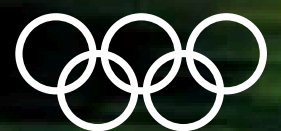


Chapter 2:
General conditions
for sport that
respects the
environment
and sustainable
development



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2.1 Acting through sport

The Olympic disciplines include sports played by individuals or teams, on land or on water, outside or indoors, in a natural environment or in a stadium, sometimes involving animals or machines. Despite such diversity, these disciplines have in common a number of general aspects relating to protection of the environment and sustainable development.

Firstly, we should explain that athletes are not expected to take the place of socio-professional forces, institutional or otherwise, involved in the protection of the environment and sustainable development.

Athletes should actively protect the environment and sustainable development by virtue of their attitude as sportsmen and -women. Athletes act through sport.

More generally, the whole Olympic family should do likewise by implementing in the activities of its various components National Olympic Committees (NOCs), International Federations (IFs), coaches, clubs, event organisers, equipment manufacturers, media, public) a number of measures that will help to preserve resources and promote the sustainable development of socio-economic conditions, as well as contribute to the positive image of sport.

2.2 Fields of action

The world of sport may act at global, national, local or individual level to promote the environment and sustainable development.

2.2.1 At global level, it is the responsibility of the IOC, the IFs and multinational media and sports equipment companies. These bodies must respect the environment and sustainable development through the way they operate and the criteria they adopt for the selection of host cities or sponsors. The IOC, for example, must incorporate these principles in its criteria for awarding the Olympic Games, through its partnership with UNEP and the activities of various commissions, particularly the Sport and Environment Commission. The same is true of many NOCs and IFs which have set up their own Environment or Sustainable Development Commissions. Meanwhile, multinational sports equipment manufacturers can play their part by implementing the standards and initiatives described in the previous chapter.

2.2.2 At national level, these activities are primarily the responsibility of the NOCs and national sports federations, although the producers or distributors of sports equipment and the national media are also involved. Practical projects may be carried out in collaboration with national political authorities, non-governmental organisations or private companies. Such projects can in particular be adapted to the specific characteristics of individual countries, including their geography, climate, culture and socio-economic situation.

2.2.3 At local and individual levels, an athlete's attitude, personal desire and activities within his or her club may form the basis for a huge number of simple, effective initiatives. Here also, close collaboration with local authorities and organisations and with environment professionals is vital. These activities should have a practical dimension and their results should be directly visible to the population.

2.3 Attitude

Nowadays, in all societies, whatever their geographical, political, economic, social, ethical or religious situation, protection of the environment and sustainable development are deeply positive values. The Olympic family can, at every level, actively promote these values, since they are also crucial to the future development of sport:

- Individual athletes can fulfil their potential only if they are in harmony with their mind and body, which must in turn be in harmony with their environment.
- For elite athletes, the quality of the environment affects their performances. Furthermore, their respect for the



Chapter 2: General conditions for sport that respects the environment and sustainable development



environment and participation in activities promoting sustainable development form part of their duty as well-known personalities to set a good example.

- For a team, respect for the environment and involvement in joint activities promoting sustainable development are among the principles that facilitate the formation of a group of individuals whose behaviour and attitudes are sound.



Figure 20: In Matharé, Nairobi (Kenya), team spirit and protecting the environment go hand in hand.

- For equipment manufacturers and builders of sports facilities, measures to protect the environment, save natural resources and fulfil the criteria of sustainable development are now essential to the quality of their products, their brand image and the general reputation of their profession.
- The media have a particular responsibility to educate the public and protect the image of sport, such as by emphasising the harmony that is necessary between athletes and their environment and the role that sport can play in promoting sustainable development.
- For spectators, respecting the environment is an active way of becoming personally involved and helping to promote the positive image of the sport they enjoy.

2.4 General rules

Firstly, we should remember that human beings themselves are an integral, if not central, part of the environment, and that any attack on their integrity is also an attack on the environment as a whole. Respect for the environment should therefore begin with respect for the individual, particularly the biological dimension. The fight against drugs, doping and narcotics, which have serious long-term psychological and physiological effects on individuals, also therefore contributes to the protection of the environment and the promotion of sustainable development.

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Whether a sports activity is held in a natural environment or in a stadium, it is essential that it should not pose an additional threat to the environment in which it takes place. Therefore, sports activities should not:

- pollute water;
- discharge solid waste;
- emit toxic gases which destroy the ozone layer or greenhouse gases;
- pollute or damage the soil;
- contribute to deforestation;
- reduce biodiversity;
- harm the landscape either physically or aesthetically;
- reduce renewable resources.

With regard to sustainable development, it is vital that sports activities do not:

- waste resources, whether raw materials, energy or water;
- marginalise a group or section of the population;
- undermine culture and beliefs;
- damage local economic activities.

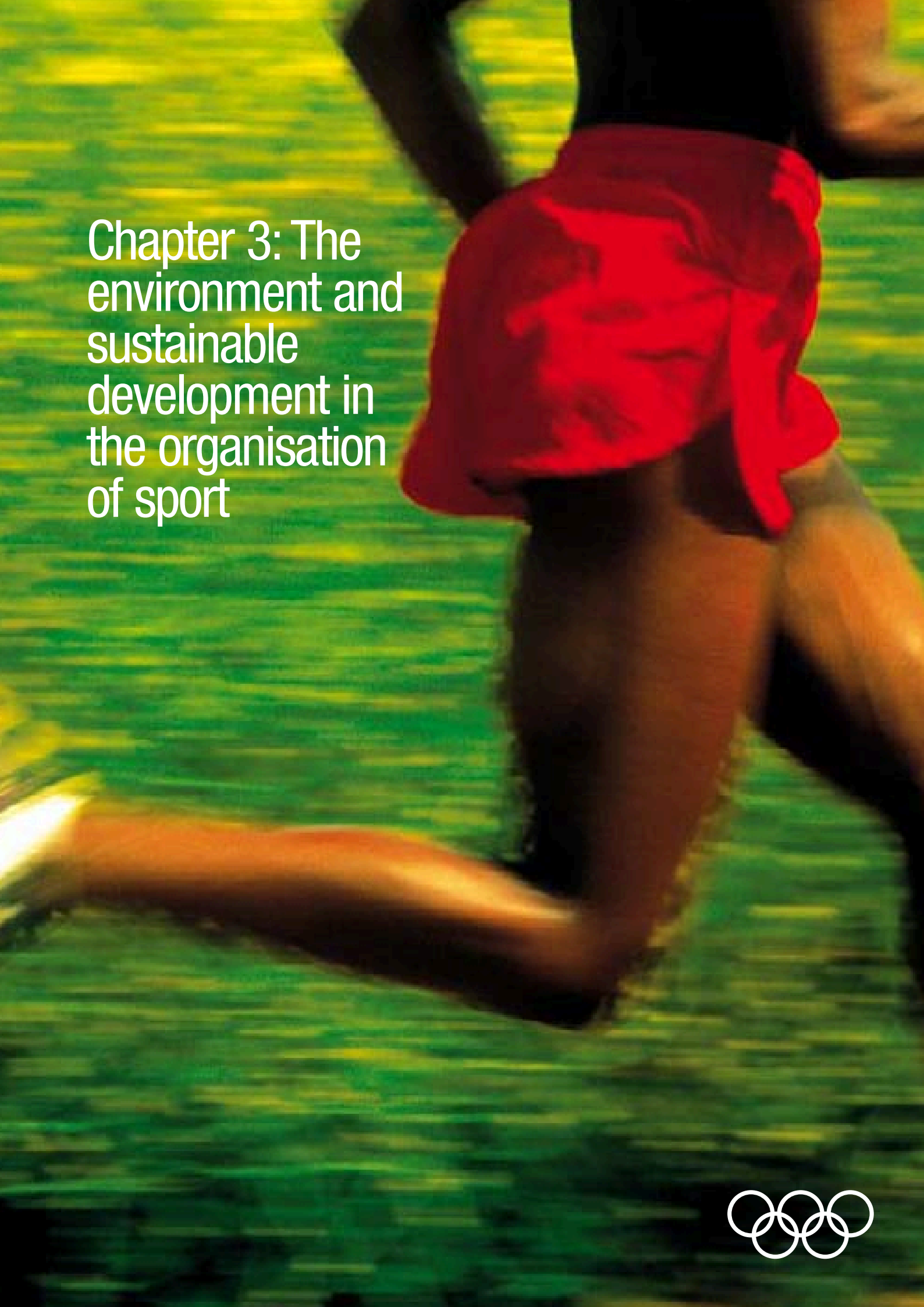
Furthermore, sport can set a good example by enhancing protection of the environment and sustainable development. For example, through sport it is possible to:

- increase awareness and enjoyment of nature;
- combat damage to health due to environmental pollution;
- promote modes of transport that produce little pollution and use few resources;
- help different social groups to meet and understand one another;
- fight against all kinds of segregation;
- protect young people from violence;
- contribute to the integration of disadvantaged groups and persons with disabilities.

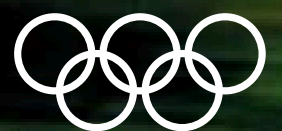
The world of sport has a particular responsibility where disabled persons are concerned. At global and national levels, this is achieved through the Paralympic Movement (for athletes who are amputees, wheelchair-bound, have cerebral palsy, visual impairment or other locomotive problems) and the Deaflympic Movement (for deaf athletes). At local level, it is important that every athlete, club and sports facility manager feels responsible for facilitating the integration of disabled or deaf persons, whether they are elite athletes, grassroots participants or spectators. For the media, it is necessary to highlight sport for athletes with disabilities, whose events are as interesting as the same events practised by athletes without a disability.







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3.1 Sports authorities

By sports authorities, we mean the IOC, NOCs, IFs and national federations. It is important to ensure that respect for the environment and the active promotion of sustainable development are incorporated in the spirit and practice of the sports governed by these bodies.

To this end, it is necessary to:

- set up a commission or working group for the environment and sustainable development;
- appoint an environment and sustainable development officer.

The commission/working group for the environment and sustainable development must have the confidence and support of the most senior officials of the organisation of which it is a part. It should be responsible for proposing realistic, practical activities and measures aimed at protecting the environment and promoting sustainable development. The commission/working group should include representatives of all the groups involved in the sport concerned (governing bodies, athletes, managers, club officials, environment or sustainable development professionals, equipment manufacturers, media).

The remit of the commission/working group for the environment and sustainable development should include the following aspects:

- Defining the activities related to the environment and sustainable development that should be given priority in the sports for which it is responsible;
- Facilitating the exchange of experiences between members of the Olympic Movement in the environment and sustainable development field;
- Promoting education on the environment and sustainable development by organising meetings and publishing handbooks;
- Coordinating and promoting joint activities with other sports and bodies, governmental or otherwise, responsible for the protection of the environment and sustainable development.

The remit of the environment and sustainable development officer should include the following aspects:

- Implementing the activities proposed by the commission/working group;
- Ensuring that these activities are actually carried out;
- Giving advice on how these activities should be implemented or putting those responsible in contact with relevant experts;
- Finding partners or support to implement these activities;
- Preparing regular reports on the activities carried out;
- Informing their organisation about the applicable regulations and standards and about new developments related to the environment and sustainable development;
- Helping their organisation to act with respect for the environment and sustainable development (office equipment, waste management, transport and energy policy, etc.);
- Communicating with the media and public about their organisation's efforts to promote the environment and sustainable development.





Figure 21: Sports authorities can promote education about the environment and sustainable development by organising national or regional meetings.

The largest sports organisations may be able to have their environmental activities certified or approved by setting up an environment management system (e.g. ISO 14001 standards), which should be regularly inspected through an independent auditing scheme. They can also demonstrate their support for the environment and sustainable development by giving priority to partnerships with companies that meet environmental (ISO 14000) or ethical and social (e.g. Global Compact, GRI, SA 8000) standards.

Finally, certain sports generate a great deal of money at professional level. Using this potential to participate in major global sustainable development initiatives is part of responsible citizenship which is the responsibility of all organisations which can carry out positive action at this level.

3.2 Sports associations

By sports associations, we principally mean clubs, which are the basic building blocks of sport. It is the clubs that are responsible for implementing activities designed to protect the environment and promote sustainable development. Their attitude sets an example for individual athletes as well as for the whole community in which they are located.

These activities should be categorised into those which relate to the functioning of the club and those that are specific to the sport itself. Specific ideas for each of the 35 Olympic disciplines are proposed later in this guide, but the present chapter suggests some activities that are common to the functioning of all sports associations, whatever discipline they represent.

As far as clubs are concerned, there are two levels of responsibility for the protection of the environment and sustainable development: example-setting and practical action. Club officials and managers are particularly responsible for setting a good example, while all members must put these principles into practice.

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3.2.1 Rules for exemplary conduct of club officials and managers

Club officials and managers have a particular responsibility for setting a good example through their behaviour. Their personal commitment to protecting the environment and sustainable development and their own conduct in this area are the motivating force for other club members.

Rules of conduct for club officials and managers

- Ensure that club members are taught to respect the environment and sustainable development;
- Rigorously abide by the rules relating to the environment and sustainable development which they require the club to respect;
- Do not needlessly award themselves benefits that are more harmful to the environment than the actions of club members;
- Endeavour to maintain a balance between all social groups in the club's managing bodies.

3.2.2 Practical advice for clubs to respect the environment and sustainable development

A club may actively promote the environment and sustainable development as part of its general activities, the management of its premises and travel arrangements, and community action.

It is essential that all of these aspects should be placed under the authority of an environment and sustainable development officer, who should be responsible for raising awareness among club members and setting up relevant activities. In order to fulfil his or her remit effectively, this person should be both a communicator and a promoter.

The functions and tasks of the environment and sustainable development officer

- Their function should be clearly defined and communicated to all club members;
- Their position within the organisation of the club should be clear;
- They should be firmly supported by the club management;
- They should be able to speak directly to the club management if they deem it necessary;
- They should have access to the activities of all the club's sub-committees/working groups (meetings, planning, contracts, etc.);
- They should be authorised, on the club's behalf, to contact outside organisations or companies on matters relating to the environment and sustainable development;
- They should be the contact person with the authorities for matters relating to the environment and sustainable development;
- They should verify the application of legal directives concerning the environment;
- They should define, depending on local conditions, the activities that should be given priority;
- They should plan their work clearly, drawing up a list of precise, practical and realistic objectives and clear indicators for progress evaluation;
- They should be involved from the outset in any special events;
- They should automatically be consulted at all the important stages of a project or the life of the club;
- They should be responsible for enforcing the rules governing the organisation and functioning of the club's premises, environmental aspects linked to transport and the club's sustainable development activities that benefit the community in general (see overleaf).



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Rules of organisation and functioning

- Equip the club, if necessary, with basic sanitary installations such as drinking water (impluviums, wells or connection to the water supply network), showers, toilets or latrines, dustbins and waste collection systems;
- Provide separate sanitary installations for women, men and, if possible, children. If necessary, draw up a timetable for use if only one installation is available;
- Finance these facilities by organising public events (sports events, fêtes, etc.) or by appealing to governmental and non-governmental organisations;
- Set up a fund for the maintenance of these installations;
- Ensure that the premises and installations (changing rooms, toilets, latrines, etc.) are cleaned regularly;
- Use recycled or unchlorinated paper for administrative purposes;
- As far as possible, use both sides of each sheet of paper;
- Recycle or reuse paper, packaging, plastic and glass. Use poorly printed sheets for rough work;
- Use low-energy electric light bulbs;
- Turn off lights and electrical devices outside working hours;
- Switch off the sleep mode on electrical devices (computers, televisions, video recorders and DVD players) if they are not used (see below);
- When building new premises, use thermal insulation rather than air conditioning;
- Do not waste water: turn off taps and showers fully after use, repair leaky taps and flushes, repair holes in pipes, do not water plants in the heat of the day;
- Use alternative energy sources: wind energy, solar panels or even just heat water using passive solar energy;
- Preference should be given to day competitions if renewable energy is not available for lighting;
- Avoid the use of aerosols or refrigeration systems that contain CFCs, which destroy the ozone layer;
- Consider when possible, the use of products that conform to environment and sustainable development criteria.



Figure 22: A leaky tap is a major and often neglected cause of water wastage.

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The harmful effects of the sleep mode

The sleep mode, which is becoming increasingly common in electrical devices, is very practical but uses a lot of energy.

In **computing**, it is often found in PCs and modems, and means that users do not have to wait for devices such as printers, scanners and photocopiers to warm up. In **audiovisual equipment**, the sleep mode is used to maintain the time display, to keep channels stored in the memory and to ensure the remote control can function. In **domestic appliances**, the sleep mode keeps water heated so that hot water is immediately available in coffee machines, for example.

In all of these devices, when they are turned off but not unplugged, the sleep mode consumes significant quantities of energy. For example, the proportion of the energy used by a domestic coffee machine in sleep mode can be up to 60% of its total consumption. It is estimated that, in western Europe, the amount of electricity consumed due to the sleep mode is equivalent to the energy produced by six nuclear power stations. In industrialised countries, the sleep mode represents 13% of household energy consumption over a 24-hour period and 36% at night time.

In order to avoid energy wastage by the sleep mode, it is necessary to:

- Unplug devices equipped with the sleep mode when they are not used for long periods (night time, holidays, etc.). Modern devices tend to have permanent memories which means that information is not lost when the device is unplugged.
- Give priority to devices with sleep modes that do not consume much energy. These can be easily identified by means of several labels.

Rules for travel

- Encourage walking and cycling (or any other method that uses muscular energy) for journeys of less than 1 km;
- For journeys of more than 1 km, use public transport or, if none is available, organise a car-sharing scheme; If possible, use maritime or river transport, which is among the least polluting and most energy efficient modes of transport;
- In many developing countries, animal traction is a cheap, non-polluting alternative;
- When purchasing vehicles, if possible choose models equipped with anti-pollution systems (catalytic converters, particle filters) or hybrid or biofuel engines;
- Regularly service the engines of club vehicles;
- When organising events, provide public transport for spectators.

Motorcycles

Motorcycles are a popular form of individual transport in cities that are clogged up with cars and provide a quick mode of transport suited to the economic conditions of developing countries. They consume less fuel per passenger than cars but they are a major source of air pollution, particularly those with two-stroke engines. Over the same distance, this type of motorcycle emits 100 times more hydrocarbons into the air than a car. Motorbikes with four-stroke engines are preferable.





Figure 23: Motorcycles are the main source of air pollution in many cities in developing countries, such as Ouagadougou, Burkina Faso.

Sustainable development activities with the community

- Participate in the environment protection activities organised by the authorities or local community (Environment Day, rubbish collection, etc.);
- Assist people with disabilities at events organised by the club;
- Offer associations the possibility of using the club's premises and facilities for social activities when the club does not need them;
- Offer the club's equipment and the services of its members for the organisation of sports education courses aimed at disadvantaged youngsters;
- Use the club's activities to bring together people from different age groups, social backgrounds, cultures and religions.

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3.3 Individual conduct of athletes

At individual level, all athletes can play an important part in promoting sustainable development and protecting the environment. All they need to do is respect a number of simple rules in their every-day life and as they practise sport.

Every-day behaviour

Avoid wasting water:

- turn taps off fully after use or use water pumps and containers that do not leak;
- use efficient toilet flushes;
- do not water the garden in the heat of the day;
- wash the car sparingly.

Avoid wasting energy:

- turn out lights;
- use heating or air conditioning sparingly (heating to 18-20°C in winter and cooling to 20-22°C in summer is usually sufficient to remain comfortable);
- avoid open fireplaces for heating and cooking on wood-burning stoves;
- do not leave electrical devices in sleep mode.

Travel as efficiently as possible:

- walk or cycle short distances;
- for long journeys, use public transport if available;
- choose fuel-efficient cars (e.g. consuming less than 7l/100km for long journeys and less than 10l/100km for short journeys);
- if using a car, share it with other people (car sharing);
- for petrol vehicles, if possible choose those that use unleaded petrol and are equipped with catalytic converters; use petrol containing biofuels if it is available and compatible with your engine; also consider using hybrid engines;
- for diesel vehicles, choose models with particle filters;
- for motorbikes, choose models with a four-stroke engine.

Consume responsibly:

- Consider when possible, the use of products that conform to environment and sustainable development criteria.

Dispose of waste properly:

- when travelling, never throw away rubbish in the natural environment (cigarette butts, chewing gum, carrier bags, food waste, etc.);
- avoid discharging excrement or waste water directly into the natural environment; use the sewerage network, septic tanks or latrines that are emptied regularly. It should be noted that, even for the most underprivileged populations, latrines can always be built very cheaply.
- sort solid waste into:
 - reusable waste (glass, plastic, aluminium), mainly objects that can be kept at home and reused;
 - recyclable waste (glass, paper, aluminium), objects that cannot be reused but which can be converted back into raw materials;
 - recoverable waste (compostable organic waste), to be used as fertiliser in private gardens or by market gardeners;
 - hazardous waste (batteries, medicines, paint, solvents) which must be kept out of children's reach and be disposed of in specialist centres;



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- other waste, which is stored in sealed containers and then collected by the responsible authorities or otherwise buried a long way from the water supply or well.
- Set a good example, encourage family and friends, teach children to respect the environment and instil at an early age the need to promote sustainable development.

Behaviour as an athlete

- Support the club's environment and sustainable development officer;
- Volunteer to undertake environment conservation tasks within the club (cleaning, collecting waste, switching off lights and electrical devices, etc.);
- Participate in the club's activities to promote dialogue and understanding between people of different generations, sexes, cultures, beliefs or origins (group training sessions or excursions, exchange of experiences, etc.);
- Volunteer to participate in environment conservation initiatives in which the club is involved (Environment Day, cleaning green areas, etc.);
- Set a good example by looking after the environment while practising sport (do not discard waste, use public transport whenever possible to travel to competition venues, etc.);
- Encourage the other club members to respect the environment and support sustainable development;
- Top-level athletes may be able to use their fame and media profile to spread ideas promoting the environment and sustainable development and to develop the Olympic family's activities in this area.

3.4 Sports events

Protection of the environment during sports events is particularly important because such events are attended by a large number of people during a short space of time. This situation is even more difficult to control when events are held away from stadiums that are specifically designed to host them. These events also create transport problems and have economic implications for the whole of the region in which they are held. The most noticeable effects on the environment result from the sheer number of spectators, their transport to the event venue and their behaviour.

In this regard, a public transport system should be provided in accordance with the size of the event, either by adding to an existing system or by setting up a temporary service. Measures may also be taken to deter people from using cars (tolls on roads leading to the event, high parking charges, etc.).

Environmental impact studies should be carried out before and after most major events. It is important to be able to base decisions on clear indicators which make it possible not only to evaluate the impact, but also to monitor progress where events that are held regularly are concerned.

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Example of indicators for the evaluation of an event's impact

Environmental aspects

- Average distance travelled by each spectator/participant to attend the event
- Proportion of spectators/participants who travelled to the event using public transport, on foot or by bicycle
- Total energy consumption during the event
- Average consumption per spectator/participant
- Total weight of waste generated
- Average weight of waste per spectator/participant
- Area of land requiring rehabilitation

Economic aspects

- Number of people attending the event
- Expenditure on accommodation and/or catering during the event
- Average expenditure per spectator/participant
- Total investment for the event
- Proportion of sponsorship in the budget
- Proportion of the budget invested locally
- Turnover achieved
- Number of jobs created (excluding volunteers)

Social aspects

- Number of days of voluntary help created
- Age breakdown of participants and spectators
- Male/female ratio among participants and spectators
- Number and type of facilities provided for people with disabilities
- Percentage of spectators who purchased discounted entry tickets (old age pensioners, unemployed, schoolchildren and students, etc.)
- Evaluation of the interest shown in the event by the local population
- Evaluation of the interest shown in the event by spectators

Sports events that are held in stadiums generally use facilities, either indoor or outdoor, that are equipped with appropriate sanitary amenities (toilets and bins). However, a number of rules need to be respected in order to ensure that these amenities are used and function properly.

Rules to be respected for events held in purpose-built stadiums

- Waste water from a stadium should be channelled into a sewer network and, possibly, to a water treatment plant designed to serve at least the equivalent number of people as the stadium capacity. This ensures the smooth discharge and treatment of waste water, which is indispensable for the proper functioning of the amenities;
- The amount of packaging, particularly plastic and aluminium, used in products, drinks and foods sold to spectators in the stadium should be kept to a minimum;
- Meanwhile, there should be plenty of bins and notices encouraging people to use them;
- The amount of waste should be reduced by setting up a deposit system;
- There should be a ban on bringing into the stadium potentially hazardous items (firecrackers, flares, foam sprays, etc.) which might cause suffocation, intoxication or fire;



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- People with disabilities should be given the help and assistance they need to participate in the event in the same way as other members of the public;
- Following each event, the stadium should be cleaned with all solid waste picked up and possibly sorted, toilets cleaned and disinfected and the waste water drainage system checked. For indoor venues, the same should apply to the heating, ventilation or air conditioning equipment.

Sports events held in the natural environment require most of the same precautions that are taken for events in stadiums, in addition to the need to choose a site where environmental constraints are at a minimum, to protect the natural environment, to provide temporary facilities at an undeveloped site and then to restore it to its original condition, and to cope with changing climatic conditions.

Rules to be respected for events held in the natural environment

The environmental rules to be respected are the same as those for events in purpose-built stadiums, as well as the following:

- Areas that are protected or of special ecological, historical or cultural value should be avoided;
- Low-lying areas should be avoided;
- Sites where the ground water is close to the surface or near to drinking water sources should be avoided;
- Trees should not have to be cut down; if it is necessary to do so, an equivalent number should be planted elsewhere or after the event;
- Begin by using all available hard surfaces before building on soil;
- Choose solid ground in order to ensure stability and a secure base for installations such as mobile cafeterias, toilets or changing rooms;
- Choose ground which soaks up water quickly when it rains; if necessary, set up a temporary drainage system;
- Install a parking area downhill from the event venue;
- Clear vegetation from as small an area as possible;
- For public access, create gravel or geotextile paths on uncleared ground;
- Ensure that spectators who watch water sports from a riverbank covered in vegetation stand at least 5-10 m back from the shore;
- Appoint a specific person to be responsible for the environmental aspects of the event and provide him/her with a team to help enforce the environmental rules, with authority to issue official warnings or expulsions. The more the public respects the environment, the less it will cost to restore the site after the event;
- Provide a suitable number of water supply points, portable toilets and bins for the number of people attending the event;
- Display everywhere, clearly and legibly, the rules to be respected and the applicable sanctions. Make regular loudspeaker announcements to the same effect;
- Set aside a special budget for the restoration of the land, as this will encourage the owner to make it available again for future events;
- Draw up a site evacuation plan in case of bad weather (to be ordered by the environment officer and implemented by his/her team), designed to prevent panic and trampling of ground other than proper pathways and playing surfaces.

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Figure 24: For events held in a natural environment bins must be made easily accessible everywhere to competitors and spectators.

From a sustainable development point of view, a sports event may have a negative impact on a particular region if it is held only occasionally or just once and accounts for an excessive proportion of the local economy. It is important that the economic spin-offs of the event and the publicity it generates for the region are invested in more sustainable development strategies based on regular activities.

3.5 Buildings and other structures

Sports stadiums and other structures devoted to sport have a wide variety of functions, from small club houses to prestigious Olympic stadiums, as well as swimming pools, harbours, skating rinks and ski-jumps. The primary function of these facilities is to provide maximum comfort and safety for people practising, competing in or watching sport. These goals are fully compatible with respect for the environment and sustainable development.

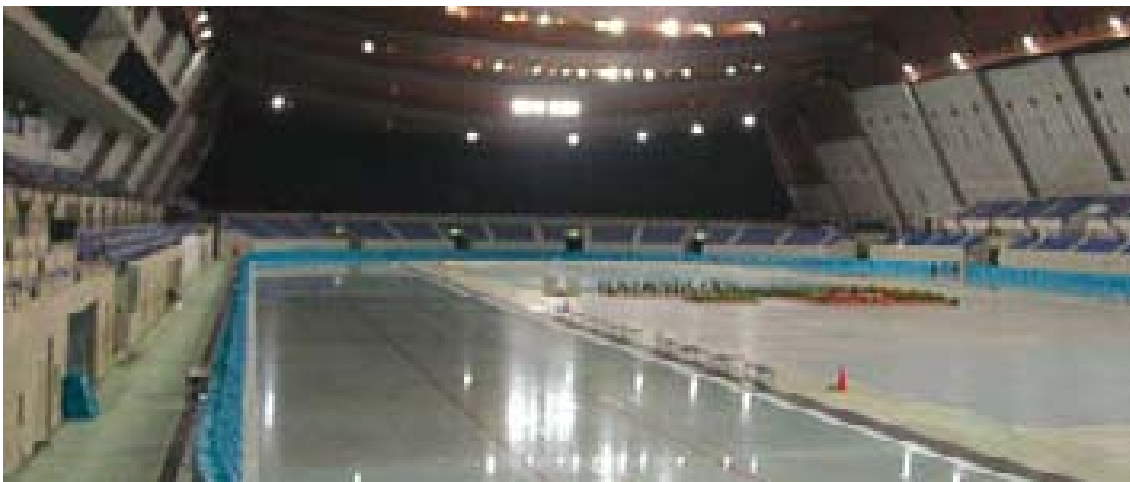


Figure 25: The facilities built for the 1998 Olympic Winter Games in Nagano (here, the speed-skating rink) fulfilled the criteria of architectural excellence as well as energy-saving.



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From an environmental and sustainable development point of view, buildings and other structures must respect six main criteria:

- Integrate harmoniously into the site where they are located;
- Offer a sustainable response to local needs in terms of sports facilities;
- Do not contaminate the environment;
- Do not waste resources or tap into resources that are needed to meet the basic needs of the local population;
- Be accessible to people with disabilities, both competitors and spectators;
- Serve as a meeting place and venue for social interaction based on sport.

Facilities must also meet the highest possible safety standards in terms of sturdiness and resistance to fire.

Integration into the site means more than just aesthetic, landscape and architectural aspects. It also includes regional planning factors, such as the provision of public transport as well as parking areas for cars and facilities for ancillary activities.

A sustainable response to local needs in terms of sports facilities has several different dimensions:

- The design, building materials and maintenance of the structure should ensure its long-term usability;
- It is vital to avoid creating “white elephants” – prestigious buildings constructed for a particular event but whose long-term potential is difficult to realise and whose maintenance needs are often disproportionate to the financial means of the local communities responsible;
- On the contrary, the structure should have a variety of uses (be capable of hosting several different sports and other types of event, offer facilities for social activities), or even a modular layout of pitches and terraces for spectators;
- For certain infrequent uses, preference should be given to installations that can be dismantled.

Respect for the environment means carrying out various kinds of measures and activities:

- An environmental impact study should be conducted before any new construction or major redevelopment project;
- Life cycle analyses may be carried out in order to assess the global environmental impact of the materials or technical processes used;
- As far as possible, existing installations should be reused after being redeveloped in order to adapt to changing needs and environment protection requirements;
- The use of renewable energies (geothermal, solar and wind power) should be maximised, since the large surface areas and structures of stadiums lend themselves perfectly to the installation of suitable equipment (solar panels and wind turbines);
- The number and distribution of sanitary installations (toilets, bins) should reflect the number of people using the facility;
- Particular attention should be paid to waste recycling;
- Waste water removal, waste management and smoke purification systems, as well as electrical circuits, heating, air conditioning and ventilation systems should be regularly checked and maintained so that the venue continues to produce minimum levels of pollution and energy consumption;
- All of these installations should be modernised in line with technological progress;
- Staff operating the venue should be trained in environment-friendly and energy-saving techniques;
- The use of chemical pollutants and hazardous substances should be banned. If it is necessary to use them, they should be used in compliance with current legislation and with great care. Particular attention should be paid to how they are stored.

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Figure 26: In countries with high sunshine levels, solar panels are particularly suitable for providing electricity for sports or other isolated facilities (Island of Cabrera, Balearics, Spain).

Sharing of resources (land, water, energy) should not disadvantage local populations. In particular, sports facilities should not be built on agricultural land or in forests, while ground waters, springs and rivers should not be tapped into if they supply communities downstream. When new installations are built, the impact study should assess the changes that will result in terms of access to these resources, and the developer should take responsibility for ensuring that local populations do not suffer.

For people with disabilities, whether competitors or spectators, access to sports facilities and structures must be provided for all events. Ramps or lifts must be provided for people with restricted mobility. For the deaf and hard of hearing, illuminated notices and visual signs should be installed so that they can be seen in any situation. Blind people should be provided with documents in Braille containing all important information and, if possible, an audio system broadcasting a commentary of the event. As far as possible, personalised assistance (guide, person who knows sign language, etc.) should be available at the venue entrance. Such assistance is vital in stadiums without special access for people with disabilities or a suitable communication system (visual notices, loudspeakers).

The social role of sports facilities should be developed as much as possible. Through their design and the way they operate, sports venues and structures should be used to host community activities beneficial to local populations. This may involve making equipment available for physical education lessons in local schools, renting rooms to local organisations, groups of senior citizens, women, young people, etc.



Chapter 3: The environment and sustainable development in the organisation of sport



3.6 Equipment manufacturers

Sports equipment manufacturers may participate in sustainable development by using production techniques that are non-polluting and use few resources, resulting in recyclable products that conform to sustainable development criteria. This is also in the manufacturers' interests, since their respect for the environment and actions to promote sustainable development form part of the brand image to which consumers are becoming increasingly sensitive.

3.7 The media

The media are the main vehicle for the image of sport and therefore have particular responsibility for educating the public and influencing their behaviour. In the same way that the manner in which the media present sports events can help to prevent violence in stadiums, the emphasis given to respect for the environment at sports events or by a particular athlete can help to raise public awareness in this field. This also contributes to the positive image and appeal of sport, which the press needs in order to attract an audience.

The press (technicians, reporters, press officers) should also respect the rules on environmental protection when they attend sports events. In particular, after a sports event requiring equipment (cameras, microphones, cables, etc.) to be set up in a natural environment, it is vital that the press restores the site to its original state. Particular care should also be taken with the use of heavy vehicles (outside broadcast vans, lorries carrying equipment) which might seriously damage fragile ecosystems.

3.8 Adapted criteria for developing countries

In most developing countries, access to resources (water, food, firewood, fertile soil, etc.) and health issues (parasitic diseases, infant mortality, quality of water and food, etc.) are much more problematic than in other countries. Any measure to protect the environment can make sense only if it takes into account the fact that these two areas are primary concerns for the authorities and the public.

Furthermore, particularly in tropical or equatorial countries, food safety is even more dependent on environmental conditions than elsewhere. Consequently, damage to the environment in these countries immediately results in the deterioration of public health.

The world of sport can play an extremely important role in this respect. In many disadvantaged communities (remote areas, underprivileged urban districts, indigenous communities), clubs/teams are sometimes the only organised social structures capable of stirring people to action. Clubs/teams, for example, have the credibility required to offer effective education about health issues. However, it is also in their interests to do so, since they benefit directly from improvements to the community's state of health (greater physical fitness and motivation of athletes, reduction in absenteeism, etc.).

Organisations that are active in the health, environment protection or social field, governmental or otherwise, should also realise that it is in their interest to work with sports organisations, which can provide them with partners who enjoy the trust of the community and individuals (club presidents, coaches) who can help them to communicate with local people.

Particular mention should be made of sports stadiums and facilities in developing countries. In most cases, local building techniques mean that it is possible to construct, at an affordable cost for these countries, facilities that respect the environment to the same degree as those built using highly sophisticated and much more expensive techniques.

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Some examples of criteria adapted for developing countries:

- The use of local materials and traditional building techniques can produce astonishing results in terms of the insulation and ventilation of buildings;
- Rainwater collection systems should be automatically included in newly built sports facilities;
- Well-designed and maintained latrines provide excellent health benefits for clubs and small sports installations;
- For larger installations, several aid organisations or research centres have developed water purification systems that require little investment and function simply and safely (see photograph below);
- Several maintenance tasks (cleaning, maintenance of green areas) do not require the use of expensive, energy-guzzling equipment, but can be carried out by local workers;
- In tropical and equatorial areas, solar panels can usually meet the main energy needs.



Figure 27: In developing countries, sports installations can purify their waste water using simply designed, affordable purification stations (Centre régional pour l'eau potable et l'assainissement – CREPA, Ouagadougou, Burkina Faso).

Some of the most harmful pollution in developing countries is caused by plastic packaging, both generally and at sports events in particular. It is vital to raise public awareness of the need to stop using plastic bags and to reuse plastic containers in accordance with hygiene rules. Sports clubs and associations can organise projects to collect used plastic bags and containers in public places, sort them, recycle them where possible and take what is left to treatment plants or rubbish dumps.

Many large cities in developing countries are blighted by expanses of waste ground which, rather than acting as uncontrolled, insalubrious rubbish tips, could be cleaned up by sports organisations and converted into sports pitches.





3.9 Priorities depending on local conditions

One of the main requirements for success in implementing policies and measures to protect the environment and sustainable development is the drawing up of priorities. For the purposes of sustainability, these priorities must firstly depend on local conditions.

Several types of conditions need to be taken into account:

- **Economic conditions** are the first to be borne in mind. It is important to avoid promoting unachievable projects whose main consequence will be to demotivate and create frustrations. In the environmental and social development field, when funding is limited, local or alternative solutions, particularly education, can often resolve many problems and make progress possible.
- **Climatic or geographical conditions** often determine what should be considered as priorities:
 - water supplies in areas affected by drought;
 - the fight against deforestation in humid tropical regions;
 - preservation of the fertility of agricultural land in temperate or semi-arid zones;
 - the fight against air pollution, which causes serious respiratory illnesses in large cities.
- **Cultural conditions:** beliefs are also important criteria in the listing of priorities. Environmental protection is sustainable only if it ties in with local culture and religion. For example:
 - health measures must respect the restrictions and practices laid down in many religions;
 - education about protecting nature should be in keeping with different civilisations' cultural perception of nature;
 - in several civilisations, certain places, trees or animals are sacred, which means they must be treated with particular respect;
 - measures to integrate different social groups within a sports club should be based on a broad diversity of social traditions.
- Finally, for marginalised groups in disadvantaged areas, the mere **possibility of practising sport** or joining a team can restore people's social self-worth and dignity, which is an indispensable condition of respect for self, others and the environment.