3. | | 3. | | |
| | **Rating justification:** | | **Rating justification:** | | **Rating justification:** | | |
| | | | | | | | |

**Scoring Guidelines**

The achievement of **Outputs** is largely assumed. Outputs are such concrete things as training courses held, numbers of persons trained, studies conducted, networks established, websites developed, and many others. Outputs reflect where and for what project funds were used. These were not rated: projects generally succeed in spending their funding.

**Outcomes**, on the other hand, are the first level of intended results stemming from the outputs. Not so much the number of persons trained; but how many persons who then demonstrated that they have gained the intended knowledge or skills. Not a study conducted; but one that could change the evolution or development of the project. Not so much a network of NGOs established; but that the network showed potential for functioning as intended. A sound outcome might be genuinely improved strategic planning in SLM stemming from workshops, training courses, and networking.

Examples

***Funds were spent, outputs were produced, but nothing in terms of outcomes was achieved.*** People attended training courses but there is no evidence of increased capacity. A website was developed, but no one used it. (Score – D)

***Outcomes achieved but are dead ends; no forward linkages to intermediary stages in the future***. People attended training courses, increased their capacities, but all left for other jobs shortly after; or were not given opportunities to apply their new skills. A website was developed and was used, but achieved little or nothing of what was intended because users had no resources or incentives to apply the tools and methods proposed on the website in their job. (Score – C)

***Outcomes plus implicit linkages forward.*** Outcomes achieved and have *implicit forward linkages* to intermediary stages and impacts. Collaboration as evidenced by meetings and decisions made among a loose network is documented that should lead to better planning. Improved capacity is in place and should lead to desired intermediate outcomes. Providing implicit linkages to intermediary stages is probably the most common case when outcomes have been achieved. (Score - B)

***Outcomes plus explicit linkages forward***. Outcomes have *definite and explicit forward linkages* to intermediary stages and impacts. An alternative energy project may result in solar panels installed that reduced reliance on local wood fuels, with the outcome quantified in terms of reduced C emissions. Explicit forward linkages are easy to recognize in being concrete, but are relatively uncommon. (Score A)

**Intermediary stages**:

The **intermediate stage** indicates achievements that lead to Global Environmental Benefits, especially if the potential for scaling up is established.

***"Outcomes" scored C or D.*** If the outcomes above scored C or D, there is no need to continue forward to score intermediate stages given that achievement of such is then not possible.

***In spite of outcomes and implicit linkages, and follow-up actions, the project dead-ends.*** Although outcomes achieved have *implicit forward linkages* to intermediary stages and impacts, the project dead-ends. Outcomes turn out to be insufficient to move the project towards intermediate stages and to the eventual achievement of GEBs. Collaboration as evidenced by meetings and among participants in a network never progresses further. The implicit linkage based on follow-up never materializes. Although outcomes involve, for example, further participation and discussion, such actions do not take the project forward towards intended intermediate impacts. People have fun getting together and talking more, but nothing, based on the implicit forwards linkages, actually eventuates. **(Score = D)**

***The measures designed to move towards intermediate states have started, but have not produced result, barriers and/or unmet assumptions may still exist.*** In spite of sound outputs and in spite of explicit forward linkages, there is limited possibility of intermediary stage achievement due to barriers not removed or unmet assumptions. This may be the fate of several policy related, capacity building, and networking projects: people work together, but fail to develop a way forward towards concrete results, or fail to successfully address inherent barriers. The project may increase ground cover and or carbon stocks, may reduce grazing or GHG emissions; and may have project level recommendations regarding scaling up; but barrier removal or the addressing of fatal assumptions means that scaling up remains limited and unlikely to be achieved at larger scales. Barriers can be policy and institutional limitations; (mis-) assumptions may have to do with markets or public – private sector relationships. **(Score = C)**

***Barriers and assumptions are successfully addressed.*** Intermediary stage(s) planned or conceived have feasible direct and explicit forward linkages to impact achievement; barriers and assumptions are successfully addressed. The project achieves measurable intermediate impacts, and works to scale up and out, but falls well short of scaling up to global levels such that achievement of GEBs still lies in doubt. **(Score = B)**

***Scaling up and out over time is possible.*** Measurable intermediary stage impacts achieved, scaling up to global levels and the achievement of GEBs appears to be well in reach over time. **(Score = A)**

**Impact:** Actual changes in environmental status

**"Intermediary stages" scored B to A.**

**Measurable impacts achieved at a globally significant level within the project life-span.** . **(Score = '+')**

**Annex 8: Template for the assessment of the Quality of Project Design – UNEP Evaluation Office September 2011**

| Relevance | | Evaluation Comments | Prodoc reference |
|---|---|---|---|
| Are the intended results likely to contribute to UNEPs Expected Accomplishments and programmatic objectives? | | | |
| Does the project form a coherent part of a UNEP-approved programme framework? | | | |
| Is there complementarity with other UNEP projects, planned and ongoing, including those implemented under the GEF? | | | |
| Are the project's objectives and implementation strategies consistent with: | i) Sub-regional environmental issues and needs? | | |
| | ii) the UNEP mandate and policies at the time of design and implementation? | | |
| | iii) the relevant GEF focal areas, strategic priorities and operational programme(s)? (if appropriate) | | |
| | iv) Stakeholder priorities and needs? | | |
| **Overall rating for Relevance** | | | |
| Intended Results and Causality | | | |
| Are the objectives realistic? | | | |
| Are the causal pathways from project outputs [goods and services] through outcomes [changes in stakeholder behaviour] towards impacts clearly and convincingly described? Is there a clearly presented Theory of Change or intervention logic for the project? | | | |
| Is the timeframe realistic? What is the likelihood that the anticipated project outcomes can be achieved within the stated duration of the project? | | | |
| Are the activities designed within the project likely to produce their intended results | | | |
| Are activities appropriate to produce outputs? | | | |
| Are activities appropriate to drive change along the intended causal pathway(s) | | | |
| Are impact drivers, assumptions and the roles and capacities of key actors and stakeholders clearly described for each key causal pathway? | | | |
| **Overall rating for Intended Results and causality** | | | |
| Efficiency | | | |
| Are any cost- or time-saving measures proposed to bring the project to a successful conclusion within its programmed budget and timeframe? | | | |
| Does the project intend to make use of / build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency? | | | |
| **Overall rating for Efficiency** | | | |
| Sustainability / Replication and Catalytic effects | | | |
| Does the project design present a strategy / approach to sustaining outcomes / benefits? | | | |
| Does the design identify the social or political factors that may influence positively or negatively the | | | |

| | | | |
|---|---|---|---|
| sustenance of project results and progress towards impacts? Does the design foresee sufficient activities to promote government and stakeholder awareness, interests, commitment and incentives to execute, enforce and pursue the programmes, plans, agreements, monitoring systems etc. prepared and agreed upon under the project? | | | |
| If funding is required to sustain project outcomes and benefits, does the design propose adequate measures / mechanisms to secure this funding? | | | |
| Are there any financial risks that may jeopardize sustenance of project results and onward progress towards impact? | | | |
| Does the project design adequately describe the institutional frameworks, governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. required to sustain project results? | | | |
| Does the project design identify environmental factors, positive or negative, that can influence the future flow of project benefits? Are there any project outputs or higher level results that are likely to affect the environment, which, in turn, might affect sustainability of project benefits? | | | |
| Does the project design foresee adequate measures to catalyze behavioural changes in terms of use and application by the relevant stakeholders of (e.g.): | i) technologies and approaches show-cased by the demonstration projects; | | |
| | ii) strategic programmes and plans developed | | |
| | iii) assessment, monitoring and management systems established at a national and sub-regional level | | |
| Does the project design foresee adequate measures to contribute to institutional changes? [An important aspect of the catalytic role of the project is its contribution to institutional uptake or mainstreaming of project-piloted approaches in any regional or national demonstration projects] | | | |
| Does the project design foresee adequate measures to contribute to policy changes (on paper and in implementation of policy)? | | | |
| Does the project design foresee adequate measures to contribute to sustain follow-on financing (catalytic financing) from Governments, the GEF or other donors? | | | |
| Does the project design foresee adequate measures to create opportunities for particular individuals or institutions (“champions”) to catalyze change (without which the project would not achieve all of its results)? | | | |
| Are the planned activities likely to generate the level of ownership by the main national and regional stakeholders necessary to allow for the project results to be sustained? | | | |
| **Overall rating for Sustainability / Replication and Catalytic effects** | | | |
| Risk identification and Social Safeguards | | | |
| Are critical risks appropriately addressed? | | | |
| Are assumptions properly specified as factors affecting achievement of project results that are beyond the control of the project? | | | |
| Are potentially negative environmental, economic and social impacts of projects identified | | | |
| **Overall rating for Risk identification and Social Safeguards** | | | |
| Governance and Supervision Arrangements | | | |
| Is the project governance model comprehensive, clear and appropriate? | | | |
| Are roles and responsibilities clearly defined? | | | |

| | | |
|---|---|---|
| Are supervision / oversight arrangements clear and appropriate? | | |
| **Overall rating for Governance and Supervision Arrangements** | | |
| Management, Execution and Partnership Arrangements | | |
| Have the capacities of partner been adequately assessed? | | |
| Are the execution arrangements clear? | | |
| Are the roles and responsibilities of internal and external partners properly specified? | | |
| **Overall rating for Management, Execution and Partnership Arrangements** | | |
| Financial Planning / budgeting | | |
| Are there any obvious deficiencies in the budgets / financial planning | | |
| Cost effectiveness of proposed resource utilization as described in project budgets and viability in respect of resource mobilization potential | | |
| Financial and administrative arrangements including flows of funds are clearly described | | |
| **Overall rating for Financial Planning / budgeting** | | |
| Monitoring | | |
| Does the logical framework:<br>• capture the key elements in the Theory of Change for the project?<br>• have 'SMART' indicators for outcomes and objectives?<br>• have appropriate 'means of verification'<br>• adequately identify assumptions | | |
| Are the milestones and performance indicators appropriate and sufficient to foster management towards outcomes and higher level objectives? | | |
| Is there baseline information in relation to key performance indicators? | | |
| Has the method for the baseline data collection been explained? | | |
| Has the desired level of achievement (targets) been specified for indicators of Outcomes and are targets based on a reasoned estimate of baseline?? | | |
| Has the time frame for monitoring activities been specified? | | |
| Are the organisational arrangements for project level progress monitoring clearly specified | | |
| Has a budget been allocated for monitoring project progress in implementation against outputs and outcomes? | | |
| Overall, is the approach to monitoring progress and performance within the project adequate? | | |
| **Overall rating for Monitoring** | | |
| Evaluation | | |
| Is there an adequate plan for evaluation? | | |
| Has the time frame for Evaluation activities been specified? | | |
| Is there an explicit budget provision for mid term review and terminal evaluation? | | |
| Is the budget sufficient? | | |
| **Overall rating for Evaluation** | | |

## ANNEX B: PROJECT LOGFRAME

| | | | | | |
|---|---|---|---|---|---|
| **GOAL** | The goal of this project is to showcase best practice carbon reduction by demonstration projects using solar energy and drive awareness on climate change and carbon offsetting through messaging in the tourism sector. | | | | |
| **PROJECT OBJECTIVE** | The objective of this project is to demonstrate the importance of the role of low carbon technologies at major sporting events. The project aims to popularise these approaches with decision-makers, the general public and international tourists who will be participating at the 2010 FIFA World Cup event in South Africa. This will promote public awareness on reducuing there carbon footprint, during major sporting events, through the demonstration of low carbon technologies. | | | | |
| | **INDICATOR** | **BASELINE** | **TARGET** | **SOURCES OF VERIFICATION** | **RISKS AND ASSUMPTIONS** |
| **Outcome 1:** | | | | | |
| Demonstration of green technologies including solar technology by the end of the World Cup. | Number of public street lighting, traffic lighting and billboards retrofitted in six host cities | Documented energy consumption and savings reports (baseline) as a result of solar panel fitted on street, traffic lights and billboards, are not in place for the six host cities. Demonstration projects by the Central Energy Fund(CEF) on retrofitting solar powered street lighting, traffic lights and bill boards have only been implemented in Cape Town and Gauteng Province | -100 solar powered public street lighting installed in 6 host cities,<br><br>- 60 solar powered traffic lights installed in 6 host cities<br><br>-12 retrofitted with solar powered technologies in 6 host cities | -Reports of energy saving (audit)<br><br>-engineers(service provider's ) progress reports<br><br>-engineers hand over report | -Host cities adopts energy efficient measures<br><br>-Host cities cooperative in providing energy consumption data |

| | | | | | |
|---|---|---|---|---|---|
| **Outcome 2:** | | | | | |
| 30% of spectators in 6 host cities adopt the Green Passport objectives as part of their participation for visitors | Number of copies 2010 Green Passports produced and distributed at hotels, airports and other venues | None of the six host cities has included the development of a green passport in their greening plans. | 100 000 , 2010 Green Passport produced and activated on UNEP's Green Passport website, SA tourism, Dept of tourism, DEA, the six host cities and hospitality industry partners | Data collected from main, FEDHASA, the six provincial based tourism information and visitor centres in host cities, airports (Cape Town, Durban & Johannesburg) and hotels check-in points. The passports will be tracked through stamps to verify how many are used. | Hospitality associations, Department of Tourism and DEA, provincial tourism agencies and host city visitor centres willingness to distribute and post the green passport on their respective websites. |
| | Number of hospitality participating in greening their establishments in the six host cities. | Limited programmes preparing the hospitality industry in reducing its contribution to the carbon footprint generated in the hospitality sector during major sporting events. | 60 hospitality establishments implementing measures to reduce their carbon foot print during the 2010 tournament. | Data will be collected from the Tourism Grading Council of South Africa on the number of establishments meeting the National Minimum Standards for responsible Tourism (NMSRT) for accreditation as environmentally responsible tourism establishments during the FIFA World Cup. | Hospitality establishments, TGCSA, DEA and Department of Tourism willing to participate in the programme. |
| **Outcome 3.** | | | | | |
| Evaluation and dissemination of lessons learned, addressing greening of hardware and software | Comprehensive independent assessments on greening projects implemented by the six host cities are not in place to draw lessons of best practice. | Plans and budgets not all in place for undertaking an comprehensive independent assessment of the environmental commitments at six host city | Devise a set of comparable and key environmental measures which should form part of planning every major sporting event in order to ensure sustainable outcomes. | Review report on the SA FIFA bid proposal and the achieved environmental commitment and LOC Green Goal<br><br>-Review report of the achievements of the six host city green goal plans<br><br>-a set of guidelines and practices developed<br><br>-a lessons learned report<br><br>The guidelines and practices will be shared with host countries for upcoming large sporting events like Sochi and FIFA, Brazil, to test their efficacy. | LOC, host city and relevant departments willing to share information. |

## ANNEX C: EVALUATION PROGRAM AND INTERVIEWS

### PROGRAM

| Activity | Date |
|---|---|
| Start of contract | 28 January 2013 |
| Meeting and interview with Task Manager from DEAT | 22 February 2013 |
| Inception report to UNEP EO | 8 March 2013 |
| Consultative meetings: Site visits to 5 host cities in South Africa. Interviews with key stakeholders have been set up as part of the site visits | 18 March 2013: Rustenburg<br>18 March 2013: Pretoria<br>19 March 2013: Johannesburg<br>20 March 2013: Polokwane<br>26 March 2013: Cape Town |
| Zero draft report to UNEP EO | 7 May 2013 |
| Collated comments by UNEP EO sent to consultant | 9 May 2013 |
| First Draft Report to UNEP EO | 17 May 2013 |
| Collated comments by UNEP EO sent to consultant | 30 May 2013 and 17 July 2013 |
| Revised First Draft Report sent to UNEP EO | 10 June 2013 and 18 July 2013 |
| Final report and response to comments to UNEP EO | September 2013 |
| End of contract | October 2013 |

### LIST OF INTERVIEWS

| Contact Person | Organisation |
|---|---|
| Ms Jenitha Badul | DEA&T |
| Mr Tshepo Lenake | Rustenburg |
| Ms Lillian Sefike | Rustenburg |
| Ms Lorraine Gerrans | City of Cape Town |
| Mr Maxwell Ledwaba | Polokwane |
| Mr Mokete Masilo | Polokwane |
| Mr Ilse Kotze | Tshwane |
| Ms Rochelle Chetty | ESKOM |

Unsuccessful efforts were made to contact the following representatives from the City of Johannesburg:

- Eugene Hlongwane
- Carolyn Lee

### QUESTIONNAIRE DISTRIBUTION LIST

| Contact Person | Organisation |
|---|---|
| Ms Jenitha Badul | DEA&T |
| Mr Tshepo Lenake | Rustenburg |
| Ms Lillian Sefike | Rustenburg |
| Ms Lorraine Gerrans | City of Cape Town |
| Mr Maxwell Ledwaba | Polokwane |
| Mr Mokete Masilo | Polokwane |
| Mr Ilse Kotze | Tshwane (Pretoria) |
| Ms Rochelle Chetty | ESKOM |
| Mr Martin Okun, | UNEP, Finance Officer |
| Mr Geordie Colville | UNEP, Energy Branch |
| Mr Jyoti Mathur | Original UNEP Task Manager |

# ANNEX D: QUESTIONNAIRE

**TERMINAL EVALUATION**
**REDUCING THE CARBON FOOTPRINT OF MAJOR SPORTING EVENTS, FIFA 2010 AND THE GREEN GOAL**
**EVALUATION QUESTIONNAIRE**

## 1. INTRODUCTION

The overall objective of the FIFA 2010 Green Goal Project was to showcase best practice carbon offset energy efficient initiatives for large sporting events in order to promote and build awareness of renewable energy, its application on eco-friendly technologies and increase its use globally. The project had three components, namely:

**Component I:** Sought to retrofit the energy efficient technologies at public street lights, traffic junctions and billboards at the ports of entry, leading up to the stadia, key traffic junctions of the stadia and strategic billboards at airports where international and domestic visitors travel through to watch the games.

**Component II:** Sought to activate the 2010 Green Passport Initiative which aimed to provide visitors with informaiton on how to promote responsible tourism during major sporting events. In addition this component also sought to raise awareness amongst the tourism/hospitality sector to manage and reduce their consumption of energy, water and waste.

**Component III:** Sought to collate and formalize the greening experiences and lessons learned during the 2010 FIFA World Cup for use in future sporting events. An assessment report was completed in May 2011.

## 2. OBJECTIVE AND SCOPE OF THE EVALUATION

Tony Barbour has been appointed by UNEP to undertake a Terminal Evaluation of the project. The objective of the Terminal Evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP, the Department of Environmental Affairs and Tourism (DEAT), the GEF and their partners. The evaluation therefore aims to identify lessons of operational relevance for future project formulation and implementation.

Based on your involvement with the project it would be appreciated if you could consider the questions below, specifically the section on Financial Planning and Management.

## 3. FINANCIAL PLANNING AND MANAGEMENT

- Were required UNEP standards for financial planning and management of the project met (clarity, transparency, audit etc.)?

- Were the timeliness for financial planning, management and reporting adequate to ensure that sufficient and timely financial resources were available to the project and its partners?

- Are you aware of any other administrative processes, such as recruitment of staff, procurement of goods and services (including consultants), preparation and negotiation of cooperation agreements etc. that may have influenced project performance?

- What co-financing was provided for the project?

- Were additional resources leveraged by the project since inception and how did these resources contribute to the project's ultimate objective?

## 4. ACHIEVEMENT OF OUTPUTS AND ACTIVITIES

- Were the outputs envisaged by the project delivered?
- Were the outputs delivered within the specified timeframes of the project (i.e. were deadlines met)?

- How successful was the project in demonstrating green technologies, in the areas of solar and energy efficiency by the end of the 2010 World Cup?
- How successful was the project in promoting the adoption of the Green tourism initiative, in the six (6) host cities by the end of the 2010 World Cup?
- To what extent have the lessons learnt and best practices from the project so far contributed to changes in practices and behaviour in sporting events, with regards to greening efforts?
- Overall, how successful has the project been in popularising low carbon technologies amongst decision makers and the general public?

### 3.2 PREPARATION AND IMPLEMENTATION

- Were the project's objectives and components clear, practicable and feasible within its timeframe?
- Were the capacities of the executing institutions and counterparts properly considered when the project was designed?
- Were lessons from other relevant projects incorporated in the project design?
- Were the partnership arrangements properly identified and the roles and responsibilities negotiated prior to project implementation?
- Were the required committees established and did they function effectively in terms of supporting the implementation of the project?
- Were there any administrative, financial, operational and/or technical problems or constraints that influenced the effective implementation of the project? If so please comment.

### 3.3 REPLICATION OF THE PROJECT

Replication can have two aspects, replication proper (lessons and experiences are replicated in different geographic area) or scaling up (lessons and experiences are replicated within the same geographic area but funded by other sources).

- Is the project suitable for replication?

### 3.4 MONITORING AND EVALUATION SYSTEMS

- Did the project have M&E plans in place to monitor results and track progress towards achieving the objectives of the project?
- Did the M&E plan make provision for proper training for parties responsible for M&E activities and was this budgeted for?
- Was a budget allocated for M&E activities and was this budget adequate?

### 3.5 UNEP SUPERVISION AND SUPPORT

- Did UNEP provide adequate project supervision and administrative support during the project?
- Was the feedback from UNEP in terms of assistance timely and of an adequate quality?
- Did UNEP provide adequate financial support during the project?

### 3.6 ON GOING SUSTAINABLITY

- Based on your experience with the project, please comment on the probability of continued long-term outcomes and impacts after the UNEP funding for this project ends.
- Identify and comment on the key conditions or factors that are likely to contribute or undermine the persistence of benefits after the project ends.

***Thank you for your time and input***

## ANNEX E: BIBLIOGRAPHY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- 2010 FIFA World Cup. Host City Cape Town. Green Goal Legacy Report
- 2010 FIFA World Cup. Host City Cape Town. Green Goal Action Plan
- 2010 FIFA World Cup. Host City Cape Town. Green Goal Progress Report, September, 2009.

## ANNEX F: FINANCE SUMMARY

### TABLE 1: GEF BUDGET

| UNEP Budget Line | | | C1: Reduce energy consumption | C2: Low carbon participation | C3: Independent assessment | Project management | Total | Feb-Dec 2010 | Jan-Mar 2011 | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| **10** | **PERSONNEL COMPONENT** | | | | | | | | | |
| | 1100 | Project personnel | | | | | | | | |
| | 1101 | Project manager | | | | 80 000 | 80 000 | 62 800 | 17 200 | 80 000 |
| | **1199** | **Sub-total** | **-** | **-** | **-** | **80 000** | **80 000** | **62 800** | **17 200** | **80 000** |
| | 1200 | Consultants | | | | | | | | |
| | 1201 | Commitments & Assessments specialist | | | 70 000 | | 70 000 | 70 000 | | 70 000 |
| | 1202 | Knowledge Management specialist | | | 50 000 | | 50 000 | 50 000 | | 50 000 |
| | **1299** | **Sub-total** | **-** | **-** | **120 000** | **-** | **120 000** | **120 000** | **-** | **120 000** |
| | 1600 | Travel on official business | | | | | | | | |
| | 1601 | Land travel | 3 000 | 3 000 | 3 000 | 3 000 | 12 000 | 12 000 | | 12 000 |
| | 1602 | Air travel | 5 000 | 5 000 | 5 000 | 5 000 | 20 000 | 20 000 | | 20 000 |
| | 1603 | DSA | 2 000 | 2 000 | 2 000 | 2 000 | 8 000 | 8 000 | | 8 000 |
| | **1699** | **Sub-total** | **10 000** | **10 000** | **10 000** | **10 000** | **40 000** | **40 000** | **-** | **40 000** |
| **1999** | **Component total** | | **10 000** | **10 000** | **130 000** | **90 000** | **240 000** | **222 800** | **17 200** | **240 000** |
| | | | | | | | | | | |
| **20** | **SUB-CONTRACT COMPONENT** | | | | | | | | | |
| | 2300 | Sub-contracts (for commercial purposes) | | | | | | | | |
| Note 1 | 2301 | Retro-fitting & demonstration of solar technologies | 485 000 | | | | 485 000 | 485 000 | | 485 000 |
| | 2302 | Tourism initiative (green passports) | | 207 500 | | | 207 500 | 207 500 | | 207 500 |
| | **2399** | **Sub-total** | **485 000** | **207 500** | **-** | **-** | **692 500** | **692 500** | **-** | **692 500** |
| **2999** | **Component total** | | **485 000** | **207 500** | **-** | **-** | **692 500** | **692 500** | **-** | **692 500** |
| | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **30** | **TRAINING COMPONENT** | | | | | | | | | |
| | 3300 | Meetings/Conferences | | | | | | | | |
| | 3301 | Inception workshop | | 5 000 | | | 5 000 | 5 000 | | 5 000 |
| | **3399** | **Sub-total** | **-** | **5 000** | **-** | **-** | **5 000** | **5 000** | **-** | **5 000** |
| **3999** | **Component total** | | **-** | **5 000** | **-** | **-** | **5 000** | **5 000** | **-** | **5 000** |
| | | | | | | | | | | |
| **40** | **EQUIPMENT AND PREMISES COMPONENT** | | | | | | | | | |
| | 4200 | Non-expendable equipment | | | | | | | | |
| | 4201 | 2 laptops and cellphones | | 5 500 | | | 5 500 | 5 500 | | 5 500 |
| | **4299** | **Sub-total** | **-** | **5 500** | **-** | **-** | **5 500** | **5 500** | **-** | **5 500** |
| | 4300 | Premises | | | | | | | | |
| | 4301 | Office rental | | | | 10 000 | 10 000 | 8 000 | 2 000 | 10 000 |
| | **4399** | **Sub-total** | **-** | **-** | **-** | **10 000** | **10 000** | **8 000** | **2 000** | **10 000** |
| **4999** | **Component total** | | **-** | **5 500** | **-** | **10 000** | **15 500** | **13 500** | **2 000** | **15 500** |
| | | | | | | | | | | |
| **50** | **MISCELLANEOUS COMPONENT** | | | | | | | | | |
| | 5200 | Reporting costs | | | | | | | | |
| | 5201 | Disseminate best practice report | | 22 000 | | | 22 000 | | 22 000 | 22 000 |
| | **5299** | **Sub-total** | **-** | **22 000** | **-** | **-** | **22 000** | **-** | **22 000** | **22 000** |
| | 5500 | Evaluation | | | | | | | | |
| | 5501 | Audit | 5 000 | | | | 5 000 | | 5 000 | 5 000 |
| | 5581 | Terminal evaluation | | | 20 000 | | 20 000 | | 20 000 | 20 000 |
| | **5599** | **Sub-total** | **5 000** | **-** | **20 000** | **-** | **25 000** | **-** | **25 000** | **25 000** |
| **5999** | **Component total** | | **5 000** | **22 000** | **20 000** | **-** | **47 000** | **-** | **47 000** | **47 000** |
| **99** | **GRAND TOTAL** | | **500 000** | **250 000** | **150 000** | **100 000** | **1 000 000** | **933 800** | **66 200** | **1 000 000** |
| | Total per CEO endorsement | | 500 000 | 250 000 | 150 000 | 100 000 | 1 000 000 | | | |

## TABLE 2: CO-FINANCING BUDGET

| **Project co-financing sources (all in-kind)** | | | | Direct contribution to: | | | | |
|---|---|---|---|---|---|---|---|---|
| Name of co-financier | Classification | Type | Project preparation | C1: Reduce energy consumption | C2: Low carbon participation | C3: Independent assessment | Indirect | Total (US$) |
| 1.DEAT | National Treasury | Grant | **Development of the following outputs:** | | | | | 4 774 399 |
| | | | National Greening 2010 Framework | | | | | |
| | | | Greening Plans for host cities | | | | | |
| | | | Development of the National Greening Plan | | | | | |
| | | | Implementation of a two-bin waste separation programme | | | | | |
| | | | Development of the National Greening Legacy Report post 2010 FIFA World Cup | | | | | |
| | | | **EPWP 2010 Related Projects:** | | | | | |
| | | | Volunteer training and placement for 2010 | | | | | |
| | | | Environment health (rodent eradication project in city of Johannesburg and Capetown) | | | | | |
| | | | Waste collection in support of existing SMME's (Polokwane, Mangaung and Rusterburg host cities) | | | | | |
| | | | Maintenance of non-motorized transport in Capetown, Polokwane and Johannesburg | | | | | |
| | | | Energy auditing skills development | | | | | |
| 2.DEFRA | Bilateral | Grant | **Total** | | | | | 289 000 |
| | | | Development of guidelines for Greening Large Sporting Events | | | | | |
| | | | Development of volunteer training manual | | | | | |
| 3.DANIDA | Bilateral | Grant | **Total** | | | | | 3 359 998 |
| | | | Roll-out of energy-efficient lighting in Cape Town, Ethekwini, Ekurhuleni | | | | | |
| | | | Development of a web based system for voluntary off-setting of carbon emissions resulting from 2010 travel (RFP stage) | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Development of a broader national greening legacy framework and strategy (RFP stage) | | | | | |
| | | | Green Review of Stadia | | | | | |
| 4.NORAD | Bilateral | Grant | Feasiblity Study Report for a carbon neutral 2010 FIFA World Cup in South Africa | | | | | 86 666 |
| 5.GTZ | Bilateral | Grant | ? | | | | | 33 333 |
| 6.INWENT | Bilateral | Grant | **Total** | | | | | 36 682 |
| | | | Development of and M&E tool | | | | | |
| | | | Environment workshop | | | | | |
| 7.KfW | Bilateral | Grant | Pre-feasibility study on non-motorized transportation in host cities | | | | | 33 333 |
| | | | Total | - | - | - | - | 8 613 411 |

## ANNEX G: REVIEW OF PROJECT DESIGN

| **Relevance** | | **Evaluation Comments** | **Prodoc reference** |
|---|---|---|---|
| Are the intended results likely to contribute to UNEPs Expected Accomplishments and programmatic objectives? | | Yes, HL | Section 2.2 and 2.6 |
| Does the project form a coherent part of a UNEP-approved programme framework? | | Yes, HL | |
| Is there complementarity with other UNEP projects, planned and on-going, including those implemented under the GEF? | | Yes, HL | |
| Are the project's objectives and implementation strategies consistent with: | i) Sub-regional environmental issues and needs? | Yes, HL | Section 2 |
| | ii) The UNEP mandate and policies at the time of design and implementation? | Yes, HL | |
| | iii) The relevant GEF focal areas, strategic priorities and operational programme(s)? (if appropriate) | Yes, HL | |
| | iv) Stakeholder priorities and needs? | Yes, HL | |
| ***Overall rating for Relevance*** | | HL | |
| **Intended Results and Causality** | | | |
| Are the objectives realistic? | | Yes, S | |
| Are the causal pathways from project outputs [goods and services] through outcomes [changes in stakeholder behaviour] towards impacts clearly and convincingly described? Is there a clearly presented Theory of Change or intervention logic for the project? | | Yes, however, limited information provided on how awareness of the hospitality sector was raised, S | |
| Is the timeframe realistic? What is the likelihood that the anticipated project outcomes can be achieved within the stated duration of the project? | | Yes, however, PIR refers to tight timeframes, MS | |
| Are the activities designed within the project likely to produce their intended results | | Yes, S | |
| Are activities appropriate to produce outputs? | | Yes, S | |
| Are activities appropriate to drive change along the intended causal pathway(s) | | Yes, S | |
| Are impact drivers, assumptions and the roles and capacities of key actors and stakeholders clearly described for each key causal pathway? | | No, detail on this aspects lacking, MU | |
| ***Overall rating for Intended Results and causality*** | | S | |
| **Efficiency** | | | |
| Are any cost- or time-saving measures proposed to bring the project to a successful conclusion within its programmed budget and timeframe? | | Unsure, will assess during interviews | |
| Does the project intend to make use of / build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency? | | Yes, builds on FIFA 2006 Green Goal and UNEP Green Passport, S | |
| ***Overall rating for Efficiency*** | | ??? | |

| **Sustainability / Replication and Catalytic effects** | | | |
|---|---|---|---|
| Does the project design present a strategy / approach to sustaining outcomes / benefits? | | No, relies on awareness raised by project, ML | |
| Does the design identify the social or political factors that may influence positively or negatively the sustenance of project results and progress towards impacts? Does the design foresee sufficient activities to promote government and stakeholder awareness, interests, commitment and incentives to execute, enforce and pursue the programmes, plans, agreements, monitoring systems etc. prepared and agreed upon under the project? | | Yes, L | Section 2.3.1 |
| If funding is required to sustain project outcomes and benefits, does the design propose adequate measures / mechanisms to secure this funding? | | N/A | |
| Are there any financial risks that may jeopardize sustenance of project results and onward progress towards impact? | | No | |
| Does the project design adequately describe the institutional frameworks, governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. required to sustain project results? | | Yes, L | Section 2.3 and 4 |
| Does the project design identify environmental factors, positive or negative, that can influence the future flow of project benefits? Are there any project outputs or higher level results that are likely to affect the environment, which, in turn, might affect sustainability of project benefits? | | Yes, L | Section 2.3 |
| Does the project design foresee adequate measures to catalyze behavioural changes in terms of use and application by the relevant stakeholders of (e.g.): | i) Technologies and approaches show-cased by the demonstration projects; | Yes, Outcome 1, L | Section 3 |
| | ii) Strategic programmes and plans developed | Yes, potential linked to best practice guidelines (Outcome 3), L | Section 3 |
| | iii) Assessment, monitoring and management systems established at a national and sub-regional level | Yes, potential linked to best practice guidelines (Outcome 3), L | Section 3 |
| Does the project design foresee adequate measures to contribute to institutional changes? [An important aspect of the catalytic role of the project is its contribution to institutional uptake or mainstreaming of project-piloted approaches in any regional or national demonstration projects] | | Yes, L | Section 3.8 and 3.7 |
| Does the project design foresee adequate measures to contribute to policy changes (on paper and in implementation of policy)? | | Potentially Yes, L | Section 3.8 and 3.7 |
| Does the project design foresee adequate measures to contribute to sustain follow-on financing (catalytic financing) from Governments, the GEF or other donors? | | No | |
| Does the project design foresee adequate measures to create opportunities for particular individuals or institutions ("champions") to catalyze change (without which the project would not achieve all of its results)? | | Yes, does create potential incentives/motivation for private sector , L | |
| Are the planned activities likely to generate the level of | | Yes, however, will need | Section |

| | | |
|---|---|---|
| ownership by the main national and regional stakeholders necessary to allow for the project results to be sustained? | to be supported by political will, L | 3.11 |
| ***Overall rating for Sustainability / Replication and Catalytic effects*** | L | |
| **Risk identification and Social Safeguards** | | |
| Are critical risks appropriately addressed? | Yes, S | Section 3.5 |
| Are assumptions properly specified as factors affecting achievement of project results that are beyond the control of the project? | No, MU | |
| Are potentially negative environmental, economic and social impacts of projects identified | Yes, S | Section 2.3.1 |
| ***Overall rating for Risk identification and Social Safeguards*** | S | |
| **Governance and Supervision Arrangements** | | |
| Is the project governance model comprehensive, clear and appropriate? | Yes, S | Section 4 |
| Are roles and responsibilities clearly defined? | Yes, S | Section 4 |
| Are supervision / oversight arrangements clear and appropriate? | Yes, S | Section 4 |
| ***Overall rating for Governance and Supervision Arrangements*** | S | |
| **Management, Execution and Partnership Arrangements** | | |
| Have the capacities of partner been adequately assessed? | Not clear from Project Document, U | Section 5 |
| Are the execution arrangements clear? | Yes, S<br>However, PMU did not realise the extent of work required on monitoring and evaluation and also performance of secretariat functions and preparedness for meetings | Section 4, Appendix 10 |
| Are the roles and responsibilities of internal and external partners properly specified? | Yes, S | Section 4 and 5 |
| ***Overall rating for Management, Execution and Partnership Arrangements*** | S | |
| **Financial Planning / budgeting** | | |
| Are there any obvious deficiencies in the budgets / financial planning. | No, however, PIRs note that budget and timeframes were tight. Budgets allocated to street lights were under-costed.<br>Procurement procedures not always followed by UNDP. | |
| Cost effectiveness of proposed resource utilization as described in project budgets and viability in respect of resource mobilization potential | Assess during evaluation | |
| Financial and administrative arrangements including flows of funds are clearly described | Assess during evaluation | |

| | | |
|---|---|---|
| ***Overall rating for Financial Planning / budgeting*** | ???? | |
| **Monitoring** | | |
| Does the logical framework:<br>• Capture the key elements in the Theory of Change for the project?<br>• Have 'SMART' indicators for outcomes and objectives?<br>• Have appropriate 'means of verification'<br>• Adequately identify assumptions | Yes, S | Appendix 4 |
| Are the milestones and performance indicators appropriate and sufficient to foster management towards outcomes and higher level objectives? | Yes, S | Appendix 4 |
| Is there baseline information in relation to key performance indicators? | Yes, listed, but quality poor or lacking, U | Appendix 4 |
| Has the method for the baseline data collection been explained? | No, U | |
| Has the desired level of achievement (targets) been specified for indicators of Outcomes and are targets based on a reasoned estimate of baseline?? | Yes, S | Section 6 |
| Has the time frame for monitoring activities been specified? | Yes, S | Section 6 |
| Are the organisational arrangements for project level progress monitoring clearly specified | Yes, S | Section 6 |
| Has a budget been allocated for monitoring project progress in implementation against outputs and outcomes? | Yes, S | Section 6 |
| Overall, is the approach to monitoring progress and performance within the project adequate? | Unsure, assess during evaluation | |
| ***Overall rating for Monitoring*** | S | |
| **Evaluation** | | |
| Is there an adequate plan for evaluation? | Yes, S | Section 6 |
| Has the time frame for Evaluation activities been specified? | Yes, S | Section 6 |
| Is there an explicit budget provision for mid-term review and terminal evaluation? | Yes, S | Section 6 |
| Is the budget sufficient? | Unable to comment | |
| ***Overall rating for Evaluation*** | S | |

## ANNEX H: CONSULTANT CV

### Tony Barbour

Tony Barbour is an independent environmental consultant with 24 years of experience. His experience as an environmental consultant includes working for ten years as a consultant in the private sector followed by four years at the University of Cape Town's Environmental Evaluation Unit. He has worked as an independent consultant since 2004. His interests as are linked to social impact assessment, strategic environmental assessment and planning, resource economics, training and capacity building and review work.

**EDUCATION**
BSc (Geology and Economics) Rhodes (1984);
BEcon (Hons) Rhodes (1985);
MSc (Environmental Science), University of Cape Town (1992)

**EMPLOYMENT RECORD**
- Independent Consultant: November 2004 – current;
- University of Cape Town: August 1996-October 2004: Environmental Evaluation Unit (EEU), University of Cape Town. Senior Environmental Consultant and Researcher;
- Private sector: 1991-August 2000: 1991-1996: Ninham Shand Consulting (Cape Town). Senior Environmental Scientist; 1996-August 2000: Steffen, Robertson and Kirsten (SRK Consulting) – Associate Director, Manager Environmental Section, SRK Cape Town.

**LECTURING**
- University of Cape Town: Environmental Economics, Social Impact Assessment, SEA and EIA.
- Cape Technikon: Environmental Economics and Waste Management;
- Peninsula Technikon: Waste Management and Environmental Economics

**AREAS OF EXPERIENCE AND EXPERTISE**
- Social Impact Assessment
- Project management
- Review
- Environmental Impact Assessment
- Strategic Environmental Assessment and Planning
- Teaching, training and research

Countries worked in are South Africa, Namibia, Zambia, Botswana, Lesotho, Mauritius, Ghana, Mozambique, Swaziland, Ethiopia and Oman.