Green Goal - Environmental goals for the 2006 FIFA World Cup

Background paper on the concept phase (as at 31.03.2003)

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Öko-Institut e.V.

Institut für Angewandte Ökologie • Institute for Applied Ecology • Institut d'écologie appliquée

Geschäftsstelle Freiburg
Postfach 62 26
D-79038 Freiburg
Tel.: 07 61 / 45 29 5-0
Fax: 07 61 / 45 54-37

Büro Darmstadt
Elisabethenstr. 55-57
D-64283 Darmstadt
Tel.: 0 61 51 / 81 91-0
Fax: 0 61 51 / 81 91-33

Büro Berlin
Novalisstr. 10
D-10115 Berlin
Tel.: 0 30 / 28 04 86-80
Fax: 0 30 / 28 04 86-88

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1 The Green Goal vision

The hosting of the 2006 FIFA World Cup offers Germany a great opportunity to present itself as hospitable, keen on sports and also conscious of its responsibility towards the natural environment. The Organizing Committee (OC) of the 2006 FIFA World Cup, with its president Franz Beckenbauer and the German Football Association (DFB) have recognized this opportunity and challenge.

In its application paper for the hosting of the 2006 Football World Cup in Germany, the DFB clearly indicated in a chapter entitled *"Environmental concept for the stadiums"*, that the planning and realization of the 2006 World Cup will also be orientated towards the objectives of sustainable development. With the decision of its Executive Board in 2001 to elaborate a comprehensive environmental concept, the DFB underscored its awareness of its social responsibility for the environment. In order to demonstrate that the FIFA World Cup and environmental protection "go hand in hand", the OC commissioned a team of scientists from Öko-Institut around Christian Hochfeld and Dr. Hartmut Stahl to elaborate and subsequently ensure the realization of comprehensive and demanding environmental objectives for the 2006 Football World Cup. The work is supported by Jürgen Trittin, Federal Minister for the Environment, and funded by the German Federal Environment Foundation (DBU).

The Organizing Committee of the 2006 FIFA World Cup regards implementation of the environmental concept in the period up to 2006 as an integral part of ongoing planning and communication. Following publication of the elaborated environmental objectives at a joint press conference of the OC Executive Board, the Federal Ministry for the Environment (BMU), the DBU and Öko-Institut on 31. March 2003, the OC has taken up the challenge.

The Football World Cup occupies a special position among major sporting events in a variety of ways. Because the stadiums are intensively used not only during the World Cup, a considerable environmental impact is to be expected in subsequent use for *Bundesliga* matches ("in Germany there's a World Cup every weekend!"). The "sustainable development" of the sport of football is therefore explicitly addressed, since it is not so much a question of creating a "green island" for a month in World Cup year 2006, but rather of making a long-term contribution to the improvement of the environmental situation.

2 The path to the environmental objectives of Green Goal

During the concept phase of Green Goal, and thanks to the commitment and excellent co-operation of all players (stadium operators, host cities), the foundations were successfully laid for the realization of a sustainable 2006 Football World Cup.

The departure point for the concept phase was **status quo analysis** at the twelve World Cup venues in Germany. The objective of status quo analysis was

- to characterize the twelve World Cup cities and stadiums from the environmental point of view, and
- to identify options for action concerning the improvement of the environmental situation towards sustainable development.

Even before final selection of the twelve World Cup venues, FIFA regulations on the selection of "host cities" were extended with a section on the environment. According to this new regulation, cities were to be questioned on their general environmental objectives and on their commitment to environmental management. The information provided was then taken into consideration in the selection of the twelve host cities for the World Cup. At the same time, this information enabled a first impression to be gained of how awareness of Green Goal initiatives is to be judged at individual stadiums. Integration of local commitment and co-operation with host cities provide the key to the success of Green Goal. Status quo analysis was supplemented by the recording of relevant environmental indicators at the venues, in order to estimate the potential easing of adverse effects on the environment within the framework of Green Goal. This provided the basis for quantification of the environmental objectives of Green Goal.

Parallel to status quo analysis, the OC, the BMU and Öko-Institut jointly identified key subject areas and spheres of action, which were to be addressed by the Green Goal environmental concept. An early distinction was made between spheres of action, which should be addressed with quantitative goals, and spheres of action, which should play an important role in the realization of Green Goal, but which cannot be addressed with quantitative objectives; either because the OC has no direct influence on the achievement of quantitative goals, or because planning in these spheres (for example, catering, merchandising) is not sufficiently advanced to enable environmental objectives to be concretized. The fact that quantitative objectives cannot be formulated, does not mean, however, that Green Goal does not address these spheres. The mutually agreed objective is to consistently take environmental aspects into consideration also in these spheres.

In mid-2002, following the Football World Cup in Japan and Korea, **environmental guidelines** were jointly drawn up **for selected areas** by the OC, the BMU and Öko-Institut. On the basis of these guidelines and also of the findings of status quo analysis, proposals for **obligatory quantitative environmental objectives for the 2006 Football World Cup** were then elaborated by Öko-Institut, agreed with the OC and the Steering Committee[1] and finally passed by the Executive Board of the OC at the beginning of 2003.

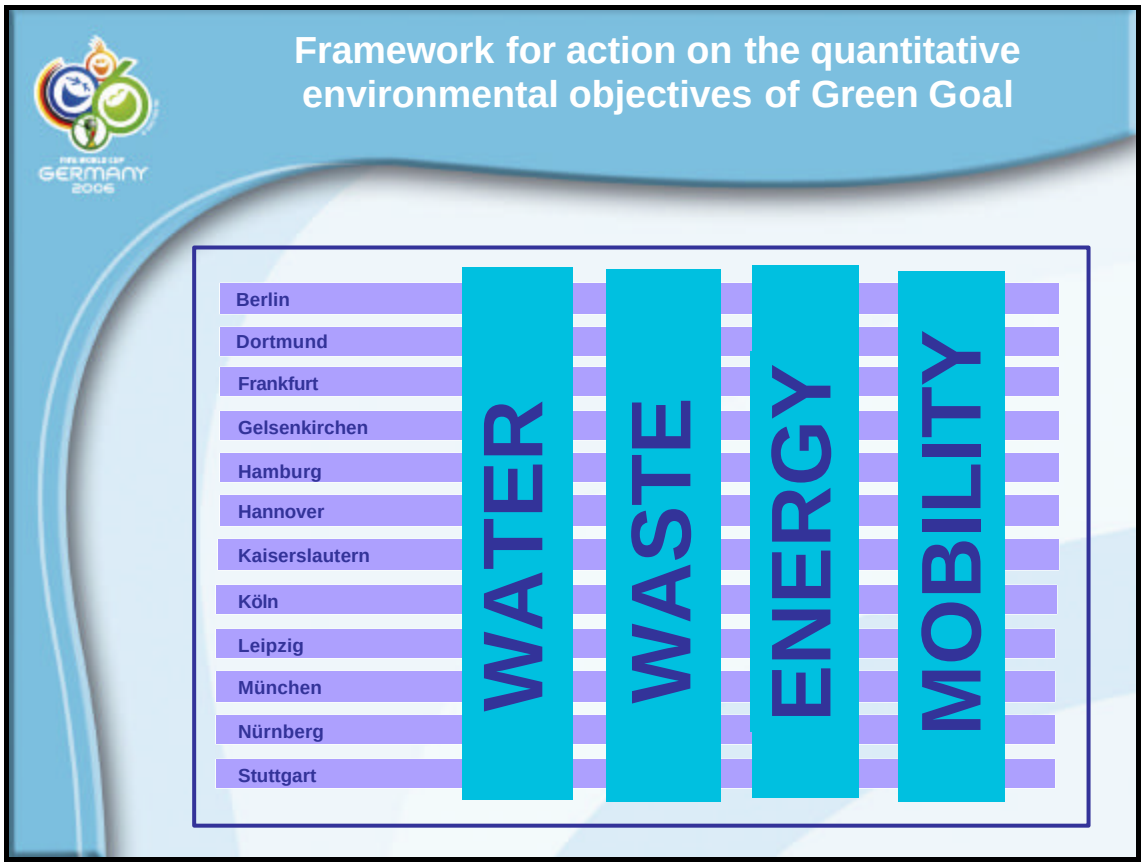
Quantitative environmental objectives are backed up with a concept for their realization and also for verification of the success of realization. This concept includes options in selected areas for measures of practical realization in stadiums. In order to provide an ecological and economic view of possible effects of measures, initial exemplary measures were singled out and their effects described quantitatively.

2.1 Quantitative environmental objectives of Green Goal

On the basis of DFB planning and statements in the application phase, the following areas were chosen for the laying down of quantitative environmental objectives for the World Cup:

- **Water**
- **Waste**
- **Energy**
- **Mobility**

[1] The steering committee was charged with ensuring the quality of the work of the Green Coal project team. Members of the steering committee were Andreas Kroll (Organising Committee), Gertrud Sahler and Sigrid Hochkamp (Federal Environment Ministry), Dr. Hans-Georg Moldenhauer and Boris Leyck (DFB), Dr. Hans Jägemann) (German Sports Federation - DSB) and Erwin Lauterwasser (German Ski Association - DSV).



2.1.1 Responsible use of water

Water is an important and sensitive resource that also plays an important role in the 2006 Football World Cup with regard to environmental issues.

Water quality is an important issue in Germany. Ground water has to be protected from contamination and its use restricted to a necessary minimum. Water extraction and ground water replenishment can vary widely at a local level. To keep our water resources pure, waste water has to be contaminated as little as possible, and quantities of waste water have to be reduced. The responsible use of water also covers rainwater. Important elements of modern rainwater management are the use, infiltration and evaporation of precipitation.

The guiding principle for sustainable action at the 2006 World Cup takes up the above points and leads to the demand for the economical use of drinking water.

The Green Goal guideline for the 2006 World Cup:

The guiding principle is the economical use of drinking water resources. For this purpose, the consumption of drinking water should be reduced as much as possible; rainwater, surface water and well water should be used instead of drinking water; precipitation should be allowed to infiltrate naturally; and the contamination of waste water and ground water should be minimized.

Attention is focused on the use of water in the operation of stadiums and the staging of matches. Corresponding measures apply also to events that take place within the setting of the World Cup.

The following water uses are relevant:

- Watering of pitches and grassed practice grounds as well as of outside areas.
- Sanitary facilities: toilets, urinals, hand basins, baths and showers.
- Catering: food and washing up.
- Cleaning and washing.

To begin with, a large number of environmental measures were elaborated and, as a result, a broad range of possibilities for action highlighted. The relevance of these measures, and the opportunity to realize them at each individual venue, have to be established in co-operation with the stadiums, taking into account the specific circumstances of each venue. In the further course of the project, and through the investigation of examples of "best practice" at stadiums, measures will be concretized and their realizability substantiated in the light of existing practices. Moreover, regarding the improvement of the environmental performance of stadiums, the objective is the direct communication and transfer of knowledge between venues.

Possibilities for reducing (drinking) water consumption and for the economical use of water are numerous. Effects can be partly achieved with very simple and relatively cost-effective measures. The following water-related measures from different areas are exemplary:

- Optimizing the watering of pitches.
- Avoiding the watering of outside areas.
- Reducing the water consumption of hand basins.
- Reducing the water consumption of toilets and urinals.
- Regular maintenance of fittings and pipes.
- Substitution of drinking water (use of rainwater).

On the basis of status quo analysis of World Cup stadiums, possible measures as well as examples of realization, the environmental objectives that have been elaborated for the 2006 FIFA World Cup with respect to water resources are shown below:

2.1.2 Avoidance and environmentally-sound recycling of waste

In a society in which not only the sensible and efficient use of natural resources and land, but also the reduction in the most important pollution emissions (greenhouse gases, heavy metals etc.) are among the major ecological challenges, the problem of waste is of great significance for government, the general public and environmental organizations.

Apart from the question of waste disposal and the related costs, the littering of large areas with discarded wrappings and packaging, food remains or promotional articles is a constant cause of concern and criticism at big events, and is one of the obvious problems associated with such events.

The topic of waste is therefore of vital importance for the 2006 World Cup.

The Green Goal guideline for the 2006 World Cup:

Waste has to be avoided as much as possible. Unavoidable waste will be recycled, and specialist firms must dispose of waste that cannot be recycled.

Within the setting of the Football World Cup, the different places at which waste accumulates, the quantity of waste and its heterogeneity pose a particular challenge both inside and outside stadiums, as well as at a great many venues of accompanying events.

Public attention is focused above all on waste resulting from sporting events. Waste that primarily arises from the organization of matches and the operation of stadiums, as well as in their immediate area, mainly comprises catering waste, packaging materials as well as promotional articles and merchandise provided to spectators. Waste originates, among other places, around kiosks, stands and hawkers, but also at restaurants and VIP areas. Waste from this area has a composition similar to household refuse, whereby a large proportion of paper, cardboard and food remains is to be expected.

In the main, the following types of waste can be distinguished:

- Plastics, wrappings and light packaging (for example, packaging material in areas such as catering, merchandising).
- Paper, cardboard (for example, from offices, media and catering, promotional material).
- Glass (for example, from restaurants, VIP areas).
- Organic waste (for example, food remains from catering and restaurants, organic waste from grassed areas and outside grounds).
- Hazardous waste (for example, batteries, drugs/medicines.
- Construction waste (from building, exhibition, demolition and renaturization phases.
- Residual waste.

Waste accumulates on the way to the stadium, whether from public car parks, railways or bus-shuttles, and has to be disposed of. This applies equally to waste deposited before matches and to that left behind by fans on their departure.

The 2006 World Cup will be supported throughout Germany by a "cultural summer", and by an accompanying programmed conducted by the host cities. In many cities, public events and live transmission of matches are expected. Additional events and functions for the media and VIPs are also expected. Besides these accompanying events, the three main sites for media facilities (Munich, Berlin and Dortmund) will also be taken into account within the framework of the waste concept.

The number of spectators will largely determine the total quantity of waste. Sponsors and their advertising activities can also have a great influence. The following points illustrate why application of *Bundesliga* operations to the 2006 World Cup is inappropriate, and why for the World Cup as a whole larger quantities of waste will definitely have to be expected:

- Additional functions and events within the stadiums (for example, the opening ceremony).

- A variety of functions, catering operations and events in the area surrounding the stadiums.
- Greater catering and restaurant facilities (for example, VIP).
- Spectator programmes before each game (for and with spectators, with the help of flags and coloured cardboard).
- Extensive supply of merchandise and promotional articles.
- Additional activities on the part of sponsors.

With regard to the above guideline, a number of exemplary measures can be mentioned concerning "avoidance and reduction" and recycling and disposal":

- o Avoidance and reduction
  - Installation of a standardized waste system.
  - Utilization of multiple-use systems (for example, in catering and with transport packaging).
  - Minimization of throwaway items (promotional articles).
  - Guide for catering and merchandising companies.
  - Avoidance of waste in the case of temporary buildings and installations.
- o Recycling and disposal
  - Separate, precisely-sorted collection.
  - Orientation aids for visitors – sufficient, multilingual information before games.
  - Consideration of the recyclability of materials used in all areas.
  - Environmentally sound disposal of waste by certified specialist firms.

Information and sensitization are important elements of the waste concept. A standardized framework for all twelve stadiums, cities and venues forms the basis for communication and environmentally conscious waste behaviour.

On the basis of work carried out, the environmental objectives that have been elaborated with respect to waste are shown below:

2.1.3 Environmentally-compatible production and efficient use of energy

Without the utilization of different forms of energy, the planning and organization of the 2006 Football World Cup would be inconceivable. A large proportion of the energy required in the fixed-site sector derives from the operation of stadiums and from facilities for media reporting. In this connection, electricity required for the staging of matches (for example, floodlights, scoreboards), including stadium lighting, has to be mentioned, as well as energy required for the provision of refrigeration, for air conditioning and ventilation systems as well as for heating systems and hot water.

The efficient use and supply of energy, as well as the promotion of the use of renewable energy sources, are fundamental elements of the determined climate and environment protection policy of the Federal Republic of Germany, the *Länder* (States) and also of German cities and communities. The environmental and climate protection objectives of the federal government require resolute action on the part of all players. In this respect, the exploitation of energy saving potentials is of top priority. The use of renewable sources for the provision of energy is also of great importance. The provision of energy should involve the least possible effect on the environment.

The reduction of energy consumption through the environmentally sound supply and efficient use of energy is also an objective in the sphere of large sporting venues. The

OC has resolved to set itself this objective for the planning and organization of the 2006 World Cup.

The Green Goal guideline for the 2006 World Cup:

Energy saving potentials in the organization of the 2006 Football World Cup will be exploited wherever possible and economically feasible by means of modern technical and organizational measures. The energy, which is required for the efficient organization of the World Cup, will be produced as environmentally compatible as possible.

An important departure point for the reduction of energy consumption, and also of environmental impacts resulting from the use of energy, is the energy required for stadium operation. Crucial areas are the recording of consumption, changes in the building shell to reduce the demand for thermal energy for heating, as well as heating, cooling and ventilation systems. And then there is lighting; with floodlights playing an important role in large stadiums. At the same time, the processing of hot water and service water could be a lever for exploiting efficiency potentials. In addition, user behaviour has a considerable influence on the energy efficiency of sports venues. It is estimated, that in particular areas there are reduction potentials of between 10 and 40 per cent at individual venues.

In the areas mentioned, not only technical, but also organizational measures can be undertaken. Consumption can be reduced in all areas of demand through reduction and efficiency technologies. Energy consumption can also be noticeably reduced by means of organizational measures. Possible starting points concern

- optimization of operational management,
- efficient energy management and controlling,
- benchmarking and
- sensitization of user behaviour.

The financing of technical investive measures often poses an obstacle to the exploitation of efficiency potentials in stadiums. It will be examined to what extent such measures can be realized at individual venues by means of financing models such as energy contracting. The use of renewable energy sources can take place through the installation of plants for captive production (for example, photovoltaic plants), or through the external supply of energy derived from renewable sources (green electricity). Whereas in some World Cup stadiums, installations for the production of renewable energy – for instance, solar energy – already exist or are planned, few stadiums are presently considering the external supply of green electricity. One objective will be to exploit this potential.

Status quo analysis in the twelve stadiums has shown that at many venues organizational improvements have already been carried out, or are at least planned, in the energy management area. These efforts will be supported within the scope of Green Goal. The implementation of technical measures for the reduction of energy

consumption in stadiums varies at present. It is a question of exploiting efficiency potentials at all venues, also by indicating and making possible various methods of financing.

On the basis of status quo analysis at World Cup stadiums, possible measures as well as examples of realization, the environmental objectives that have been elaborated for the 2006 Football World Cup with respect to energy are shown below:

2.1.4 Efficient and environmentally-beneficial development of mobility

Around 3.2 million home and foreign visitors are expected to attend the 64 World Cup matches. In addition, more than 20,000 journalists and some 1,500 FIFA representatives will also follow the matches. The transport of visitors, journalists and honorary guests to the venues, and between the stadiums, as well as the transport of supplies and services to stadiums, also involves adverse effects on the environment.

The reduction of traffic-related effects on the environment is an important objective of sustainable development in Germany. This concerns the avoidance of unnecessary traffic, the switching of private transport to (local) public transport systems and the environmentally efficient development of transport through the further development of

the technical and organizational systems of all means of transport. These objectives of sustainable mobility can be applied to the planning and, above all, to the organization of the Football World Cup.

The guiding principle for sustainable action at the 2006 World Cup takes up these issues and results in the demand for sustainable mobility in the organization of the Football World Cup.

The Green Goal guideline for the 2006 World Cup:

A guiding principle for the 2006 Football World Cup is the development of efficient, environmentally sound mobility. The avoidance of unnecessary traffic and an increased transfer to public means of transport are the focus of activities together with the efficient and ecological development of existing traffic systems.

Transportation in connection with the World Cup is particularly relevant to the environment because of greenhouse gas emissions and the impact of atmospheric pollution on the environment. In comparison with public transport systems, air traffic and private motorized traffic give rise to considerably more noxious exhaust gas, emissions harmful to the climate and noise; and the number of traffic accidents is considerable higher in private motorized traffic than in the case of bus and rail traffic. Traffic congestion in the area surrounding stadiums leads time and again to conflicts with residents. The supply of goods and services to stadiums also has an adverse effect on the environment. In many World Cup cities, only 20 to 40 per cent of spectators travel to stadiums with public transport; the rest use private cars

In comparison to other central spheres of action of Green Goal, and with regard to the minimization of adverse effects on the environment, World Cup traffic requires the greatest attention. Individual segments of World Cup traffic – foreign visitors, home visitors, journalists and FIFA officials – have to be separately addressed with packages of measures.

Unnecessary traffic and related adverse effects on the environment can be avoided merely through the effective organization of matches and other events. For journeys to the venues, as well as in the host cities themselves, attractive offers should be made by public transport systems to visitors who follow teams and have to cope with long journeys to matches. Status quo analysis has shown, that nearly all venues aim for an increase in the number of visitors travelling to matches with public transport. The necessary efforts will be supported within the scope of Green Goal. Important improvements can be made – according to venue – in the following areas:

- Improvements in the accessibility of venues.
- Increasing the capacity of the public transport system.
- Supply of combined tickets.
- Increased availability of park-and-ride facilities.

- Improvements in parking management systems from the ecological point of view.

The use of attractive (local) public transport offers during the World Cup should be positively communicated through appropriate marketing measures.

Undesirable environmental effects of World Cup traffic can also be reduced in so much as existing traffic systems – above all public traffic systems – can be optimized from the technical point of view wherever this is economically justifiable. This applies not only to the use of pioneering alternative fuels and drive systems, but also to the use of highly-efficient engine techniques and the most modern waste gas purification technology.

On the basis of status quo analysis of World Cup stadiums, possible measures as well as examples of realization, the environmental objectives that have been elaborated for the 2006 Football World Cup with respect to mobility and traffic are shown below:

2.2 With Green Goal to the first FIFA World Cup with a neutral impact on the climate

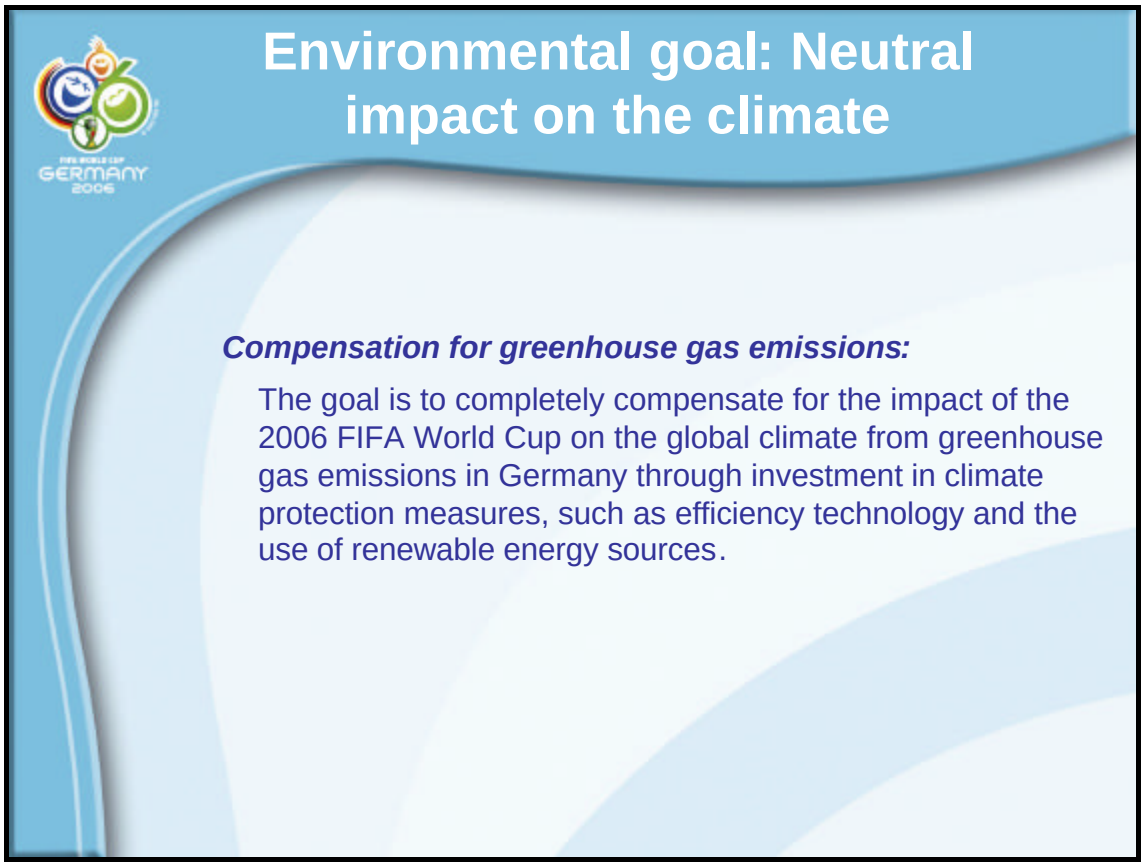
Despite extensive measures in all Green Goal spheres of action, the emission of greenhouse gases resulting from the staging of the 2006 FIFA World Cup is not to be avoided. The transport of World Cup visitors and the supply of energy are mainly responsible for this. The quantity of greenhouse gases that, following exhaustion of all possible efficiency potentials and the most environmentally favourable development of transport and energy facilities, will be emitted in Germany, can amount to up to 100,000 tonnes.

Global climate protection is of enormous importance to Germany. It is therefore the objective of Green Goal to avoid this undesirable impact on the global climate. Through the exhaustion of energy efficiency potentials, the environmentally favourable supply of energy from renewable sources and, subsequently, the option for compensation of remaining greenhouse gas emissions, for the first time worldwide a big sporting event can be realized with a neutral impact on the environment. How can this occur? The Organizing Committee of the 2006 FIFA World Cup aims to compensate these greenhouse gas emissions through investments in climate protection (efficiency technology and the use of renewable energy sources) elsewhere. This means that greenhouse gas emissions, which unavoidably result from the staging of the World Cup, will be compensated in other areas through investment on the part of the OC. The 2006 FIFA World Cup in Germany will be the first big sporting event worldwide that has a neutral impact on the global climate.

This form of climate protection was last practised by the German delegation to the 2002 World Summit in Johannesburg, the follow-up conference of the Rio Summit in 1992. The greenhouse gas emissions brought about by the journey of the German delegation to and from Johannesburg were compensated for by investment in efficiency measures elsewhere; in this case, through investment in the "*EECO Housing Project*" in South Africa, which supports the financing of energy-saving housing in the townships of South Africa.

A detailed and clearly understandable compensation and financing model for the 2006 Football World Cup, with a neutral impact on the global climate, is due to be developed during the course of 2003 and presented to the public.

The realization of the 2006 Football World Cup in Germany with a neutral impact on the climate is thus a general, quantifiable environmental objective.



2.3 Qualitative environmental objectives of Green Goal

Besides the central spheres of interest and action with appropriate environmental objectives that have already been discussed, other subject areas concerning the planning of the Football World Cup are addressed with activities to protect the environment. They include the environmentally sound construction and reconstruction of stadiums, media centres and other temporary buildings. In addition, the Federal Environment Ministry and interested sections of the public also expect that environmental aspects will be incorporated, within the framework of Green Goal, into relevant planning areas such as tourism, merchandising and catering. It will be ensured, moreover, that nature conservation will be addressed in further planning for the 2006 World Cup. The OC welcomes this, and will support such endeavours wherever possible.

The initial project phase has already highlighted the importance of regular exchange between representatives of the stadiums, Öko-Institut and the OC, to guarantee that the objectives of environmental protection and sustainable development can be integrated into as many planning and procurement processes as possible. Excellent experiences made in the concept phase show this to be an important success factor.

3 From objectives to reality – the realization of Green Goal for the 2006 Football World Cup

The key to the success of Green Goal and to the successful elaboration and realization of a sustainability concept for the Organising Committee is **co-operation and integration**. The more successful one is in winning over those involved in planning for the World Cup the more Green Goal is to be seen as an integrative part of the FIFA World Cup, as part of an inspiring "World Cup edifice" that can contribute to the success of the whole project.

The tasks of the Green Goal initiative were of a dual nature already in the concept phase. It was a question, on the one hand, of formulating demanding and at the same time realistic sustainability objectives for the planning and organization of the World Cup and of developing paths to realization and concretization. On the other hand – and this is demonstrated by experiences already gained with Green Goal – it is an important task to win over the organising committee's partners to Green Goal, to incorporate them and their activities into the concept and realization of Green Goal and to put this across to the public. The foundations for this were laid down in the concept phase.

In the implementation phase, it will be a matter of dovetailing the programmatical concept and the involvement of the partners. Working together with the partners, it will be very important

- to speed up the elaboration and realization of environmental measures for the achievement of sustainability objectives formulated in the planning phase;
- to undertake the monitoring of realization measures with regard to the achievement of joint sustainability objectives for the 2006 World Cup; and
- to integrate activities and progress on the path to Green Goal into the communication concept for the 2006 World Cup.

The most important partners in this respect are the **venues** and **stadiums**, **FIFA's business partners** and the **organising committee**. Their support is essential for the success of Green Goal.

Whereas, in the initial project phase, general concepts covering all venues were developed in different spheres of action, and with them the foundations for the organization of the whole concept and further activities could be laid, the implementation phase (2003-2006) also encompasses solutions tailored to individual venues and/or players. It is planned to discuss and co-ordinate the realization of the environmental concept with important societal groups, including sports associations and environmental organizations.

3.1 Green Goal at a local level: practical realization at World Cup venues

Implementation of Green Goal at the twelve venues for the 2006 World Cup will take place bearing in mind the different initial situations and potentials of the venues and in close co-operation between the Organizing Committee, responsible local people and Öko-Institut. The most important areas of activity, whose relevance and intensity can vary from venue to venue, are

- **travel to and from** host cities and stadiums,
- **energy efficient**,
- **water economizing** and
- **waste avoiding** operation of the stadiums (including catering etc.), as well as
- **resource conservation** and **limited land use** in the construction and reconstruction of stadiums, the International Media Centre and other (temporary) buildings.

An important measure, with the help of which long-term sustainability objectives can be secured and environmental standards improved, is the establishment of **environment management systems in the** stadiums.

The OC and Öko-Institut see the main objectives and elements of the implementation phase for the period 2003 to 2006 in the following areas:

- After **specific adaptation and formulation of the environmental objectives of the 2006 World Cup** for **each individual venue**, activities in the implementation phase are focused on the **implementation and realization of the concepts that have been developed** in the above-mentioned fields of action. Concept implementation will involve the concretization for each venue of respective improvement potentials from the environmental point of view and the proposal of specific options for action. Beyond this, the respective players will be supported and advised during implementation.
- It has already been demonstrated in the concept phase, that investive measures for the achievement of sustainability goals are amortized within a relatively short period of time through savings in operating costs. In the implementation phase it is necessary, above all, to **remedy the lack of information**. So far as environmental measures are concerned, which do not cover costs or are difficult to finance in advance, specific **financing and contracting models** will be developed.
- The development and **further development of environment management skills**, preferably in the direction of EMAS II), is of particular significance, because they can provide the basis for the implementation of measures in individual **programmatical** areas. The OC and Öko-Institut will therefore promote the introduction and implementation of environment management systems, such as EMAS II, at World Cup venues. Supported by Öko-Institut, the OC will function as

host cities adviser and co-ordinator; while stadium operators will themselves conduct audits with local partners.

- The **monitoring of activities** is another important task. Measures at individual venues – also within the general context of the World Cup – will be monitored by Öko-Institut, and progress in implementation examined with regard to compliance with individual, venue-specific environmental objectives and overall objectives for the 2006 World Cup. For this purpose, the status of implementation will be regularly documented and communicated to the general public. On the basis of evaluations of monitoring results, activities for the achievement of formulated environmental objectives can be adapted where necessary. Monitoring is an important source of information for the Green Goal communication strategy. Equally important for the implementation phase of Green Goal are the questions of what will be implemented at venues and stadiums, and how the commitment of individual venues can be maintained and increased.

Besides the provision of advice to individual venues, the setting-up of a **Green Goal Forum** serves the stated purpose by promoting the exchange of information on environmental issues between individual host cities and stadiums, and thus competition between host cities in this area. The Green Goal Forum can help to bring about the adoption at other locations of those good practice measures that have been successfully introduced at individual venues. The concept phase has shown, for instance, that certain stadiums have a considerably lower demand for energy and water as well as lower quantities of refuse than other stadiums. The Green Goal Forum should encourage the communication of this know-how to all stadiums, thus promoting a reduction not only in energy and water consumption, but also in the quantity of waste.

3.2 Setting up business partnerships for *Green Goal*

Business co-operation with *global partners* of the FIFA World Cup and also with *national suppliers* of the Organizing Committee plays an important role in organization and communication. The aim is the implementation of specific measures, by means of which businesses and the World Cup organizers can present themselves not only as sports enthusiasts, but also as forward-looking and sustainability-orientated. Initial contacts with official sponsors during the concept phase have confirmed the promising nature of this approach.

All business co-operation has to be conducted in line with FIFA sponsoring guidelines and be co-ordinated by the responsible OC. Activities of business in support of Green Goal can be pursued both for individual venues and for the World Cup as a whole.

4 The communication of Green Goal

The conception and realization of Green Goal offers the unique opportunity to inform large sections of the population about environmental protection and sustainable development, as well as to sensitive them for these issues.

It is therefore intended to integrate Green Goal into the communication concept of the FIFA World Cup. This way, the central theme – "sport and sustainability go hand in hand" – can be communicated already in the run-up period to the 2006 World Cup, and the World Cup can be shown to point the way to the vision of sustainability.

In addition to activities at stadiums, environment-orientated public relations campaigns should be jointly created by Öko-Institut and individual host cities, who will use the World Cup and Green Goal as a means for successful environmental communication and, in particular, for promoting environmental protection in the respective city. Estimates from the initial project phase show that, as a result, it could be possible to compensate the adverse environmental effects associated with the Football World Cup.

The association of huge sporting events, such as the 2006 Football World Cup, with realization of the vision of sustainable development offers the opportunity to communicate a practical example of the concept of sustainability to broad sections of the worldwide population. Such a broad and positive external effect for environmental protection and the concept of sustainability, as is offered by huge sporting events, is hardly attainable by other means. The environmental issue, but also that of sustainability, is often perceived as one of compulsion and sacrifice. With a huge sporting event as sponsor, the opportunity arises to present the concept of sustainable development as an integral part of modern planning. In order to make use of this opportunity and to integrate the concept of sustainability into the planning and organization of such a huge event as the Football World Cup, there is also a need for co-operation between organizing associations, government, industry and, not least, the sports mad general public. Only with joint effort can ambitious sustainability goals be realized. This is not possible without close inter-linking of planning, implementation and communication.

Berlin, Darmstadt, March 2003

Christian Hochfeld, Dr. Hartmut Stahl, Öko-Institut