A two-bin collection system for wet waste and dry recyclable waste was implemented at Cape Town Stadium, the FIFA Fan Fest™ and the fan jols, so that the dry waste could be completely separated and made available for high-grade recycling. The LOC developed appropriate signage to promote waste separation at these venues, and the LOC environmental services volunteers promoted the use of the two-bin system among fans.

The City also implemented a split-bin recycling system along the main pedestrian routes in the Cape Town CBD, including the fan walk. These dual litter bins remain in place in certain areas after the event.

The two-bin waste system implemented at key World Cup venues.

TABLE 13: Waste recycling at different World Cup venues

	Total waste generated (tonnes) (a)	Recycled waste (tonnes)	Recycled (% of total)	Operating days (b)	Kg/day generated (avg) (c = a/b*1000)	Total attendance (d)	Daily attendance (avg) (e = d/b)	Kg/pppd (f = a*1000/d)	2010 Business plan estimate	2010 Business plan estimate recycled %
Stadium	156	102	65%	8	19 500	507 332	63 417	0.31	0.5	20%
FIFA Fan Fest™	26	11	42%	25	867	558 159	18 605	0.47	0.2	20%
Fan jols	95	47	49%	13	7 308	175 469	13 498	0.54	0.2	20%
Fan walk and surrounds	340	198	58%	8	42 500	581 913	72 739	0.58	0.2	20%
Sub-total FIFA Footprint waste	**617**	**358**	**58%**	**30**	**70 174**	**1 822 873**	**168 259**	**0.34**	**n/a**	**20%**
Event waste outside of FIFA Footprint	7 001	4 060	58%	30	233 367	1 822 873	60 762	3.84	1	20%
Total waste due to event	**7 618**	**4 418**	**58%**	**30**	**303 541**	**1 822 873**	**229 021**	**1.33**	**n/a**	**20%**

The waste recycling programme at the various venues and along pedestrian routes was largely successful. A total waste diversion and recycling rate of 58% was achieved against the 20% target set by host cities and the LOC. At the stadium itself, 65% of waste was diverted from landfill to recycling. The main recycled waste item was cardboard. At the FIFA Fan Fest™, 42% of waste was recycled, and along the main pedestrian areas in the CBD, the average recycling rate was 58%. (See Table 13 and Figures 7 and 8).

It is interesting to reflect on how much waste generated inside venues (controlled areas = 0,34 kg/pppd) will vary from waste in general areas. The initiatives put in place either through procurement policy (e.g. banning the use of certain packaging, service contracts etc.), on-site controls and on-site infrastructure (different bins, etc.) definitely made a difference (about four-fold in this instance compared to 1.33). This is all the more reason to ensure that as far as major event planning goes, the City must ensure that these measures are put in place and costed by event planners/ organisers, as there is ultimately a saving for the rate payer.

The cleaning of the stadium and other event venues, including the CBD and other major party areas, started immediately after the venues had closed and the fans had dispersed. Many fans commented that it never looked the next morning as if there had been a major event in the city the day before. All waste collected from cleaning the event venues and the fan walk was also sorted and recycled where possible.

A large quantity of vinyl, PVC and polyester branding material was donated to the Cape Craft and Design Institute after the event, for use by local crafters. Various products were manufactured from these materials, including bags.

Split-bin recycling bins were places along the main pedestrian routes in the central city.

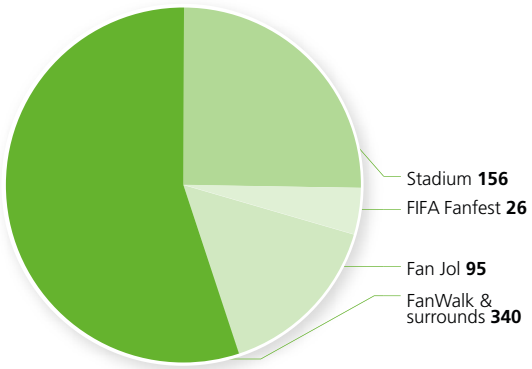


FIGURE 7: Waste generation at different venues in Cape Town during the event (by tonne)

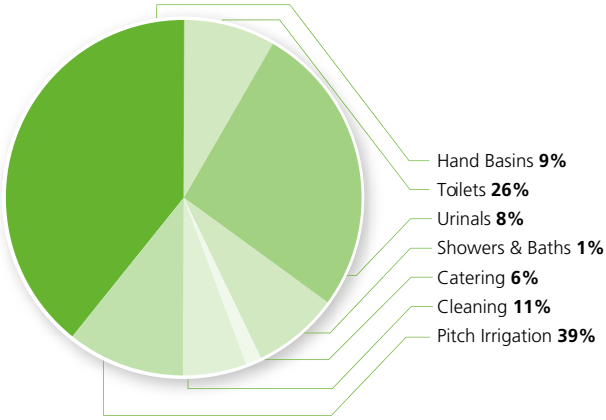


FIGURE 8: Stadium recyclable waste breakdown according to type (by weight)

> **"A total recycling rate of 58% was achieved against the 20% target set by host cities and the LOC."**

ZIBI, MASCOT OF A CITY-WIDE ANTI-LITTER CAMPAIGN

Before the kick-off of the 2010 FIFA World Cup™ the City of Cape Town obtained the sole rights to relaunch the character Zibi (an ostrich), for its waste recycling awareness campaign. Zibi is the well-loved mascot of a country-wide anti-littering campaign in the late 1970s and 80s. He put his soccer kit on to remind fans to recycle their waste in the correct bin.

3.3 Recycling drop-off centres in the CBD and on the Atlantic seaboard

Following the adoption of the City's IWMP in 2006, a need was identified for well-controlled and secure recycling drop-off facilities in the Cape Town CBD and surrounding areas. Such facilities would provide the public with an area where clean recyclable items only, such as glass, plastic, paper, cardboard and cans, could be dropped off at no charge. All recyclables would be recovered from the waste stream, and sold/donated to the manufacturing stream for reuse.

Consequently, as legacy projects of the 2010 Green Goal programme, the construction of two facilities, one in the CBD and another in Sea Point, started in 2008. At the time, it was envisaged that these facilities would receive recyclable waste from Cape Town Stadium and the FIFA Fan Fest™ during the 2010 FIFA World Cup™. However, due to delays in the permitting process, the facilities could not be launched in time.

The Sea Point recycling drop-off facility opened on 1 December 2010, while the CBD facility is scheduled to open in mid-2011.

Lessons learnt on integrated waste management projects

Host City Cape Town's IWMP for the 2010 FIFA World Cup™ was conceived three years in advance, which allowed sufficient time to schedule capital and operational works, acquire additional equipment, appoint contractors, and schedule area cleaning. Effective planning was paramount to the overall success of the event.

The assumptions of waste per person were over optimistic in all venues apart from the Cape Town Stadium; however the recycling target was exceeded at all venues.

The 2010 FIFA World Cup™ demonstrated that separate waste collection can be successful at the sites where spectators assemble, not only inside the stadium and at the FIFA Fan Fest™, but also in the direct vicinity of the stadium, at admission control areas, and along the main pedestrian routes. In fact, more waste appears to have been generated outside the venues than within their bounds.

The support of the LOC, FIFA and the FIFA commercial affiliates were critical to implement an integrated waste management system, particularly at Cape Town Stadium. The split-bin recycling system added to the cost of hosting the event. However, all parties agreed that the benefits justified the additional cost.

Waste separation played an important part in increasing fans' environmental awareness. However, fans could have been better informed about separate waste collection prior to the 2010 FIFA World Cup™, for example at the time of selling tickets, on the FIFA website, in the official fan guide, etc.

The purchase of additional equipment and the construction of two drop-off centres were legacy investments that have increased the City's capacity to separate and recycle waste, and reduce the amount of waste finally sent to landfill sites.

Throughout the World Cup one of the key success factors was the manner in which good waste management added to the general tourist appeal and fan experience.

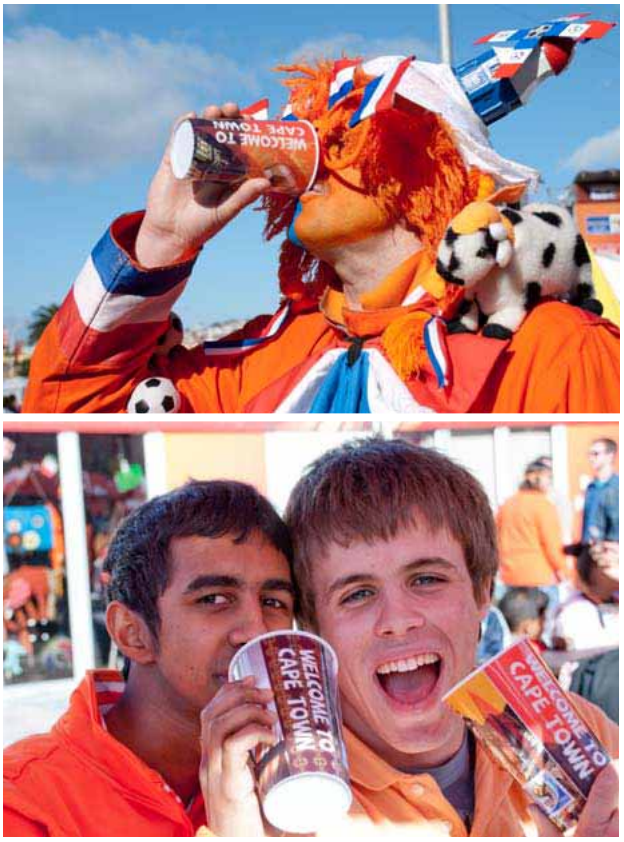
In general, the waste avoidance, reduction, recycling and cleaning efforts of Host City Cape Town were highly successful and widely commended.

Key references for integrated waste management

- City of Cape Town. 2007. Integrated Waste Management Business Plan.
- Department of Environmental Affairs and Tourism. July 2008. National Greening 2010 Framework. Tshwane.
- FIFA Local Organising Committee (LOC). 2008. Minimum Environmental Standards for Green Goal 2010 (Unpublished).
- FIFA Local Organising Committee (LOC). 2009. Proposal for bin stickers in stadia and fan fests for Confederations Cup and World Cup. E-mail of 5 May.
- Germany. 2006. Green Goal Legacy Report 2006 FIFA World Cup™. Frankfurt.
- Host City Cape Town. July 2010. Event-Reporting Tool data report.
- Ozinsky, S., Ackermann, K. and Lamb, S. January 2009. Green Point Park and ECO Centre Business Plan. Cape Town, South Africa. Commissioned by City of Cape Town.

REUSABLE SOUVENIR CUPS

A reusable souvenir cup was available to fans at the FIFA Fan Fest™. However, the availability of the cup did not result in the anticipated reduction in waste volumes. This was partly because the purchase of a reusable cup was optional, and there was no refundable deposit if a cup was returned. Many fans did not want to pay more for the reusable cups, or did not want to carry the cups with them to the stadium, and therefore opted for a free non-reusable cup. The logistics of taking cups back, washing and reusing them were not in place as they had been in Germany during the 2006 FIFA World Cup™. The business case for reusable cups needs to be further developed for events in Cape Town and South Africa.



Dutch fans enjoy drinking out of reusable souvenir cups provided at the FIFA Fan Fest™. Photos: Rob Oettle

RECYCLING PLAN FOR BEER IN PET PLASTIC BOTTLES

To support Green Goal 2010 objectives, Anheuser-Busch advised that, during the 2010 FIFA World Cup™, they would be selling Budweiser beer in PET bottles. Anheuser-Busch Companies, Inc. contacted Coca-Cola South Africa, who put them in touch with PETCO in Cape Town and asked if PETCO would facilitate the recycling of the bottles.

PETCO asked for samples and the technical specifications of the bottle – which they shared with their contracted recyclers. The first challenge was that the bottle was brown. The market for rPET (recycled PET) in South Africa is fibre, with no demand for brown fibre. The second challenge was that the bottle was multilayered with a nylon barrier layer, which is a challenge for bottle-to-fibre recyclers. After discussions with all of PETCO's contracted recyclers (Extrupet, Hosaf and Sen Li Da), Extrupet was the only one who was able to implement a plan to recycle these bottles.

Extrupet and Anheuser-Busch looked at how the 'recycling loop' could be closed by investigating what the bottles could be recycled into. As Extrupet also recycled HDPE (high-density polyethylene) and had a division manufacturing composite 'timber' planks, the Budweiser PET bottles were blended into this process.

This was a win-win solution for all – a good example of thinking about the end of the product's life cycle upfront, and taking extended producer responsibility seriously.

PETCO supplied fibre with fibre made from recycled PET bottles. This was spun into yarn, woven into fabric (polyester/cotton mix), and made into T-shirts worn by the Green Goal team at the Green Goal Expo at the FIFA Fan Fest™. Photo: Kevin Newman.

4 TRANSPORT, MOBILITY AND ACCESS

As a host city of the 2010 FIFA World Cup™, Cape Town leveraged significant investment in its transport infrastructure, in particular improvements in public transport and NMT.

A Host City Transport Operations Plan (HCTOP) was developed to ensure that all aspects of the event transport planning and management were addressed. Transport planning activities focused on the avoidance of unnecessary travel and the provision of feasible and safe alternatives to the use of private vehicles, thereby reducing congestion and carbon emissions. Fans were encouraged to use public transport to travel to Cape Town Stadium and the FIFA Fan Fest™. Park-and-ride facilities were available at 22 rail stations, and the City's new MyCiTi IRT bus system provided a shuttle service from three additional sites. An airport shuttle was also available, making use of new stations at Cape Town International Airport and the main transport hub at Cape Town Civic Centre in Hertzog Boulevard. The new buses purchased as part of the IRT system met the Euro 4 standard for fuel efficiency and CO^2 emissions.

To maximise the available capacity in the transport system, school and university holidays were scheduled to coincide with the event.

Suitable NMT infrastructure, including new walkways, pedestrian crossings, appropriate surfacing, sufficient lighting, etc., were put in place around the stadia to encourage walking to the venues.

Fuel-efficient driving was promoted through awareness campaigns before and during the 2010 FIFA World Cup™. Posters with tips for fuel-efficient driving were displayed at Council buildings and motor vehicle licensing centres. In partnership with the South African Petroleum Industry Association (SAPIA), an eco-driving training module was developed and piloted with 20 metered-taxi drivers, who received training on how to drive their vehicles in a more environmentally friendly and economical way.

Shuttle buses transported fans from the CBD to Cape Town Stadium.
Photo: Bruce Sutherland, City of Cape Town

THE PROJECTS

PROJECT ACTIONS

4.1 Development of bicycle and pedestrian facilities

4.2 Development of public transport infrastructure

4.3 CBD bicycle services

The 2010 FIFA World Cup™ was a catalyst for significant investment in public transport and NMT facilities in Cape Town. Phase 1a of the City's new IRT system was operational in time for the World Cup and, together with rail, formed the backbone of the public transport system for the event.

Pedestrian bridges, a new IRT system and a revamped Cape Town Station are legacies of the World Cup. Photos: Bruce Sutherland, City of Cape Town

Phase 1a of the IRT system included an airport shuttle and match-day shuttle services between the stadium and the main transport hub at Cape Town Civic Centre in the CBD. New IRT main stations were constructed at Cape Town International Airport, Hertzog Boulevard and Cape Town Stadium. Bus-based park-and-ride facilities were provided at the Upper Campus of the University of Cape Town (UCT) in Rondebosch, Camps Bay High School, and Kronendal Primary School in Hout Bay. Investment in infrastructure by the City and the Passenger Rail Association of South Africa (PRASA) enabled legacy improvements to 26 railway stations to promote rail-based park-and-ride during the World Cup event. Additional parking, security and lighting were installed at these stations, and station facilities were upgraded as part of the project.

Cape Town Station was also refurbished in time for the World Cup.

The IRT system and the additional rail services on match days assisted Host City Cape Town to meet the LOC target of 50% of fans travelling to the 2010 stadia by public transport and NMT. The target was met, as a Department of Environmental Affairs survey showed that public transport was used as a main mode of transport by 40% of fans, and 13% walked. In the immediate vicinity of the stadium, fans used the fan walk and stadium shuttle service. The stadium shuttle service was used by 235 000 fans and 581 913 fans walked along the fan walk to the stadium (some without a match ticket, simply to experience the festive atmosphere).

It is estimated that all modes of Cape Town football fan transport covered a total of 36 million passenger-kilometres, allowing the movement of more than 1,3 million people. The FIFA fleet (buses and vans) travelled 354 000 km, which was responsible for about 124 tonnes of CO^2 emissions. In addition to the investment in bus and rail-based public transport, new pedestrian and bicycle lanes were constructed in the city. Waterkant Street was permanently pedestrianised between Burg Street and Buitengragt, and the sidewalk of Somerset Road was widened to accommodate a bicycle lane and additional footway. This route became the official fan walk between the CBD and Cape Town Stadium during the 2010 FIFA World Cup™. The fan walk is a permanent legacy for Cape Town, and has been well utilised for events at the stadium since the World Cup events.

Two new pedestrian bridges were constructed over Buitengragt – one at the intersection with Waterkant Street (part of the fan walk) and the other at North Wharf Square – to provide a safe pedestrian crossing over this busy route.

A new bicycle route and pedestrian walkway were constructed through the stadium precinct and around Green Point Common. This new route linked up with existing bicycle and pedestrian routes along the Mouille Point and Sea Point promenades, as well as to the CBD through the fan walk.

The establishment of a bicycle rental service to complement the IRT system is currently being scoped. A number of international models are being investigated, including systems used in Paris, Barcelona and Amsterdam. The systems all rely on customers registering to use the service. An operator will be appointed to manage the service.

Mobility for persons with disabilities was a priority for the 2010 FIFA World Cup™. Special measures and operational services were included in the HCTOP to provide transport for this market. The new IRT stations were made wheelchair-friendly, and additional measures were included in the rail station upgrade project to improve services to persons with disabilities. Special match-day shuttles were provided to take mobility-impaired persons as close to the stadium precinct as possible.

Lessons learnt on bicycle and pedestrian facilities, the development of public transport infrastructure, and CBD bicycle services

Public transport and NMT improvements are among the legacies of the 2010 FIFA World Cup™ in Cape Town.

It is a major challenge to develop a safe and reliable public transport system for an event of the magnitude of the World Cup – even more so in Cape Town, where the share of public transport as a transport mode has been declining in recent years. It is expected that the new IRT system and investment in the upgrade of rail infrastructure in preparation for the 2010 FIFA World Cup™ will play a major role to reverse this trend.

An efficient public transport system is not only required for the safe transportation of fans, but also to contribute to a significant reduction in the event's carbon footprint. Transport already accounts for 50% of Cape Town's energy use. New public transport and NMT infrastructure will assist in reducing this over time – an essential trend for any city looking to be sustainable and to have a smaller carbon footprint in the future. To put it in perspective: Compared to single-occupant private vehicles, fans consumed a tenth of the energy by taking the train, and about a quarter by taking a bus.

During the 2010 FIFA World Cup™, many South Africans for the first time switched their mode of transport from private vehicle to bus or train. Although additional event train services were scheduled, these were inadequate for the large numbers of fans. Safe, efficient and reliable public transport can form the backbone of a major events transport plan, provided that sufficient capacity is available. This positive public transport experience may increase the use of this travel mode in the future.

CAPE TOWN FAN WALK

The Cape Town fan walk was one of the talking points of the World Cup experience. It was based on the highly successful Berlin fan mile and the inner-city fan experience in Cologne. The fan walk served a practical purpose: It ran from Cape Town Station, a major public transport hub, to the stadium, thus providing a real alternative to car-based access to the stadium. Initially, the fan walk was conceptualised as a back-up to the shuttle service. However, after two matches, it became the preferred option. The fan walk concept was incorporated into the City's 2010 transport planning process from January 2007, thus allowing ample time for design, planning and implementation. The City committed sufficient capital budget to make the route permanently pedestrian-friendly. Measures included the provision of pedestrian priority areas and cycle lanes, lighting, dual-bin waste receptacles, outdoor furniture, trees, and directional and interpretive signage. The two most significant improvements were the pedestrian bridge over Buitengragt and the Green Point circle underpass, which both ensured a safe crossing over two of Cape Town's busiest roads.

The fan walk provided an opportunity for locals, including those without tickets, to participate in the World Cup. During the World Cup, a programme of entertainment by local emerging artists contributed to the festive atmosphere along the route, and local delicacies, such as vetkoek, rotis and biltong, were for sale.

In retrospect, the fan walk was one of the most important legacies of the World Cup in Cape Town, not only achieving local participation, but also contributing to Host City Cape Town's achievement of the Green Goal target of 50% of fans accessing the stadium by public transport or on foot. The fan walk remains in place as the main pedestrian and cycle route to Cape Town Stadium, and is activated for major events, with additional road closures and entertainment.

The fan walk is one of the legacy projects of the World Cup.
Photos: Bruce Sutherland, City of Cape Town

4.4 Eco-taxis/fuel-efficiency programme

The original intention had been to facilitate the establishment of a fleet of low-emission, energy-efficient, eco-friendly metered taxis operating in the CBD for 2010 and beyond. These taxis are already available in many cities, including London, Dublin, Auckland and Taipei. Eco-taxis have low fuel consumption and energy-efficient technology, thereby reducing emissions that harm the environment.

After engagement with various stakeholders involved in the authorisation of metered-taxi services in the Western Cape, it became clear that, within current government mandates and the legislative framework, it would be difficult to achieve. The licensing of metered taxis was demand-driven, responding to requests from the private sector, rather than supply-driven, whereby licences are offered to those who qualify.

The focus of this project then shifted to the development of an eco-driving training module for metered-taxi drivers in Cape Town. The Province and the City partnered with SAPIA to develop a training module that could be included in the compulsory professional driver training course offered to metered-taxi drivers. The eco-driving training aimed to promote fuel-efficient driving habits, which would reduce harmful vehicle emissions. As part of a pilot project, 20 drivers received theoretical training, and their eco-driving was monitored during practical sessions. Based on the outcome of the pilot project, the Province requested the Transport Education and Training Authority (TETA) to incorporate and accredit the eco-driving training course content as a core unit standard module of the professional-driver National Qualifications Framework (NQF) (level 3) training.

An eco-driving campaign took place during Transport Month, October 2009, and again during Environment Week in June 2010 to encourage Province and City staff to apply innovative and proactive measures in driving and vehicle maintenance in order to reduce carbon emissions. In addition, posters with eco-driving tips were displayed in Council and Province buildings as well as vehicle licensing centres.

The Province and City departments responsible for air quality management and transport have since adopted this initiative as part of their ongoing management interventions.

Lessons learnt on the eco-taxi project

From various engagements with authorities responsible for overseeing taxis, it became clear that this was a very complex industry, with many role players and issues to consider. In addition, the industry had become increasingly regulated, with more clearly defined roles and responsibilities.

The original proposal to offer new permits for environmentally friendly taxis (eco-taxis) could not be accommodated within the current legislative mandate of provincial and local government. The norm had been for government to respond to taxi operator applications from the private sector. Government was not in a position to offer licences based on certain criteria, such as the environmental features of the vehicle. In fact, it was pointed out that there were no emission standards for metered taxis operating in South Africa. The only criteria for the vehicles related to roadworthiness. The permit was issued to the operator/driver, not to the vehicle. That allowed old vehicles with high potential for carbon emissions to operate alongside new vehicles with better emission profiles. Province raised this issue with the Department of Transport (DOT), and requested a review of the policy and the incorporation of emission standards into the permitting process.

Key references for transport, mobility and access

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- City of Cape Town. June 2009. Cape Town's Integrated Rapid Transit System (brochure).
- Department of Environmental Affairs. 2010. 2010 National Environmental Volunteer Project Survey: Western Cape Provincial Report.
- Sustainable Energy Africa. April 2009. A Green Goal 2010 Workshop: Taking responsibility for tourism during the 2010 FIFA World Cup™. Cape Town.

5 LANDSCAPING AND BIODIVERSITY

Cape Town is situated in the Cape Floristic Kingdom, one of the world's richest biodiversity hot spots, and is home to the greatest non-tropical concentration of plant species in the world. In addition, the city borders the Cape Floristic Kingdom World Heritage Site, which includes Table Mountain, the city's best-known landmark.

Steps were taken to ensure that the activities associated with the World Cup event did not have a negative impact on biodiversity or the natural environment.

Landscaping projects in and around key venues prioritised indigenous species over exotics. City beautification projects linked to the event, such as tree-planting and urban regeneration projects, were encouraged. An indigenous biodiversity showcase garden was included in the new Green Point Park adjacent to the stadium. The showcase garden raises awareness of the unique plant species in the city, and demonstrates indigenous horticultural and gardening practices.

THE PROJECTS

A visitor studies the signage in the Biodiversity Garden at Green Point Park. Photo: Marijke Honig

PROJECT ACTIONS AND RESULTS

5.1 Indigenous gardening training programme for Green Point Park staff

5.2 Biodiversity showcase garden at Green Point Park

Green Point Park adjacent to Green Point Stadium is a brand-new public park and a legacy project of the 2010 FIFA World Cup™. The park was developed according to ecological principles, with energy and water efficiency, multipurpose spaces and indigenous landscaping incorporated into the design.

A biodiversity showcase garden of indigenous, water-wise plants that displays the region's biodiversity and demonstrates responsible environmental gardening/horticultural practices was established. The availability of spring water from the Oranjezicht Springs presented an opportunity to develop a wetlands landscape. This area not only captures and manages water quality and flows, using reed beds and vegetation, but also provides habitats for small frogs and insects.

A combination of interpretive signage and educational art provides the visitor with a range of messages about the value of biodiversity.

An educational booklet was developed to enhance the educational value of the garden. The Cape Town Stadium visitor centre offers tours of the biodiversity garden and Green Point Park.

The biodiversity showcase garden is a legacy project of the Green Goal 2010 programme, and was selected as one of the City's ICLEI Local Action for Biodiversity projects. It was one of the focus areas of the City's campaign to promote biodiversity awareness during 2010, the International Year of Biodiversity. In lieu of a training programme for landscapers, ongoing hands-on training is provided to the staff of the landscape contractors responsible for maintaining the garden.

Lessons learnt on the indigenous gardening training programme and biodiversity showcase garden

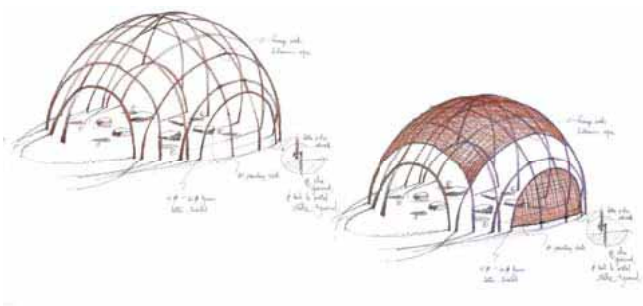
It is fortunate that the biodiversity showcase garden was planted and landscaped at the same time as the remainder of Green Point Park. The garden is integrated with a series of wetlands and water ponds, and interpretive signage enables users to appreciate that Cape Town is one of only three cities in the world that ranks as an urban biodiversity hot spot.

The combination of interpretive signage and educational art provides the visitor with information in a fresh and exciting way. The themes were carefully selected to be relevant to biodiversity conservation in the urban context.

The staff members of the park's landscaping contractors were trained on how to care for the garden. However, due to staff turnover, this cannot be a once-off, but will need to continue as an annual programme.

Interpretive signage in the Biodiversity Garden provides visitors with messages about the value of biodiversity. Photo: Marijke Honig

Green Point Park has become a popular attraction amongst Capetonians. Photo: Marijke Honig



5.3 Student landscape design competition for Mouille Point beachfront and promenade

In April 2008, a competition was launched for landscape design and architectural students from UCT and the Cape Peninsula University of Technology (CPUT) to show how they would transform the Mouille Point beachfront and promenade, located along the main protocol route leading to Cape Town Stadium, ahead of 2010. The brief required the students to create a safe, spacious and aesthetically pleasing inner-city recreational area, allowing for a diversity of uses. The students were also required to include 2010 Green Goal principles, such as biodiversity, green building, mobility, efficient water use, and waste minimisation and recycling, in their designs.

A panel of judges, including representatives from the City, Province, CPUT, OVP Landscape Architects and the Cape Town Partnership, reviewed the submissions. The winners were announced on 8 May 2008, with Scott Masson (UCT) and Marica Fick (CPUT) winning the top prizes.

The upgrade of the promenade will continue after the World Cup.

Lessons learnt on the student landscape design competition

The Mouille Point student landscape design competition was the first 2010 Green Goal project to be completed. At the time, it was important to show that the Green Goal programme was on track, and that it was contributing to the greening of the 2010 FIFA World Cup™ in Cape Town. The competition increased the media profile of the 2010 Green Goal programme, and focused politicians and senior officials' attention on this initiative.

The initiative highlighted the role that interns could play in advancing individual Green Goal projects. Interns working in the City Environmental Resource Management Department compiled the background documents, discussed the details with the students, arranged the judging, and organised the launch function. The project provided the interns with valuable work experience and skills in project management, communications and events management.

Water features and planting trees enhanced the CBD for the Wold Cup.
Photo: Bruce Sutherland, City of Cape Town

5.4 City beautification and tree-planting campaign

Cape Town and the Western Cape's image and appearance during the 2010 FIFA World Cup™ were the city and region's calling card – not only for fans visiting Cape Town, but also for the millions of people around the world who followed the tournament on television. By signing the HCA, Host City Cape Town agreed to render the city as attractive as possible for the 2010 FIFA World Cup™. City beautification related to enhancing the visual appeal of the city, and also included the screening of construction sites visible from event locations, and limiting construction works in key event areas.

As a Green Goal 2010 legacy project, the city beautification programme aimed to meet the following goals:

- To improve and maintain existing assets.
- To invest in beautification of previously undeveloped areas.
- To create a vibrant and exciting atmosphere in the city ahead of the 2010 FIFA World Cup™.
- To promote excellent design and creativity.
- To promote a spirit of community and civic engagement through involvement in local beautification programmes.
- To gain maximum financial advantage and media exposure through opportunities created by city decoration and beautification.

A detailed scoping exercise was undertaken between January and April 2009 to identify and map areas where improvements and maintenance had to be prioritised ahead of the 2010 FIFA World Cup™. The maps and detailed description of issues were presented to the City's executive management team, for consideration and action. A number of new projects were initiated, including landscaping and tree-planting projects along the protocol routes and in the vicinity of the VSTSs in two of Cape Town's previously disadvantaged areas. More than 2 000 new trees were planted, including 50 mature trees that had been donated by a prominent Cape Town businesswoman, which were planted outside Athlone Stadium.

A local NGO, Abalimi Bezekhaya (Xhosa for 'Planters of Home'), planted 100 indigenous trees at Philippi Stadium, one of the official training venues, to commemorate the number of days before the kick-off of the 2010 FIFA World Cup™ in South Africa. Abalimi Bezekhaya is an urban agriculture and environmental action association operating in the socio-economically neglected townships of Khayelitsha, Nyanga and surrounding areas on the Cape Flats of Cape Town.

The city beautification programme offered communities the opportunity to be involved in preparing the city to host the 2010 FIFA World Cup™. Four community beautification and clean-up campaigns with the youth and community members, facilitated by local NGOs, not only benefited the environment, but also created a sense of anticipation and ownership of the World Cup event.

Lessons learnt on city beautification and the tree-planting campaign

The scoping of the 2010 beautification project highlighted the opportunity for legacy investment in the city's open spaces and visible infrastructure. The city beautification work stream was one of the largest 2010 work streams, involving a host of City departments, role players from Province, and other stakeholders. The work stream members accepted the challenge of city beautification with enthusiasm, excited to be part of the process to prepare the city to host the World Cup event. The support provided by a Dutch international intern to scope the extent of the 2010 city beautification programme was invaluable. The site visits and mapping formed part of the intern's final-year thesis to qualify for a degree in Engineering and Urban Design.

The fact that landscaping formed part of almost all of the infrastructure upgrade contracts issued before the World Cup resulted in dozens of newly landscaped areas, also in previously disadvantaged areas.

Although the tree-planting campaign did not materialise as had been intended, the project initiated through the city beautification programme resulted in a significant number of new trees planted in Cape Town – a city mostly devoid of mature trees due to the climate and high water table in many areas.

Key references for landscaping and biodiversity

- City of Cape Town. January 2009. Announcement of Mouille Point promenade student design competition.
- City of Cape Town. April 2008. Submissions received from Cape Peninsula University of Technology and University of Cape Town students for the landscape design competition for Mouille Point beachfront and promenade.
- City of Cape Town. August 2009. Draft 2010 City Beautification Plan.
- FIFA. November 2008. City Beautification Guideline.
- OVP Landscape Architects. August 2009. Detailed design of Green Point Park.
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Bus shelters were decorated with colourful images from the Green Goal 2010 soccer and environment poster, created by Capetonians.

6 GREEN BUILDING AND SUSTAINABLE LIFESTYLES

Even before the World Cup, increased awareness of environmental issues linked to impending resource constraints and global warming concerns in the Western Cape had led to a drive for urgent action at both local and provincial level.

The platform provided by a major event such as the 2010 FIFA World Cup™ was therefore leveraged to influence the behaviour and sustainability choices of participants, spectators and the public. This included constructing greener and more resource-efficient buildings, and promoting a healthy and environmentally sound lifestyle.

THE PROJECTS

Architectural rendering of the proposed Smart Living Centre in Green Point Park.

PROJECT ACTIONS

6.1 Smart Living Centre in Green Point Park

The proposed Smart Living Centre in Green Point Park is a 2010 Green Goal legacy project expected to deliver substantial value to Cape Town. Once completed, the Smart Living Centre will educate and inspire residents and visitors to adopt sustainable living practices. The Centre will demonstrate environmentally friendly construction, and will embody the principles of 'treading lightly' on the earth.

The Centre will provide a tangible and enjoyable learning experience for young people and adults through hands-on workshops, interactions with living plants and animals, seminars, lectures and guided tours.

The following could be associated with the Smart Living Centre:

- A worm farm
- Organic and farmers' markets
- Indoor and outdoor play areas for children
- A public art pavilion and outdoor art
- A recycling drop-off centre and demonstration area
- A bicycle rental facility

A business plan and draft fundraising strategy were developed in 2008, and a KAS-sponsored workshop to discuss the Centre and its programmes was convened on 27 March 2009. A wide range of stakeholders attended and expressed support for the project.

The architects responsible for the upgrade of other buildings in Green Point Park were appointed to prepare conceptual design drawings of the Centre. Their brief called for the design of a 'green building' that was a demonstration of sustainable building practices in its own right. The footprint of the Centre was finalised, and the detailed design was translated into artist's impressions to be used for fundraising purposes.

An intern from Germany scoped the environmental education programme that could be offered by the Centre, focusing on messages and contents not already covered by other environmental education facilities in Cape Town.

Lessons learnt on the proposed Smart Living Centre

The Smart Living Centre is potentially an anchor element within Green Point Park, and a legacy project of Green Goal 2010. Approval in terms of environmental and planning legislation is currently being obtained, and more public consultation will follow to ensure broad buy-in. Significant capital funding is required to construct and equip this Centre to offer a world-class urban environmental education experience to visitors and residents. Local institutional arrangements made securing funding from sponsors a challenge, but this has changed recently, and the Centre is now likely to be funded through a combination of government, sponsor and grant funding.

6.2 Undertaking and monitoring green review for Cape Town and Athlone stadia

In 2007, DEA, through the UEMP funded by DANIDA via the Royal Danish Embassy, commissioned a review of the greening status of the FIFA World Cup™ stadia (four official match stadia and one training venue). The aim was to establish how 'green' the stadium designs were, and to provide the design teams with the opportunity to enhance the green aspects of their designs. The review, which included both Cape Town and Athlone stadia, was carried out using the Council for Scientific and Industrial Research's (CSIR) sustainable-building assessment tool.

Representatives from the City and the professional teams responsible for the design of the stadia met with the review team to brief them on the design of the stadia as well as measures that had been taken to make the stadia more sustainable from an environmental, social and economic perspective.

The professional teams reviewed the draft report produced for each stadium before it was finalised. The findings from the reports were published in two booklets.

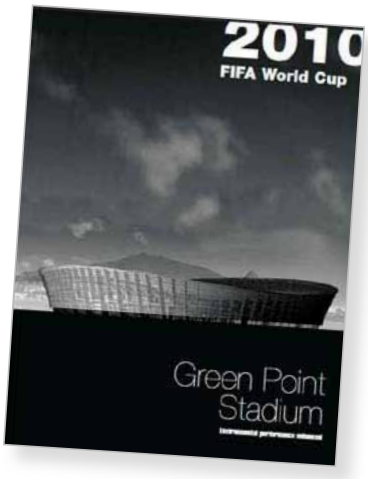
The review team concluded that the overall sustainability of both stadia was good and well balanced across the three measured areas. Some cutting-edge interventions in Green Point Stadium were noted, including the water-cooled variable refrigerant-volume air-conditioning system, used for the first time in a stadium application in South Africa.

Lessons learnt on the green review of Cape Town and Athlone Stadia

Although the purpose of the review was to determine whether the stadia designs were in line with green building principles, the review team also shared considerable insight and knowledge with the stadium professional teams. The host cities that participated in the review of the 2010 World Cup stadia (Cape Town, Durban, Rustenburg and Polokwane) all felt that it would have been more beneficial if this specialist knowledge had been available during the conceptual design stage of the stadia, as, by the time the review took place, most stadia were already designed and under construction.

While it was an academic exercise for most of the stadia, in the case of Cape Town Stadium, some of the recommendations from the review were indeed implemented.

The final report of the Cape Town Stadium review was shared with the professional team responsible for the Philippi Stadium upgrade and, as a result, two best-practice energy-saving interventions were included in the stadium refurbishment, also funded by the UEMP 2010 carbon mitigation grant.



6.3 Cape Town Green Map

The primary objective of the Cape Town Green Map is to inform Capetonians and visitors of opportunities to experience and support Cape Town's wealth of natural resources and sustainable 'green' living options. The Green Map provides a fresh view of the city's environment, and showcases 'hot spots' and locations of ecologically sensitive areas and activities in and around Cape Town. Included in the map are nature reserves, ecotourism sites, organic and farmer's markets, recycling drop-off centres, etc.

The map provides an overview of the wealth of sustainable options available, and motivates behavioural change. It further provides an incentive to the city's commercial sector to become more environmentally aware and adopt 'green' and/or sustainable practices and operating procedures.

The Cape Town Green Map was launched on 5 June 2009 at a carbon-neutral 'virtual' function hosted on personal computers, laptops and mobile phones. The media were invited to register upfront to receive their green media pass, which provided up-to-the-minute news feeds on the day of the launch. The project has continued to grow from strength to strength with the number of listings having exceeded the 400 mark.

The Cape Town Green Map is available in an online interactive version, accessible to the general public and visitors alike, on www.capetowngreenmap.co.za. A printed version of the map is also available.

The Cape Town Green Map is based on the Open Green Map System (http://www.greenmap.org), thereby benefiting from Greenmap.org's resources and mapping technologies. Cape Town joined over 350 Green Map cities in 50 countries on the Greenmap.org website.

Lessons learnt on the Cape Town Green Map

The Cape Town Green Map is a legacy project of Host City Cape Town's Green Goal 2010 programme. The project built up a valuable track record and goodwill, having produced two print map editions and maintained a successful web presence. The services of a specialist mapping and communications team were commissioned to create the print and online versions of the Green Map. The team's creative approach was invaluable in creating a world-class map and web presence, and establishing it as a source of environmental information in the city. Green Goal funding will ensure a further print run of the map after the 2010 FIFA World Cup™, after which third-party sponsorship will again be considered.

Cape Town Green Map Informed fans about the numerous 'green' living options available in the city.

6.4 2010 Green Goal volunteer training module

The LOC identified 16 functional areas for volunteers, including in the field of environmental services. The LOC appointed 1 200 volunteers in Host City Cape Town, including 12 environmental services volunteers tasked to inform spectators of the environmental management initiatives implemented in the stadium precincts where they had been deployed. The environmental services volunteers received in-depth training to equip them to assist with recycling and waste management during the 2010 FIFA World Cup™, and informing local and international fans of the Green Goal programme.

Host City Cape Town also appointed 504 volunteers to assist with the logistical operations of the 2010 FIFA World Cup™. An environmental awareness training module was developed for these volunteers, incorporating contents from the City's Basic Environmental Awareness Training (BEAT), the Smart Living training modules for adult learners, and the DEA training course on event-greening guidelines. Six host city volunteers were assigned full-time to the Green Goal expo at the FIFA Fan Fest™, where they received specific training to assist with the Green Goal awareness programme.

DEA also trained 32 volunteers in each host city to support the Green Goal programmes. In Cape Town, the DEA volunteers assisted at the Green Goal expo at the FIFA Fan Fest™, and administered questionnaires during face-to-face interviews with fans. All the volunteers at the Green Goal expo were issued with a badge that encouraged fans to ask them about the Green Goal programme. They also walked among the fans with signage that created awareness of the Green Goal programme, and invited fans to visit the Green Goal expo.

The volunteer programme was one of the legacy programmes of the World Cup event, having aimed to equip volunteers with valuable work experience and the skills to serve at future major events. The imparting of environmental knowledge about the Green Goal 2010 programme, the city and the region was part of this legacy. The environmental awareness training module will be used for volunteer training for future major events in Cape Town and the Western Cape.

Lessons learnt on the Green Goal volunteer training module

Host City Cape Town took the important decision that all volunteers, regardless of where they had been deployed, had to receive basic environmental awareness training to equip them to answer general questions about Cape Town and environs. The inclusion of environmental services in the functional areas of all volunteers was an early success of the national Green Goal programme.

The LOC recruited environmental services volunteers for the FCC and the 2010 FIFA World Cup™, who contributed significantly to keeping the stadium environments litter-free by assisting spectators to recycle waste in the bins provided. Host City Cape Town gained valuable insight into the FCC volunteer programme, and applied it in the conceptualisation of the volunteer programme for the World Cup.

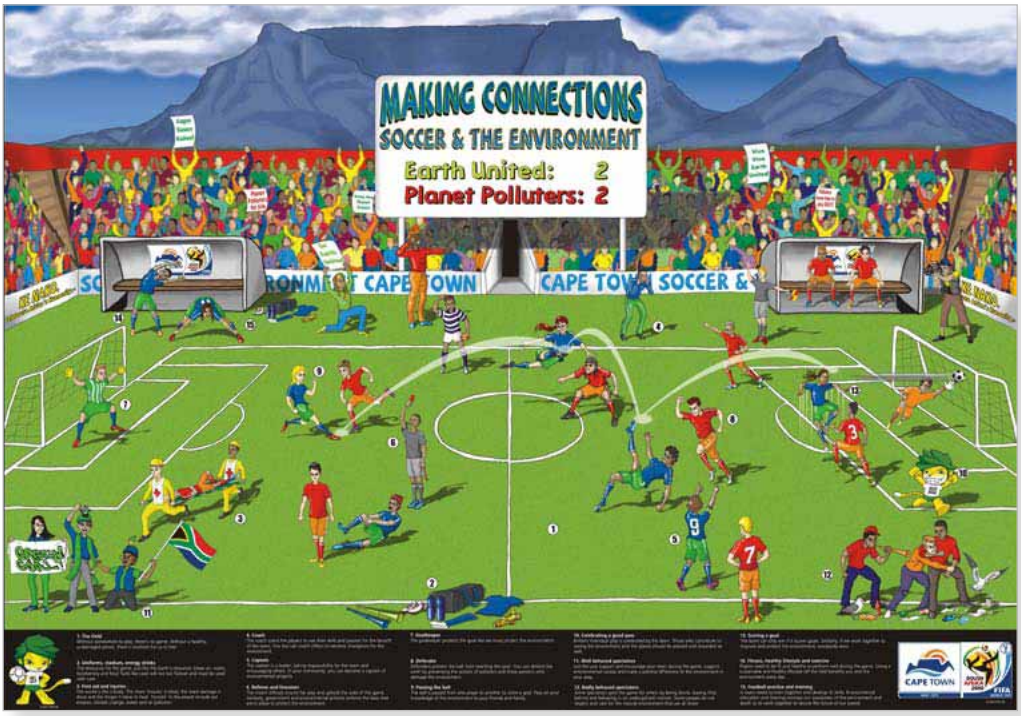
6.5 Green Goal soccer club competition

6.6 Soccer and environment educational poster and guide

The "Making Connections" soccer and environment project was conceptualised by the team responsible for the City Local Agenda 21 programme. The City partnered with a local NGO, Youth Unlimited, to develop the poster and conceptualise the messages. The poster was successfully piloted as an environmental education tool at a Manenberg youth football tournament in 2006.

The 2010 Green Goal soccer and environment educational programme targeted Grade 7 learners of schools participating in the City's Youth Environmental Schools (YES) programme. The poster was updated with new messages and a 2010 FIFA World Cup™ 'look and feel'. A teacher's guide, containing suggestions on how to integrate the soccer and environment poster and concepts with the Grade 7 curriculum, was also developed.

An educational programme, including an interactive theatre production, was developed using concepts from the poster and booklet, and was rolled out to 38 schools in Cape Town. During two teachers' workshops, educators were trained to use the booklet and poster in their lesson plans.



Twenty-four schools that participated in the soccer and environment educational programme participated in a Green Goal soccer and environment tournament on World Environment Day, six days before the kick-off of the World Cup, on 5 June 2010. Zakumi, the official 2010 FIFA World Cup™ mascot, visited and helped to hand out the prizes to the winners.

Lessons learnt on the soccer and environment educational poster and guide

Leveraging the opportunity provided by the 2010 FIFA World Cup™ to promote environmental awareness, and to educate and inspire learners about sustainability, was one of the key legacy objectives of Green Goal 2010. The World Cup created the platform to use soccer as a theme, and to publish an educational poster, which, together with an environmental education programme, aimed to raise awareness and change behaviour among Grade 7 learners. An interactive theatre production made use of concepts from the poster to support the message of environmental protection. The contents of the educational booklet were integrated with the school curriculum, so that teachers could utilise it as part of the syllabus.

6.7 Green Goal short films

A five-minute DVD promoting the Green Goal 2010 programme was developed and screened for the first time at the Green Goal Action Plan launch in October 2008. After that, the DVD was screened at various meetings and exhibitions, including Soccerex 2008 and 2009. Three short films on water conservation, waste reduction and recycling, and Green Goal 2010 in general were made and screened during the World Cup on the large-format screen at the FIFA Fan Fest™, at the Green Goal expo and at the fan jols.

Lessons learnt on the Green Goal short films

Audiovisual media are a powerful way to reach and inspire target audiences. Time on the big screens at the FIFA Fan Fest™ and the fan jols was reserved for the screening of the Green Goal short films.

To document the Green Goal programme effectively, new footage should be regularly obtained. Filming should start as early on in the process as possible.

6.8 Anti-littering and waste recycling campaign

The City has ongoing anti-littering campaigns as part of the Solid Waste Department's communications strategy. These were extended to incorporate the 2010 FIFA World Cup™. The character Zibi (the rubbish-eating ostrich) was used to assist with a public awareness campaign promoting a split-bin system for wet and dry waste in the Cape Town CBD, along the fan walk, at the FIFA Fan Fest™ and fan jols. The campaign targeted residents and visitors before and during the World Cup, and aimed to prevent littering and promote recycling in event areas.

In addition, the Province's 2Wise2Waste campaign, launched in December 2006, was rolled out to fan jols and base camps in the province as part of the 2010 FIFA World Cup™ preparations. The volunteers who had received training in the Green Goal programme assisted the Province-supported fan jols by raising awareness of waste separation and anti-littering actions at these venues.

The LOC also developed recycling signage, which was placed on the bins in the split-bin waste system at the FIFA Fan Fest™.

6.9 "Drink tap water" campaign

Every year since the Blue Drop awards were conceived in 2008, the City has been awarded Blue Drop status by the Department of Water Affairs (DWA). Blue Drop status indicates that consumers can safely drink water from the taps in Cape Town.

To provide access to clean, safe drinking water for all the soccer fans along the fan walk and at the FIFA Fan Fest™, water fountains were designed and installed. A short film was produced promoting the drinking of water from fountains, which was screened on the big screen at the FIFA Fan Fest™.

The water fountains will now be rebranded and used at other events and along the fan walk to coincide with major events in Cape Town Stadium.

Fans were encouraged to drink tap water from fountains at the fan fest and fan walk. Photo: Rob Oettle

Lessons learnt on the "Drink tap water" campaign

The installation of the water fountains at the FIFA Fan Fest™ and along the fan walk was welcomed by residents and fans. The fountains were well utilised, despite the fact that the 2010 FIFA World Cup™ was held in winter, when there is traditionally a demand for warm drinks.

The water fountains were designed to be reused at other events and along the fan walk.

The secondary message of the campaign, i.e. that drinking tap water could reduce the energy and waste created by bottled water production, was underplayed because of sensitivities around FIFA's commercial affiliates.

6.10 Green procurement for 2010 events

6.11 Greening of 2010 events

The City's Events Policy, adopted in October 2008, contains event-greening principles aimed at promoting environmentally and socially responsible events in the city. The principles are applicable to events in their entirety, including planning, construction, operations, management, decommissioning, and ongoing maintenance of events, events infrastructure and facilities.

Event-greening and green procurement criteria were included in the tenders for the event operators of Cape Town Stadium, the FIFA Fan Fest™, fan jols, the FIFA Fan Fest™ media centre, the fan walk and the Final Draw pre-event. A scoring mechanism was developed, which served as a basis for other operational tenders for the 2010 FIFA World Cup™. Workshops were arranged with the operators to discuss practical tips on how to implement event-greening at their respective venues and events.

Green Goal promotional items, including lapel badges, water bottles, note pads, goodie bags, and the peak caps and cotton golf shirts worn by the Green Goal team during the 2010 FIFA World Cup™, were manufactured in South Africa. In addition, PETCO sponsored Green Goal-branded long-sleeved T-shirts made from the fibre of recycled plastic bottles. Where possible, promotional items were sourced from SMME companies and suppliers.

Green Goal functions, including the launch functions of the Green Goal Action Plan and Green Goal Progress Report, were held at venues that subscribe to event-greening principles. The catering at these functions was vegetarian with fresh seasonal produce, and tap water instead of bottled water was served.

All Host City Cape Town Green Goal 2010 publications, including the Green Goal Action Plan and Progress Report, Green Goal brochure, two editions of the Cape Town Green Map and the Smart Events Handbook, were printed on Sappi Triple Green paper. Triple Green paper is made from chlorine-free sugar cane fibre sourced from local suppliers and obtained from sustainable and internationally certified afforestation, using independently audited chains of custody for incoming fibre. This paper was also used for the printing of the Final Draw and 2010 FIFA World Cup™ host city and media guides.

Split-bin waste recycling at the FIFA Fan Fest™. Photo: Rob Oettle

EXAMPLES OF EVENT-GREENING MEASURES IMPLEMENTED AT 2010 FIFA WORLD CUP™ VENUES

- No handouts of leaflets or souvenirs at the gates
- Separation of wet and dry waste at source at all venues
- Recycling of dry waste from all venues
- Making available reusable souvenir cups at the FIFA Fan Fest™
- Reusable cutlery and crockery in all VIP catering areas
- Tap-water fountains installed at the FIFA Fan Fest™ and along the fan walk
- Green-electricity certificates purchased from the Darling wind farm for the FIFA Fan Fest™
- Green-electricity certificates from hydropower installations donated by Eskom for use in Cape Town Stadium

Lessons learnt on green procurement and the greening of 2010 events

The lack of a comprehensive green procurement policy for South Africa was a challenge, although municipal legislation provided for environmental criteria to be included in tenders, as long as these were supported by a defensible scoring system. The City's scoring system is being refined and, once approved, can be applied to the procurement of goods and services for future events. Specific measures, such as the purchasing of green/renewable energy, should be implemented in future to improve the greening of events. In Cape Town, it is possible to purchase wind energy from a facility on the city's doorstep.

FIFA published a host city events guide, documenting the rules and procedures for host city events. It was disappointing that the events guide made no mention of event-greening as a requirement for host city events. It was left up to the host cities themselves to implement event-greening at their various events.

Host City Cape Town did extensive research on biodegradable plastics and composting to determine whether they would be a feasible alternative for conventional plastics. It was found that, without dedicated composting facilities, biodegradable plastics actually contaminate the industrial plastics recycling streams. Biodegradable cups, containers and cutlery should be used only when they can be kept in a separate waste stream and composted after the event.

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Zibi, the rubbish-eating ostrich assisted with a public awareness campaign.

KELPVUVUS: A SYMBOL FOR AN ECO-FRIENDLY WORLD CUP

Kelpvuvus, soccer blow horns made of sea kelp, were Cape Town's contribution to football culture. Eco-friendly and custom-crafted, the Kelp Environmental Learning Project, or simply KELP, creates opportunities for employment, social upliftment and environmental education. Based at the Kommetjie Environmental Action Group at Imhoff Farm in Kommetjie, and founded by Adam Carnegie, KELP employs as many as six formerly unemployed men and women, who collect kelp from local beaches, dry them in the sun, and then carve them into vuvuzelas. Unlike plastic vuvuzelas, Kelpvuvus are made from a sustainable resource, and do not harm the environment. Probably the most notable kelp vuvuzela is that blown by the whale crier in Hermanus, who walks around the town blowing his vuvuzela to inform locals and tourists alike where the whales are to be found. The Green Goal 2010 programme supported this project by purchasing Kelpvuvus for its communication campaign.

Eco-friendly kelp vuvuzelas made from an abundant natural resource, were a feature of the Green Goal Programme. Photo: Cape Town Green Map

Fans leaving Cape Town Stadium after a match. Photos: Bruce Sutherland, City of Cape Town

7 RESPONSIBLE TOURISM

Cape Town is one of the most beautiful places on earth, and attracts visitors from across the globe.

A more mindful approach to tourism that respects the natural and cultural environment and contributes in an ethical manner to local economic development is essential. Cape Town and the Western Cape are leaders in the move towards responsible tourism. Therefore, a KAS-sponsored Green Goal workshop entitled "Taking responsibility for tourism during the 2010 FIFA World Cup™" was held on 20 April 2009 to explore responsible-tourism objectives for the World Cup and beyond.

In December 2009 the City approved the Responsible Tourism Policy and Action Plan which set the scene for the tourism approach to be taken during the World Cup.

Responsible tourism was an integral part of the tourism development plan for the 2010 FIFA World Cup™. The development and marketing of tourism packages that emphasised environmentally friendly and socially responsible activities, for example, hiking trips in natural areas or township tours providing economic opportunities to disadvantaged communities, were promoted. Accommodation facilities were encouraged to improve their environmental footprint and provide guests with technical, organisational and behavioural options for a more resource-efficient stay. Activities focused on effective resource management (energy, water and waste) and the promotion of socially responsible investment, benefiting local communities.

Local communities and visitors were made aware of their responsibilities for example, communities to ensure a clean city and be friendly to visitors and visitors to ensure that during their stay they acted in a responsible manner.

THE PROJECTS

Crafters making beaded South African flags. Photo: Bruce Sutherland, City of Cape Town

CAPE TOWN DECLARATION NOW THE WORLD'S DEFINITION OF RESPONSIBLE TOURISM

The 2002 Cape Town Declaration on Responsible Tourism in Destinations defines responsible tourism as tourism that:

- minimises negative economic, environmental and social impacts;
- generates greater economic benefits for local people, and enhances the well- being of host communities;
- improves working conditions and access to the industry;
- involves local people in decisions that affect their lives and life chances;
- makes positive contributions to the conservation of natural and cultural heritage, embracing diversity;
- provides more enjoyable experiences for tourists through more meaningful connections with local people, and a greater understanding of local cultural, social and environmental issues;
- provides access for physically challenged people; and
- is culturally sensitive, encourages respect between tourists and hosts, and builds local pride and confidence.

TOURISM IMPACT OF THE 2010 FIFA WORLD CUP™

- A total of 309 554 foreign tourists arrived in South Africa for the primary purpose of attending the 2010 FIFA World Cup™. African land markets accounted for 32% of total foreign tourists, followed by Europe with 24% and Central and South America with 13%.
- A total of 59% of arrivals for the World Cup were first-time visitors to South Africa.
- The total expenditure in South Africa by tourists who came specifically for the 2010 FIFA World Cup™ was R3,64 billion. Foreign tourists spent an average of R11 800 in South Africa for the duration of their trip, compared to the annual average spend of R9 500 in 2009.
- Europeans spent the most in South Africa during this period. Most tourists spent their money on shopping, followed by accommodation and food and drink. These tourists' average length of stay was 10,3 nights.
- A total of 79% of tourists stayed in paid accommodation, with 21% staying with friends and family.
- Tourists from Australia and North America stayed the longest.
- Gauteng, which hosted the majority of the matches, was the most visited province during the event, with 223 039 foreign tourists, followed by the Western Cape (108 384) and KwaZulu-Natal (83 819).
- In addition to FIFA's official media programme, Cape Town Tourism hosted more than 520 members of the media from 16 countries, representing major newspapers, broadcasters and online platforms, exposing them to the city's environment and responsible-tourism programmes.
- A total of 89% of tourists said they would consider visiting South Africa again in the future, while 96% said they would recommend the country to their friends and relatives.
- Total awareness of South Africa as a leisure destination increased by 9% following the event.
- The intention to visit South Africa in the short-term increased by 35% following the event.

PROJECT ACTIONS

7.1 Code of responsible conduct for visitors

The City's Tourism Department and Cape Town Tourism (CTT) jointly developed a code of responsible conduct for visitors and tourism product owners/operators, building on the Cape Town Declaration of 2002, when the first International Conference on Responsible Tourism in Destinations was held in Cape Town, with the ratified Cape Town Declaration becoming the global definition for responsible tourism.

An abridged version of this code was included in the 2009 official Cape Town visitor's guide, and responsible-tourism tips for travellers were featured in the 2010 official visitor's guide as well as in the 2010 official fan's guide.

A Responsible Tourism Policy and Action Plan was approved by the City in 2009 followed by the signing of a responsible tourism charter by the City and major tourism associations also in 2009.

A responsible-tourism DVD, "Taking Responsibility for Tourism", was commissioned by the Tourism Department specifically for the World Cup to convey to visitors the approach taken by Destination Cape Town, and was screened at the Green Goal expo at the FIFA Fan Fest™, raising awareness of the issue.

Lessons learnt on the code of responsible conduct for visitors

As the 2009 winners of the "Best Destination" category of the Virgin Holidays Responsible Tourism Awards, Cape Town has been recognised internationally by the tourism sector as a leading destination in adopting and practising responsible tourism. A programme is in place to make Cape Town a truly responsible destination, and to ensure that key stakeholders have appropriate levels of awareness and understanding of responsible tourism. The City and its partners in the tourism industry have recognised the role of responsible tourism in achieving the triple-bottom line outcomes of sustainable development, i.e. economic growth, environmental integrity and social justice.

The opportunity to use the platform of the World Cup to promote the message of responsible tourism to both local and international fans was an important one. Subsequent to the World Cup, the events industry developed a Smart Events Handbook to encourage and guide event organisers in hosting sustainable events in Cape Town.

7.2 Responsible-tourism awareness and training

CTT together with the City's Tourism Department presented a responsible-tourism awareness and training course to the industry as part of a service excellence programme. The training was based on the contents of the City's Smart Living Handbook, and was implemented before and during the 2010 FIFA World Cup™.

In addition, the City coordinated a clean-up and awareness campaign, 'Operation Green', in four areas, mobilising learners and local NGO's. The campaign focused on waste and how to be a responsible citizen in ensuring that the City was litter-free and welcoming to visitors.

Lessons learnt on responsible tourism awareness and training

The Responsible Tourism Awareness and Training workshops were successful in that the tourism industry was engaged around service excellence and responsible practise ahead and during the World Cup. The training programme is ongoing as part of the City's Responsible Tourism approach.

The 'Operation Green' campaign was successful and communities felt proud to be part of the clean-up campaign in preparation for the World Cup.

7.3 Environmental certification system for accommodation sector: GreenStaySA

GreenStaySA is an online information resource and certification system that supports the move towards improved environmental performance in the accommodation sector. It provides guidance and support to facilities that wish to improve their environmental footprint and operate in an environmentally responsible manner. All accommodation establishments, however small, may use the GreenStaySA tools and resources to improve their environmental footprint.

The tools and resources that have been developed include the following:

- A self-assessment tool to assess current environmental performance
- A technical manual to assist accommodation establishments in the implementation of environmental interventions

GreenStaySA has its origin in a pilot project initiated in 2004 under the "Cleaner Production" programme of the DEA&DP. Nine accommodation establishments participating in the pilot were audited for energy and water consumption and management as well as waste management. During the pilot project, a need for a certification programme was identified. The development of such programme was subsequently funded by the DEA&DP and the British High Commission. Certification of tourism businesses under GreenStaySA commenced in 2010. It is envisaged that GreenStaySA will merge with a prominent South African responsible-tourism certification body in order to strengthen access to the tourism industry.

Responsible-tourism training workshops were convened by the DEA&DP and GreenStaySA throughout the Western Cape.

Currently, SEA and the DEA&DP are working together with the National Department of Tourism, the Tourism Grading Council of South Africa (TGCSA) and other responsible-tourism certification authorities to develop and implement a national standard for responsible tourism as well as an accreditation system for the certification agencies in South Africa. These standards are being approved through the South African National Standards public participation process, and will be launched in 2011.

After transport, the accommodation sector accounted for most of the World Cup's carbon footprint. A survey conducted by South African Tourism indicated that, of the approximately 309 000 international visitors, 79% used hotels, guest houses or bed-and-breakfasts for overnight accommodation. With another approximately 300 000 guest nights in the form of event organiser and team accommodation, this resulted in a total of approximately 525 000 guest nights being spent in the host city. The estimated resource implications of these guest nights are shown in Table 14 below.

TABLE 14: Impact of accommodation on resource use

	Per guest night	Total
Energy kWh	29*	15,250,994 kWh
Water kℓ	0,7**	368,127 kℓ
Waste tonnes	0,00073**	385 tonnes
CO^2 tonnes from electricity use		15,197 tCO^2e

* From Econ Pöyry carbon footprint report based on study of 47 South African hotels

** From Green Globe environmental benchmarking system

Lessons learnt on GreenStaySA

A very small proportion (fewer than 500) of tourism enterprises in South Africa are currently accredited with responsible-tourism schemes, compared to 8 457 in the country that have a star rating from the TGCSA. Although the low level of uptake by tourism enterprises in South Africa is not unusual when compared to global experience, it is an indication that responsible-tourism certification is not yet mainstreamed in South Africa.

The delays in rolling out GreenStaySA or any significant adoption of green certification for the 2010 FIFA World Cup™ were due to the National Department of Tourism's ongoing process to formalise minimum standards for responsible tourism.

FIFA and its hospitality provider, MATCH, did not require the accommodation establishments signed up with them to demonstrate that they had a greening programme. Phasing in this requirement over time could lead to the accommodation sector in host countries becoming more proactive in improving their environmental performance.

GreenStaySA brochure for the greening of the accommodation sector during the World Cup.

7.4 Smart Events Handbook

Host City Cape Town produced a Smart Events Handbook to guide event organisers, venue staff and suppliers in planning and implementing events in a sustainable and responsible manner. The handbook provides an overview of event-greening and contains practical tips for implementation. It can be used for a range of events, such as meetings, conferences, exhibitions and applied equally to large sporting events and to small community initiatives.

The handbook was developed in consultation with partners and key role players in the events industry and was endorsed by a number of industry bodies and networks.

The Smart Events Handbook was published during the 2010 FIFA World Cup™ to take advantage of the media opportunity presented by the event. A copy of the Smart Events Handbook can be downloaded from www.capetown.gov.za/smartlivinghandbook.

Lessons learnt on the Smart Events Handbook

The Smart Events Handbook is endorsed by a wide range of organisations active in the events and conference industry. The handbook has been widely distributed as a result of the buy-in of these industry bodies and networks such as the Event Greening Forum.

It is not yet known how widely the document is used, but early indications are that event organisers are starting to apply some of the suggestions and clients, including City departments, are using the handbook to evaluate venues for functions and inform specifications for service providers assisting to organise events.

Key references on responsible tourism

- City of Cape Town. 2007. Smart Living Handbook. Making sustainable development a reality in Cape Town homes.
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- Department of Environmental Affairs and Development Planning. Provincial Government of the Western Cape. 2006. What Cleaner Production means for your bottom line in the Hospitality Industry (case studies).
- Department of Environmental Affairs and Tourism. April 2009. Towards national minimum standards for responsible tourism and an accreditation system for certification agencies. Phase 1 Situation Analysis (Unpublished).
- GreenStaySA. 2009. Training manual and certification criteria. www.greenstaysa.org.za.
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The FIFA Fan Fest™ on the Grand Parade at full capacity. Photo: Bruce Sutherland, City of Cape Town

Fans were encouraged to learn about the greening of the World Cup, through exhibitions and educational theatre. Photos: Bruce Sutherland, City of Cape Town

8 GREEN GOAL COMMUNICATIONS

All role players, including the broader public, visitors, service providers and industries, needed to be encouraged to participate actively in all aspects of the greening of the event. A clear outreach strategy had to be drafted to ensure that all event-greening stakeholders were aware of their roles regarding greening implementation. Also, an educational and public awareness campaign had to be developed to raise awareness and facilitate behavioural change among fans and local residents.

The World Cup provided an exceptional platform to increase awareness of Cape Town's unique environment and the initiatives that had been put in place to make the World Cup a sustainable event.

Information on the objectives, milestones and implemented projects orientated audiences to the Green Goal programme. It also provided a context, placing the 2010 environmental programme within the existing communications framework of the City's Integrated Development Plan as well as the City and Province's various policies and strategies aimed at environmental protection.

Promoting permanent and positive behavioural change towards the environment was another Green Goal objective. The platform of the 2010 FIFA World Cup™ was therefore used to profile international and local environmental challenges, and to promote activities to address these challenges in Cape Town.

A KAS-funded workshop on Green Goal communications in Host City Cape Town was held in March 2008. A further workshop in the same month, also funded by KAS and coordinated by the LOC, was held in Johannesburg for all the host cities.

Tools such as a Green Goal website, logo, newsletter, brochures, exhibition and DVD were used to inform fans about the greening initiatives.

The media were an important stakeholder, and regular media interaction helped spread the message of the status of the Green Goal project implementation.

The key objectives of the Host City Cape Town Green Goal 2010 communication and awareness plan were as follows:

- To raise the profile of Cape Town and the Western Cape as responsible hosts of the 2010 FIFA World Cup™.
- To raise awareness of measures taken to host the event in an environmentally sustainable way.
- To use the 2010 FIFA World Cup™ platform to demonstrate how residents and visitors could live a more sustainable lifestyle.
- To align messages communicated by various stakeholders involved in Green Goal 2010.
- To facilitate media coverage of the Green Goal 2010 programme in Cape Town/the Western Cape.
- To build on the growing awareness of environmental issues and sustainable development globally, but particularly in African countries.
- To encourage behavioural change among football fans.
- To encourage corporate responsibility among private-sector suppliers, governments and municipalities.
- To provide a model for replication at other major sporting and cultural events.

THE PROJECTS

PROJECT ACTIONS

8.1 Green Goal workshop series 1 and 2

Green Goal workshop series 1 and 2 were completed from 2007 to 2009. For more details, refer to Section 4 of this Report.

Lessons learnt on the Green Goal 2010 workshop series

The first Host City Cape Town Green Goal workshop series invited stakeholders to work with local government to agree on the priorities for the 2010 FIFA World Cup™ event-greening programme. The workshop series ensured consultation with a wide range of stakeholders before decisions were made on principles, objectives and projects. The second Green Goal workshop series was more focused and aimed to advance the implementation of specific projects. The carbon offset workshop, as an example, informed the final selection of carbon mitigation projects to be funded from the UEMP 2010 carbon interventions fund. The workshops led to buy-in from senior management of the City and the Province, and increased political support.

8.2 Green Goal brand development and activation

8.4 Green Goal marketing and communications plan and roll-out

8.5 Green Goal ambassadors

8.6 Green Goal website and online resources

8.7 Online press resources and materials

One of the key legacy opportunities presented by the 2010 FIFA World Cup™ is the platform that the event provided to leverage international and local media attention, which, in turn, led to behavioural change in favour of the environment. This will have the long-term benefit of reducing the consumption of scarce resources, such as water, energy and biodiversity, as well as reducing the amount of waste ending up on landfill sites.

A Green Goal communications and awareness plan was compiled in line with Host City Cape Town's 2010 FIFA World Cup™ communications strategy. The plan identified key messages, target audiences and channels of communication.

The LOC released the official Green Goal logo only six months before the start of the 2010 FIFA World Cup™. The official mark, owned by FIFA, was subject to FIFA's guideline for the operation of the Green Goal programme and utilisation of the Green Goal logo. Any application of the logo had to be preapproved by FIFA. Host City Cape Town developed an internal guideline for the use of the Green Goal logo with the host city logo and its creative elements.

A Host City Cape Town Green Goal website was created at www.capetown.gov.za/fifaworldcup. It was regularly updated and served as an online resource for people who wished to learn more about the event-greening programme in Host City Cape Town.

Other communication channels and resources used to promote the Green Goal programme and its key messages included the following:

- Green Goal brochure
- Green Goal expo
- Publications (including Green Goal Action Plan and Green Goal Progress Report)
- Media releases
- Regular radio slots and television interviews
- Media partnerships with three major daily newspapers
- Features in City newsletters
- Features in industry magazines
- Big screens at the stadium and FIFA Fan Fest™/fan jols
- Official speeches
- 2009 and 2010 official tourist guides
- Official event guides for the Final Draw and 2010 FIFA World Cup™

A photographer and videographer were appointed to document Green Goal activities during the 2010 FIFA World Cup™, both in the lead-up to the kick-off and throughout the tournament at the FIFA Fan Fest™, fan walk and fan jols. A short video was produced after the 2010 FIFA World Cup™ that captured the excitement of the event, and showcased the greening measures that had been undertaken to make the 2010 FIFA World Cup™ an environmentally sustainable event.

Green Goal 2010 brochure.

Maintaining a good relationship with the media and stakeholders was a priority of the Host City Green Goal programme. Positive media coverage resulted from the launch of the Green Goal Action Plan and Progress Report. Green Goal featured prominently as part of the media partnership between the City and two local media houses that covered host city activities between January and June 2009. Articles focusing on the green technologies in Cape Town Stadium, the development of the Green Point Park spring water irrigation project, integrated waste management, city beautification, eco-driving training, the solar water heater carbon mitigation project and the proposed Smart Living Centre were published. During the World Cup, a communications consultant was appointed to assist with media releases in respect of the Green Goal programme and its activities. This resulted in coverage in print media, on radio, the internet and television.

The Host City Cape Town Green Goal programme was featured twice on the South African Broadcasting Corporation's Countdown 2010 television programme as well as on the environmental programme 50/50.

The virtual launch of the Cape Town Green Map attracted significant media attention, and the project manager and Green Goal team members were interviewed on radio and television. The project team used the local media to invite NGOs and communities to register their environmental projects and products on the Cape Town Green Map. Innovative new media, such as Sony Fevacasters, were used to feature various aspects relating to the preparations of the event in South Africa. In Cape Town, the new stadium and its green technologies were featured to an exclusively online audience. The FIFA Fan Fest™ made extensive use of Facebook and Twitter to communicate the upcoming events and the vibe around them.

Three Green Goal DVDs were regularly broadcast on the big screen at the FIFA Fan Fest™. A Green Goal DVD, produced by the LOC, was also screened at Cape Town Stadium before the start of each match. Green Goal brochures, copies of the Cape Town Green Map and other Green Goal marketing materials were available during the 2010 FIFA World Cup™ at the various information kiosks in the city and at the Green Goal expo at the FIFA Fan Fest™. Over a period of three years, more than 70 Green Goal presentations were made to stakeholders and the media. The Host City Cape Town Green Goal programme was also presented at the G-ForSE conference in Alicante, Spain, in October 2008, and in Nairobi, Kenya, in November 2010.

Lessons learnt on Green Goal brand development and activation, Green Goal marketing and communications, Green Goal ambassadors, and the Green Goal website and online resources

The 2010 World Cup provided a platform for the environmental message to be presented to a wide audience. At a national Green Goal communications workshop in 2008, the host cities agreed with the LOC that a national Green Goal 2010 visual identity (logo) would be designed and promoted ahead of and during the World Cup, and that national 2010 Green Goal ambassadors would be appointed to represent the 2010 greening programme. Both these initiatives were launched very late by the LOC, resulting in insufficient marketing and awareness of the Green Goal brand. The lack of FIFA involvement as well as the low-key integration of Green Goal with overall LOC World Cup communications meant that valuable communication opportunities had been lost. Nonetheless, by keeping the media informed of Host City Cape Town Green Goal projects, some media space for Green Goal was achieved.

The media's focus on the 2010 greening programme manifested in the following ways:

- Until approximately four months before the event, the media and the general public had been content just to know that there was a greening programme for the 2010 FIFA World Cup™. They were not really interested in the details. However, questions did arise with regard to progress towards reaching stated goals and the legacy that the initiative would leave behind.
- From approximately four months before the event (or just after the 2010 Winter Olympics in Vancouver, which probably was the greenest Olympic Games to date), attention turned to South Africa as the next host of a major international sporting event. Suddenly, the general media wanted to know whether we were ready, what visitors could expect when they came to South Africa/ Cape Town, what the event cost, what the legacy of the event was, etc. The environmental media asked about the event's carbon footprint, the environmental impact, the green status of the stadia, and the event-greening plans and programmes.

Social media networks, such as Facebook and Twitter, provided instant access to a large audience interested to follow the World Cup and related activities. The ability of instant video uploads onto sites such as YouTube provided further opportunities to share information with a large international audience at a very low cost. The Green Goal programme had not reached out to this new audience until just before the World Cup, when Green Goal messages started to appear on the Facebook and Twitter sites of CTT and the FIFA Fan Fest™, and theme-specific videos were uploaded onto YouTube.

Host City Cape Town also established a website shortly after it had been announced as a host city of the 2010 FIFA World Cup™. Comprehensive information on the Green Goal programme was included in the website, which served as background information for the media and the many students and researchers who did research on the World Cup and the Green Goal programme. Documents could be downloaded, which saved on the printing of hard copies.

8.3 Briefing for potential Green Goal funders

Host City Cape Town was fortunate to attract two partners, KAS and Sappi, as Green Goal contributors. Additional support and sponsorships were received from the following organisations:

- DANIDA via the UEMP
- Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)
- InWEnt – Capacity Building International, Germany
- Öko-Institut, Germany
- UNEP
- Coca-Cola ZZ
- SAPIA
- Murray & Roberts/WBHO
- Polyoak Packaging
- PETCO
- WORLDSPORT
- Eskom

8.8 Green Goal 2010 exhibitions

The Host City Cape Town Green Goal programme was featured at a number of national exhibitions, including the Tourism Indaba in Durban and Soccerex in Johannesburg in both 2008 and 2009. Green Goal content was featured as part of the host city exhibition during the Final Draw at the CTICC in December 2009, and the Host City Cape Town Green Goal Progress Report was approved by FIFA for distribution at the Final Draw. The host city displays at the Final Draw and at Cape Town Stadium during the 2010 FIFA World Cup™ promoted Cape Town and the Western Cape as responsible-tourism destinations.

A portable Green Goal exhibition was procured and used at the 2010 biodiversity expo as well as a number of other smaller expos in Cape Town before the 2010 FIFA World Cup™. The exhibition was used at a Germany/South Africa expo in June 2010 and, in the FIFA Fan Fest™ media centre for the remainder of the World Cup period. For four months following the event, the exhibition was displayed in the Cape Town Stadium visitor centre.

FIFA made extensive use of a new product, X-board (Xanita board), which is manufactured in Cape Town, for the production of temporary furniture in the Final Draw venue and in the stadia during the FCC and 2010 FIFA World Cup™ matches. The board is lightweight with a printable laminate surface; is entirely recyclable, and can be reprocessed into pulp, achieving cradle-to-cradle ecological benefits. Host City Cape Town used X-board as part of an exhibition to support the fuel-efficiency campaign.

For the duration of the World Cup, Green Goal projects were showcased in a specially designed and constructed Green Goal expo at the FIFA Fan Fest™ on the Grand Parade. The expo was designed to inform soccer fans about the Green Goal programme, encourage visitors to enjoy the World Cup activities in a responsible manner, and motivate fans to apply green living practices in their daily lives. The expo structure had been specifically designed to demonstrate the use of materials that were recycled, reusable, reclaimed, or newly purchased but earmarked for reuse afterwards, so as to produce zero waste after deconstruction.

The Green Goal Expo at the FIFA Fan Fest™ on the Grand Parade during the World Cup. Photos: Stephen Lamb

Large posters at the Green Goal Expo showcased the Green Goal 2010 projects.
Photo: Arne Purves

> **“Nice to see that things are being done with the environment in mind and that saving the earth is just as important as football.”**
>
> David Davey, Fan Fest visitor

Lessons learnt on the Green Goal exhibitions

The portable Green Goal exhibition was widely used at events in the months leading up the 2010 FIFA World Cup™, and its installation in the FIFA Fan Fest™ media centre during the event increased the media's exposure to the Green Goal message. Elements from the portable exhibition were on display at the G-ForSE conference in Nairobi, Kenya, in November 2010 as well as the Brazil Ministry of Sport 2014 FIFA World Cup™ and Sustainability seminar held in Rio de Janeiro in December 2010.

The Green Goal 2010 expo at the FIFA Fan Fest™ successfully showcased the City's Green Goal campaign. This was measured by visitors' responses to the stand (both written and verbal), which were overwhelmingly positive from both locals and tourists. Many visitors (especially locals) asked questions such as 'What can we do?', 'Is the City going to carry on with this after the World Cup?' and 'Where can we find out more?'

The expo was a unique physical creation, and the flags and interesting look of the expo made it easy for people to find. People were intrigued by the stand, praised it, and were delighted to learn about what the City had done to green the World Cup. Locals were amazed and proud of what the City had done. It was a much talked-of stand, and people often returned to it or used it as a landmark meeting place at the FIFA Fan Fest™. In many ways, it was quite iconic.

However, it was difficult to measure the extent of information visitors absorbed, and the messages they took with them. Also, it is difficult to ascertain whether the programme of activities will promote long-term behavioural change. The programme objectives centred on enlightening, educating, motivating and encouraging. One can only hope that some meaningful information was received and that, in time, behaviour will change.

Pamphlets and information brochures were available at the stand. However, it is debateable as to how effective these were. Sometimes, visitors just collected the brochures without engaging with the stand at all. Some days, no printed materials were put out on the stand; then, it was found that visitors engaged more in conversation and with the information presented in the stand itself. However, most people welcomed printed materials. Therefore, it was difficult to achieve the right balance between materials and actual engagement with the stand.

THE GREEN GOAL 2010 EXPO AT THE FIFA FAN FEST™

The form of the Green Goal 2010 expo structure was a cube clad in a matrix of 1 450 multicoloured plastic milk crates containing 17 400 empty milk bottles, all tied to a scaffolding frame. Low-energy lighting illuminated the crates from behind, turning them into a glowing 'jewel box' by night. Local references to indigenous plants, fynbos smells, colours and quiet spaces enticed visitors to experience the Green Goal expo posters inside. A 'forest' of bamboo flags waved in the wind, announcing the Green Goal 2010 expo from afar.

The expo housed visual information (ten 2,4 x 0,8 m posters) as well as two flat-screen monitors for the screening of Green Goal videos produced for the World Cup on the topics of drinking tap water, recycling waste and Green Goal projects in general.

Environmental services volunteers from the City, volunteers trained by DEA, together with permanent City and Province employees and interns staffed the expo. Fifty-six people worked to manage the stand throughout the World Cup, from early in the morning until late at night. A programme of educational and awareness activities included the fans scoring green goals with a 'waste monster' as the goalkeeper.

Three provincial soccer ambassadors, David Byrne (former South Africa U-23 player), Sivuyile 'Sugars' Qinga (former Seven Stars captain) and Joanne Solomons (former Banyana Banyana striker) visited the expo, interacted with the youth, and scored green goals for the environment against the waste monster.

In total, approximately 15 000 people visited the expo for the duration of the World Cup.

An educational theatre group helped to raise awareness of the environment and Green Goal at the FIFA Fan Fest™ on the Grand Parade. Photo: Stephen Lamb

8.9 Green Goal 2010 awards

The Host City Cape Town 2010 FIFA World Cup™ Green Goal Action Plan and workshop series won a silver Impumelelo Sustainability Award. Over 250 applications from across South Africa were received.

Host City Cape Town and KAS were instrumental in bringing the opportunity of a National 2010 Sustainability Award to the attention of the Impumelelo Awards Trust. The Impumelelo 2010 Sustainability Award was consequently launched in May 2009, with KAS as a headline partner and Danny Jordaan, LOC CEO, as the guest of honour. The Cape Town Green Map, a legacy project of Green Goal 2010, made the top-100 cut.

Host City Cape Town's Green Goal programme also received a certificate for "Best-Practice Model for Environmental Sustainability" from KAS at the SA-German Chamber of Commerce and Industry gala dinner on 10 July 2010.

More recently, the 2010 FIFA World Cup™ Host City Cape Town Green Goal programme was awarded the International Olympic Committee (IOC) Sport and Environment Award. Nominated by FIFA, the award recognises the efforts of the Host City to mitigate negative environmental impacts of the World Cup and to maximise the positive environmental and social legacy.

Lessons learnt on the Green Goal 2010 awards

There are clear benefits to ensuring a Green Goal awards programme. This motivates local authorities and their implementing partners, and creates awareness of event greening and its importance.

Key references for Green Goal communications

- City of Cape Town. February 2009. Draft Green Goal 2010 marketing and awareness plan.
- City of Cape Town. 2009. Cape Town – 2010 FIFA World Cup™ Host City. Ready to Welcome the World. Official 2010 FIFA World Cup™ site. www.capetown.gov.za/fifaworldcup.
- Columns and features in Cape Times, Cape Argus and Die Burger. Impumelelo Awards Trust. April 2008. 2010 Sustainability Award.
- Impumelelo Awards Trust. November 2010. Impumelelo Magazine.
- FIFA Local Organising Committee (LOC). April 2008. Communications Action Plan for FIFA 2010 World Cup™ (Unpublished).
- Sustainable Energy Africa. October 2008. 2010 FIFA World Cup™ Host City Cape Town Green Goal Action Plan.

Green Goal 2010 Coordinator, Lorraine Gerrans (fourth from left) at the IOC 9th World Conference on Sport and Environment held from 30 April – 1 May 2011 in Doha, Qatar. Photo: Qatar Olympic Committee

9 MONITORING, MEASURING AND REPORTING

To assess the effectiveness of the Green Goal 2010 projects, and to ensure accurate reporting of progress and results, a comprehensive monitoring strategy was developed. This strategy relied on the development of both an efficient system for collecting information, and the establishment of baseline data against which pre-set targets could be measured. The effectiveness of the greening projects and their impact were evaluated on an ongoing basis. The first set of results was published in the Host City Cape Town 2010 FIFA World Cup™ Green Goal Progress Report, while this Host City Cape Town 2010 FIFA World Cup™ Green Goal Legacy Report presents the final results.

THE PROJECTS

Monitoring, measuring and reporting actions

The Host City Cape Town Green Goal projects were documented and tracked by means of project management methodologies. Monthly reports and scorecards were produced, which documented progress and key decisions, and highlighted issues and areas of risk. The Host City Cape Town 2010 FIFA World Cup™ Green Goal Progress Report, published in September 2009, provided a summary of the status of each project, and highlighted lessons up to that point. This Host City Cape Town 2010 FIFA World Cup™ Green Goal Legacy Report will serve as a guide for the hosting of future major events in Cape Town as well as to hosts of future FIFA World Cup™ tournaments and other major events worldwide.

The lack of baseline environmental information for a major event such as the FIFA World Cup™ was identified as a challenge early on. The LOC commissioned baseline energy, water and waste studies during rugby matches at Ellis Park Stadium in Johannesburg and Loftus Versfeld Stadium in Pretoria, and these were augmented by a baseline study commissioned by Host City Cape Town during the Manchester United/Kaiser Chiefs football match at Newlands

DEA volunteers conducted more than 2 000 face-to-face interviews on greening the World Cup. Photo: Sheryl Ozinsky

Stadium on 19 July 2008. The baseline studies informed the development of minimum greening standards and a monitoring and evaluation matrix created by the LOC. The monitoring matrix guided the development of the Green Goal component of Host City Cape Town's integrated event-reporting tool.

The integrated event-reporting tool was the first of its kind for a South African city, and added substantial value to the monitoring and reporting initiatives of Host City Cape Town during the 2010 FIFA World Cup™. The monitoring tool made provision for the monitoring of the environmental impact of the event in terms of energy and water use, waste generated and recycled, and emissions into the atmosphere from transport and energy sources.

The City commissioned a visitor survey during the 2010 FIFA World Cup™. This survey collected data on visitors, consumer behaviour, attendance, demographics, and perceptions of Cape Town and South Africa. Questions relating to the event's perceived impact on the environment and visitors' perceptions of responsible tourism were included in the questionnaire.

In addition, the DEA volunteers in Cape Town and the Western Cape conducted more than 2 000 face-to-face interviews, using a questionnaire developed by the DEA. The transport work stream also used host city volunteers to monitor the use of public transport, which information was captured in the event-reporting tool.

Monitoring, measuring and reporting results

Results that enabled the monitoring and assessment of the event's impact were both qualitative and quantitative. To quantify the impact, data on energy use, water consumption and waste generation as well as transport trends, modes and distances were tracked. This was no small task, but with preplanning and use of the integrated event-reporting tool, most of the information could be collected.

For qualitative monitoring, information on the experiences of the Green Goal team as well as other staff involved in event implementation was gathered by means of interviews or descriptive reports submitted, which was documented under each individual project description. The DEA questionnaire also contributed to the qualitative assessment. Both the quantitative and qualitative assessment results were included under the individual project sections, and a summary assessment is provided in Section 5 of this Report.

Lessons learnt on project monitoring, measuring and reporting

In general, the data collection systems that had been established for the Green Goal 2010 programme were adequate, and enough data were collected to quantify consumption and impact, including CO^2 emissions. This was largely due to the preplanning that had been undertaken. However, there were some inconsistencies in the data, which led to a measure of uncertainty in the results. A more integrated system of data collection and checking would have been useful (for example, including a cross-check between the event assessment tool and the individual venue operators' reports – which were not always consistent).

The reporting matrix developed by the LOC succeeded to some degree to standardise the information collected by all host cities. However, because of the lack of submetering of energy and water use at Cape Town Stadium and other venues, a detailed venue-specific breakdown of the use of these resources could not be provided. Retrofitting of submeters is possible in Cape Town Stadium and will be considered as part of future upgrades to the stadium.

Low-energy lighting illuminated the Green Goal Expo at the FIFA Fan Fest™ turning it into a glowing jewel box by night.

Photo: Stephen Lamb

GREEN GOAL 2006 AND 2010
IS THERE PROGRESS?

Host City Cape Town enthusiastically embraced the Green Goal concept, as initiated in Germany for the 2006 FIFA World Cup™. Host City Cape Town's performance was thus assessed against the Green Goal 2006 Legacy Report to ascertain whether Host City Cape Town advanced on the Green Goal path in 2010.

A public art installation in the Cape Town CBD of 200 trees wrapped in a rainbow palette of coloured cotton fabric by Cape Town artist Strydom van der Merwe, enhanced key pedestrian routes.

Photo: Bruce Sutherland, City of Cape Town

7 GREEN GOAL 2006 AND 2010

IS THERE PROGRESS?

Host City Cape Town enthusiastically embraced the Green Goal concept, as initiated in Germany for the 2006 FIFA World Cup™. Overall indications are that Cape Town performed well in implementing the programme, but, given the environmental imperatives facing the world and the huge impact of such an event, it is important that the Green Goal concept be further strengthened and developed with each World Cup.

It is important to note that the Green Goal concept cannot be transferred from one host country to another in its entirety. The initiative needs to be adapted to suit the political and socio-economic parameters of the host country. For example, in a developmental context, the social component may need to be emphasised more.

Host City Cape Town's performance was thus assessed against the Green Goal 2006 Legacy Report to ascertain whether Host City Cape Town advanced on the Green Goal path in 2010. Although the programme varied in detailed implementation, with Host City Cape Town placing more emphasis on ensuring that the event contributed to social development, the overall thematic design in 2006 was relatively similar to Cape Town's approach, as can be seen from the 2006 Green Goal principles in Table 15.

Patriotic fans during the World Cup. Photo: Bruce Sutherland, City of Cape Town

TABLE 15: Green Goal principles for the 2006 FIFA World Cup™

Water
Careful treatment of potable water is the focus of attention. This includes reducing the consumption of potable water, the use of rainwater, well water and surface water instead of potable water, allowing rain to infiltrate naturally, and reducing contamination of wastewater and groundwater.
Waste
Waste should be avoided to the greatest extent possible. Unavoidable waste should be recycled in an environmentally favourable manner, and non-recyclable waste should be properly disposed of.
Energy-saving
Energy-saving potentials will be exploited during the World Cup through modern technical and organisational measures, wherever these are possible and economically feasible. The energy required for the efficient organisation of the World Cup will be produced as far as possible by environment-compatible means.
Transport
Transport during the 2006 FIFA World Cup™ should be environmentally favourable and efficient. Activities should be focused on the avoidance of unnecessary transport and a marked shift to public means of transport, as well as on the efficient and ecological design of the existing transport system.

Approach to monitoring and evaluation

Monitoring is often heavily influenced by practical constraints, including the availability of information and the allocation of resources to information collection (which can be very demanding). The 2006 FIFA World Cup™ Green Goal programme faced a number of these practical constraints. Based on this experience, Host City Cape Town adopted the approach of assessing the impact based on resource savings and other interventions implemented, and the expected savings resulting from these, rather than collecting huge amounts of detailed baseline data and extensive monitoring of exact resource consumption at numerous points, which would not have been feasible.

Comparing the achievement of targets

Table 16 shows that Host City Cape Town compared well with the overall 2006 Green Goal achievements, despite the lack of a set framework and targets provided by the South African government. The German government played a strong role in 2006 in facilitating and setting guidelines and standards. Strong support for the event-greening initiative from the host city's LOC and national government is essential, and was one of the shortcomings in the 2010 Green Goal programme.

TABLE 16: Comparison between Host City Cape Town Green Goal 2010 and Germany Green Goal 2006 environmental achievements

2006 FIFA World Cup™ Green Goal targets	Actual 2006 achievements	2010 FIFA World Cup™ Host City Cape Town Green Goal achievements
Energy efficiency: To reduce energy consumption in World Cup stadia by at least 20% through the efficient use of energy.	13% - target not achieved	South Africa set no targets in this respect. Cape Town Stadium achieved an estimated 13% electricity saving.
Renewable energy: To provide an efficient supply of energy for the 2006 FIFA World Cup™ from renewable energy sources, as far as possible.	Target achieved. All stadia, the international broadcasting centre and associated hospitality energy were covered by renewable purchases	South Africa set no targets in this respect. Renewable energy was purchased for the FIFA Fan Fest™. Eskom donated renewable energy for all host city stadia, including Cape Town Stadium.
Waste reduction: To use packaging-free and multi-use systems in all areas, as far as possible, to reduce quantities of waste. To reduce the quantity of waste in and around stadia by 20%.	17% - target considered achieved, given the existence of certain other unquantifiable savings	A total of 58% of waste generated was diverted away from landfill to recycling, and waste reduction measures were implemented. (National 2010 target was 20% waste diversion from landfills.)
Public transport: To increase the share of public transport journeys to World Cup stadia to 50%.	52% - target achieved. Local public transport was generally well utilised	Target was achieved, as the main mode of transport used to travel to matches was public transport for 40% of fans, with 13% walking. (National 2010 target was 50%.)
Water: To protect potable water resources by reducing water consumption at stadia by 20%. Further objectives included the use of rainwater, i.e. 20% of remaining stadium water requirements were to be covered by rainwater, well water and surface water.	18% - target considered achieved, given the existence of certain other less quantifiable savings	South Africa set no targets in this respect. Cape Town Stadium is estimated to have achieved a 27% water use reduction.
Climate neutrality: To avoid or reduce the formation of climatically harmful GHG emissions during the 2006 FIFA World Cup™ as far as possible. Unavoidable incremental GHG emissions in Germany were to be compensated by capital investment in climate protection projects elsewhere.	Target achieved. Remaining carbon emissions were offset in two offset projects – one in India and another in South Africa	South Africa set no targets in this respect, but the country (via Eskom) purchased a substantial amount of 'green electricity' which offset the majority of the event carbon emissions. Cape Town did not aim for a carbon-neutral event which would have been more appropriate as a national programme – but a low-carbon event instead. Carbon mitigation projects were initiated that are set to result in carbon savings in future. All of the above measures combined reduced or offset almost all event emissions. This was a significant achievement.

Is there progress?

In general, Host City Cape Town performed well compared to the 2006 Green Goal achievements in Germany. In particular, Host City Cape Town can demonstrate clear outcomes, impact reduction and event legacies as a result of the implementation of the Green Goal 2010 programme.

However, whereas the German government appointed the Öko-Institut, an independent environmental consulting firm, to play a leading role in the greening of the 2006 FIFA World Cup™, South Africa had no such dedicated capacity to drive this agenda at national level, and the Green Goal programme was largely left to the host cities to implement, few of which had the required capacity. In addition, FIFA itself still does not appear to place any great emphasis on environmental performance in the World Cup, and does not require host nations to provide a guarantee to meet minimum environmental performance criteria. Finally, when comparing the 2006 Green Goal programme to that of 2010, it should be remembered that Germany is a relatively well-resourced country and, thus, for any city in South Africa to have a comparable level of achievement is highly commendable.

> **"When comparing the 2006 Green Goal programme to that of 2010, it should be remembered that Germany is a relatively well-resourced country and, thus, for any city in South Africa to have a comparable level of achievement is highly commendable."**

A view of action showing Table Mountain at sunset during the 2010 FIFA World Cup™ Quarterfinal match between Argentina and Germany at Cape Town Stadium on 3 July 2010.

Photo: Clive Rose, Getty Images


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LESSONS LEARNT

CHALLENGES AND RECOMMENDATIONS

Greening cannot be a nice-to-have add-on of the FIFA World Cup™, but must be fully integrated with the entire event-planning process from the outset. Only then will there be an actual platform for environmental concerns in national and international football, which will aid those planning future FIFA World Cup™ tournaments.

8 LESSONS LEARNT

CHALLENGES AND RECOMMENDATIONS

Since 2006, when Host City Cape Town produced the first business plan for greening the 2010 FIFA World Cup™, many lessons were learnt. One of these was that greening cannot be a nice-to-have add-on of the FIFA World Cup™, but must be fully integrated with the entire event-planning process from the outset. Only then will there be an actual platform for environmental concerns in national and international football, which will aid those planning future FIFA World Cup™ tournaments, such as Brazil in 2014, in their greening efforts.

The 2010 FIFA World Cup™ accelerated efforts to improve environmental quality and provide new perspectives on environmental protection. Prior to the World Cup, the authorities in Cape Town and the Western Cape had policies and programmes in place to reduce, reuse and recycle waste, promote energy-efficient and universally accessible mobility, incorporate indigenous landscaping, enhance biodiversity, encourage responsible tourism and create environmental awareness. However, the World Cup added impetus to these plans, and fast-tracked implementation.

Host City Cape Town was fortunate to have learnt from the programme initiated by the German government, as hosts of the 2006 FIFA World Cup™, and developed the 2010 Green Goal programme after having reviewed the work of the Öko-Institut. The fact that the Öko-Institut and 2006 FIFA World Cup™ host cities had been willing to share their experiences meant that the legacy and knowledge gained from 2006 became the standard for 2010. This implied that the learning curve was less steep and that the progress made in 2010 has hopefully contributed to a cycle of continuous environmental improvement into the future. This also confirmed that there is no real reason for any major event not to be sustainably green.

Fans accessed the fan walk via newly built pedestrian bridges. Photo: Jeremy Jowell

Implementation of the 41 Host City Cape Town Green Goal 2010 projects took place through a range of channels. In some cases, projects tied in with existing initiatives undertaken by the City, Province or National Government in preparation for 2010. In other cases, the City or Province made specific budget allocations for Green Goal 2010 project implementation. Also, some projects were implemented through partnerships with donors, business, NGOs and civil society.

Of the 41 Green Goal 2010 projects implemented in Host City Cape Town, 19, or 50%, were legacy projects, still contributing to the well-being of residents after the 2010 FIFA World Cup™.

Certain key overall Green Goal 2010 lessons, challenges and recommendations are summarised in Table 17.

TABLE 17: Key Green Goal 2010 lessons, challenges and recommendations

Lessons learnt	Challenges	Recommendations
Event greening must be integrated with the planning process from the start, and must be a priority work stream at national level.	Greening cannot be a nice-to-have add-on programme, but should be a key component of hosting a major event, integrated with other event logistics at the highest level.	Event-greening needs to be fully integrated with the event-planning process, from the initial bid through to the closing ceremony. The 2010 Green Goal programme was designated as a secondary work stream at national level, falling under the legacy work stream. Ideally, the programme should be elevated to a full-fledged work stream so as to receive better support.
Securing FIFA buy-in for the environmental dimension of the World Cup is critical.	There seemed to have been a lack of leadership, enthusiasm, involvement and funding from FIFA for the 2010 greening programme. The HCA included only a vague clause on environmental protection. There was no binding Green Goal clause in the FIFA HCA that provided the political and legislative framework that such an initiative requires.	Event-greening criteria should be included in FIFA's requirements and agreements/contracts for hosting the event. This will ensure that funds from national government departments (such as treasury) are made available for the greening programme.
Greening needs to be planned well in advance.	Greening plans and the roles and responsibilities of different players need to be established well in advance if greening is to be adequately implemented.	Resources need to be allocated timeously so that they do not have a negative effect on the planning, implementation and monitoring of the Green Goal projects. It is also important that the timing of different processes be synchronised, i.e. many of the host cities had their action plans in place when guidance started to come from national level and/or the LOC. The early appointment of a full-time Green Goal coordinator, with technical and administrative support staff, is fundamental to the success of the programme.
Political champions are necessary.	Greening of events requires the support of the political leadership. Fortunately, Green Goal 2010 had the support of both the City and the Province, with the Mayor and Premier launching both the Green Goal Action Plan and the Progress Report. There also was a good working relationship between the City and Province's staff and the Green Goal project manager.	Obtain the political leadership's support and buy-in for the greening programme.
Capacity building and training are required for effective event greening.	There was, and continues to be, a lack of understanding about what the implementation of a green event entails. Lack of capacity (skills) also manifested as a problem when projects were put out to tender in terms of higher costs for scarce skills, reduced availability of these skills (i.e. causing delays), and fewer tenders submitted. Also, there was a significant risk that under-capacitated individuals and teams would not be able to deliver on projects up to an appropriate standard or within the required time frame.	Capacity building is required, specifically among local authorities and provincial governments' non-environmental line function departments, officials, the stadium operator and other service providers, so that they can provide appropriate services that take environmental considerations into account. Hands-on experience during live events can further develop the skills and experience required for successful event-greening.
An appropriate budget should be allocated for event-greening.	Where funding was allocated to the building of the new stadium and transport and other infrastructure, the financial constraints remained high, and greening elements were not necessarily given priority. A lack of or insufficient funding caused delays and gaps in implementation, thereby compromising delivery.	An appropriate budget needs to be provided for greening initiatives. Where it is possible to implement new green technologies, the full life-cycle costs should be analysed rather than just the capital investment.

Lessons learnt	Challenges	Recommendations
Engagement with donors and funders is necessary.	To secure the required finances to deliver a full-scale greening effort and implement legacy projects, donor assistance is required. Host City Cape Town was fortunate to have secured the participation of KAS and Sappi as Green Goal 2010 contributors early on already.	Active engagement with donors and other funders early on in the process is vital. In Host City Cape Town's case, the Green Goal Action Plan and Progress Report were used to secure additional funding for projects.
Institutional arrangements across spheres of government and agencies, and coordination and synergy among the host cities and with the LOC and national department tasked with environmental affairs, are essential.	Coordination of Green Goal projects among the host cities is necessary to manage a coordinated set of Green Goal implementation plans. This proved especially important in Green Goal communications (such as recycling signage) to ensure consistent messaging. There were huge discrepancies in implementation between very active municipalities, such as Cape Town and Durban (eThekwini), and less proactive host cities, like Rustenburg and Bloemfontein (Mangaung), many of whom lacked the resources to devise and implement a substantial greening programme. Roles and responsibility matrices for waste management and city beautification were never finalised.	Synergy between the national department tasked with environmental affairs, the LOC as well as all host cities is crucial to ensure optimal Green Goal activation (branding, carbon offset, and negotiations with FIFA and FIFA suppliers and sponsors). Roles and responsibility matrices should be finalised well in advance to allow all parties to formulate implementation plans and allocate budgets accordingly.
Partnerships and consultation with stakeholders are very important.	An environmental initiative for a major event like the FIFA World Cup™ cannot be achieved by a few government departments or the LOC and host cities alone, but requires the commitment of all stakeholders, from international governments to FIFA, national teams, sponsors, NGOs, schools, business, sports clubs and society at large.	Sound partnerships between municipalities and NGOs, business, sponsors, communities, sports clubs and civil society are critical. Regular consultation with and involvement of key stakeholders are very important. Establishing a more ambitious, participatory grassroots process at an early stage will provide impetus and buy-in for the projects, as well as contribute to the implementation and monitoring of the programme. Create space for serious consideration and debate of the environmental costs and benefits of hosting such a mega-event in the first place.
The public and international visitors' buy-in must be obtained.	A coordinated and compelling Green Goal communications plan, targeting the public and international visitors, needs to be driven by the LOC and the national department tasked with environmental affairs, with inputs by the host cities.	It is important to launch the Green Goal brand timeously to create awareness of Green Goal objectives and to influence behavioural change. Appoint 'green ambassadors' (local and international) to help spread the environmental message.
Focus on fewer achievable projects, and complete them well.	Undertaking too many projects in a short space of time and with limited resources is risky.	Be realistic in terms of the number of projects that should be implemented. Host City Cape Town implemented 42 projects, but could have limited these to fewer projects with more time and resources allocated.
The monitoring and verification approach should be understood upfront.	In the 2010 case, baseline data collection proved expensive and time-consuming. In some cases, baseline data were not even available, as facilities had been newly built.	Assess resource use and the impact of Green Goal interventions (percentage savings) on energy, carbon, water and waste, rather than collecting detailed data against an estimated baseline. Report on actions taken and results achieved, lessons learnt and recommendations for future events.
A long-term legacy must be ensured.	The challenge was to look beyond the tournament and ensure a long-term legacy. Host City Cape Town, for example, had to think how a large empty stadium could act as magnet for employment generation after the World Cup.	Ensure clear articulation of the links between the 'hard' legacy of the stadium and other built infrastructure, and the 'soft' economic and social regeneration targets.

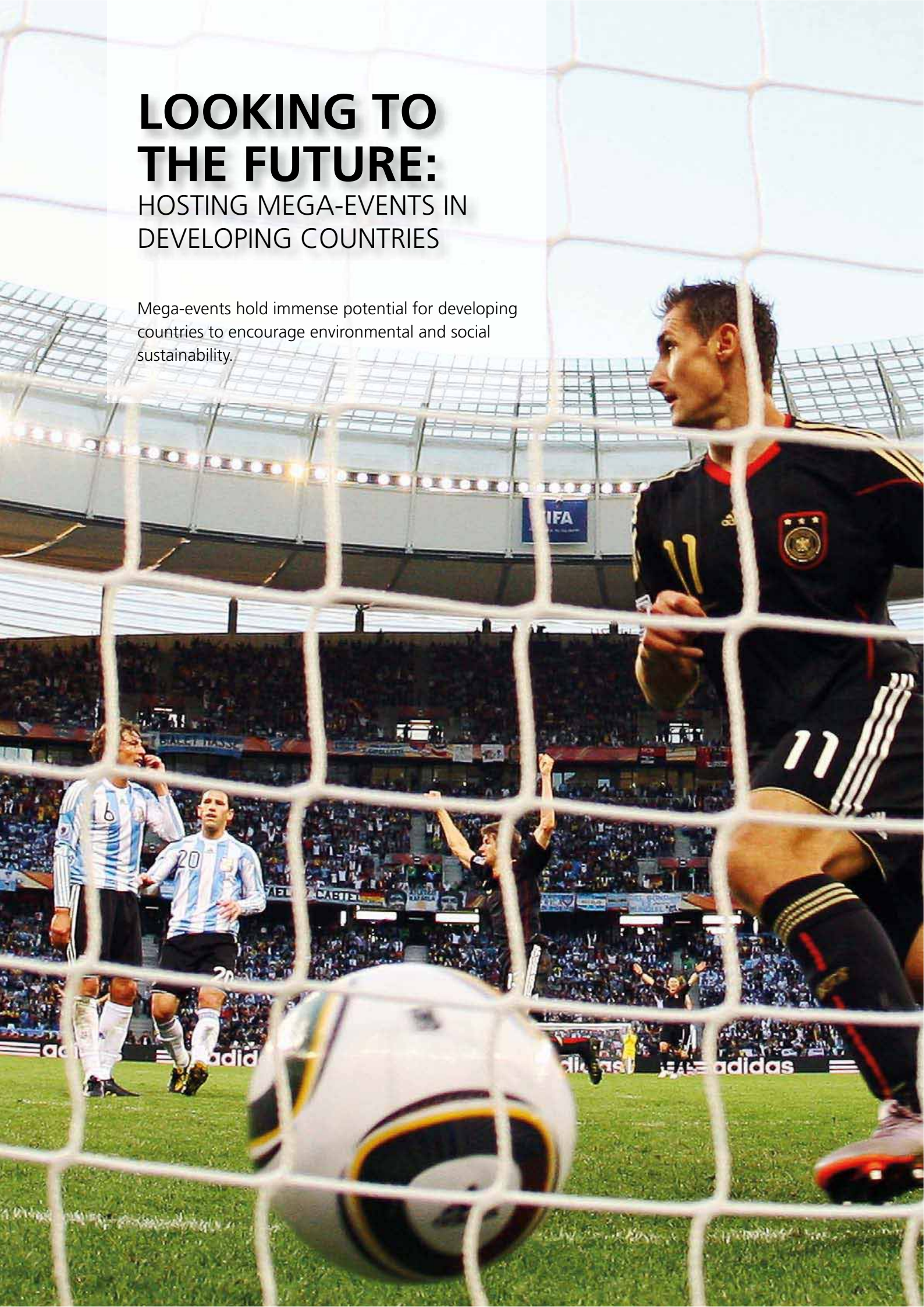
"Die Kaap is weer Hollands" – The Cape is Dutch again! Dutch fans turn Cape Town orange ahead of their Semifinal against Uruguay on 6 July 2010. The Afrikaans expression relates to the occupation of the Cape by the Dutch in 1652.

Photo: Bruce Sutherland, City of Cape Town

LOOKING TO THE FUTURE:

HOSTING MEGA-EVENTS IN DEVELOPING COUNTRIES

Mega-events hold immense potential for developing countries to encourage environmental and social sustainability.



Miroslav Klose of Germany scores the second goal during the 2010 FIFA World Cup™ Quarterfinal match between Argentina and Germany at Cape Town Stadium on 3 July 2010.

Photo: Paul Gilham, Getty Images

LOOKING TO THE FUTURE:

HOSTING MEGA-EVENTS IN DEVELOPING COUNTRIES

The hosting of mega-events, such as the FIFA World Cup™, has a tremendous impact on cities. However, for developing countries in particular, there are further concerns regarding the impact of such events that need to be considered. These are the economic impacts – such as the huge investments in infrastructure that may be needed for the event, but should also be constructed in a way that serves the country well in the longer term – and the social benefits, particularly for the poor – such as what the poor stands to gain from such huge resource allocations and whether these allocations could be better directed both to meet the needs of the event and promote the poor's welfare. Supporters of mega-sporting events claim that these events attract hoards of wealthy visitors, and lead to lasting economic benefits for the host regions. For this reason, cities and countries compete vigorously for the right to stage these events and, more recently, developing countries too have started to bid. The specialised infrastructure and operating expenses required to host these events, however, could be extremely high, and it is not at all clear whether either the long-term or short-term benefits are anywhere near large enough to cover these costs. In fact, independent researchers nearly unanimously find that bolstered projections of the economic impact exaggerate the true economic impact by a wide margin.

The most important issue for developing countries is not successfully hosting mega-events, but rather the promotion of social, economic and environmental sustainability through these events, especially in cities. Cities are the most resource-intensive nodes on the planet. In South Africa, for example, they consume approximately half of the country's energy, yet occupy only 4% of the land area. Also, cities are often beset with social problems linked to slums, inadequate service delivery and unemployment. Given cities' challenges, resource injections linked to mega-events need to be skilfully directed to support cities in their quest for sustainability.

Green Goal Soccer and Environment Tournament, World Environment Day, 5 June 2010. Photo: Rob Oettle

Host countries' direct government expenditure on the World Cup tournament is significant. Expenditure on infrastructure can leave a positive legacy but must be balanced against the immediate developmental needs of the country. The indirect benefits can also be significant. The World Cup has showcased South Africa to an international audience of approximately 8 billion viewers and introduced the country to non-traditional markets such as Latin America, Eastern Europe and Asia. Host countries' tourism and business sectors can take advantage of this additional exposure during and after the event.

It is important to also assess the socio-economic impact of these mega-sporting events. These events offer an unprecedented opportunity for nation building and nation "branding". If this unique marketing opportunity is capitalised on, it can result in a change of perceptions of the host nation or city, setting it apart and winning the trust of investors and tourists.

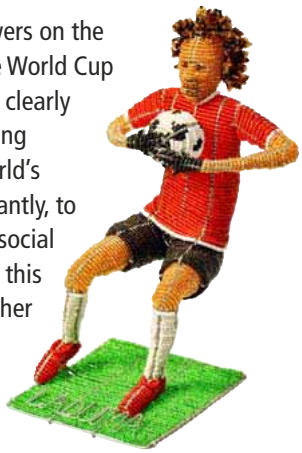
> **"No effort should be spared to use such a high-profile international media event to feature social and environmental issues, as it constitutes a rare awareness-raising opportunity for the host country and the world."**

Doing it differently in developing countries

Clearly, many aspects of the World Cup have been of great benefit to South Africa. The investments in public transport – a sorely lacking feature in South African cities – are one of the most significant. However, we need to consider how the tournament could have benefited the country more, given the dire needs for development in the country. So, how could developing countries organise and run such an event differently so that their development agendas are best supported? Here are some considerations:

- Consider using only local stadia that are better matched to local fans rather than exceptional events, and rely more on FIFA Fan Fests™ and PVAs. There should be less focus on a few huge venues that cannot be filled after the event, and more on numerous dispersed, accessible, 'local-sized' venues.
- FIFA relies on big multinational sponsors. Is it possible to draw more local business into the event – as sponsors as well as suppliers of goods and services – so that local business too benefits?
- Many of the jobs created by the infrastructure projects of the World Cup in South Africa were temporary, such as for construction workers on the stadia. Is there a way to create more sustainable jobs through World Cup projects, or at least develop certified skills that are of more sustained value to workers and the economy?
- FIFA derives significant profits from the World Cup. Could a larger proportion of such profits be invested back into the host country, and could FIFA contribute financially to a greening programme?
- No effort should be spared to use such a high-profile international media event to feature social and environmental issues, as it constitutes a rare awareness-raising opportunity for the host country and the world. Currently, FIFA does not emphasise environmental or social sustainability, and the resulting low media profile of issues such as global warming sends a misleading message to the world about the gravity of these and other critical issues.

While we may not have all the answers on the appropriate approach to hosting the World Cup and other mega-events, such events clearly hold immense potential for developing countries – not only to draw the world's attention to them, but, more importantly, to encourage their environmental and social sustainability. However, exactly how this potential is to be realised needs further attention and debate.



Making soccer balls out of recycled plastic bags at the Green Goal Soccer and Environment Tournament, World Environment Day, 5 June 2010. Photo: Rob Oettle

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Pedro Espi-Sanchez of the Vuvuzela Orchestra heralds in the end of the 2010 FIFA World Cup™.

Photo: Bruce Sutherland, City of Cape Town


CAPE
TOWN
Love it! Love it! LOUDER!

2010 FIFA WORLD CUP™ QUICK FACTS

32 teams
64 matches
10 venues
9 host cities
8 matches in Cape Town Stadium
15 000 FIFA volunteers
More than 300 000 visitors to South Africa

- More than 1,8 million fans visited the Cape Town Stadium, FIFA Fan Fest™, four fan jols, and fan walk during the World Cup.
- Overall, 507 332 spectators watched the games at the stadium, 581 913 fans walked the fan walk, 558 159 people converged on the FIFA Fan Fest™, 135 878 caught the MyCiTi shuttle service and 175 469 people watched the games at the City's four fan jols
- 9 new hotels were constructed in Cape Town
- R12,4 billion total investment in infrastructure
- World Cup produced 148 216 jobs of which 68 013 were directly created by the World Cup
- 120 000 fans accommodated in the Long Street Festival and surrounds during the Final Draw
- The FIFA Final Draw was transmitted to 199 territories (53 in Africa, 48 in the Americas, 29 in Asia, 52 in Europe and 17 in Oceania). The City of Cape Town events were covered by BBC television and radio, CNN, Sky News and Sport, El Jazeerah English TV, ARD German TV, CNBC Africa and others

Basic information

Days of World Cup: 11 June to July 11, 2010	31
Total number of World Cup matches in Cape Town	8
Number of Semifinal matches in Cape Town	1

Stadium information

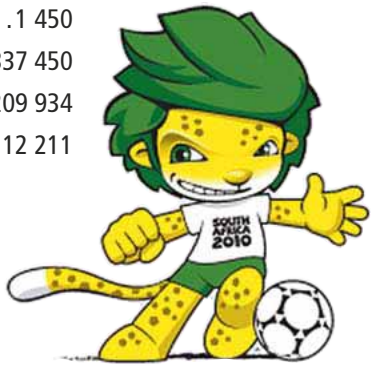
Design capacity of stadium for World Cup	68 000 max
Capacity of stadium reduced after World Cup	55 000 max
Number of spectator tiers	3
Number of high-definition replay screens	2
Grass type of playing surface drained, reinforced to FIFA requirements.	rye grass
Maximum noise level measured inside the stadium during match.	97 dB
Noise level measured outside the stadium.	65 dB
Average mass of solid waste produced in stadium during match	19 486 kg
Total number of beers sold in stadium during World Cup	223 788
Total number of soft drinks sold in stadium during World Cup	153 039
Stadium cost	R4,4 billion

Attendance

Total attendance at stadium for all 8 World Cup matches	507 332
Total attendance at FIFA Fan Fest™ (Grand Parade).	558 159
Total attendance at fan walk (Grand Parade to stadium).	581 913
Total attendance at fan jols (public viewing areas)	175 469
Maximum attendance at stadium at a single match	64 100
Total attendance at all city Facilities during World Cup*.	1 822 873

Transport

Total number of people using special Metro Rail World Cup service in City.	1 070 000
Total number of people using shuttle service during match days.	235 000
Total number of people using contracted minibus-taxi services.	31 000
Total number of people using facilities provided for disabled during World Cup	1 450
Total number of people using all modes of transport provided for World Cup.	1 337 450
Total number of calls handled by the Transport Information Centre.	209 934
Maximum number of calls handled in a day by the Transport Information Centre.	12 211



Economic Impact

Maximum number of people employed on stadium construction 2 600
Number of directly created jobs by World Cup 68 013
Number of indirectly created jobs by World Cup 80 203
Total number of jobs created directly and indirectly by the World Cup 148 216
Total value of contracts related to World Cup awarded by the City . . . . . R 6,8 billion
Percentage by value of contracts related to World Cup awarded to SMMEs 35%
Total public capital investment into city infrastructure. . . . . R 12,4 billion
Total public operational expenditure on World Cup . . . . . R 364 million

Safety and Security

Total number of incidents logged during World Cup 546
Total number of incidents logged resulting in a patient requiring medical care. 35
Total number of incidents logged which involved serious injury or fatality 0

Financial Impact

Estimated final capital cost of stadium . . . . . R 4,4 billion
Estimated city share of stadium cost . . . . . R 1 060 million
Estimated total City capital expenditure on World Cup related infrastructure . . . . . R 2 637 million
Estimated total City operating expenditure on World Cup event . . . . . R 278 million

32 TEAMS PARTICIPATED IN THE 2010 FIFA WORLD CUP™


Australia


Japan


North Korea


South Korea


Algeria


Cameroon


Côte d'Ivoire


Ghana


Nigeria


South Africa


Honduras


Mexico


United States


Argentina


Brazil


Chile


Paraguay


Uruguay


New Zealand


Denmark


England


France


Germany


Greece


Italy


The Netherlands


Portugal


Serbia


Slovakia


Slovenia


Spain


Switzerland

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ACKNOWLEDGEMENTS

The development of this report was made possible by the support, guidance and cooperation of a number of key stakeholders. The authors wish to thank participating representatives of the City of Cape Town and the Provincial Government of the Western Cape, the National Department of Environmental Affairs (DEA), the 2010 FIFA World Cup™ Local Organising Committee (LOC), and numerous non-governmental organisations and individuals for their cooperation and assistance.

The report was prepared by Mark Borchers, Sheryl Ozinsky and Lize Jennings of Sustainable Energy Africa (SEA), and Lorraine Gerrans of the City of Cape Town. The extensive comments and guidance from Stephen Granger of the City of Cape Town and Gottlieb Arendse of the Provincial Government of the Western Cape, were greatly appreciated.

The input and support of Jenitha Badul (DEA) and Ike Ndlovu (LOC) in the build-up to the 2010 FIFA World Cup™ were extremely valuable, as were contributions from the interns in the Green Goal 2010 programme, in particular Sarah Piel, Sonja Carl, Sanja Heric, Treve Jenkin, Abigail Joustra, Helashini Kalawan, Christophe Laloe, Beatrice Niedoba, Tim Ruijs and Barbara Toressi.

We thank the Konrad-Adenauer-Stiftung (KAS), SEA and Sappi, as 2010 FIFA World Cup™ Host City Cape Town Green Goal contributors, for their generosity, guidance and technical support.

The City of Cape Town appreciates the support provided by the following international agencies:

- The Danish International Development Agency (DANIDA) through the Urban Environmental Management Programme (UEMP)
- Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)
- InWEnt – Training and Capacity Building International, Germany
- Öko-Institut – Institute for Applied Ecology, Germany
- United Nations Environment Programme (UNEP)

In addition, Host City Cape Town acknowledges the contribution of the Green Goal 2010 project sponsors, in particular the following:

- Coca-Cola, represented by Peninsula Beverage Company, for the soccer and environment tournament
- The South African Petroleum Industry Association (SAPIA), for the eco-driving project
- Murray & Roberts/WBHO, for the student landscape design competition
- Polyoak Packaging, the PET Plastic Recycling Company (PETCO) and Grand World Visions, for the Green Goal expo at the FIFA Fan Fest™
- Wendy Ackerman, for trees donated as part of the 2010 city beautification programme

The support, guidance and partnership of KAS, in particular Christina Teichmann and Dr Werner Böhler, over the period 2007–2011 were invaluable.

We also thank the members of the 2010 environmental and city beautification work streams for their contributions and guidance to ensure the successful implementation of the Green Goal 2010 Action Plan.

PHOTOGRAPHIC CREDITS:

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Paul Gilham - FIFA via Getty Images
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Clive Rose, Getty Images
Coco van Oppens

And special thanks to Bruce Sutherland, official photographer of the City of Cape Town.

DESIGN AND LAYOUT:

Fizzee Studios

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