

Rustenburg Municipality

Greening Plan for the 2010 Soccer World Cup





**environment
& tourism**

Department:
Environmental Affairs and Tourism
REPUBLIC OF SOUTH AFRICA



Rustenburg Local Municipality Greening Plan for the 2010 FIFA World Cup

The preparation of this document was funded by:
Department of Environment Affairs and Tourism (DEAT)
Private Bag X447
Pretoria
0001

March 2009

Project Consultants:

Nick Steytler, Monique Sham and Nicci Diederichs

Cover Design:

Tanza Crouch



Making Environments Work for People!

PO Box 2221

Everton, 3625

Tel: 031 764 6449

Fax: 031 764 4907

www.futureworks.co.za

THIS DOCUMENT HAS BEEN PRINTED ON 50% RECYCLED PAPER

ABBREVIATIONS / ACRONYMS USED IN THE TEXT

BMS	Building Management System
CBO	Community-based Organisation
CDM	Clean Development Mechanism (as per Kyoto Protocol)
CEF	Central Energy Fund
CER	Certifiable Emissions Reduction
CIDA	Canada International Development Agency
DACE	North West Department of Agriculture, Conservation and Environment
DANIDA	Danish International Development Agency
DALA	Department of Agriculture and Land Administration
DEAT	National Department of Environment Affairs and Tourism
DEDT	North West Department of Economic Development and Tourism
DBSA	Development Bank of Southern Africa
DLGH	Department of Local Government and Housing
DME	Department of Minerals and Energy
DWAF	Department of Water Affairs and Forestry
EDM	Ehlanzeni District Municipality
EIA	Environmental Impact Assessment
EMS	Environmental Management System
EPWP	Expanded Public Works Programme
FEDHASA	Federated Hospitality Association of Southern Africa
FIFA	Fédération Internationale de Football Association
GEF	Global Environment Facility
GWSSD	Greening the World Summit on Sustainable Development
HOV	High Occupancy Vehicles
IDP	Integrated Development Plan
IWMP	Integrated Waste Management Plan
LED	Local Economic Development
LOC	Local Organising Committee (appointed by FIFA)
MoU	Memorandum of Understanding
NGO	Non-governmental Organisation
NIGF	Neighbourhood Improvement Grant Fund
NSLGCP	North South Local Government Cooperation Programme
PPP	Public Private Partnership
PT	Public Transport
RLM	Rustenburg Local Municipality
SANBI	South African National Biodiversity Institute
SBU	Small Business Unit
SESSA	Sustainable Energy Society of Southern Africa
SRPP	Social Responsibility Policy and Projects
TGCSA	Tourism Grading Council of South Africa
TM	Trade Mark
UNDP	United Nations Development Programme
VER	Verifiable Emissions Reduction
WESSA	Wildlife and Environment Society of Southern Africa
WWF	Worldwide Fund for Nature
WWTW	Wastewater Treatment Works

INTRODUCTION

Rustenburg has been selected as one of nine cities in South Africa to host the 2010 FIFA Soccer World Cup™. In total 5 first round matches and one second round match will be played at the Royal Bafokeng Sports Palace (located in Phokeng approximately 15 km north west of Rustenburg) on 12, 15, 19, 22, 24 and 26 June 2010 respectively. In addition the Royal Bafokeng Sports Palace will also host Confederations Cup matches in 2009.

All 2010 World Cup Host Cities have signed a “Host City Agreement” with FIFA. The Host City Agreement includes a commitment to environmental sustainability – which places the onus on all Host Cities to formulate a plan of action to ensure effective implementation of environmental sustainability principles and approaches in the lead up to, during and after the 2010 event. Throughout South Africa, these environmental sustainability initiatives associated with the hosting of the 2010 World Cup are commonly being called “Greening” programmes and projects.

The Rustenburg Local Municipality (RLM) has committed to this requirement for “Greening” of the 2010 event in its area of jurisdiction, and has established a “2010 Greening Workstream” that will drive the implementation of the required greening programme and projects.

The purpose of this 2010 Greening Business Plan is to provide a clear action plan for the RLM’s 2010 Greening Workstream - to minimize the environmental impact of hosting the 2010 Soccer World Cup and to leave a positive environmental legacy within the municipal area. In addition, the Business Plan aims to assist the RLM in allocating appropriate budgets for Greening activities, sourcing Greening project funding, and finding support networks for the implementation of Greening projects and activities.

At a broader level, the Department of Environment Affairs and Tourism (DEAT) is supporting the FIFA 2010 Local Organising Committee (LOC) in co-ordinating the National Greening Programme for the 2010 FIFA World Cup. The “Greening” plan, programmes and projects of the RLM, as one of the host cities, are aligned with the approaches and frameworks established by this National Greening Programme. The development of this Greening Plan for MLM has been facilitated and funded by the National Department of Environmental Affairs and Tourism.

It should be noted that this Greening Plan is the responsibility of the RLM to finance and implement. For this reason, the RLM may need to go through a comprehensive process of prioritising the projects within this plan that it wishes to implement in time for 2010, and other projects that it may wish to implement post-2010 as legacy initiatives, or that it cannot implement for financial or other reasons.



Zakumi – the official 2010 World Cup mascot – a Leopard with green hair. Interestingly, the mascot is a strong biodiversity icon for South Africa, with the Leopard being one of South Africa’s most threatened animal species.

TABLE OF CONTENTS

ABBREVIATIONS / ACRONYMS USED IN THE TEXT	3
INTRODUCTION.....	4
TABLE OF CONTENTS.....	5
SECTION A: BACKGROUND AND CONTEXT: GREENING THE 2010 WORLD CUP IN SOUTH AFRICA	8
A1 TRENDS IN EVENT GREENING	8
A2 THE NATIONAL 2010 GREENING CONTEXT – GREEN GOAL	8
A3 INTERNATIONAL BEST PRACTICE IN EVENT GREENING	9
A3.1 OLYMPIC GAMES.....	10
A3.2 WORLD ATHLETICS CHAMPIONSHIPS.....	12
A3.3 FIFA SOCCER WORLD CUP	12
A3.4 WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT	12
SECTION B: CONTEXT OF GREENING 2010 IN RUSTENBURG.....	13
B1 RUSTENBURG HOST CITY – PROFILE AND ATTRACTIONS.....	13
B2 PREPARATIONS FOR HOSTING OF 2010 EVENTS IN RUSTENBURG	13
SECTION C: GREENING APPROACH	14
C1 GREENING FOCUS AND AIMS	14
C2 GREENING THEMATIC AREAS	15
C3 IMPLEMENTATION OF THE 2010 GREENING PLAN	16
C4 SUMMARY OF GREENING PROGRAMME STRATEGIES	16
SECTION D: GREENING PROGRAMME BUSINESS PLAN	17
D1 CLIMATE IMPACT MANAGEMENT STRATEGY	17
D1.1 ACHIEVEMENTS TO DATE / WORK IN PROGRESS	18
D1.2 STRATEGY TABLE	18
D2 ENERGY EFFICIENCY STRATEGY.....	19
D2.1 ACHIEVEMENTS TO DATE / WORK IN PROGRESS	19
D2.2 STRATEGY TABLE	20
D3 WATER CONSERVATION AND MANAGEMENT STRATEGY	20
D3.1 ACHIEVEMENTS TO DATE / WORK IN PROGRESS	20
D3.2 STRATEGY TABLE	21
D4 SUSTAINABLE WASTE MANAGEMENT STRATEGY	22
D4.1 ACHIEVEMENTS TO DATE / WORK IN PROGRESS	22
D4.2 STRATEGY TABLE	22
D5 SUSTAINABLE TRANSPORT STRATEGY.....	23
D5.1 ACHIEVEMENTS TO DATE / WORK IN PROGRESS	23
D5.2 STRATEGY TABLE	24
D6 BIODIVERSITY STRATEGY	24
D6.1 ACHIEVEMENTS TO DATE / WORK IN PROGRESS	24
D6.2 STRATEGY TABLE	25
D7 AWARENESS RAISING AND REPORTING STRATEGY.....	26
D7.1 ACHIEVEMENTS TO DATE / WORK IN PROGRESS	26
D7.2 STRATEGY TABLE	27

D8	MONITORING AND EVALUATION STRATEGY	27
D8.1	STRATEGY TABLE	27
D9	CROSS CUTTING PROJECTS / RESOURCES.....	28
D9.1	ENVIRONMENTAL MANAGEMENT SYSTEMS FOR 2010 VENUES	28
D9.2	GREENING PROGRAMME RESOURCES / CAPACITY	28
SECTION E:	PROJECTS AND FINANCIAL PLAN.....	29
E1	CROSS-CUTTING PROJECTS.....	29
E1.1	ENVIRONMENTAL MANAGEMENT SYSTEMS FOR 2010 VENUES	29
E1.2	GREENING PROGRAMME CO-ORDINATOR.....	30
E2	CLIMATE IMPACT MANAGEMENT	30
	PROJECT 1A: CARBON FOOTPRINT CALCULATION	30
	PROJECT 1B: REPORTING ON CARBON FOOTPRINT REDUCTIONS AND BEST PRACTICE GUIDEBOOK	31
	PROJECT 2A: LOBBY FOR LOW EMISSIONS PUBLIC TRANSPORT FLEET.....	32
	PROJECT 3A: SUPPORT / MAXIMISE TREE PLANTING	32
	PROJECT 3B: CARBON SEQUESTRATION PROJECT DEVELOPMENT	33
	PROJECT 3C: CARBON EMISSIONS REDUCTIONS PROJECT DEVELOPMENT	33
E3	ENERGY EFFICIENCY.....	35
	PROJECT 1A: MAXIMISE ENERGY EFFICIENCY AT 2010 VENUES & CITY BEAUTIFICATION ROUTES.....	35
	PROJECT 1B: PROMOTE ENERGY EFFICIENCY IN PRIVATE SECTOR	35
	PROJECT 2A: RENEWABLE ENERGY SUPPLY PROJECT.....	35
E4	WATER CONSERVATION AND MANAGEMENT	36
	PROJECT 1A: MAXIMISE WATER USE EFFICIENCY AT 2010 VENUES.....	36
	PROJECT 2A: DRY / COMPOSTING TOILET DEMONSTRATION PROJECT	37
E5	SUSTAINABLE WASTE MANAGEMENT	39
	PROJECT 2A: MOLOK DEEP COLLECTION BIN DEMONSTRATION PROJECT.	40
E6	SUSTAINABLE TRANSPORT	41
	PROJECT 1A: PROMOTION OF BUS USE AND RAIL TO ACCESS 2010 VENUES.	41
	PROJECT 2A: PARK & RIDE.....	42
	PROJECT 3A: DESIGN AND CONSTRUCTION OF SAFE PEDESTRIAN AND CYCLE NETWORKS FOR 2010.	42
E7	BIODIVERSITY	42
	PROJECT 1A: REVIEW OF THE LOCAL AND PROVINCIAL 2010 TOURISM STRATEGIES.....	42
	PROJECT 1B: REVIEW OF KEY ECOTOURISM AND HERITAGE SITES PROMOTED FOR 2010	43
	PROJECT 2A: REVIEW OF STADIUM PRECINCT LANDSCAPING PLAN.....	46
	PROJECT 2B: REVIEW OF TRANSPORT ROUTE LANDSCAPING PLAN.....	46
	PROJECT 3A: GREEN LANDSCAPING GUIDELINES.....	46
	PROJECT 4A: WETLAND / RIVERINE SYSTEM UPGRADING AND ENHANCEMENT PROJECT.....	47
E8	AWARENESS RAISING AND REPORTING.....	48
	PROJECT 1B: GREENING 2010 NEWSLETTER.....	49
	PROJECT 1C: INFORMATION SHARING WITH COMMUNICATIONS WORKSTREAM	50
E9	MONITORING AND EVALUATION	50
	PROJECT 1A: MONITORING	50
	PROJECT 2A: EVALUATION AND REPORTING.....	51
E10	FINANCIAL PLAN.....	51
SECTION F:	IMPLEMENTATION PLAN.....	53
F1	IMPLEMENTATION AGENTS & PARTNERS.....	53
F1.1	GREENING WORKSTREAM	53
F1.2	STADIUM WORKSTREAM AND PROJECT TEAM.....	53
F1.3	RUSTENBURG LOCAL MUNICIPALITY (RLM) SERVICE DEPARTMENTS.....	53

F1.4	ROYAL BAFOKENG	53
F1.5	BOJANALA PLATINUM DISTRICT MUNICIPALITY	53
F1.6	NATIONAL GOVERNMENT & AGENCIES	54
F1.7	PROVINCIAL GOVERNMENT	54
F1.8	PRIVATE SECTOR	54
F1.9	PARASTATALS, NGO'S & CBO'S	55
F2	GREENING WORK TEAM	56
F3	POSSIBLE SUPPORT/FUNDING SOURCES FOR GREENING ACTIVITIES	57
F3.1	DEAT AND NATIONAL TREASURY	57
F3.2	DBSA	57
F3.3	FIFA SPONSORS	57
F3.4	GEF	57
F3.5	SANBI	58
F3.6	WORLD BANK	58
F3.7	WWF - SA	58
F3.8	ESKOM	58
F3.9	NORTH SOUTH LOCAL GOVERNMENT COOPERATION PROGRAMME	58
F3.10	FINISH MINISTRY OF FOREIGN AFFAIRS	58
SECTION G:	REFERENCES / BIBLIOGRAPHY	59
G1	DOCUMENTS CONSULTED	59
G2	USEFUL WEBSITES	59

SECTION A: BACKGROUND AND CONTEXT: GREENING THE 2010 WORLD CUP IN SOUTH AFRICA

A1 TRENDS IN EVENT GREENING

Since the early 1990's there has been a growing awareness of the potential negative impacts that major and mega events, such as large sporting events and conferences, can have on the people, environment and economy of the host country or city. These negative impacts may include:

- * Change in land use through construction of event-hosting infrastructure, with associated destruction of natural environments and ecosystem services supply,
- * The consumption of non-renewable resources (water, energy) to service the event,
- * Pollution of soil, air and water,
- * Greenhouse gas emissions that contribute to accelerated global warming and ozone layer depletion,
- * Generation of large volumes of waste that take up valuable landfill space,
- * Construction of expensive event-hosting infrastructure that is unsustainable to operate or maintain post-event.

This concern has given rise to a trend in “responsible event hosting”, which essentially involves the inclusion of key sustainability principles in the development of event-hosting infrastructure, and in the operational plans for the event. This approach has become commonly known as “event greening”, and most often includes the following aspects¹:

- * Implementation of environmental best practice,
- * Maximisation of social and economic development,
- * Building environmental awareness,
- * Proactive monitoring, evaluation and reporting to ensure the greening process is a learning experience,
- * Leaving a positive legacy.

A2 THE NATIONAL 2010 GREENING CONTEXT – GREEN GOAL

As part of the 2006 FIFA Soccer World Cup event in Germany, an event greening programme, aptly named Green Goal, was developed. The key aim of this programme was to ensure that the event was climate neutral, but it also included targeted environmental sustainability interventions in the following sectors:

- * Energy,
- * Water,
- * Waste and
- * Mobility / transport.

FIFA has indicated that it would like to see similar event greening programmes implemented in all countries that are host to the Soccer World Cup. Accordingly, an environmental protection clause has been included in FIFA's standard Host City Agreement for the 2010 Soccer World Cup that commits all Host Cities to ensuring that environmental sustainability issues are addressed:

¹ These five principles of event greening are included in the 2004 edition of “Leaving a greening Legacy, guidelines for event greening”, produced by the Greening of the World Summit on Sustainable Development (GWSSD).

“CLAUSE 6.7: ENVIRONMENTAL PROTECTION

The Host City undertakes to carry out its obligations and activities under this Agreement in a manner which embraces the concept of sustainable development that complies with applicable environmental legislation and serves to promote the protection of the environment. In particular, the concept of sustainable development shall include concerns for post-competition use of Stadia and other facilities and infrastructure”.

So, in being awarded the opportunity to host the 2010 FIFA Soccer World Cup, South Africa has agreed to address issues of environmental sustainability associated with hosting this event. Apart from the commitment of all Host Cities to this through Clause 6.7 of the Host City Agreement, the National Department of Environmental Affairs and Tourism (DEAT) is supporting the 2010 FIFA Local Organising Committee (LOC) to coordinate the Green Goal Programme for the 2010 FIFA Soccer World Cup event at a national level. DEAT, in collaboration with numerous stakeholders, including the LOC has developed the National Greening Framework, which provides the outline for this initiative. DEAT has also developed the guideline for the greening of large sporting events.

In addition, the LOC has developed a set of environmental objectives and national targets for host cities for greening 2010.

The South Africa Green Goal Programme has adopted the following greening thematic areas:

- * Energy efficiency,
- * Water efficiency,
- * Responsible waste water management,
- * Biodiversity and ecology,
- * Sustainable waste management,
- * Transport, mobility and access,
- * Communication and awareness-raising.

A3 INTERNATIONAL BEST PRACTICE IN EVENT GREENING

Since the early 1990's, implementation of event greening has gained momentum internationally both in developing and developed countries. However, as there is no formally defined or recognised approach for event greening internationally, which has resulted in event greening programmes having different approaches and focal areas in each instance in which they are implemented. As this is still an emerging field, there is still much to be learnt about the most effective event greening approaches and strategies, and so most event greening programmes include a monitoring and evaluation component.

In terms of this learning to date, the following are generally considered to represent **best-practice in event greening programmes**:

Text Box 1: Summary of Best Practice Approaches in Event Greening Programmes

- * *Focus on positive environmental legacy for the host city / country,*
- * *A lifecycle approach to estimating and measuring environmental impacts,*
- * *Carbon neutrality in event hosting – i.e. preventing global climate impacts – with a focus on event users contributing towards the cost of offsetting emissions; and using this as a platform for establishing carbon offset projects that have the capacity to offset greater amounts of CO₂ than produced by the event,*
- * *Installation of energy efficient infrastructure to minimise carbon footprint,*

- * *Use of green energy for event operations – especially where this involves installing infrastructure that both produces and uses green energy (e.g. solar water heating, photovoltaic energy) as this ensures that the operational carbon footprint of the infrastructure is reduced in the medium and long term,*
- * *Incentives for increasing the use of public transport systems (aligned to improved public transport infrastructure / services),*
- * *Promoting the use of vehicles that meet appropriate fuel efficiency and emissions standards,*
- * *Sustainable waste management – with a primary focus on minimising waste at source, and recycling maximally the waste that can't be avoided,*
- * *Recycling of buildings / construction materials,*
- * *Installation of water efficient infrastructure and systems (including landscaping), water capture and re-use systems,*
- * *Green procurement policies that address both social and environmental concerns,*
- * *Investment into ecosystems services supply, green landscapes for a better quality of life / urban landscape;*
- * *Awareness raising and education aimed at achieving positive behavioural changes in society at large,*
- * *Monitoring and evaluation aimed at measuring performance and learning from the greening programmes strengths and weaknesses.*

Some of the **milestone event greening programmes** and their **associated achievements** are evaluated below:

A3.1 Olympic Games

The Olympic Games have increased in number and extent over the last 20 years, with concomitant increasing environmental, social and economic impacts on the Host Cities. The environmental impact was recognised by the International Olympics Committee (IOC) when the Albertville Winter Games in 1992 stimulated a large public protest about environmental degradation and negative quality of life impacts on local people caused by the event. This resulted in environment being included as a third pillar of the Olympic Charter, along with sport and culture.

The Olympic Movement has since developed a Greening Policy, which has two main objectives:

- * To promote the hosting of Olympic Games in such a way as to respect the environment and meet the standards of sustainable development,
- * To promote awareness in the Olympic family and amongst other sports practitioners of the importance of a healthy environment and sustainable development.

The Sydney 2000 Olympics was the first to include an event greening programme. It set the benchmark for event greening by developing a green standard for major sporting events. There was an attempt to consider the environment in all aspects of planning, managing and staging of the games. It included remediation projects, transport systems, catering and waste management.

A summary of the greening approaches and best practices adopted at the Olympics is as follows:

Torino – 2006:

- * Carbon neutral event – all emissions offset through €3 million in energy efficiency projects
- * Water-saving projects reduced water storage required for snow-making from 350,000 m³ to 220,000m³,
- * Sensitive wastewater handling that minimised pollution,
- * Extensive construction monitoring and rehabilitation work,
- * Tree planting, habitat creation and green engineering incorporated in infrastructure projects,
- * Sustainable waste management planning,
- * Sustainable transport planning,
- * Eco-friendly buildings in Olympic Village,
- * Green procurement policy,
- * Promotion of European Eco-label for hospitality industry,
- * Sponsors of the Games subject to voluntary “sustainability programme” – involving meeting a set of ethical and environmental standards.

Beijing – 2008:

- * Air quality a major area of focus:
 - o relocation and refitting major polluting industries
 - o switch away from coal-fired energy generation towards natural gas
 - o older buses, taxis and cars have been replaced by those using compressed natural gas or new vehicles and fuels that meet tougher, internationally recognized emissions standards such as the Euro III standard
- * Acceleration of the phase-out of ozone depleting chemicals and for the provision of energy efficiency and green energy appliances at buildings and sports venues
- * Sustainable waste management (target 50% waste recycled), including re-use of treated wastewater for heating and cooling systems in the Olympic Village,
- * Water conservation and rainwater harvesting, including drought-resistant planting and intelligent irrigation,
- * Cleaner transport systems,
- * Promotion of public transport usage: ticketing allowing free rides on public transport,
- * New urban green belts including a 580-hectare Olympic Forest Park,
- * Olympic Model Schools Programme – promotion of environment action and awareness,
- * Other environmental awareness initiatives.

Vancouver – 2010:

The Vancouver Organizing Committee for the 2010 Olympic and Paralympic Winter Games has committed to enhance environmental performance at the 2010 Winter Games and increase public awareness of the importance of environmental protection and sustainable development, as well as to leave a lasting legacy in the host communities of Vancouver and Whistler, the province of British Columbia, Canada, and beyond, and to provide innovative ways to organize major events that minimize their environmental footprints before, during and after the Games.

London – 2012:

Sustainability Plan developed aims for a “One Planet 2012”, including:

- * Carbon neutral event,
- * Standards for venue construction using environmental rating tools;
- * Development of a sustainable food strategy that promotes local, seasonal and organic produce from environmentally responsible sources;
- * Getting all suppliers and partners to sign a sustainability code, including sustainable sourcing and ethical trading.

A3.2 World Athletics Championships

The 2005 World Championships in Helsinki was the first event run by the International Athletics Associations Federation (IAAF) which included an event greening approach. The greening approach adopted has since been used as a best practice model by many other Athletics Associations.

The 'Helsinki Model' for greening deals with the following:

- * Lifecycle management of environmental impacts,
- * Climate change impacts,
- * Material flows and efficiency (including waste avoidance and management),
- * Water, chemicals and noise).

It details four phases during which greening considerations need to be taken into account: bidding phase, winning the bid, planning and preparation, operation and post-event phase.

A3.3 FIFA Soccer World Cup

The Green Goal programme established for the FIFA Soccer World Cup in Germany in 2006 included the following targets:

- * To be the first "climate neutral" FIFA World Cup TM event.
- * 20% reduction in refuse volumes in and around the stadiums
- * 50% increase in spectators travelling to and from the stadiums on public transport
- * 20% reduction in stadium energy consumption
- * 20% reduction in stadium water consumption to relieve pressure on main water resources

The approach adopted in the Green Goal 2006 Programme was to first set national greening targets based on what could be achieved cumulatively across all Host Cities. Different greening activities were undertaken in each Host City depending on the strengths and resources of each, which then contributed to the achievement of the Green Goal targets nationally.

A3.4 World Summit on Sustainable Development

Otherwise known as Rio+10, the United Nations World Summit on Sustainable Development took place in 2002 in Johannesburg (South Africa) and included an event greening programme called "Greening the World Summit on Sustainable Development" (GWSSD). The goal of GWSSD was to minimize the negative environmental impact of the WSSD on Johannesburg and maximize the positive sustainable development legacy. The key approaches adopted and achievements included:

- * Sustainable / green procurement,
 - * Energy efficiency,
 - * Purchase of green energy – 26% of energy used was from this source,
 - * Carbon fund established and carbon offset projects implemented – resulted in the establishment of the Johannesburg Climate Legacy (JCL) (40% of emissions offset),
 - * Sustainable waste management (27% of waste was recycled),
 - * Water conservation,
 - * Public awareness and education (focusing on behaviour change),
 - * Monitoring and evaluation.
-

SECTION B: CONTEXT OF GREENING 2010 IN RUSTENBURG

B1 RUSTENBURG HOST CITY – PROFILE AND ATTRACTIONS

Rustenburg, situated at the foot of the Magaliesberg in the North West Province, is some 112km northwest of Johannesburg. In total, the Rustenburg Municipal Area houses a population of approximately 400,000 people. Out of this total, roughly 240,000 people live in settlements that are located on non-tribal land. Approximately 100,000 people live on tribal land belonging exclusively to the Royal Bafokeng. Approximately 20,000 people of the remainder of the population live in mining hostels and approximately 40,000 people live on farms located within the Municipal Area. The Royal Bafokeng are members of the Setswana-speaking indigenous community and rose to prominence during the 1980s when they demanded compensation and royalties from mining companies who were mining platinum in the area. Most live outside Rustenburg on land under the sovereign control of the royal family.

Rustenburg has almost all year sunshine. Summer temperatures average 27°C, with frequent afternoon thunderstorms (Summer rainfall varies between 400 - 600 mm per year). Winter is the dry season with temperatures averaging 20°C. Given the natural bushveld vegetation the covers the entire area and with the added attraction of the Magaliesberg mountain range, this region has much to offer eco-tourists. The Rustenburg Nature Reserve offers hiking trails in the Magaliesberg with its abundant bird life and fauna and flora. The Nature Reserve is a scenic 4,250 ha expanse of upland terrain on the northern slopes of the Magaliesberg, which is home to some 115 different types of rare trees and shrubs. The Pilansberg National Game Park which boasts the “Big Five” is situated in the crater of a huge extinct volcano formed over 1300 million years ago.

There is a large variety of historical and cultural interest to be found in the area such as the German community of Kroondal that dates back to 1857, the indigenous Bafokeng, Bakgatla and Botswana tribes with their totemic and other tribal traditions. Many past battles have been fought in the districts of Koster, Swartruggens and Rustenburg during the Anglo Boer War and other ethnic wars. Prominent battlefields, memorial graves and ruined forts are scattered throughout, and the area is also an archaeological treasure trove of iron and stone-age sites.

The town lies on the edge of the Bushveld Igneous Complex, one of the most heavily mineralized regions in the world. The Platinum mines in Rustenburg are the largest producers of Platinum in the world. The mines in the district also produce chrome, tin, lead, granite and slate. In the agricultural sector the Rustenburg area also has tremendous potential. It is one of South Africa’s most important Citrus growing areas and has one of the oldest packing houses in the country which was established more than a half a century ago. The cultivation of tobacco also plays an important role and on average 187 million kilograms of tobacco are cultivated annually on approximately 19,500ha of farmland. The phenomenal growth of the town can be measured against the fact that over the past 15 years the growth rate fluctuated between 3.55% to 15.50% - at all times higher than the national growth rate.

B2 PREPARATIONS FOR HOSTING OF 2010 EVENTS IN RUSTENBURG

Rustenburg will act as a host city for both the 2010 FIFA World Cup and the 2009 FIFA Confederations Cup. The Royal Bafokeng Sports Palace, which is being upgraded from a 39,000 to a 45,000 seat capacity stadium, will be the venue for six matches (five first round matches and one second round match) during the 2010 World Cup. The matches will be played between the 12th and 26th of June 2010.

The stadium is owned and managed by the Royal Bafokeng, a sovereign nation which owns and administers significant parts of the North West Province. The hosting of 2010 World Cup in Rustenburg is a joint venture of

between the RLM, the Royal Bafokeng Nation and the Bojanala Platinum District Municipality, with support also being provided by the Madibeng and Moses Kotane Local Municipalities. To ensure a co-operative environment in preparing for and hosting the 2010 World Cup, a Memorandum of Understanding (MoU) was signed between the Royal Bafokeng Nation and the RLM. The MoU indicated that the RLM would be responsible for the financial management related to the 2010 events, and that Royal Bafokeng Nation would be responsible for all construction work at the stadium site.

The official FIFA Fan Park will be sited at Rustenburg's Olympiapark Stadium, located ± 2 km from the Rustenburg CBD and ± 10 km from the Royal Bafokeng Sports Palace. In addition, two public viewing areas, one in the Chaneng / Luka area and the other one in Kanana / Boitekong area, will be constructed. To ensure efficient access and to minimise congestion, six Park & Ride facilities will be established to service the events in Rustenburg. The official training venues that will be upgraded to meet FIFA's requirements are Sun City Stadium, Mogwase Stadium, Tlhabane Stadium and Moruleng Stadium.



Royal Bafokeng Sports Palace

The FIFA family will be accommodated at Sun City and the locally hosted soccer teams will be based at KwaMaritane and Bakubung. The existing 8 hotels, 15 lodges, 220 B&Bs and 21 Holiday Resorts in Rustenburg will provide for the accommodation requirements of visitors. In addition three new hotels are presently under construction.

Major infrastructure upgrading projects underway for 2010 include the following:

- * The construction of three new major roads referred to as the Eastern and Western Bypasses and the Ring Road;
- * Upgrade of Rustenburg Transport Terminal;
- * Construction of a new media centre for 2010;
- * Six Park & Ride facilities will be established, and included is the construction of the Lebone 2 Educational College which as an interim will serve as a parking area for one of the Park & Ride facilities;
- * Replacement of asbestos / cement water supply pipelines with UPVC pipes in selected areas;
- * Augmentation of water supply pipelines from two existing water reservoirs;
- * Provision of a water supply to the Delta area where the new hotels are being constructed;
- * Provision of waterborne sewerage reticulation to the Fan Park and public viewing areas at Chaneng / Luka and Kanana / Boitekong, including upgrading of the Boitekong Wastewater Treatment Works (WWTW); and
- * Commissioning of a 160 MVA electrical substation to cater for the increase in load associated with 2010.

SECTION C: GREENING APPROACH

C1 GREENING FOCUS AND AIMS

The key focus of the 2010 Greening Plan for Rustenburg is to ensure that environmental impacts are minimised and a positive environmental legacy is achieved. This infers that Greening activities should be specifically focused around the 2010 preparations and operations, and in particular the Greening Plan should include all aspects of environmental legal compliance associated with the hosting of the event (including the construction of key infrastructure). In addition to this, Greening activities can seek to address any existing environmental issues in the Municipality associated with services, waste management systems, biodiversity protection (and associated ecosystem services supply) and cultural heritage protection – such that a positive environmental legacy is achieved.

There are a number of aims that the Rustenburg 2010 Greening Plan is focused around achieving. These aims have been set in terms of international best practice in event greening, and the national context set by the South African Green Goal Programme.

Text Box 2: Aims of Greening 2010 in Rustenburg

- * Minimise ecological, social and economic impacts and costs;
- * Maximise ecological, social and economic benefits;
- * Minimise wastage of resources;
- * Scale and type of installations and systems to service the event must be appropriate to the South African and Rustenburg context;
- * Financial sustainability;
- * Leave a positive legacy;
- * Establish iconic installations that showcase working examples of green (environmentally friendly) technologies;
- * Promote environmentally sustainable behaviour and awareness.

C2 GREENING THEMATIC AREAS

Rustenburg's 2010 World Cup Greening Plan includes seven Thematic Areas with associated broad goals:

A. Carbon Emissions Management / Offsetting

- i. Reduce carbon emissions from transport systems
- ii. Reduce carbon emissions through reducing energy consumption
- iii. Reduce embodied carbon in new event hosting buildings / infrastructure
- iv. Maximise opportunities for carbon offsetting and sequestration

B. Energy Efficiency

- i. Minimise consumption of energy
- ii. Maximise use of renewable energy

C. Water Conservation and Management

- i. Minimise consumption of water
- ii. Maximise capture and recycling of water
- iii. Avoid pollution of water resources

D. Sustainable Waste Management

- i. Maximise the avoidance, reduction and recycling of waste

E. Efficiency of Transport and Access

- i. Maximise availability, accessibility, efficiency and use of public transport systems
- ii. Reduce carbon emissions from public transport systems
- iii. Maximise availability and accessibility of non-motorised transport systems

F. Biodiversity and Ecosystem Services Management / Protection

- i. Protect and enhance biodiversity and related ecological systems
- ii. Maximise recreational / tourist experiences associated positively with biodiversity

G. Communication and Awareness Raising

- i. Raise awareness of greening in all sectors
- ii. Communicate greening progress made
- iii. Market greening and attract funding

All of these Thematic Areas align with those set by DEAT and the LOC in the national greening framework. The goals associated with each Focus Area are intended to reflect the aims of the Greening Programme. These are translated into a range of targets, strategies and interventions further on in this Plan.

C3 IMPLEMENTATION OF THE 2010 GREENING PLAN

To achieve implementation of the requisite environmental protection and sustainability aims in the hosting of 2010 Soccer World Cup events in Rustenburg, **greening interventions will need to be made in a multitude of municipal sectors as well as in areas under the jurisdiction of the Royal Bafokeng and in some cases with support from private enterprise and NGOs.** For example, greening interventions at the Royal Bafokeng Sports Palace will need to be designed and constructed by the Royal Bafokeng's Stadium Project Managers and professional team; and the establishment of an environmentally sustainable waste management system for the stadium and hospitality industry servicing the event will need to be implemented by the relevant Municipal waste management department in partnership with private recycling and waste contractor agencies.

Implementation of the 2010 Greening Plan needs to be allocated to a Programme Co-ordinator / Workstream Leader. In the RLM, the Greening Workstream Leader is the appropriate candidate for this responsibility.

It should be noted that NOT ALL PROJECTS CONTAINED WITHIN THIS PLAN MUST NECESSARILY BE IMPLEMENTED. It is anticipated that the Greening Workstream Leader will liaise with municipal Treasury Department and other line functions in order to prioritise which projects can be accommodated financially and within human resource constraints in time for 2010. The option exists to implement the remaining projects post-2010 as legacy Greening projects for the municipality.

Apart from co-ordinating and driving key Greening initiatives, one of the key roles of the 2010 Greening Plan (and Workstream) is to **facilitate the integration** of Greening approaches into the various infrastructural projects and operational systems established for hosting the 2010 Soccer World Cup in Rustenburg (which are implemented by other 2010 Workstreams and non-environmental municipal departments). The Greening Workstream can play an important role in assisting other municipal sectors to source funding for implementing their projects in a "greener" way, linking them to Greening support agencies and accessing Greening technologies and information. The Greening Workstream can play the lead role in gathering information on what greening interventions are achieved by other sectors, and showcase this as part of the RLM's media / communications campaign associated with the event.

C4 SUMMARY OF GREENING PROGRAMME STRATEGIES

In order to achieve action in the seven Thematic Areas (see Section C2), this Plan sets up eight Programme-level strategies which, when implemented by the relevant sectors, will achieve the common and overarching greening aims and purpose. These strategies are detailed in Section D of this Plan, but are summarised here as follows:

1. Climate Impact Management Strategy

- Addresses potential climate impacts by reducing carbon emissions, and offsetting emissions that cannot be avoided through carbon emissions reduction and sequestration projects.

2. Energy Efficiency Strategy

- Addresses energy efficiency and green energy imperatives.

3. Water Conservation and Management Strategy

- Addresses water conservation, recycling and rainwater harvesting requirements.
- Protection of natural water resources.

4. Sustainable Waste Management Strategy

- Addresses the sustainable management of waste through waste minimisation and recycling.

5. Sustainable Transport Strategy

- Addresses the requirement of increased use of public transport and non-motorised transport systems to service the event.

6. Biodiversity Strategy

- Addresses the requirement for avoiding / minimising impacts on biodiversity resources, and investment into ecosystem services supply to achieve a positive legacy.

7. Awareness Raising and Reporting Strategy

- Increases public awareness of greening and changes perceptions about the environment.
- Collects and disseminates information on what is achieved in the Greening Programme.
- Creates capacity for implementation of greening strategies in all sectors.
- Stimulates further greening action for a greater positive environmental legacy from the event.

8. Monitoring and Evaluation Strategy

- Monitors implementation of the Greening Programme.
- Critically evaluates achievements and failures of the Programme, and develops lessons for future event greening approaches in RLM and elsewhere.

SECTION D: GREENING PROGRAMME BUSINESS PLAN

D1 CLIMATE IMPACT MANAGEMENT STRATEGY

The **Climate Impact Management Strategy** aims to address the potential impact on global climate of hosting the 2010 World Cup events in Rustenburg through reducing carbon emissions as much as possible, and offsetting the emissions that cannot be avoided. Both carbon emissions reduction and sequestration projects are suggested as means to offsetting unavoidable carbon emissions.

* **Carbon Emissions Reductions:** Reduction in carbon emissions through avoidance or permanent capture. The Clean Development Mechanism (CDM) under the Kyoto Protocol is one way to establish and fund projects that result in Certifiable Emissions Reductions (CERs). However, the costs of CDMs and the requisite certification process may be prohibitive. Projects that result in Verifiable Emissions Reductions (VERs) with a less onerous registration and certification process (and can be traded on the open market) may be a suitable alternative.

* **Sequestration:** The capture of carbon in trees (one tree can capture approximately 500kg of carbon over a 15 year period). All tree planting done for 2010, as well as potential reforestation projects and avoided deforestation projects can be included and counted either as VERs or voluntary carbon emissions reductions for 2010.

The Climate Impact Management Strategy has its own actions, but is linked to the Energy Efficiency, Sustainable Transport and Sustainable Waste Management Strategies, as these all have components that will assist in **reducing** carbon emissions associated with the event to the maximum extent possible.

D1.1 Achievements to Date / Work in Progress

The RLM plans a City Beautification Programme for 2010, which will involve the planting of a significant number of trees in the urban parts of Rustenburg. The potential sequestration benefits of this Programme can be quantified as voluntary carbon sequestration achievements.

The national 2010 Greening Programme has commissioned the calculation of the national carbon footprint of the 2010 World Cup. This work will deliver an estimate of the applicable / proportional carbon footprint associated with hosting the 2010 World Cup in Rustenburg. This can be used in the Climate Impact Management Strategy to measure the relative achievements of CER and sequestration projects in reducing the climate impacts of hosting the event.

D1.2 Strategy Table

TARGETS	ACTIONS	PROJECT DRIVER & COLLABORATORS
1. Measure and report on Climate Impact Management Achievements	1A. CARBON FOOTPRINT Provide necessary information for the calculation of, and obtain Nelspruit's Carbon Footprint estimate from national footprinting study. Or conduct own carbon footprinting exercise.	DRIVER: Greening Workstream
	1B. REPORTING ON CARBON FOOTPRINT REDUCTIONS AND BEST PRACTICE GUIDEBOOK Account for carbon sequestration potential of trees planted in City Beautification Programme, in stadium, practice stadia and fan park landscaping. Evaluate design and specifications and construction process of Royal Bafokeng Sports Palace in respect of achievements in embodied carbon emissions reductions and reduction in energy footprint (with associated carbon savings). Also account for carbon savings from sustainable transport systems implemented to service the event and sustainable waste management systems implemented. Calculate carbon emissions reductions and sequestration achieved as a % of total estimated carbon footprint. Produce best practice carbon emissions minimisation guide for use in Municipal construction tenders / contracts (including for Training Venue upgrades).	DRIVER: Greening Workstream COLLABORATORS: Solid waste management Transportation Workstream Parks Department Beautification Workstream Stadium Design Team
2. Minimise / avoid carbon emissions wherever possible	2A. LOBBY FOR LOW EMISSIONS TRANSPORT FLEET Where possible, ensure that public transport vehicles servicing 2010 (and beyond) meet appropriate emissions standards (Euro II) and have maximum fuel economy.	DRIVER: Greening Workstream COLLABORATOR: Transportation Workstream
3. Offset / sequester maximum unavoidable emissions possible.	3A. SUPPORT / MAXIMISE TREE PLANTING Collaborate with Beautification Workstream to maximise number of trees planted throughout the Municipal Area.	DRIVER: Greening Workstream COLLABORATOR: Beautification Workstream Parks Department
	3B. CARBON SEQUESTRATION PROJECT DEVELOPMENT Identify potential carbon sequestration projects (reforestation, mass tree planting around 2010 venues etc) and develop these to business plan level. Submit business plans for funding.	DRIVER: Greening Workstream COLLABORATOR: Environmental / Sustainability Department Parks Department

	3C. CARBON EMISSIONS REDUCTIONS PROJECT DEVELOPMENT Undertake a Carbon Emissions Reductions project identification, prioritisation and feasibility assessment process (using suitably qualified specialists). Develop funding applications and project implementation plans where appropriate.	DRIVER: Greening Workstream COLLABORATORS: Environmental / Sustainability Department All other line departments with potential energy savings projects (traffic & transportation, housing, buildings management, architectural services, wastewater management, solid waste management etc)
--	--	---

D2 ENERGY EFFICIENCY STRATEGY

The energy efficiency strategy aims to minimise energy usage during the hosting of the 2010 World Cup through appropriate demand management measures, and create a positive legacy for the RLM by developing energy efficient infrastructure as part of the preparations to host the event. In addition to this, the strategy aims to promote the development of renewable / green energy supply systems as part of the event hosting strategy. This will be done through the municipality including at least one renewable energy initiative in its 2010 infrastructure. Key users of energy at event hosting sites include:

- * Floodlights (stadia and fan parks),
- * Airconditioning and heating systems,
- * Internal lighting and external night and feature lighting,
- * Water heating systems for ablutions and catering facilities,
- * Cookers, ovens and refrigerators at event venues,
- * Scoreboards, large screen TVs and broadcasting equipment.

D2.1 Achievements to Date / Work in Progress

Given the anticipated energy demand associated with 2010, the RLM have focused their 2010 energy supply preparations around increasing supply through the commissioning of a 160 MVA substation to cater for the increase in load, mainly associated with new developments in the east and south of Rustenburg that are associated with the 2010 FIFA World Cup. There is also a back-up plan which involves the installation of an 88KV overhead line which will run power from the town's main substation to the south of the town. However the national energy crisis remains a challenge with Eskom, the national energy utility, unable to guarantee a sustained supply. As a result Municipalities across the country are involved in initiatives to reduce their electricity consumption to meet the 10% reduction target set by Eskom. These have typically involved the retrofitting of street and traffic lights with energy efficient lightbulbs. The 2010 World Cup undoubtedly offers a very real opportunity for the RLM to step up its energy saving initiatives and efforts should focus on event-hosting venues. While the required upgrades to the Royal Bafokeng Sports Palace are well underway (and as such the opportunity for retrofitting are almost lost), the required upgrades to the Training Venues, the Fan Park and Public Viewing Areas in Chaneng / Luka and Kanana / Boitekong still present opportunities to introduce energy-efficient technologies.

D2.2 Strategy Table

TARGETS	ACTIONS	ACTION DRIVER & COLLABORATORS
1. Maximise & demonstrate energy use reductions through implementing energy efficiency measures wherever feasible in 2010 facilities, and	1A. MAXIMISE ENERGY EFFICIENCY AT 2010 VENUES & ALONG BEAUTIFICATION ROUTES Energy efficient designs and fittings to be incorporated into Training Venue upgrade plans, Fan Park plans. This approach needs to be built into the tender brief and contract conditions.	DRIVER: Training Venue Workstream Fan Park Organisers Beautification Workstream COLLABORATORS: Municipal Electricity Department Greening Workstream
	1B. PROMOTE ENERGY EFFICIENCY IN PRIVATE SECTOR Promote the adoption of DSM and energy efficiency approaches in all private sector agencies associated with 2010 and by individuals – particularly the broadcasting, hospitality and catering sectors.	DRIVER: Municipal Electricity Department COLLABORATORS: Stadium operator Training Venue operators Fan Park operators MATCH FEDHASA
2. Implement at least one renewable energy project at a prominent 2010 World Cup venue.	2A. RENEWABLE ENERGY SUPPLY PROJECT Investigate possibilities for renewable energy supply for Fan Park, at Training Venues (solar water heating and PV cells for lighting) and along pedestrian walkways (solar street lights). Identify at least one feasible initiative and implement for 2010 World Cup.	DRIVER: Greening Workstream COLLABORATOR: Training Venue and Fan Park Design Teams

D3 WATER CONSERVATION AND MANAGEMENT STRATEGY

The water conservation and management strategy aims to minimise water use in the hosting of the 2010 World Cup, and include sustainable water management systems in all 2010 infrastructure such that a positive legacy is achieved into the future. Key water users and potential sources of water resource pollution at event hosting venues include:

- * Pitch irrigation,
- * Landscape irrigation,
- * Ablutions (toilets, urinals, hand basins, drinking fountains),
- * Catering ablutions (sinks),
- * Cleaning (spraying down of waste areas, spectator seating areas and all other public areas),
- * Polluted run-off from parking areas.

D3.1 Achievements to Date / Work in Progress

Meeting 2010's potable water demand is an important challenge for the RLM. Aside from the increased levels of consumption as a result of the influx of tourists during the event, Rustenburg also plans extensive beautification throughout the city involving the planting of numerous trees and flowers which will need irrigation water. Opportunities exist for grey / red (industrial) water reuse for irrigation throughout the City but infrastructure for such a system needs to be upgraded. With the upgrading of the Training Venues and the Olympiapark Fan Park, there are also opportunities to ensure that designs and fittings are water-use efficient. Regarding the protection of surface water, all the hard surface run-off generated within the Royal Bafokeng

stadium precinct will be discharged into the Legadigadi River near the stadium. An opportunity exists to upgrade this natural ecosystem to provide flood attenuation services such that it will act as a bioretention facility for removing contaminants from the stormwater and a flood attenuator.

The challenge of meeting 2010's potable water and sanitation demand is compounded by the dire situation that the RLM finds itself in. During the early 2000's, Rustenburg had access to approximately 75 MI/d of potable water and had sewage treatment capacity for 31 MI, whereas the actual demands were well over the 90 MI/d on average for potable water and the required sewage treatment capacity was closer to 40 MI/d. This situation arose as a result of massive population growth within the Municipal area as a result of the growing platinum mining industry. The serious lack of adequate sewage treatment capacity prompted a study by Magalies Water in conjunction with Department of Water Affairs and Forestry (DWAF) and other stakeholders. The most important finding of the monitoring programme was that the primary reason for the deterioration of the Bospoort Dam water quality was due to the inefficient and overloaded operation of the Rustenburg WWTW and the fact that the Boitekong WWTW could not remove phosphates. The contribution of the informal settlement next to the dam undoubtedly also contributed to the problem.

In addition to Rustenburg's existing formal services being pushed beyond their capacity, large areas of Rustenburg remain without any formal services (e.g. residential properties in the Waterkloof area use borehole water and use of soakaways for the subsurface disposal of sewage) - but where reticulation does exist it is often constructed of outdated and unsuitable material (e.g. asbestos pipes) and prone to failure.

To address the service infrastructure constraints related to water and sanitation, the RLM is currently replacing asbestos and cement pipes with UPVC pipes. Additionally the potable water supply to the town is being augmented from two existing reservoirs and the Delta area (where the new hotels are being constructed) is being connected to the municipal potable water supply.

D3.2 Strategy Table

TARGETS	ACTIONS	ACTION DRIVER & COLLABORATORS
1. Reduce water use through procurement of water-saving fittings / systems and through maximising & showcasing water / wastewater capture & recycling	1A. MAXIMISE WATER USE EFFICIENCY AT 2010 VENUES Water efficient designs and fittings (including consideration of grey water recycling, rainwater harvesting) to be incorporated into Training Venue upgrade plans, Fan Park plans. These need to be included in TOR for upgrades / Fan Park operators.	DRIVER: Greening Workstream COLABORATOR: Training Venue and Fan Park Design Teams Venue operators
2. Establish at least one demonstration project of waterless alternatives in sanitation	2A. DRY / COMPOST TOILET DEMONSTRATION PROJECT Internal review of Fan Park and Training Venues to identify opportunity for dry / compost toilet demonstration project. Install dry / compost toilets in at least one location.	DRIVER: Greening Workstream COLABORATOR: Training Venue and Fan Park Design Teams Venue operators
3. Prevent pollution of water resources and minimise impacts on aquatic ecosystems.	3A. STORMWATER MANAGEMENT PLAN – ROYAL BAFOKENG SPORTS PALACE Prepare and implement a stormwater management plan for the Royal Bafokeng Sports Palace that includes water quality protection measures including the upgrading and utilisation of local aquatic ecosystems to filter and attenuate stormwater generated from the stadium and stadium precinct. Plan must cover construction and operational period. Plan must be included in TOR / contract for Stadium Operator.	DRIVER: Stadium Design Team / Infrastructure Workstream COLLABORATOR: Greening Workstream

D4 SUSTAINABLE WASTE MANAGEMENT STRATEGY

The strategy aims to support the waste management system being implemented for 2010 which includes establishment, upgrading and expansion of facilities and resources for waste separation and recycling. Ultimately the strategy aims to create new mindsets around sustainable waste management that will have benefits far beyond the 2010 World Cup.

The key areas of waste generation associated with the 2010 event include:

- * Demolition and construction of event hosting infrastructure,
- * Waste generated at event hosting facilities associated with food and beverages, and catering,
- * Waste generated at hospitality facilities associated with servicing spectators,
- * Waste generated through operation of the 2010 event hosting facilities during and beyond the events (light bulbs, paper towels from toilet areas, cleaning materials waste).

D4.1 Achievements to Date / Work in Progress

Waste management within the Rustenburg Local Municipal area faces many obstacles with the Waste Management Unit having to stretch its resources to also service areas under the administration of the Royal Bafokeng Nation. The level of recycling is fairly low as it accounts for 6-8% of the waste stream. However, plans are underway to improve waste management through the Municipal Integrated Waste Management Strategy, which aligns with best practice principles of waste reduction, reuse and recycling. Additionally a focused waste management plan for 2010 has been prepared by post-graduate students from Finland. This plan is currently being redrafted by the Waste Management Unit and will include Bafokeng land.

In gearing up for 2010 the RLM plans to purchase four additional waste compactor vehicles, establish new waste transfer stations and rehabilitate Rustenburg's existing landfill. As part of an ongoing project a new regional landfill is under construction and this will be completed by 2010.

As a result of a national agreement between a private sector supplier and the LOC, Soccer Ball Pole Bins and a job creating clean-up plan for all the host cities may be implemented. In order to facilitate waste separation at source the Soccer Ball Pole Bins will be colour coded. The Bins will be installed into the highest pedestrian areas in host cities, where the most litter is generated, at no cost to the host city.

D4.2 Strategy Table

TARGETS	ACTIONS	ACTION DRIVER & COLLABORATORS
1. Establish a waste management system that includes waste separation & recycling and creates jobs where possible – to service 2010 and beyond.	1A. DEVELOPMENT OF A SUSTAINABLE WASTE MANAGEMENT STRATEGY FOR 2010 Based on the waste baseline assessments which will be done as part of preparing the EMS (see Section D9), develop a sustainable waste management system for servicing the 2010 event. To include waste separation facilities, recycling waste streams, waste composting and waste minimisation at source (including product packaging specifications for all catering concessions and service providers). Volunteers for 2010 and NGOs to be included where possible. Job creation in waste separation and recycling businesses to be targeted.	DRIVERS: Greening Workstream COLLABORATORS: Waste Management Workstream Stadium / Infrastructure Workstream Fan Park Workstream and operators Training Venue Workstream and operators
2. Include at least one demonstration project of innovative waste management technology at a 2010 venue	2A. MOLOK DEEP BIN DEMONSTRATION PROJECT Identify a suitable site for a Molok Deep Collection Bin Demonstration Project and run project for the duration of the 2010 event.	DRIVER: Greening Workstream COLLABORATOR: Waste Management Unit Stadium, Training Venue and

		Fan Park Design Teams
3. Minimise waste & maximise recycling during all municipal infrastructure development and refurbishment.	3A. CONSTRUCTION WASTE RECYCLING All construction and demolition contracts must include a waste management programme that maximises recycling of waste, and responsible disposal of all non-recyclable waste. To be included in tender briefs and contract conditions.	DRIVER: Stadium Workstream Training Venue Workstream Fan Park organisers Transportation Workstream COLLABORATOR: Greening Workstream

D5 SUSTAINABLE TRANSPORT STRATEGY

The strategy aims to achieve an improved system and quality of public transport to service the 2010 event, to accommodate the maximum possible numbers of event participants. This will address the need for reduced carbon emissions from individual vehicle transport to events, and will ease existing problems of traffic congestion and inadequate parking space around the 2010 World Cup venues during events. This strategy looks to establishing a positive public transport and non-motorised transport legacy in Rustenburg through the upgrading of public transport facilities and systems, and the establishment of appropriate pedestrian linkages between transportation nodes and 2010 sports venues.

D5.1 Achievements to Date / Work in Progress

It is expected that the majority of fans visiting Rustenburg for 2010 will travel in by road and rail. Within the town there is a substantial public transport fleet including 3,800 mini-bus taxis and 135 buses. Special arrangements will be made by Shosholoza Meyl Inter-City Rail Services (Pty) Ltd to transport 1440 people during match days into Rustenburg (3.2% of spectators). Regarding air travel it is expected that some visitors during 2010 will fly in to the Pilansberg Airport which has a limited capacity - providing only for chartered commercial flights. The RLM plans to provide a shuttle from the Pilansberg Airport via Sun City to the Stadium during local matches.

A major challenge regarding efficient transport and access is the fact that the Royal Bafokeng Sports Palace is situated in the nearby town of Phokeng, approximately 15km northwest of Rustenburg. Phokeng has a very limited accommodation capacity for fans and as a result fans will have to travel in from Rustenburg and Sun City, where they are most likely to be accommodated. This limits the possibility of pedestrian access being used on any major scale to access the Stadium. Therefore, to ensure that vehicular access is efficient, 2010 preparations have focussed on the construction of three new major roads giving access to Phokeng and the Stadium, known as the Eastern Bypass, Western Bypass and Ring Road. Also planned are six Park & Ride facilities which will ensure that private vehicle access to the Stadium and Fan Park is limited, with the result that congestion along roads leading to these venues are minimised during the 2010 event. The central taxi rank, known as the Rustenburg (Public) Transport Hub will also be upgraded for 2010.

D5.2 Strategy Table

TARGETS	ACTIONS	ACTION DRIVER & COLLABORATORS
1. Increase quality, accessibility & maximise levels of use of public transport for 2010 & beyond.	1A. PROMOTION OF BUS USE AND RAIL TO ACCESS 2010 VENUES Promote the use of buses and rail to access 2010 venues through some / all of the following measures: - implementation of high occupancy vehicle lanes on key access routes (bus lanes) - ensuring buses and rail services are deployed to service the venues at peak times for events on routes to and from these venues - advertising the availability and cost of buses and rail services to / from 2010 venues (advertising on sides of buses, at transport nodes and bus / train stops, in the media) - incentivise use of public transport on event days through reduced tariffs	DRIVER: Transportation Workstream COLLABORATOR: Greening Workstream
2. Minimise traffic congestion & parking requirements at all event venues for 2010 & beyond.	2A. PARK & RIDE Plan and implement Park & Ride facilities for all 2010 events and to service maximum numbers possible as planned.	DRIVER: Transportation Workstream COLLABORATOR: Planning and Development Unit Greening Workstream
3. Increase non-motorised transport linkages & safety between transport nodes and 2010 venues.	3A. DESIGN AND CONSTRUCTION OF SAFE PEDESTRIAN AND CYCLE NETWORKS FOR 2010 Design safe pedestrian linkages and systems around (and linking where appropriate) the Fan Park, public viewing sites and Training Venues, shuttle stops, train stations and bus stops, as well as the Rustenburg Transport Terminal.	DRIVER: Transportation Workstream COLLABORATORS: Training Venue, Public Viewing Site and Fan Park Design Teams Transportation Workstream Traffic & Transport Department

D6 BIODIVERSITY STRATEGY

The aim of this strategy is to ensure that local biodiversity is promoted and enhanced through the hosting of the 2010 World Cup in Rustenburg. With the influx of tourists during 2010 the city's ecotourism and heritage sites will come under pressure and plans are needed to ensure that these are not negatively impacted. Also 2010 presents local ecotourism profiling opportunities. The amenity value of the city's parks and nature areas beyond the city should be improved to optimize their tourism potential. Regarding cultural and historical sites which are being promoted as part of the provincial and local 2010 tourism strategies, there appears to be insufficient forward planning to ensure that these are adequately protected during 2010. Also if nothing is done the legacy impact opportunity to develop these sites as places of tourist attraction beyond 2010 would be lost.

As such the Biodiversity Strategy for Rustenburg includes a study to determine the capacity of facilities and infrastructure at key local ecotourism sites with a view to undertaking the necessary upgrades to ensure that the tourism potential is optimised and that local biodiversity is not negatively impacted. As heritage sites have potential as sites of tourist interest, a feasibility study is also recommended to identify opportunities for the upgrading of facilities and infrastructure at Rustenburg's key sites.

D6.1 Achievements to Date / Work in Progress

A Terms of Reference (ToR) has been prepared for the landscaping of all the major transport routes for 2010. While the ToR specifies the requirement for mostly indigenous plants, the Greening Workstream should lobby

for 100% indigenous plants and should also ensure that local biodiversity is adequately showcased in all landscaping and beautification for 2010.

D6.2 Strategy Table

TARGETS	ACTIONS	ACTION DRIVER & COLLABORATORS
1. Ensure that local ecotourism and heritage sites are adequately developed, promoted and protected for 2010 and beyond. Job creation through ecotourism must be maximised.	1A. REVIEW OF LOCAL AND PROVINCIAL 2010 TOURISM STRATEGIES Specialist review of the both the provincial and local 2010 Tourism Strategy's to identify sites within the RLM area that are being promoted for 2010 and give input if local sites missed.	DRIVER: Greening Workstream COLLABORATORS: Tourism Workstream Environmental Management SBU Parks Department SAHRA North West Tourism LED SBU
	1B. REVIEW OF KEY ECOTOURISM AND HERITAGE SITES PROMOTED FOR 2010 Commission specialist study of sites (if any) to determine whether ecotourism and heritage sites are adequately protected and whether amenities are sufficient, and whether job creation opportunities are maximised. Implement specialist recommendations. This may involve upgrading of infrastructure and facilities and legal approvals may be required. In particular the Rustenburg Nature Reserve, Kgaswane Mountain Reserve, Boekenhout Tree Site and Boekenhout House Site should be evaluated.	DRIVER: Tourism & Greening Workstream COLLABORATORS: Tourism Facility owners / operators SAHRA North West Tourism Unit Planning and Development Unit LED Unit
	1C. INFRASTRUCTURE UPGRADING AT 3 KEY ECOTOURISM AND HERITAGE SITES IN RLM Develop a local marketing and profiling strategy for ecotourism and heritage sites identified as "must see" sites for all visitors to Rustenburg. Incentives such as free entrance, special accommodation rates etc can be used to maximise use of these areas if necessary.	DRIVER: Tourism & Greening Workstream COLLABORATORS: Venue owners / operators
	1D. MARKETING AND PROFILING STRATEGY FOR 3 KEY ECOTOURISM AND HERITAGE SITES IN RLM Develop a local marketing and profiling strategy for ecotourism and heritage sites identified as "must see" sites for all visitors to Rustenburg. Incentives such as free entrance, special accommodation rates etc can be used to maximise use of these areas if necessary.	DRIVER: Tourism & Greening Workstream COLLABORATORS: Communications Workstream Venue owners / operators
2. Achieve 100% locally indigenous landscaping in the Stadium Precinct & all municipal facilities / tourist routes established for 2010 & beyond.	2A. REVIEW OF STADIUM PRECINCT LANDSCAPING PLAN Internal review of stadium precinct landscaping plan to ensure that only locally indigenous species are being used and that local biodiversity is showcased. The use of water wise landscaping and irrigation systems must be included as an objective.	DRIVER: Greening Workstream COLABORATOR: Stadium Design Team Beautification Workstream Parks Unit Environmental Management Unit

	2B. REVIEW OF TRANSPORT ROUTE LANDSCAPING PLAN Internal review of transport route landscaping plan to ensure that only locally indigenous species are being used and that local biodiversity is showcased. The use of water wise landscaping and irrigation systems must be included as an objective.	DRIVER: Greening Workstream COLABORATOR: Beautification Workstream Appointed landscape architect
3. Create a green landscaping legacy in Rustenburg	3A. GREEN LANDSCAPING GUIDELINES Develop a set of Green Landscaping Guidelines that can be used in all municipal, private and domestic landscaping projects in the RLM area in future. Should include locally indigenous landscaping palettes, environmental design for safety in parks, green lighting and street / park furniture, water wise irrigation systems, habitat creation, ecosystem rehabilitation, alien plant management etc.	DRIVER: Greening Workstream COLLABORATORS: Parks Department SANBI WESSA Environmental Management Department
4. At least one investment into ecosystem services enhancement at / near a 2010 venue.	4A. WETLAND / RIVERINE SYSTEM UPGRADING AND ENHANCEMENT PROJECT Design and implement a wetland / riverine system upgrading and enhancement project at Royal Bafokeng Sports Palace (the receiving environment for stormwater discharged from the precinct) to increase the capacity of this area to filter and attenuate stormwater flows, as well as reinstate habitat functionality.	DRIVER: Greening Workstream COLLABORATORS: Stadium design team / Infrastructure Workstream Stadium operator Stormwater department

D7 AWARENESS RAISING AND REPORTING STRATEGY

The 2010 Greening Programme introduces a range of environment friendly approaches and technologies that assist in creating more sustainable infrastructure and operational systems, and minimise local, regional and global environmental impacts. There is thus a key opportunity to promote the use of these “best practice” approaches to a broader audience as part of the 2010 profiling campaign. Over and above this, 2010 represents an opportunity to promote general environmental awareness and the need for all individuals to take action. In addition to this, the achievements of the 2010 Greening Programme need to be reported on. This will be done through an environmental awareness raising campaign linked to the 2010 Communications Workstream.

In terms of the Framework for the National 2010 Greening Programme, appropriate levels of reporting on progress and achievements will be required from all Host Cities to LOC. LOC will use this information to report nationally on 2010 Greening Achievements in South Africa. In addition, DEAT will assist on compilation of the Legacy report where possible and within financial means.

D7.1 Achievements to Date / Work in Progress

The RLM 2010 Communication Workstream is in the process of developing their Strategy for Rustenburg. It plans to use a variety of media and materials and would like to include awareness raising around greening and report of progress made with regard to greening as part of the overall Communication Strategy. The Greening Workstream has been active in developing materials and hosting events which are specifically aimed at raising awareness around the greening of 2010. These include a pamphlet which provides information on climate change and waste management and what people can do in their everyday lives to make a difference. The pamphlet is being circulated in schools throughout the Municipal Area. Another achievement is a planned Greening 2010 Expo (to be held in late October 2008) at the Waterfall Mall in Rustenburg where green technologies will be displayed and the private sector will exhibit their green technology products and services.

D7.2 Strategy Table

TARGETS	ACTIONS	ACTION DRIVER & COLLABORATORS
1. Raise awareness of green technologies, systems & approaches before and through the 2010 World Cup.	1A. GREENING 2010 EXPO Organise at least two Greening 2010 Expos to showcase eco-friendly approaches and technologies to the 2010 event infrastructure and operational systems. Could link to a local tourism / ecotourism expo.	DRIVER: Greening Workstream COLLABORATOR: Communications Workstream Tourism Workstream
	1B. GREENING 2010 NEWSLETTER Publish a Greening 2010 newsletter (two in 2009 and two during 2010) raising awareness of greening and reporting on progress made with regard to greening 2010 in Rustenburg. Distribute newsletter widely throughout the RLM area and area under the administration of the Royal Bafokeng. Newsletter should be electronic where possible with a limited number of hard copies published for distribution to homes without internet.	DRIVER: Greening Workstream COLLABORATOR: Communications Workstream
	1C. INFORMATION SHARING WITH COMMUNICATIONS WORKSTREAM Provide the 2010 Communications Coordinator (under the Communications Workstream) with material that can raise awareness of greening and provide regular updates of greening progress made.	DRIVER: Greening Workstream COLLABORATOR: Communications Workstream
2. Report on greening achievements.	2A. LOCAL AND NATIONAL PRESS RELEASES AND RADIO TALK SHOWS Maintain positive presence in local and national press and radio through regular submission of articles and talkshows on what is being done / achieved.	DRIVER: Greening Workstream COLLABORATOR: Communications Workstream

D8 MONITORING AND EVALUATION STRATEGY

Owing to the fact that event greening is an emerging field internationally, the Rustenburg 2010 World Cup Greening Programme offers an important opportunity to critically evaluate and learn from the experience. In order to do this, implementation of the Greening Plan must be monitored. Information from monitoring needs to be critically evaluated to determine the factors of success and failure during each phase of implementation - from event planning to hosting of the event, and for a period following to determine the legacy effects of the Programme.

The outputs of the Programme Evaluation can be used by the RLM to develop greening approaches to other events hosted in Rustenburg, and can be shared with other South African cities, FIFA and the international community.

D8.1 Strategy Table

TARGETS	ACTIONS	ACTION DRIVER & COLLABORATORS
1. Monitor implementation of the Greening Programme during 2010 and for 6 months post event.	1A. MONITORING Collect and collate information on what is achieved in the Greening Programme throughout the build up to and hosting of the event.	DRIVER: Greening Workstream

2. Critically evaluate the successes and failures of the Greening Programme and make assessment information available to others.	2A. EVALUATION AND REPORTING Analyse factors of success and failure in the planning, hosting and post-event stages of the 2010 World Cup. Publish results to an appropriate level of public access.	DRIVER: Greening Workstream
--	--	--------------------------------

D9 CROSS CUTTING PROJECTS / RESOURCES

D9.1 Environmental Management Systems for 2010 Venues

The Minimum Environmental Standards for greening the 2010 event in South Africa have included the need for an Environmental Management System (EMS) to be developed for each official 2010 venue (stadia, Fan Parks and Training Venues). These EMS's are intended mainly to guide the operational phases of these venues, and the closure phase where appropriate. The EMS's cut across the targets and objectives of the various Greening Strategies contained in this plan, and need to address the following key areas:

- Maximising efficiency of energy use, and maintenance of energy infrastructure (including renewable energy sources).
- Maximising efficiency of water use, and maintenance of water infrastructure. This includes ongoing prevention of water pollution.
- Maximising efficiency and sustainability of waste collection, handling and disposal.
- Minimising negative impacts on natural resources, ecosystems and biodiversity.
- Minimising local and global environmental impacts through an environment-focused procurement policy.
- Ensuring maximum financial sustainability.

The EMS's need to include the following components at a minimum:

- Energy Management Operational Plan
- Water Use Management Operational Plan
- Stormwater Management Plan
- Waste Management Operational Plan
- Landscape Development and Management Plan
- Procurement Policy

D9.2 Greening Programme Resources / Capacity

Given the fact that most of the Greening projects contained within this Plan will need to be developed, owned and driven by a dedicated Greening Workstream or other resource within the Rustenburg Municipality, it is believed to be absolutely necessary to ensure that additional human resources are obtained to perform or assist with this function (as currently there is one person allocated part-time to this task within the Municipality). It is therefore recommended that a dedicated Programme Manager / Co-ordinator is appointed to manage the various projects and ensure their delivery.

SECTION E: PROJECTS AND FINANCIAL PLAN

This section contains estimated budgets needed to implement the various Projects identified in the Greening Strategies contained within this Plan, and contains project briefs for each of the projects that needs to be contracted out of the RLM.

It should be noted that NOT ALL PROJECTS CONTAINED WITHIN THIS PLAN MUST NECESSARILY BE IMPLEMENTED. It is anticipated that the Greening Workstream Leader will liaise with municipal Treasury Department and other line functions in order to prioritise which projects can be accommodated financially and within human resource constraints in time for 2010. The option exists to implement the remaining projects post-2010 as legacy Greening projects for the municipality.

E1 CROSS-CUTTING PROJECTS

These projects cross-cut a range of the Greening Strategies outlined in this Plan.

E1.1 Environmental Management Systems for 2010 Venues

1. Project Description / Overview

This project responds to the national Minimum Environmental Standards for Greening as developed by the LOC and involves the establishment of an Environmental Management System (EMS) at each of the official FIFA venues which ensure that the environmental sustainability and efficiency concepts of the Greening Programme are implemented. This includes the Royal Bafokeng Sports Palace, the Training Venues and Fan Park.

2. Project Drivers and Collaborators

Greening Workstream to own and drive project. Requires close collaboration with the Infrastructure Workstream and Stadium Design and Construction teams, Training Venue Workstream, Fan Park organisers and operators of these venues.

3. Scope of Work

- Undertake energy, water and waste baseline assessments of all official 2010 Venues.
- Develop an EMS for each of the official 2010 Venues that address the operational management phase of the facilities (and the construction, set up and / or closure where appropriate). These must include Energy Management Operational Plans, Water Management Operational Plans, Sustainable Waste Management Operational Plans. The EMS's must address maximised environmental sustainability and efficiency, as well as appropriate types and levels of monitoring / metering and measurement systems.

4. Outputs

- Baseline water, energy and waste reports for each 2010 Venue.
- EMS for each 2010 Venue containing Water, Waste and Energy Management Operational Plans.

5. Skills / Resources Required for Completion of the Work

Architect (with "Green Buildings" experience)

Electrical Engineer

Mechanical Engineer

Integrated Waste Management Specialist

Landscape Architect / Irrigation Specialist

6. Key Partnering Agencies

DBSA

DANIDA

DEAT

CEF

7. Timeframe

Start: First Quarter 2009, completed by mid-2009.

8. Budget

OPERATING BUDGET will need to be used for this Project.

TASKS (from scope of work)	Budget			TOTAL BUDGET
	2009	2010	2011	
Baseline assessments - Royal Bafokeng Sports Palace	R 60 000	R 0	R 0	R 60 000
Baseline assessments - Training Venues	R 60 000	R 0	R 0	R 60 000
Baseline assessments - Fan Park	R 30 000	R 0	R 0	R 30 000
EMS - Royal Bafokeng Sports Palace	R 350 000	R 0	R 0	R 350 000
EMS - Training Venues	R 300 000	R 0	R 0	R 300 000
EMS - Fan Park	R 100 000	R 0	R 0	R 100 000
TOTAL	R 900 000	R 0	R 0	R 900 000

E1.2 Greening Programme Co-ordinator

It is proposed that a person is appointed on an 18 month contract to co-ordinate the Greening Programme within the RLM. The selected individual needs to have the following skills:

Project Management
Experience in working in a local municipal environment
Experience in environmental-related projects

It is suggested that remuneration come from operating budget and be structured as follows:

2009: Monthly remuneration R25,000 / month X 12 months = R300,000

2010: Monthly remuneration R26,750 / month X 6 months = R160,500

TOTAL COST: R460,500

E2 CLIMATE IMPACT MANAGEMENT

Project 1A: Carbon Footprint Calculation

1. Project Description / Overview

This project responds to the Greening Programme target of measuring and reporting on Climate Impact Management achievements. The national Greening 2010 Programme co-ordinated by DEAT and the LOC has a process in which the national carbon footprint of the 2010 World Cup is being calculated. Rustenburg's footprint should be included in this, and this information should be available back to the RLM such that they have their local carbon footprint for the 2010 World Cup.

The Greening Workstream should lead the process of providing the necessary information to DEAT and their appointed specialists for the carbon footprint calculation. Should this process not be able to provide a detailed carbon footprint for RLM, a separate project may be undertaken for this.

Project 1B: Reporting on Carbon Footprint Reductions and Best Practice Guidebook

1. Project Description / Overview

This project responds to the Greening Programme target of minimising or avoiding carbon emissions wherever possible and measuring and reporting on Climate Impact Management achievements.

The purpose of the project is to account for the carbon sequestration potential of trees planted in City Beautification Programme, in the stadium, practice stadia and Fan Park landscaping. It involves a review of the design and specifications of Royal Bafokeng Sports Palace in respect of achievements in embodied carbon emissions reductions through the materials used and construction methods employed. It should also account for carbon savings from sustainable transport systems implemented to service the event and sustainable waste management systems implemented. The project should calculate the carbon emissions reductions and sequestration achieved as a % of total estimated carbon footprint.

The outcomes of this review should be used to produce a best practice carbon emissions minimisation guide for use in the training venue upgrades, but also for future Municipal construction tenders / contracts (thus positive legacy impact).

2. Project Drivers and Collaborators

Greening Workstream to own and drive project. Requires close collaboration with the Infrastructure Workstream and Stadium Design and Construction teams, Fan Park organisers and operators. Also requires close collaboration with:

- Solid waste management
- Transportation Workstream
- Parks Department
- Beautification Workstream

3. Scope of Work

- Consult with city Beautification Workstream, Parks and Environment Department to determine the number of trees and shrubs planted in preparation for 2010.
- Estimate the carbon sequestration potential of the identified carbon sequestration and carbon offset projects.
- Review Stadium Bill of Quantities and calculate embodied carbon emissions associated with the materials used.
- Review stadium design to identify good / best practices that have reduced the installed energy capacity and carbon footprint of the stadium (e.g. natural ventilation and lighting).
- Review engineering design and specification to determine the energy footprint of the stadium and associated carbon footprint (this can be calculated on the basis of energy use anticipated during the 2010 World Cup events).
- Through consultation with the professional design team, evaluate how / whether the installed energy capacity of the stadium and / or actual energy footprint of the stadium has been reduced through climate / environmentally sensitive design and specifications of the stadium – and quantify this (in terms of actual energy saved and how this has reduced the carbon footprint).
- Evaluate the construction process to determine examples of energy efficient practice and how this might reduce the carbon footprint / climate impacts of this process.
- Calculate and produce a report on the carbon footprint reductions / sequestration potential of the above. The project should calculate the carbon emissions reductions and sequestration achieved as a % of total estimated carbon footprint. The report should point to best practices and good approaches used.
- Produce a best practice guidebook on design, construction and energy specifications for reducing impacts on global climate – that uses positive examples from the above review – and that can be used in municipal construction contracts and for the training venues.

4. Outputs

- Review Report
- Best Practice Guidebook

5. Skills / Resources Required for Completion of the Work

- Architect (with “Green Buildings” experience)
- Electrical Engineer
- Carbon Footprinting Specialist

6. Key Partnering Agencies

DBSA

DANIDA

DEAT

Green Building Council of SA

7. Timeframe

Start: July 2009 – December 2009.

8. Budget

OPERATING BUDGET will need to be used for this Project.

TASKS (from scope of work)	Budget			TOTAL OPEX BUDGET
	2009	2010	2011	
Collection of information and consultation	R 50 000.00	R 0	R 0	R 50 000
Stadium design review	R 20 000	R 0	R 0	R 20 000
C footprint calculations	R 80 000	R 0	R 0	R 80 000
Production of Review Report	R 60 000	R 0	R 0	R 60 000
Production of Guidebook	R 150 000	R 0	R 0	R 150 000
TOTAL	R 360 000	R 0	R 0	R 360 000

Project 2A: Lobby for Low Emissions Public Transport Fleet

Project Description / Overview

This project responds to the Greening Programme target of minimising or avoiding carbon emissions wherever possible. It involves the Greening Workstream lobbying the relevant Transportation unit or workstream to ensure that public transport vehicles servicing 2010 (and beyond) meet appropriate emissions standards (Euro II) and have maximum fuel economy.

This is an internal function that can be completed by municipal staff members and does not require the appointment of specialist consultants.

Timeframe

Start immediately and lobby through to completion of purchase of transport fleet.

Project 3A: Support / Maximise Tree Planting

Project Description / Overview

This project responds to the Greening Programme target of offsetting the unavoidable carbon emissions associated with hosting the event to the maximum extent possible. It involves the Greening Workstream providing a support function to the City Beautification Workstream in terms of maximising the number of trees planted in the Municipal Area. These trees will perform an important role in sequestering carbon.

It should be noted here that the Greening Workstream can also assist by seeking funding for tree planting from agencies such as Department of Water Affairs and Forestry's "Million Trees Programme", which is providing funding for tree planting initiatives in many of the 2010 Host Cities. Food and Trees for Africa may also be approached to assist with finding tree planting sponsors.

Timeframe

Start immediately – to June 2010.

Project 3B: Carbon Sequestration Project Development

Project Description / Overview

This project responds to the Greening Programme target of offsetting the unavoidable carbon emissions associated with hosting the event to the maximum extent possible. It involves the Greening Workstream working with the Parks Department and local SANBI office to identify any deforested areas, or areas around the stadium, that could be viable sites for establishing / re-establishing forests through mass tree planting. These areas will be key carbon sequestration zones within the municipal area that can assist in offsetting the carbon footprint.

The Greening Workstream should lead the process of developing a project business plan and taking this out to potential project funders. The budget for the project will be dependant mainly on the size and location of the identified Tree Planting area.

It is suggested that the project development process is also assisted by possible implementation partners such as Wildlands Conservation Trust's Trees for Life / Treepreneurs Programmes, such that job creation and other social objectives associated with such projects can be maximised.

Timeframe

First quarter 2009.

Project 3C: Carbon Emissions Reductions Project Development

1. Project Description / Overview

This project responds to the Greening Programme target of offsetting the unavoidable carbon emissions associated with hosting the event to the maximum extent possible. It involves a process of identifying, evaluating and prioritising potential carbon offset projects that can be implemented in the municipal area. The purpose is to achieve maximum possible offsets locally, with maximum associated social and economic benefits.

2. Project Drivers and Collaborators

Greening Workstream to own and drive project. Requires close collaboration with Environmental / Sustainability Department and all other line departments with potential energy savings projects (traffic & transportation, housing, buildings management, architectural services, wastewater management, solid waste management etc).

3. Scope of Work

The development of the carbon offset project must include a process to identify potential carbon emissions reductions projects that will offset the carbon emissions associate with the 2010 World Cup in Nelspruit, and evaluation and prioritization of these. It is a requirement that all potential projects identified and evaluated be located within the Rustenburg Municipal Area. It is not a requirement that projects identified / prioritized must qualify as Certifiable Emissions Reductions projects (i.e. by the UNFCCC), or as Verifiable Emissions

Reductions projects; however, the specialist consultant will be expected to advise on the qualification criteria, benefits and options of selecting projects that can be certified or verified for emissions trading.

It is intended that the project identification and development process will include:

- Development of a set of criteria for evaluating potential carbon sequestration and offset projects, to include:
 - Maximum carbon emissions mitigation (to meet and / or exceed the emissions associated with hosting the 2010 World Cup locally);
 - Maximum long term and financial sustainability;
 - Project precedents for achieving carbon accreditation for trading of any excess carbon credits (over and above those needed to offset the 2010 emissions) - CER's or VER's depending on which is considered appropriate;
 - Affordability and potential interest from funders / donors;
 - Social benefits from the project, including job creation;
 - Location of project within municipality.
- Consultation with relevant municipal service departments in the identification of appropriate and implementable local carbon sequestration and offset projects (possibly including biogas projects, energy efficiency initiatives etc).
- Consultation with relevant carbon trading authorities / market players to determine likelihood of obtaining CER certification from the UNFCCC and / or establishing VER's that can be traded on the open market (note that this may be one mechanism for funding the project if carbon credits over and above those required to offset the 2010 carbon footprint can be achieved).
- Development of a project business plan for the preferred and most viable carbon offset project. This plan must be ready for taking to potential project funders.

4. Outputs

- Project evaluation criteria
- Workshop / meeting reports
- Project identification and prioritisation report
- Project Business Plan (for preferred project)

5. Skills / Resources Required for Completion of the Work

- Specialist expertise in carbon emissions reductions project identification and planning, preferably with some experience in carbon credits registration and trading

6. Key Partnering Agencies

DANIDA
DEAT
World Bank
FirstClimate

7. Timeframe

Start: First Quarter 2009, completed by end-2009.

8. Budget

CAPITAL BUDGET will need to be used for this Project.

TASKS (from scope of work)	Budget			TOTAL CAPEX BUDGET
	2009	2010	2011	
Development of project selectio criteria	R 40 000	R 0	R 0	R 40 000
Workshops / meetings with municipal sectors	R 60 000	R 0	R 0	R 60 000
Consultation with UNFCCC etc	R 15 000	R 0	R 0	R 15 000
Project prioritisation process & report	R 60 000	R 0	R 0	R 60 000
Project Business Plan	R 150 000	R 0	R 0	R 150 000
TOTAL	R 325 000	R 0	R 0	R 325 000

E3 ENERGY EFFICIENCY

Project 1A: Maximise Energy Efficiency at 2010 Venues & City Beautification Routes

Project Description / Overview

This project responds to the Greening Programme target of maximising and demonstrating energy use reductions through efficiency, but also through the use of renewable energy where possible. The Greening Workstream needs to ensure that the Training Venue, Beautification and Infrastructure Workstreams and the Fan Park organisers include the need for maximum energy efficiency in the terms of reference, tender and contract documents for the Training Venues, Fan Park, Park & Rides and Intermodal Transport Facilities, as well as along city beautification routes. In addition to this, contractors and consultants need to investigate the possibilities for use of renewable energy sources (PV cells, solar water heating, wind energy etc) as a more sustainable supply source where possible and feasible. CFL's should be installed to replace standard street lighting along the approximately 20km of city beautification routes.

The Greening Workstream needs to ensure that appropriate energy efficiency and renewable energy criteria are included in the tender documentation and contracts of all parties involved in the development, design, upgrading, establishment and operation of these facilities. The Greening Workstream may also assist by lobbying Eskom and the CEF for funding for CFL's as a DSM initiative in the RLM.

Project 1B: Promote Energy Efficiency in Private Sector

Project Description / Overview

This project responds to the Greening Programme target of maximising and demonstrating energy use reductions. The Greening Workstream needs to ensure that the Municipal Electricity Dept / Infrastructure Workstream and the Fan Park organisers include the need for energy efficiency in all agreements with private service providers (caterers, hospitality, media and broadcasting) that will be operating at FIFA venues during the 2010 World Cup. In addition, the tourism and hospitality sector should be lobbied to maximise their energy savings.

Project 2A: Renewable Energy Supply Project

1. Project Description / Overview

This project responds to the Greening Programme target of implementing at least one renewable energy project at a prominent 2010 World Cup venue. Appropriate specialists would need to be hired to undertake feasibility investigations into potential renewable energy supply projects including solar water heating, solar street lights etc; prioritise feasible projects and identify funding sources for implementation. It is suggested that such initiatives should be implemented in time for 2010 at either the sports stadium, training venues, fan park or a major tourism destination within Rustenburg (main street walkway or park etc).

2. Project Drivers and Collaborators

Greening Workstream to own and drive project. Requires collaboration with a range of municipal service departments.

3. Scope of Work

- Scope potential for possible new renewable energy supply projects at 2010 venues
- Evaluate feasibility and cost of implementation of priority projects
- Identify and canvass potential project funders
- Prepare business plan for selected priority project

4. Outputs

- Project Scoping Report
- Business Plan

5. Skills / Resources Required for Completion of the Work

Electrical Engineer
Mechanical Engineer

6. Key Partnering Agencies

DWAF
DANIDA
World Bank
DBSA
GEF

7. Timeframe

July 2009 – June 2010.

8. Budget

CAPITAL BUDGET will need to be used for this Project.

TASKS (from scope of work)	Budget			TOTAL BUDGET
	2009	2010	2011	
Scope potential renewable energy supply projects	R 20 000			R 20 000
Test feasibility and cost of priority projects	R 10 000			R 10 000
ID and canvas potential funders	R 15 000			R 15 000
Implement project (with additional finding where possible)		300000		R 300 000
TOTAL	R 45 000	R 300 000		R 345 000

E4 WATER CONSERVATION AND MANAGEMENT

Project 1A: Maximise Water Use Efficiency at 2010 Venues

Project Description / Overview

This project responds to the Greening Programme target of minimising water use at event hosting venues – including efficiency of use, rainwater harvesting and grey water recycling. The Greening Workstream needs to ensure that the Training Venue, Infrastructure Workstream and the Fan Park organisers include the need for maximum water use minimisation in the terms of reference, tender and contract documents for the Training Venues, Fan Park, Park & Rides and Intermodal Transport Facilities. In addition to this, contractors and consultants need to investigate the possibilities for use of harvested rainwater and recycled grey water as a more sustainable supply source where possible and feasible.

The Greening Workstream needs to ensure that appropriate water conservation and management criteria are included in the tender documentation and contracts of all parties involved in the development, design, upgrading, establishment and operation of these facilities.

Project 2A: Dry / Composting Toilet Demonstration Project

1. Project Description / Overview

The project entails an internal review of Fan Park and Training Venue plans to identify a suitable site for at least one dry / compost toilet demonstration project. As dry / compost toilets are water use efficient the project will serve to reduce water consumption during the event and will also serve to demonstrate this alternative technology to the public.

2. Project Drivers and Collaborators

DRIVER:

The project will be owned and driven by the Greening Workstream. Collaborators include: Training Venue and Fan Park Design Teams and Venue operators.

3. Scope of Work

- In collaboration with the Training Venue and Fan Park Design Teams, Greening Workstream to review Fan Park and Training Venue plans to determine a suitable site for at least one dry / compost toilet demonstration project.
- Revise designs of relevant venue(s).
- Source and secure funding for the construction and operation of the dry / compost toilet demonstration project.
- Construct dry / compost toilets.
- Train operators in the use and maintenance of the dry / compost toilet demonstration project.

4. Outputs

- Site for demonstration project included in design of relevant venue(s).
- Funding for construction and operation secured.
- At least one dry / compost toilet demonstration project operational for the duration of the event.

5. Skills / Resources Required for Completion of the Work

Identifying a suitable site for the demonstration can be undertaken in-house by the municipality. The appointed architect and civils engineer will be required to include the demonstration project in the relevant 2010 venue design / plans.

6. Key Partnering Agencies

There are no agencies that need to be included in the project team from a technical input perspective but as the success of the project depends on securing funding for the construction and operation of the dry / compost toilets, funders will have to be approached early on. Potential funders include the Finnish Ministry of Foreign Affairs, North-South partnership with Lahti, local mining companies and DWAF.

7. Timeframe

The project must start early in 2009 and be completed before the event.

8. Budget

The process of identifying a suitable site and reviewing the relevant plans will be conducted in-house (i.e. funded out of the municipality's normal operational budget. Budget will need to be secured for the construction of the demonstration project (CAPITAL expenditure) and for the training of staff and ongoing operation and maintenance of the system (OPERATING expenditure).

TASKS (from scope of work)	Budget			TOTAL BUDGET
	2009	2010	2011	
Review Fan Park and Training Venue plans	R 0	R 0	R 0	R 0
Revise designs accordingly	R 0	R 0	R 0	R 0
Construct toilets	R 0	R 400 000	R 0	R 400 000
Train staff	R 0	R 30 000	R 0	R 30 000
Operate and maintain	R 0	R 80 000	R 40 000	R 120 000
TOTAL	R 0	R 510 000	R 40 000	R 550 000

Project 3A: Stormwater Management Plan: Royal Bafokeng Sports Palace Precinct

1. Project Description / Overview

This project responds to the Greening Programme target of avoiding increased flood peaks and pollution of natural water resources as a result of the construction and operation of the Royal Bafokeng Sports Palace.

2. Project Drivers and Collaborators

Stadium / Infrastructure Workstream to own and drive the project with assistance from the Greening Workstream. Key collaborators will be the Stadium Operators, Municipal Stormwater Management Department.

3. Scope of Work

- Review EIA Record of Decision for upgrading of Royal Bafokeng Sports Palace to define the requirements (if any) of the Stormwater Management Plan.
- Develop a Stormwater Management Plan for the construction and operational phases of the development that ensure that flood peaks are not exacerbated and that local water resources are protected.
- Inclusion of Plan in TOR for Stadium Operator.
- Implementation of Stormwater Management Plan.

4. Outputs

Stormwater Management Plan.

Relevant component of Stadium Operator ToR.

5. Skills / Resources Required for Completion of the Work

Stormwater Engineer

6. Key Partnering Agencies

DWAF

DBSA

7. Timeframe

February to October 2009.

8. Budget

CAPITAL BUDGET will need to be used for this Project.

TASKS (from scope of work)	Budget			TOTAL BUDGET
	2009	2010	2011	
Review ROD and consult with DWAF	R 8 000	R 0	R 0	R 8 000
Development of Stormwater Management Plan	R 60 000	R 0	R 0	R 60 000
Inputs to Stadium Operators TOR	R 8 000	R 0	R 0	R 8 000
Implementation of Plan	R 250 000	R 0	R 0	R 250 000
TOTAL	R 326 000	R 0	R 0	R 326 000

E5 SUSTAINABLE WASTE MANAGEMENT

Project 1A: Development of a Sustainable Waste Management Strategy and System for 2010

1. Project Description / Overview

This project responds to the Greening Programme target of establishing a waste management system for 2010 that minimises waste at source, includes waste separation and recycling, and creates sustainable jobs. Note that this is not to replace the Waste Management Plan for 2010 as the Sustainable Waste Management Strategy is an add-on to this Plan which ensures that waste management during is “greener”.

2. Project Drivers and Collaborators

Greening Workstream to own and drive project. Requires close collaboration with the municipal solid waste department, stadium workstream, infrastructure workstream, Fan Park workstream and operators, training venues workstream and operators. Implementation of the Strategy will need to be done either by the municipality’s own waste management department or selected waste contractor / s.

3. Scope of Work

- Utilise waste baseline assessments conducted under Project A of “Cross-Cutting Projects” to estimate waste volumes and types from the various 2010 venues.
- Undertake estimation of increase in waste volumes (and types) from tourism and hospitality facilities within the area.
- Evaluate current infrastructural capacity to handle the anticipated waste volumes, and determine the capacity of existing recycling / waste separation facilities within the area.
- Determine and cost additional infrastructure and facilities required.
- Develop protocol for waste minimisation at the official 2010 venues.
- Develop adapted protocol / guideline for tourism and hospitality sector to use in minimising their waste outputs.
- Develop a Sustainable Waste Management Strategy including the above information.
- Implement strategy.

4. Outputs

Waste minimisation protocol for 2010 Venues

Waste minimisation guideline for tourism and hospitality sectors

Sustainable Waste Management Strategy.

Refurbished or installed waste management infrastructure.

5. Skills / Resources Required for Completion of the Work

Integrated Waste Management Specialist

Waste Systems Expert

6. Key Partnering Agencies

FIFA Sponsors (food and beverage)

Recycling agencies

DLGH

DEAT

DBSA

7. Timeframe

February 2009 to July 2010.

8. Budget

CAPITAL BUDGET will need to be used for this Project.

TASKS (from scope of work)	Budget			TOTAL CAPEX BUDGET
	2009	2010	2011	
Collection of waste information	R 25 000	R 0	R 0	R 25 000
Evaluation of infrastructure capacity	R 30 000	R 0	R 0	R 30 000
Costing of additional infrastructure and systems re	R 40 000	R 0	R 0	R 40 000
Develop waste minimisation protocols	R 200 000	R 0	R 0	R 200 000
Develop waste management strategy	R 200 000	R 0	R 0	R 200 000
Implementation	R 0	R 1 500 000	R 0	R 1 500 000
TOTAL	R 495 000	R 1 500 000	R 0	R 1 995 000

Project 2A: Molok Deep Collection Bin Demonstration Project.

1. Project Description / Overview

The project responds to the Greening Programme target of including at least one demonstration project of innovative waste management technology at a 2010 venue. The Molok Deep Collection Bin, developed in Europe, is believed to be a very efficient waste bin owing primarily to its large size and potential to store waste for longer periods thereby reducing the frequency of collections. The project involves identifying a suitable site for a demonstration project where a number of these bins would be installed and would operate for the duration of the event. The efficiency of the bin system needs to be monitored to determine whether it should be rolled-out elsewhere in the RLM (or even wider). If the project is successful then carbon emission reductions are expected as a result of the less frequent truck collections.

2. Project Drivers and Collaborators

The project is to be owned and driven by the Greening Workstream. The Waste Management Unit Stadium, Training Venue and Fan Park Design Teams will collaborate with the Greening Workstream to identify a suitable site for the system and see to it that it is effectively implemented for the duration of the 2010 event.

3. Scope of Work

- Greening Workstream to review design plans for 2010 venues to identify a suitable site for the Molok Deep Collection Bin demonstration project.
- Estimate the number of bins that would be required.
- Liaise with manufacturer regarding the sponsorship of bins for the demonstration project.
- Arrange for the importation of the bins.
- Install bins at selected venue.
- Maintain a record of frequency of collections and compare with conventional system.

4. Outputs

- Molok Deep Collection Bin demonstration project at one 2010 venue (probably the Fan Park).
- Record of frequency of collections for both Molok system and conventional system.

5. Skills / Resources Required for Completion of the Work

The project can be carried out in-house by the Greening Workstream.

6. Key Partnering Agencies

No additional agencies need be included from a technical perspective.

7. Timeframe

The project must commence early in 2009 and the bin system must be installed before the start of the event.

8. Budget

The in-house tasks (review of plans, planning, liaison with manufacturer and the maintenance of records) will be covered by the municipality's operational budget. Funding (CAPITAL expenditure) may need to be secured for the importation and installation of the bins (although the manufacturer may cover these costs).

TASKS (from scope of work)	Budget			TOTAL BUDGET
	2009	2010	2011	
Review design plans for 2010 venues	R 0	R 0	R 0	R 0
Estimate the number of bins that would be required	R 0	R 0	R 0	R 0
Liaise with manufacturer	R 0	R 0	R 0	R 0
Install bins	R 0	R 800 000	R 0	R 800 000
Maintain records of collections	R 0	R 0	R 0	R 0
TOTAL	R 0	R 800 000	R 0	R 800 000

Project 3A: Construction Waste Recycling

Project Description / Overview

This project responds to the Greening Programme target of minimising waste and maximising recycling during all municipal infrastructure development and refurbishment. The Greening Workstream needs to ensure that the Training Venue, Infrastructure Workstream and the Fan Park organisers include the need for waste minimisation and recycling in the construction / demolition terms of reference, tender and contract documents for the Training Venues, Fan Park, Park & Rides and Intermodal Transport Facilities.

The Greening Workstream needs to ensure that appropriate sustainable waste management criteria are included in the tender documentation and contracts of all parties involved in the development, design, upgrading, establishment and operation of these facilities.

E6 SUSTAINABLE TRANSPORT

Project 1A: Promotion of Bus Use and Rail to Access 2010 Venues.

1. Project Description / Overview

The project responds to the Greening Programme target of increasing the quality, accessibility & maximise levels of use of public transport for 2010 & beyond. The project entails the promotion of the use of buses and rail to access 2010 venues through some / all of the following measures:

- implementation of high occupancy vehicle lanes on key access routes (bus lanes)
- ensuring buses and rail services are deployed to service the venues at peak times for events on routes to and from these venues
- advertising the availability and cost of buses and rail services to / from 2010 venues (advertising on sides of buses, at transport nodes and bus / train stops, in the media)
- incentivise use of public transport on event days through reduced tariffs.

The project will be driven and owned by the Greening Workstream. The Greening Workstream will lobby for the adoption of the above-mentioned measures in the 2010 Transportation Plan. This implies close collaboration with the Transportation Workstream.

Project 2A: Park & Ride

Project Description / Overview

This project responds to the Greening Programme target of minimising traffic congestion and parking requirements at all event venues for 2010 and beyond by promoting the use of Park & Ride systems.

The Greening Workstream needs to provide a support function to the Infrastructure Workstream to ensure that this is implemented such that it meets the required greening targets and objectives.

Project 3A: Design and construction of safe pedestrian and cycle networks for 2010.

Project Description / Overview

This project responds to the Greening Programme target of improving pedestrian linkages and cycle networks between public transport nodes and 2010 venues. The Greening Workstream can play a supporting role to the Infrastructure Workstream in the implementation of this.

E7 BIODIVERSITY

Project 1A: Review of the local and provincial 2010 Tourism Strategies

This project (and projects 1B, C & D below) responds to the Greening Programme target of enhancing and promoting local biodiversity and cultural heritage. The project entails commissioning a specialist review of both the local and provincial 2010 Tourism Strategies to identify heritage and ecotourism sites within the RLM area that are being promoted for 2010 and give input if local sites have been missed. The project, along with Projects 2 B & C, aim to ensure that ecotourism opportunities associated with 2010 are maximised while at the same time ensuring that local biodiversity and heritage sites are adequately protected by identifying sites that are being promoted.

2. Project Drivers and Collaborators

The project is to be driven by the Greening Workstream with close collaboration with the Tourism Workstream. Other collaborators include:

Environmental Management SBU
Parks Department
SAHRA
North West Tourism
LED SBU

3. Scope of Work

- Review of local and provincial tourism strategies for 2010 to identify local (i.e. in RLM) ecotourism and heritage sites being promoted.
- Determine if any key local ecotourism and heritage sites missed and make recommendations for the inclusion of any key sites missed.

4. Outputs

- Report listing local ecotourism and heritage sites being promoted and recommendations for the inclusion of any additional sites (if appropriate).

5. Skills / Resources Required for Completion of the Work

The work must be outsourced to a professional in the tourism sector who has a knowledge of local heritage and ecotourism sites in the RLM.

6. Key Partnering Agencies

No agencies need to be involved from a technical input perspective (although these will be required in Projects 1B & C. The Greening Workstream (and the appointed specialist) will have to collaborate with the provincial tourism agency (North West Tourism) and the RLM's LED SBU as these are the custodians of the provincial and local tourism strategies respectively.

7. Timeframe

The project must start early in 2009 and be completed by February 2009.

8. Budget

The budget is OPERATING EXPENDITURE.

TASKS (from scope of work)	Budget			TOTAL BUDGET
	2009	2010	2011	
Review of tourism strategies	R 10 000	R 0	R 0	R 10 000
Prepare report detailing findings	R 20 000	R 0	R 0	R 20 000
TOTAL	R 30 000	R 0	R 0	R 30 000

Project 1B: Review of key ecotourism and heritage sites promoted for 2010

1. Project Description / Overview

The project entails the commissioning of a specialist review of all the key ecotourism and heritage sites promoted in the 2010 Tourism Strategy to ensure that facilities and infrastructure are adequate to service guests and that job creation opportunities are maximised. It is recommended that the Rustenburg Nature Reserve, Kgaswane Mountain Reserve, Boekenhout Tree Site and Boekenhout House Site should be evaluated, regardless of whether these are listed as a key 2010 ecotourism sites. Job opportunities for trail guides, bird guides, hospitality service persons etc are to be identified and promoted. The primary output of the project are recommendations for the upgrading and/or installation of new facilities at 3 key sites that optimise the tourism potential of the each site while at the same time as ensuring that they are adequately protected. The project also has potential legacy impacts because the upgraded / new infrastructure will remain in place beyond 2010 and as a result sites will have a greater potential to attract tourists.

2. Project Drivers and Collaborators

The project is a combined initiative to be driven by both the Tourism Workstream and the Greening Workstream. A representative from each workstream should be involved in managing the specialist study.

Collaborators include the following:

Tourism Facility owners / operators (as access to the sites will be required and information regarding the status of existing services will be required).

SAHRA (as the government agency delegated with protecting heritage resources and potential funder).

North West Tourism (the custodian of the provincial strategy and authority mandated with promoting tourism in the North West province).

Planning and Development & LED SBU's (to provide input regarding employment creation opportunities).

3. Scope of Work

Assessment of all Natural and Cultural Heritage sites promoted in the tourism strategy in terms of:

- Capacity to accommodate visitors

- Actual visitor numbers per annum
- Revenue generated
- Quality of services provided and need for upgrade / improvement (access, parking, signage, ablutions, educational and kiosk facilities, recreational infrastructure, and interpretive signage)
- Advertising and promotions strategy

Select 3 key Natural and Cultural Heritage facilities for upgrading. Selection of these facilities will be on the basis of:

- Quality / uniqueness of experience offered to visitors
- Accessibility to the central areas and accommodation nodes
- Ability to accommodate high numbers of visitors with limited threat to the natural / cultural heritage assets

Develop business plans for the upgrading of these facilities that can be submitted to the provincial department of tourism and other potential funders. The business plans must address the upgrading of visitor facilities to maximise the number of visitor numbers that can be accommodated, diversify the range of offerings to visitors, improved advertising and marketing for 2010, improved signage and interpretive materials etc where appropriate. The business plans must contained detailed costings for the required upgrades.

4. Outputs

- Specialist report assessing local sites promoted and identifying 3 key sites for upgrading.

5. Skills / Resources Required for Completion of the Work

The project must be outsourced to an appropriately qualified specialist team. The specialist team must include a tourism specialist with demonstrated capabilities to prepare tourism plans and a civils engineer who can review the capacity of service infrastructure, facilities etc and make recommendations for upgrading and/or construction of new infrastructure and facilities.

6. Key Partnering Agencies

No agencies need to be included in the project team from a technical input perspective as the specialist team should have the necessary expertise. Potential funders for the specialist review include DBSA, WWF-SA, DACE and DEDT. These agencies need to be approached at the project inception stage to secure the necessary funds.

7. Timeframe

The specialist assessment must be completed in the first half of 2009 (i.e. by July 2009) to allow time for any building / infrastructure upgrading to be completed before the 2010 event.

8. Budget

The budget required for the specialist review is Capital expenditure.

TASKS (from scope of work)	Budget			TOTAL BUDGET
	2009	2010	2011	
Assessments of facilities (X10)	R 200 000	R 0	R 0	R 200 000
Business plans for 3 facilities	R 180 000	R 0	R 0	R 180 000
TOTAL	R 380 000	R 0	R 0	R 380 000

Project 1C: Infrastructure Upgrading at 3 Key Ecotourism and Heritage Sites in RLM

1. Project Description / Overview

The project entails infrastructure construction / upgrading projects recommended in the specialist review which will ensure that local ecotourism opportunities are and job creation opportunities are maximised while at the same time the biodiversity and heritage sites are adequately protected.

As above the project should be jointly driven by the Tourism Workstream & Greening Workstream. Collaborators include the venue owners / operators. Potential funders include the North West Tourism, DEDT, DEAT (under the EPWP if sites are of national significance), DBSA and SAHRA (for heritage sites).

The budget for this project is CAPITAL EXPENDITURE and an amount of R6 000 000. should be allocated.

Project 1D: Development and Implementation of a Marketing and Profiling Strategy for 3 Key Ecotourism and Heritage Sites in RLM

1. Project Description / Overview

The project entails the development and implementation of a marketing and profiling strategy for local ecotourism and heritage sites identified as “must see” sites for all visitors to Rustenburg. Incentives such as free entrance, special accommodation rates etc can be used to maximise use of these areas if necessary.

2. Project Drivers and Collaborators

The project should be driven by the Tourism Workstream with close collaboration from the Communications Workstreams. Other collaborators include the venue (local ecotourism and heritage sites) owners / operators. The Greening Workstream should provide a facilitatory role.

3. Scope of Work

- Specialist to develop a marketing and profiling strategy for the 3 local ecotourism and heritage sites selected for upgrading (see Projects 1B & C).
- Tourism Workstream in collaboration with the Communications Workstream to implement strategy.

4. Outputs

- Report detailing marketing and profiling strategy.

5. Skills / Resources Required for Completion of the Work

The work must be outsourced to an appropriate specialist. The appropriate candidate should be a tourism specialist who has experience in developing marketing strategies for tourism sites.

6. Key Partnering Agencies

There are no agencies who need be involved from a technical perspective.

7. Timeframe

The project can start once the specialist review of key ecotourism and heritage sites (Project 2B) has been completed (i.e. after July 2009) and should be completed by December 2009.

8. Budget

The budget is OPERATING expenditure.

TASKS (from scope of work)	Budget			TOTAL BUDGET
	2009	2010	2011	
Development of marketing strategy	R 150 000	R 0	R 0	R 150 000
Production of marketing materials	R 100 000	R 150 000	R 0	R 250 000
Advertising	R 0	R 100 000	R 0	R 100 000
TOTAL	R 250 000	R 250 000	R 0	R 500 000

Project 2A: Review of Stadium Precinct Landscaping Plan

1. Project Description / Overview

This project responds to the Greening Programme target of achieving 100% locally indigenous landscaping in the Stadium Precinct & all municipal facilities / tourist routes established for 2010 & beyond. The project is to be driven by the Greening Workstream in close collaboration with the Stadium Design Team. The review should also cover water-wise issues and ensure that 100% locally indigenous species are used and that local biodiversity is showcased (i.e. achieves both Greening Programme targets).

This project falls within the mandate of the Environmental Management Department and should be funded out of their normal operating budget.

Project 2B: Review of Transport Route Landscaping Plan

1. Project Description / Overview

This project responds to the Greening Programme target of achieving 100% locally indigenous landscaping in the Stadium Precinct & all municipal facilities / tourist routes established for 2010 & beyond. The project is to be driven by the Greening Workstream in close collaboration with the Stadium Design Team. The review should also cover water-wise issues and ensure that 100% locally indigenous species are used and that local biodiversity is showcased (i.e. achieves both Greening Programme targets).

This project falls within the mandate of the Environmental Management Department and should be funded out of their normal operating budget.

Project 3A: Green Landscaping Guidelines

1. Project Description / Overview

This project responds to the Greening Programme target of enhancing and promoting local biodiversity through green landscaping. The Green landscaping guidelines are intended to inform the various city beautification and landscaping projects that will be undertaken for 2010 and beyond. The guidelines should also be made available to the public to promote a more environmentally friendly form of landscaping in the RLM as a positive legacy initiative. The green landscaping guidelines should cover hard and soft landscapes, and address broadly the environmental issues that can be associated with landscaping (water and energy efficiency, use of environmentally friendly plants and materials etc).

2. Project Drivers and Collaborators

Greening Workstream to own and drive project. Requires collaboration with the Parks Department.

3. Skills / Resources Required for Completion of the Work

Specialist landscaper / environmental rehabilitation specialist

6. Key Partnering Agencies

DWAF
WESSA
SANBI

7. Timeframe

First quarter 2009.

8. Budget

OPERATING BUDGET will need to be used for this Project.

TASKS (from scope of work)	Budget			TOTAL BUDGET
	2009	2010	2011	
Develop guideline	R 200 000	R 0	R 0	R 200 000
Print and distribute to public	R 200 000	R 0	R 0	R 200 000
TOTAL	R 400 000	R 0	R 0	R 400 000

Project 4A: Wetland / Riverine System Upgrading and Enhancement Project

1. Project Description / Overview

The project responds to the Greening Programme target of achieving at least one investment into ecosystem services enhancement at or near a 2010 venue. The project entails the design and implementation of a wetland / riverine system upgrading and enhancement project at Royal Bafokeng Sports Palace (the receiving environment for stormwater discharged from the precinct) to increase the capacity of this area to filter and attenuate stormwater flows, as well as reinstate habitat functionality. The project will serve as an investment into ecosystem services enhancement at or near a 2010 venue.

2. Project Drivers and Collaborators

The project will be owned and driven by the Greening Workstream. Collaboration will be required from the following:

Stadium design team / Infrastructure Workstream

Stadium operators

3. Scope of Work

- Review EIA Record of Decision for upgrading of Royal Bafokeng Sports Palace to define the requirements (if any) for a wetland / riverine system upgrading and enhancement project.
- Review the Stormwater Management Plan developed for the Royal Bafokeng Sports Palace and ensure upgrading project accommodates the plan for stormwater.
- Develop a Wetland / riverine system Upgrading and Enhancement Plan for the construction and operational phases of the development that ensure that the capacity of this area to filter and attenuate stormwater flows and habitat functionality is maintained.
- Inclusion of Plan in TOR for Stadium Operator.

4. Outputs

Wetland / riverine system Upgrading and Enhancement Plan.

Relevant component of Stadium Operator TOR.

5. Skills / Resources Required for Completion of the Work

Aquatic ecologist with experience in wetland / riverine system rehabilitation. Other specialists may need to be involved in obtaining the necessary statutory approvals (e.g. EIA approval).

6. Key Partnering Agencies

No agencies need to be included in the project team from a technical input perspective.

7. Timeframe

The project must start early in 2009 with the aquatic ecological study completed by end February and the preliminary plans completed by end March 2009. The upgraded / enhanced wetland system needs to be constructed and landscaped before the opening of the event.

8. Budget

CAPITAL BUDGET will need to be used for this Project.

TASKS (from scope of work)	Budget			TOTAL BUDGET
	2009	2010	2011	
Review ROD and consult with DWAF	R 8 000	R 0	R 0	R 8 000
Development of Wetland Upgrading Plan	R 50 000	R 0	R 0	R 50 000
Inputs to Stadium Operators TOR	R 8 000	R 0	R 0	R 8 000
Implementation of Plan	R 250 000	R 0	R 0	R 250 000
TOTAL	R 316 000	R 0	R 0	R 316 000

E8 AWARENESS RAISING AND REPORTING

Project 1A: Greening 2010 Expo

1. Project Description / Overview

This project responds to the Greening Programme target of raising public awareness of greening. The project involves the organisation of at least one Greening 2010 Expo to showcase eco-friendly approaches and technologies for the 2010 event infrastructure and operational systems. As there is a project entailing marketing of key ecotourism and heritage sites (see Biodiversity Strategy – Project 1D), if appropriate, the Greening 2010 Expo could be combined with a local tourism / eco-tourism expo.

2. Project Drivers and Collaborators

Greening Workstream to own and drive project. Requires collaboration with Communications Workstream.

3. Scope of Work

- Organiser to secure venue.
- Organiser to secure exhibitors (to include public sector [government agencies involved in greening] and private sector [businesses selling 'green' products] and the Greening Workstream [present overview of greening initiatives for 2010]).
- Host Expo over a 1 week period.

4. Outputs

- Host 2010 Greening Expo.

5. Skills / Resources Required for Completion of the Work

The work should be outsourced to an event organiser.

6. Key Partnering Agencies

No agencies need to be included in the project team from a technical input perspective. Potential funders for the Expo include DEAT, FIFA sponsors and DEDT and/or DACE.

7. Timeframe

To allow the opportunity of the event to be combined with a tourism / eco-tourism expo the event can only be held after completing of the local marketing and profiling strategy for ecotourism and heritage sites which is to be completed by December 2009. It is therefore expected that a combined Greening / tourism / eco-tourism expo will take place early in 2010.

8. Budget

The budget is OPERATING expenditure.

TASKS (from scope of work)	Budget			TOTAL BUDGET
	2009	2010	2011	
Hosting of Expo	R 600 000	R 0	R 0	R 600 000
TOTAL	R 600 000	R 0	R 0	R 600 000

Project 1B: Greening 2010 Newsletter

1. Project Description / Overview

The project responds to the Greening Programme target of raising awareness of green technologies, systems & approaches before and through the 2010 World Cup. The project involves the publishing of a Greening 2010 newsletter (two in 2009 and one in 2010) to raise awareness of Greening and to report on progress made with regard to greening 2010 in Rustenburg. The newsletter must be widely distributed throughout the RLM area and area under the administration of the Royal Bafokeng. The newsletter should be produced and distributed electronically where possible and placed on the municipality's webpage. A limited number of newsletters should be printed for distribution to homes / interest groups without internet.

2. Project Drivers and Collaborators

The project must be driven by the Greening Workstream with close collaboration from the Communications Workstream.

3. Scope of Work

- Collate relevant information for inclusion in the newsletter.
- Layout newsletter for printing and electronic distribution and lodgement on the municipality's webpage
- Distribution of newsletter electronically and by post

4. Outputs

- 2000 printed newsletters circulated biannually.
- Broad circulation of electronic newsletters biannually
- Lodgement of newsletters on municipal website

5. Skills / Resources Required for Completion of the Work

The 2010 Greening Coordinator should be tasked with collating relevant information. Layout and printing of the newsletter will have to be outsourced to a media specialist / service provider.

6. Key Partnering Agencies

No agencies need to be included in the project team from a technical input perspective.

7. Timeframe

The first newsletter must be circulated in March 2009 and the second in September 2009. The third should be published in February 2010 and the last a few months after the close of the event in 2010. In all it is expected that 4 editions of the newsletter should be prepared and published / distributed.

8. Budget

Operating budget is required.

TASKS (from scope of work)	Budget			TOTAL BUDGET
	2009	2010	2011	
Collate information	R 0	R 0	R 0	R 0
Layout of newsletters (X4)	R 16 000	R 17 120	R 0	R 33 120
Print newsletters (X 8000)	R 8 000	R 9 200	R 0	R 17 200
Distribute newsletters	R 2 000	R 2 800	R 0	R 4 800
TOTAL	R 26 000	R 29 120	R 0	R 55 120

Project 1C: Information sharing with Communications Workstream

1. Project Description / Overview

This project responds to the Greening Programme target of raising public awareness of greening. The project entails providing the 2010 Communications Coordinator (under the Communications Workstream) with material that can raise awareness of greening and provide regular updates of greening progress made.

2. Project Drivers and Collaborators

Greening Workstream to own and drive project. Requires collaboration with Communications Workstream.

Project 2A: Local and National Press Releases and Radio Talk Shows

1. Project Description / Overview

This project responds to the Greening Programme target of reporting on greening achievements. The Greening Workstream is required to draft regular press releases that report on the Greening Programme achievements, advertise the availability of the various greening guidelines produced, and generally promote greener behaviour before and during the event.

2. Project Drivers and Collaborators

Greening Workstream to own and drive project. Requires collaboration with Communications Workstream.

E9 MONITORING AND EVALUATION

Project 1A: Monitoring

1. Project Description / Overview

This project responds to the Greening Programme target of monitoring the implementation of the Greening Programme during 2010 and for 6 months post-event. A specialist environmentalist should be appointed to conduct this function. The process must include collection of information on energy and water use (and savings) at the various venues, the management of waste, the successes and failures of the projects implemented under this programme and the public (and fans) perceptions of the greening programme and its achievements.

2. Project Drivers and Collaborators

Greening Workstream to own and drive project.

3. Timeframe

June 2010 – December 2010.

4. Budget

R100,000 – OPERATING budget.

Project 2A: Evaluation and Reporting

1. Project Description / Overview

This project responds to the Greening Programme target of critically evaluating the successes and failures of the Greening programme. An assessment report should be produced which is published at an appropriate level of public accessibility.

2. Project Drivers and Collaborators

Greening Workstream to own and drive project.

3. Skills / Resources Required for Completion of the Work

Suggest using the same specialist appointed for project 1A.

4. Timeframe

January – March 2011

5. Budget

An OPERATING BUDGET of R150,000 will need to be used for this Project.

E10 FINANCIAL PLAN

This financial plan contains estimated budgets needed to implement the various Projects identified in the Greening Strategies contained within this Plan.

The following notes apply to the financial plan:

RLM Budget:	Funds that need to be allocated from the RLM budget in the absence of alternative funding sources
2009, 2010, 2011:	Denote calendar years in which budget should be allocated
Non-RLM Budget:	Only funds that have already been allocated from other sources have been reflected

Yellow shading denotes work to be completed in-house with no additional budget required for hiring of specialists or purchase of materials.

Strategy	Project	RLM Budget			Non-RLM Budget	Total Capex	Total Opex
		2009	2010	2011			
Cross-Cutting	A - EMS for 2010 Venues	R 900 000	R 0	R 0	R 0	R 0	R 900 000
	B - Greening Programme Manager	R 300 000	R 160 500	R 0	R 0	R 0	R 460 500
	Sub-total	R 1 200 000	R 160 500	R 0	R 0	R 0	R 1 360 500
Climate Impact Management	1A - Carbon Footprint Calculation	R 0	R 0	R 0	R 0	R 0	R 0
	1B - Reporting on Carbon Footprint reductions & Best	R 360 000	R 0	R 0	R 0	R 0	R 360 000
	2A - Lobby for Low Emissions PT Fleet	R 0	R 0	R 0	R 0	R 0	R 0
	3A - Support / Maximise Tree Planting	R 0	R 0	R 0	R 0	R 0	R 0
	3B - Carbon Sequestration Project Development	R 0	R 0	R 0	R 0	R 0	R 0
	3C - Carbon Offset / Emissions Reductions Project Development	R 325 000	R 0	R 0	R 0	R 325 000	R 0
	Sub-total	R 685 000	R 0	R 0	R 0	R 325 000	R 360 000
Energy Efficiency	1A - Promote energy efficiency in all 2010 venues	R 0	R 0	R 0	R 0	R 0	R 0
	1B - Promote energy efficiency in the private sector	R 0	R 0	R 0	R 0	R 0	R 0
	2A - Renewable Energy Supply	R 45 000	R 300 000	R 0	R 0	R 500 000	R 0
	Sub-total	R 45 000	R 300 000	R 0	R 0	R 500 000	R 0
Water Conservation & Management	1A - Maximise Water Use Efficiency at 2010 Venues	R 0	R 0	R 0	R 0	R 0	R 0
	2A - Dry / Compost Toilet Demonstration Project	R 0	R 510 000	R 40 000	R 0	R 430 000	R 120 000
	3A - Stormwater Management Plan: Peter Mokaba Stadium	R 326 000	R 0	R 0	R 0	R 326 000	R 0
	Sub-total	R 326 000	R 510 000	R 40 000	R 0	R 756 000	R 120 000
Sustainable Waste Management	1A - Sustainable Waste Management Strategy for 2010	495 000	1 500 000	0	0	R 1 995 000	R 0
	2A - Molok Deep Collection Bin Demonstration Project	R 0	R 800 000	R 0	R 0	R 800 000	
	3A - Construction Waste Recycling	0	0	0	0	R 0	R 0
	Sub-total	R 495 000	R 2 300 000	R 0	R 0	R 2 795 000	R 0
Sustainable Transport	1A - Promotion of Bus Use and Rail	0	0	0	0	R 0	R 0
	2A - Park and Ride	0	0	0	0	R 0	R 0
	3A - Safe pedestrian and cycle networks	0	0	0	0	R 0	R 0
	Sub-total	R 0	R 0	R 0	R 0	R 0	R 0
Biodiversity	1A - Review of local and provincial tourism strategies for	30 000	0	0	0	R 0	R 30 000
	1B - Review of key ecotourism and heritage sites promoted for	380 000	0	0	0	R 380 000	R 0
	1C - Infrastructure upgrading at 3 key ecotourism and heritage	3 000 000	3 000 000	0	0	R 6 000 000	R 0
	1D - Marketing and Profiling Strategy for 3 key ecotourism	250 000	250 000	0	0	R 0	R 500 000
	2A - Review of Stadium Precinct Landscaping Plan	R 0	R 0	R 0	R 0	R 0	R 0
	2B - Review of Transport Route Landscaping Plan	R 0	R 0	R 0	R 0	R 0	R 0
	3A - Green Landscaping Guidelines	400 000	0	0	0	R 0	R 400 000
	4A - Wetland / Riverine System Upgrading and Enhancement	316 000	0	0	0	R 316 000	R 0
	Sub-total	R 4 376 000	R 3 250 000	R 0	R 0	R 6 696 000	R 930 000
Awareness Raising & Reporting	1A - Greening 2010 Expo	600 000	0	0	0	R 0	R 600 000
	1B - Greening 2010 newsletter	26 000	29 120	0	0	R 0	R 55 120
	1C - Information sharing with Communications Workstream	0	0	0	0	R 0	R 0
	2A - Press Releases & Radio Talk Shows	0	0	0	0	R 0	R 0
	2B - Record of Greening Projects & Achievements	0	0	0	0	R 0	R 0
	Sub-total	R 626 000	R 29 120	R 0	R 0	R 0	R 655 120
Monitoring & Evaluation	1A - Monitoring	0	100 000	0	0	R 0	R 100 000
	2A - Evaluation	0	0	150 000	0	0	150 000
	Sub-total	R 0	R 100 000	R 150 000	R 0	R 0	R 250 000
TOTALS		7 753 000	6 649 620	190 000	0	11 072 000	3 675 620
TOTAL MUNICIPAL BUDGET REQUIRED							14 747 620

SECTION F: IMPLEMENTATION PLAN

F1 IMPLEMENTATION AGENTS & PARTNERS

There are a number of Sectors mentioned in the Greening Strategies that have a role to play in implementation.

F1.1 Greening Workstream

The RLM 2010 Greening Workstream will play the lead role in driving the implementation of this Plan. For many of the projects, the Greening Workstream is the project DRIVER – indicating leadership of the project but not necessarily the conducting of the required work – which may be subcontracted to appropriate specialists or undertaken by other 2010 Workstreams or municipal departments. In some of the projects the Greening Workstream will be a COLLABORATOR – in such instances the work will be lead by another Sector but the Greening Workstream will provide input into the project where appropriate and monitor performance and outputs.

F1.2 Stadium Workstream and Project Team

The Stadium Team comprises the Professional Consortium appointed to design and upgrade the Royal Bafokeng Sports Palace and to plan and upgrade the surrounding stadium precinct. Included in this team are the Royal Bafokeng Administration and the RLM project managers that also lead and co-ordinate the Rustenburg 2010 World Cup event planning and hosting.

The Stadium Team has an important role to play in investigating, designing and implementing appropriate greening technologies at the stadium and in the stadium precinct. It also has a role to play in evaluating and reporting-back on its achievements and compliance with the Greening Plan's principles and approaches.

F1.3 Rustenburg Local Municipality (RLM) Service Departments

There are a number and range of **municipal departments** (called small business units or SBUs) that will play a role in the planning, design and servicing of the 2010 World Cup events in Rustenburg. Many of these business units are represented in the various 2010 Workstreams that have been set up and are specifically involved in actions related to the 2010 World Cup events in Rustenburg. There are also other units that have a role to play in the implementation of the Greening Programme through their day-to-day development planning and control, transport systems planning and development, environmental management, waste management, plant production and landscape management functions. It is all of these departments that are called on in this Greening Programme to implement or assist with greening actions and communications specific to the 2010 World Cup events.

F1.4 Royal Bafokeng

The Royal Bafokeng owns the Royal Bafokeng stadium and significant portions of land within the RLM. While the Royal Bafokeng will see to the construction of the stadium and stadium precinct, the RLM will retain the responsibility of managing the Treasury funds for the upgrading of the stadium. A Memorandum of Understanding has been entered into between the RLM and the Royal Bafokeng which provides a framework for the joint provision of services associated with the Stadium and Training Venues in areas under the jurisdiction of the Royal Bafokeng Stadium.

F1.5 Bojanala Platinum District Municipality

The Bojanala Platinum District Municipality plays an active advocacy role in greening in the local municipalities within its jurisdiction. In Rustenburg some of the initiatives facilitated by the District Municipality include the following:

- An Energy Audit which was undertaken for the entire Bojanala Platinum District Municipality which included audits of specific municipal facilities in Rustenburg; and
- The preparation of a Waste Management Plan for 2010 for Rustenburg.

A lot of this has been made possible as a result of a North South Local Government Co-operative Agreement between the City of Lahti in Finland and Bojanala Platinum District Municipality which has made funding available for greening.

F1.6 National Government & Agencies

The **Department of Environment Affairs and Tourism (DEAT)** is the key national department with a role to play in the RLM 2010 Greening Programme. DEAT will be expected to take leadership in all interventions that require a national-scale directive. This will include, for example, the following:

- offsetting the balance of carbon emissions associated with hosting the 2010 World Cup in Rustenburg that cannot be offset by local initiatives,
- procurement of funding and expertise to assist host cities in achieving their greening targets where possible and within financial means,
- establishing a national hospitality and tourism framework that sets criteria and standards for greening of tourism service sectors; etc.

DEAT has close links with the UNDP, GEF and DANIDA, which would put it in a strong position to assist with procuring project finance for greening initiatives associated with 2010. DEAT also administers the **National Poverty Alleviation Fund** and **Working for Wetlands Programme**, both of which may be approached for project funding associated with the 2010 World Cup (specifically in the areas of job creation associated with environmental and waste management and wetland rehabilitation associated with the Royal Bafokeng Stadium Precinct).

The **Department of Water Affairs and Forestry (DWAF)** is the custodian of South Africa's water and forestry resources. It is primarily responsible for the formulation and implementation of policy governing these two sectors. As such DWAF is a key roleplayer at a national level in managing water consumption, preventing the pollution of surface and groundwater resources and supporting reforestation and tree planting initiatives. At a local level and relating to 2010, DWAF has allocated funding support to city beautification (tree planting programme).

F1.7 Provincial Government

The **North West Department of Agriculture, Conservation and Environment (DACE)** has been tasked by DEAT to assist and support 2010 World Cup host cities in the province. This role can include assistance with procurement of greening project funding, assistance with technical expertise and advice on legal frameworks under their jurisdiction etc.

The **North West Department of Economic Development and Tourism (DEDT)** is preparing a Tourism Strategy for the province for 2010 and may be able to assist RLM with local tourism projects.

F1.8 Private Sector

For the purposes of implementation of the Greening Programme, the private sector includes:

- National Energy Supplier - Eskom
- Private developers that will service and benefit from 2010
- Hospitality industry
- Catering industry
- Tourism / leisure industry
- Public transport industry (private taxi's and buses)

- Private business that wishes to partner, fund or participate in greening interventions²
- Recycling agencies
- Mining industry

Eskom is a private company that is wholly owned by the South African government. It is the national supplier of electricity to South Africa. Eskom has a number of initiatives underway to manage electricity demand in the face of a current bulk energy supply crisis. In addition, Eskom has been undertaking research into renewable energy systems. Eskom may thus contribute knowledge and capital to assist in the Energy Strategy of the Greening Programme.

Many **hospitality, catering and tourism / leisure businesses** based in the RLM area stand to benefit substantially from the hosting of the 2010 World Cup in Rustenburg. However, unless these businesses are direct suppliers to the 2010 event under the control of the event organisers, there is limited means to force them to assist in achieving the city's greening targets, but the RLM may wish to consider incentivising positive greening action.

The Federated Hospitality Association of Southern Africa (FEDHASA) represents the hospitality sector in South Africa. It is a key point of contact for any intervention that involves the promotion of greener tourism for 2010 and beyond.

Recycling agencies such as Mondi, Reclam and Collect-a-Can will have an important role to play in the Waste Strategy, as it is likely that their services will be used in the sustainable waste management system established for the event and beyond.

Private developers may be encouraged to participate in the greening approach by adopting the various greening guidelines developed through the Greening Programme.

Mining companies have shown a keen interest to support sustainable development in the RLM. The mining companies have resources and expertise which could be a valuable asset and assist with promoting the greening of 2010 in Rustenburg. In February 2007 a Memorandum of Understanding (MoU) was signed between the host city and the mines which indicated that the mines would assist with the planning process for the needed infrastructure.

F1.9 Parastatals, NGO's & CBO's

There are a number of parastatals, NGO's and CBO's that can contribute to the targets and actions of the Greening Programme. These include:

North West Tourism and Parks Board – North West province's mandated custodians of biodiversity, and can assist in planning and designing interventions in the Biodiversity Strategy, as well as tourism greening approaches.

WESSA – The Wildlife and Environment Society of Southern Africa is an NGO lobby group focusing on environmental protection. It includes an environmental education arm that could assist with the design and development of educational and awareness materials as part of the Greening Programme. WESSA is a potential partner in the establishment of an environmental education centre at the Green Resources Hub proposed as part of the Biodiversity Strategy.

IZWA – The Institute for Zero Waste is a NGO promoting sustainable waste management in South Africa. IZWA can be co-opted to assist in designing a sustainable waste management system for Rustenburg to

² Important here are the FIFA official sponsors of the 2010 World Cup™. Coca-cola is currently supporting a WWF fresh water conservation initiative in the USA; McDonalds have a sustainable waste management strategy that they implement in some countries that could be drawn on for SA; Budweiser supports a range of conservation and stewardship programmes internationally.

service 2010, and may be able to assist in providing volunteers and trained people to create awareness around waste separation and recycling during the 2010 World Cup event, and assist with development of educational displays on waste management.

SANBI - The South African National Biodiversity Institute is mandated to promote the sustainable use, conservation, appreciation and enjoyment of South Africa's exceptionally rich biodiversity, for the benefit of all people. SANBI thus has a role to play in identifying, designing and collaborating in the implementation of the Biodiversity Strategy of this 2010 Greening Plan.

F2 GREENING WORK TEAM

A Greening Work Team should be established to co-ordinate the Actions required for implementation of the Greening Plan. The whole or part of the Work Team may meet regularly where co-ordination is required between different Projects, but if this is not required then relevant members of the team may be called to meetings to discuss specific issues, problems or make decisions as and when required. This Work Team is the key mechanism for implementation the required COLLABORATION during implementation of this Plan.

The Work Team will be chaired by the 2010 Greening Workstream Co-ordinator. The membership of the Work Team is proposed as follows:

2010 Co-ordinator: Mr N. Matima
CHAIR: 2010 Greening Co-ordinator: Mr T. Lenake (Environmental Dept)

Municipal Departments Represented on Task Teams:

- Stadium team representatives (called on as required)
- Infrastructure Workstream
- Training Venue Workstream
- City Beautification Workstream
- Transportation Workstream
- Communications Workstream
- Tourism Workstream
- Skills Development Workstream
- Municipal Electrical Engineering Services Unit
- Municipal Water & Sanitation Unit
- Municipal Waste Management Unit
- Municipal Development Planning Unit
- Road Traffic Services Unit
- Integrated Environmental Management Unit
- Bojanala Platinum District Municipality representative

Non-Municipal Roleplayers:

- Royal Bafokeng Administration
- WESSA
- IZWA
- Birdlife SA / International
- Eskom
- Provincial Department of Agriculture, Conservation and Environment
- Recycling Companies
- Rustenburg Chamber of Commerce
- Specialists

F3 POSSIBLE SUPPORT/FUNDING SOURCES FOR GREENING ACTIVITIES

All Host Cities are expected to provide their own funding for the preparations associated with hosting the 2010 World Cup. It is therefore expected that the RLM will allocate a funding stream to the 2010 Greening Workstream and the implementation of this Plan.

Although this is the case, all Host Cities are finding this financial commitment exceedingly onerous, and it is therefore important that supplementary funding is obtained from other agencies wherever possible.

This section provides a brief description of potential funding and partnering agencies that can be canvassed for greening project funding and technical support under the Greening Programme. Agencies already mentioned in Section F1 as possible implementation partners may be approached to provide funding to Programme initiatives.

F3.1 DEAT and National Treasury

DEAT does not have funds available to give to municipalities for the implementation of their 2010 Greening Programmes. However, they do have access to a range of funding streams that could be used to contract consultants and implementation agents for key projects. In addition, DEAT may facilitate funding allocations from:

- * Working for Water (alien plant clearing funding),
- * Working for Wetlands (wetland rehabilitation programmes), and
- * The National Poverty Alleviation Fund.

National treasury is also the source of the Neighbourhood Improvement Grant Fund (NIGF). This fund is mainly directed at beautification of previously disadvantaged areas and additional funds can be sourced within existing NIGF awards that National Treasury has issued to the Municipality. In Rustenburg the townships of Boitekong, Meriting, Freedom Park and Paardekraal have been awarded beautification funds in terms of the NIGF.

F3.2 DBSA

The Development Bank of Southern Africa (DBSA) is one of several development finance institutions in South and Southern Africa. Its purpose is to accelerate sustainable socio-economic development by funding physical, social and economic infrastructure. DBSA's goal is to improve the quality of life of the people of the region. DBSA plays a multiple role of Financier, Advisor, Partner, Implementer and Integrator to mobilise finance and expertise for development projects. Their focus is mainly on supporting the establishment of good practice in development and capital development projects. They may provide funding as a grant or loan finance. The DBSA would be approached in the Greening Programme for funding of capital projects and installations.

F3.3 FIFA Sponsors

The official FIFA Sponsors for the 2010 FIFA World Cup™ include: Adidas, Hyundai, Coca-Cola, Sony, MTN, First National Bank, McDonalds and Budweiser. These sponsors could be approached through the Local Organising Committee (LOC) to provide technical assistance, partnerships of specific funding for greening initiatives.

F3.4 GEF

The Global Environment Facility (GEF) helps developing countries fund projects and programs that protect the global environment and promote sustainable livelihoods in local communities. GEF grants support projects related to biodiversity, climate change, international waters, land degradation, the ozone layer, and persistent organic pollutants. GEF funding into South Africa is largely co-ordinated through the UNDP, which liaises

directly with DEAT. Potential GEF funding for the RLM's 2010 Greening Projects would best be sought through the assistance / representation of DEAT, and currently seem to be directed towards the transport sector.

F3.5 SANBI

The South African National Biodiversity Institute (SANBI) aims to promote the sustainable use, conservation, appreciation and enjoyment of the exceptionally rich biodiversity of South Africa, for the benefit of all people. SANBI undertakes biodiversity-related research and co-ordinates a range of advisory groups. SANBI could be approached for funding of biodiversity-related studies or research for the Greening Programme. SANBI would also be a valuable partner to the RLM on design and implementation of the Biodiversity Strategy projects.

F3.6 World Bank

The World Bank provides financial and technical assistance to developing countries providing low interest loans, interest-free credit and grants. A key focus area of the World Bank is currently in supporting CDM projects where developing countries benefit from trading carbon credits to first world countries.

F3.7 WWF - SA

The Worldwide Fund for Nature (WWF) has become one of the world's largest independent organizations dedicated to the conservation of nature. In South Africa, five programmes are being established for Marine, Freshwater, Grasslands, Fynbos and Conservation Education, with a Climate Change sub-programme. Although WWF has limited funding of its own, it could be approached to assist the Greening Programme through educational partnerships and assistance with access to funding from a range of donor agencies.

F3.8 Eskom

Eskom has a Demand Side Management (DSM) Programme that includes a specific component for 2010 Host Cities. Eskom offers a "package of incentives" to official 2010 venues that is effectively a subsidised rate on energy saving / renewable energy devices such as solar water heaters and energy saving light bulbs. Eskom could be approached for subsidisation of energy saving initiatives at all 2010 venues, but may also be approached to contribute technically to the development and roll-out of energy saving initiatives for 2010 and beyond.

F3.9 North South Local Government Cooperation Programme

The North South Local Government Cooperation Programme (NSLGCP) between the City of Lahti of Finland and Bojanala Platinum District Municipality of South Africa is based on the implementation of Local Agenda 21 process which was first declared in the United Nations Conference on Environment and Development in Rio De Janeiro 1992 and enforced in Johannesburg World Summit on Sustainable Development with the Plan of Implementation in 2002. The programme is also supporting the Millennium Development Goals, especially Goal no 7 on Ensuring Environmental Sustainability by 2015 set by the Millennium Summit 2000. As a result of this Programme an agreement between the City of Lahti and Bojanala Platinum District Municipality has been established and this has resulted in funding being made available for energy efficiency for public awareness raising initiatives in Rustenburg related to 2010.

F3.10 Finish Ministry of Foreign Affairs

A delegation from the Finish Ministry of Foreign Affairs visited Rustenburg in October 2008 and has pledged funding to support greening, primarily in the energy reduction and renewable energy solutions.

SECTION G: REFERENCES / BIBLIOGRAPHY

G1 DOCUMENTS CONSULTED

Econ Analysis, 2006. **Pre-feasibility CDM Assessment for New Green Point Stadium.** Western Cape Provincial Government Report.

Katzel, CT. 2007. Event Greening: Is this concept providing a serious platform for sustainability best practice? Unpublished Masters Thesis.

Oko-Institut e.V. 2003. **Green Goal: Environmental Goals for the 2006 FIFA World Cup.** Oko-Institut e.V. Report.

Oko-Institut e.V. 2004. **Green Goal™ - the environmental concept for the 2006 FIFA World Cup™.** Organising Committee of the 2006 FIFA World Cup, Frankfurt.

G2 USEFUL WEBSITES

CIDA Website. www.acdi-cida.gc.ca

Collect-a-Can Website. www.collectacan.co.za

DANIDA Website. www.um.dk

DBSA Website. www.dbsa.org/

DEAT Website. www.environment.gov.za

Eskom Website. www.eskom.co.za

FEDHASA Website. www.fedhasa.co.za

FIFA Website. www.fifa.com

GEF Website. www.gefweb.org

GreenStay SA Website. www.greenstaysa.org.za

IZWA Website. www.izwa.org.za

North West Provincial Government Website. www.nwpg.gov.za

North West Tourism and Parks Website. www.tourisminorthwest.co.za

Mondi Recycling Website. www.mpsa.co.za/services/

Nampak Website. www.nampak.co.za

Reclam Website. www.reclam.co.za

SANBI Website. www.sanbi.org.za

TGCSA Website. www.tourismgrading.co.za

UNDP Website. www.undp.org

WESSA Website. www.wessa.org.za

World Bank Website. www.worldbank.org/

WWF-SA Website. www.panda.org.za