

# **Sustainable Olympic Games**

## ***A dream or a reality?***

Philippe Furrer, (project manager, International Olympic Committee)

*This paper doesn't necessarily reflect IOC's opinion, but only the author's ones.*

### **Summary**

This article seeks to contribute to the literature that assesses the impacts of hallmark events by taking the Olympic Games as an example and exploring the apparent contradictions between the concepts of a large scale one-off event and the principles deriving from sustainable development policies. The integration of sustainable development strategies through the different phases of the event management is investigated from various viewpoints: Games organisers, host city authorities as well as from the standpoint of the Olympic Games governing body, the International Olympic Committee (IOC).

The conditions and parameters that may eventually bring true meaning to the term “sustainable Olympic Games” are reviewed, taking into account the latest developments in sustainable monitoring and reporting strategies that exist in corporate business.

Recommendations for responsible public authorities, Olympic Games organisers and for the IOC are discussed in the conclusion.

### **1. Introduction**

A review of the literature on the effects of the Olympic Games on the host city and its citizens immediately points to the large amount of material on the economic impacts of the Games, while the understanding of their social and environmental long term impacts remains inconsistent. Also, the manner in which the Olympic Games have been or are being grafted on to long term public urban and regional development strategies clearly deserves more attention.

Although it is widely accepted that mega-events such as the Olympic Games have a large impact on and leave an important legacy to the host city and region, the Olympic Games have until now hardly been part of the sustainability debate. This may result from apparent contradictions between these two paradigms. It is true from the outset that the high concentration implied by the Games in time (a two-week event), in space (one host city only) and in investment (the operating and infrastructure costs of the Games are in the billions) seems largely to contradict the concepts of sustainable development that advocate the dispersion and sharing of environmental, social and economic impacts across time and space for the benefit of all. However, this paper demonstrates that significant efforts are being made by host cities, Games organisers and by the IOC to ensure host cities and regions, as well as their citizens, are left with a positive long term legacy.

While accomplishments by governments and corporate businesses in the area of sustainable development have been limited since the signing of Agenda 21 in Rio, it appears that great opportunities exist for event management to lead by example. The apparent contradictions between sustainable development and hosting the Olympic Games do pose challenges. However, the Olympic Games could also, under the right guidance, create an opportunity for governments to implement

sustainable development policies. As the eyes of the world turn to the host city during the Games, it becomes the ideal stage upon which principles and examples of sustainable development can be showcased.

One of the aims of this paper is to propose a definition of sustainable Games and, by doing so, encourage others to refine it and explore all potential applications for future mega-event management. Recent and current experiences must be consolidated and passed on to future event organisers and city authorities in charge.

## **2. Definitions**

### *2.1 Sustainable development*

According to the United Nation's definitions, sustainable development is development that is balanced between people's economic and social needs and the ability of the earth's resources and ecosystems to meet present and future needs.

Also widely accepted is the three-dimensional nature of sustainable development: economic, social and environmental. It refers to a path of socio-economic development that would be financially balanced, socially equitable, ethically responsible and adequately integrated in the long-term ecological balance of the natural environment. Sustainable development is also a dynamic process that will continue to evolve and grow as lessons are learnt and ideas re-examined.

Since the Rio Earth Summit where the Agenda 21 was unanimously adopted in 1992, many countries have been working towards sustainable development. While there has been some progress made in certain areas and a large number of ideas and policy recommendations have been produced, implementation has clearly been slow in many ways. However, the journey towards sustainable development has not been straightforward and is far from being fully achieved. Very little progress seems to have been made towards the practical implementation of a sustainable development mode (Griethuysen and Hug 2001). In fact, much progress result from local initiatives, thus putting into practice the well-known adage "think globally, act locally".

Little progress has also been made on the understanding of the inter-relationship between the three pillars of sustainable development. A large part of the focus has been put on the environmental dimension of sustainability. It can be argued here that the Olympic Games, by their multidimensional nature, epitomise the notion of a truly global event and may therefore represent a very interesting investigative field to shed a new light on the debate over sustainable development in the urban milieu of post-modern cities.

### *2.2 The post-modern Olympic Games*

The Olympic Games, particularly over the last 20 years, has experienced unparalleled growth and universal popularity. It is the largest and most successful sporting event in the world, and has become the pinnacle of most athletes' careers.

Hosting the Olympic Games is a major project which always leaves an enduring mark on the host city/region and their residents. With the legacy of new or renovated venues and infrastructure, the Games may represent a facelift for the host city.

The IOC and the Sydney Organising Committee for the 2000 Olympic Games (SOCOG) generated approximately US\$3 billion during the period 1997 – 2000 from the marketing of the Games. Olympic spectators purchased 6.7 million tickets. At the Sydney and Salt Lake City Olympic Games, there were 200,000 and 90,000 people accredited respectively. There were 10,651 athletes from 199 competing nations in 300 events at the Sydney Games (Pound 2002).

The operating budget of the Olympic Games has now reached more than US\$ 2 billion for Summer Games and US\$ 1.5 billion for Winter Games. The technology budget to deliver information systems, telecom needs and other services necessary for the staging of the Games alone amounts to US\$ 270 million (Winter) and US\$ 430 million (Summer). The additional public expenditure for new venues or Olympic-related infrastructure such as new roads or metro lines is more than US\$ 1 billion and may in some cases reach several billion US\$.

These statistics illustrate the monumental task of staging the Olympic Games not only for the organisers, but also for a host city/region and its citizens. Hosting the Games puts enormous pressure on the city's accommodation stock, on its waste management system, land use, on its energy supply, water consumption, sewage system and on its transport and security networks. Each of the above needs to be brought up to such a standard at which it can accommodate the increased population during the Games and is thus a problem for organizers and city planners to resolve.

### **3. The impact of hosting the Olympic Games: a legacy or a burden?**

Hosting the Games can never be said to be exclusively positive or negative. There is a mixture of both in all cases. The sections below will describe the most common effects of the Games on a host city and its residents, and explore how these impacts should be best assessed in the future. As the aim of this paper is not to list all potential impacts of the Games but to discuss sustainability issues, we will concentrate on some of the more significant long-term effects.

#### *3.1 The Olympic legacy*

Staging the Olympic Games can have multiple impacts on a host city or region. There can be physical, economic, environmental, social, cultural, psychological, political or even ideological impacts. A few of them will now be reviewed.

##### *Economic benefits*

The most widely publicised benefit of hosting the Games is the prestige of putting the host city “on the map”. As noted in a report commissioned by the New South Wales Government after Sydney successfully hosted the 2000 Games, “The Games also served as a magnet for domestic and

international tourism and rapidly accelerated the process of elevating Australia's international profile and brand in a way that would not otherwise have been possible" (PriceWaterhouseCooper 2002). As such, the Games are seen as a catalyst for growth. The successful organisation of a major event creates confidence in the city and favours subsequent investment (Metropolis 2002).

One of the characteristics of the Olympic Games is that it brings more than US\$ 1 billion worth in contributions from the IOC to the host city for the operating cost of the event (Summer Olympic Games). This Olympic investment is for the most part a share of the IOC-negotiated TV rights fees and sponsorship deals, and represents approximately half of the organising committee's operating budget. Such investment also acts as a magnet for other public or private investments that in turn allow the city to upgrade its facilities and infrastructure. For example, investments in transport infrastructure improve the mobility of people and goods, which is one of the keys to sustainable economic development.

In macroeconomic terms the Games can be seen as an attempt by the host city or region to attract investment or to establish new trade relationships. Other expected benefits are increased income and employment. For example, the increase in the number of tourists and the management over time of the new facilities, hotels, etc. creates lasting jobs.

This view has been confirmed by a recent comparative analysis of case studies (Metropolis 2002) which showed that major events have in fact been a trigger for economic development in the host cities. Hallmark events studied (Olympic Games, Soccer World Cup, etc.) have often provided an opportunity to mobilise substantial public and private investments and have induced immediate or longer-term economic effects in many sectors, such as property, employment or tourism.

In many cases, the Olympic Games have closed their accounts with a profit, which usually funds local sports communities for years to come. For example, the recent Olympic Winter Games in Salt Lake City made a profit of US\$ 100 million. The legacy is therefore not of taxpayers struggling to pay off Olympic debt, but of a large amount of funding going into the Utah Athletic Foundation, the body responsible for running several of the Olympic competition venues (Salt Lake Tribune 2002).

### *Construction and urban renewal*

One of the most vivid examples of benefits associated with hosting the Games is that of enhancing fundamental structural changes in cities and regions. The most significant long-term changes which take place in an Olympic host city are the construction or upgrading of new sports and multi-functional venues as well as the modernisation of the transport systems and other infrastructures (water treatment, power supply and distribution, etc.). These long-term changes can take various forms: enlarged airport capacity, new roads and tram lines, better public transport systems, large venues which can be used for mega-conventions, etc. All of the above, together with new hotel facilities, not only represent a significant improvement for the city life people experience every day, but also a significant legacy for tourism in the city, region and country by "raising infrastructural standards to levels appropriate for international tourists" (Essex and Chalkley 1999: 196-197).

Several examples in Olympic history show that hosting the Games became the opportunity to undertake extensive urban renewal. In some cases, the Olympic Games have allowed entirely run-down areas to be upgraded. In Barcelona, the renovation of the seafront area, a stretch of 5.2 km of coastal landscape, was transformed and now offers attractive leisure and recreation opportunities for visitors and residents alike. Such experience will be repeated in Athens with the re-development of the entire Faliro coastal zone. In Sydney, the Olympic Park in Homebush was built in a former derelict industrial

area full of toxic waste. This is now likely to become the major sporting and recreational centre in Sydney.

### *Social benefits*

Socially, the Games can provide a unique opportunity for harnessing and improving building skills and capabilities among the host population. Being at the centre of the world's attention for two weeks and successfully hosting the Games may function as a showcase of new technological developments or promoting the depth of talent, creativity and organisational skill of local business. As noted by Roper after the Sydney Games, "Participation in state of the art facility and service design enhanced innovation in private sector firms. Also, more than 100,000 individuals, including 50,000 volunteers, received technical and further education training" (Roper 2002: 96).

The Games also represent an opportunity to spread the practice of sports across all layers of the host population, as well as promote Olympic education and Olympic values among the young generation of the host country. Values such as respect, tolerance, fair-play, the balance between a strong body and mind, pursuit of excellence and others do contribute to building a better and more peaceful world.

### *Psychological benefits*

In terms of psychological benefits, studies have shown how hosting Olympic Games can create a sense of enthusiasm and pride among the host population and give a sense of community and unity which can even transcend social and ideological divisions. In Sydney two years before the Games were staged, the level of enthusiasm was apparently equally as high among those people economically most disadvantaged or those most advantaged by the process of economic restructuring (Waitt and Furrer 1999).

### *Environmental benefits*

Although the Olympic Games imply new construction and additional pressure on the environment through increased traffic, water consumption and waste production, they can nevertheless bring several environmental benefits. Examples of such are new standards in the building industry, use of renewable energy sources, innovations in environmentally friendly technologies, upgrade of water and sewage treatment, new waste management systems and, very importantly, environmental education programmes.

### *Political benefits*

Politically too, the Games have had positive impacts such as in South Korea where, with hindsight, we can see that the 1998 Olympic Games in Seoul launched the country on to the international scene and improved its position among the 'Asian tigers' (Metropolis 2002). In the case of the 2008 Games in Beijing, the Games can be argued to play a significant part in the opening up of the country to internationally-accepted practices in areas such as tendering procedures for major projects, true enforcement of laws and regulations, protection of intellectual property, establishment of new environmental management and assessment systems, etc. On a micro-political level, the Games can also produce positive impacts such as new forms of public-private partnerships in leading major projects or acceleration of public investment decisions. In Athens for example, unprecedented forms of

cooperation among the public authorities and between the public authorities and the private sector may well prove to be one of the greatest benefits for Greece in the new millennium. The latest management practices are also spread through public agencies, thus improving their efficiency.

The review of the above benefits of hosting the Games must however not blind us to the risks and pitfalls that exist along the path to success. Several questions remain open. As Preuss stated in his comparative analysis of Olympic legacies, “the question remains, however, of whether an alternative project would have led to a higher benefit level in the city and/or a socially more just distribution” (Preuss 2000: 100). The rest of this paper will address some of these challenges in more detail.

### *3.2 The Olympic Burden*

Under this heading we are now discussing some of the negative effects the Olympic Games may have on the host city and its citizens. Only a true and honest examination of the obstacles to success will allow organisers and city planners to draw the maximum benefit from the Games and turn it into a lasting legacy.

#### *White elephants*

The first image that comes to mind is that of half-empty and costly white elephants. This expression refers to over-sized venues and facilities that were planned with Olympic-size crowds and ticket sales in mind. White elephants are designed in order to showcase the local economy and engineering prowess instead of fitting them into a long-term urban planning policy and responding to the local population's needs relative to leisure and cultural facilities.

Today, in Sydney, attracting enough events to attain profitability and competing with other pre-Olympic venues is proving a serious problem for Stadium Australia and the SuperDome, both financed by the private sector. Convincing leading teams in several sports to move their home ground to these new Olympic venues is proving difficult. The problem of attracting large crowds to newly developed parts of the city away from the CBD and trying to change citizens' habits should not be neglected. Some critics have even re-named the Sydney Olympic Park “Sydney Jurassic Park”. Evidence also suggests that the more recent Football World Cup in Korea and Japan has left many cities with over-scoped stadia, which, in many cases, represents a considerable financial burden to maintain.

Another type of white elephant can take the shape of new hotels constructed in the lead-up to the Games. Hotel room oversupply after the staging of the Games may have significant effects on the host city or region's hotel industry.

#### *Unequal distribution of the Games benefits*

Realistically, hosting an event of the Games' magnitude must produce winners and losers. The challenge for public authorities and city planners is to avoid a situation whereby the positive effects of the Games are primarily to the benefit of the prosperous classes. Evidence gathered from general urban studies suggests that cities with growing inequalities not only see an increase in marginalisation of social groups and in crime rate, but also lose many of their attributes and much of their selling power.

Therefore, an important question that remains for the most part unanswered is that of equality in the distribution of the Games benefits. Several observers have warned about the risk of increased inequalities between different strata of society or between different geographical parts of the city. This potentially adverse impact can often be related to the concentration of new Olympic venues and infrastructures in specific areas of the host city, processes of gentrification, increase in public debts which may impact heavily on future public investment in various services, and a lack of consultation with local communities who become dis-empowered to act on issues regarding their future.

In a comparative assessment of major events' impacts, Metropolis noted there was a risk that the centre of the host city grab all the profits made from the events to the detriment of other cities in the conurbation or region (Metropolis 2001). Also, the concentration of new developments in derelict urban sectors may lead to a gentrification process, whereby the needs of the poor and social justice in general get overlooked. However, while some studies indicate that the impacts of major events may be spatially concentrated, there is currently little evidence to back up such theories.

### *The Games of city entrepreneurs*

Hosting an event with a magnitude of that of the Olympic Games often means that there are winners and losers among categories of citizens. An ideological interpretation of the Games points to the way in which the event may be used by new types of city entrepreneurs who pay less attention to public services and welfare.

Entrepreneurial conception of the Games can result in a lack of public consultation when planning for major projects. A number of observers have attempted to show how anti-democratic procedures of agencies responsible for planning hallmark events can lead to major events serving the interests of private capital.

In her study of the Sydney Olympic Games, Owen listed the characteristics of urban entrepreneurialism that she considered in her impact assessment in specific Sydney areas. This included "increased centralisation of planning powers, increased privatisation of government operations, the relaxation of normal planning requirements, reduced or tokenistic community consultation, subversion of democratic principles, and reduced public accountability" (Owen 2001: 6).

While theories of elite Games managed by city entrepreneurs as well as unequal distribution of the event's benefits may hold true to a certain extent, evidence also suggests cities bidding but integrating Games concepts in a long-term harmonious way and using the Games as a leverage for positive change reap some concrete benefits for the majority of residents.

### *3.3 Town-planning and the Olympic Games*

As we have seen above, the pursuit of hallmark events is an important strategy utilised by entrepreneurial governments to promote economic growth, secure global investment and even generate social cohesion. The Games are also used by city planners as an urban management tool to improve the city look, operations and attributes. In some cases, the Games have proven to be the most successful tool in refurbishing a downgraded industrial area (e.g. the Barcelona water-front or the Homebush Bay site in Sydney). In other instances, the Games are used as an opportunity to redefine the urban identity of the host city, as in the case of Turin, which is trying to position itself as a city which has now moved beyond its heavy industrial past.

Staging prestigious large-scale events has become a highly competitive industry with cities entering fierce battles to secure mega sporting events or international conferences. Many metropolises have set up permanent task forces responsible for preparing the city's bids to secure prestigious events.

This is not new in the history of event management. It has been claimed that major events have been conceived as accelerators for big urban transformation projects and showcases for the architectural modernity of the city since the first Universal Exhibitions in the 19th century (Metropolis 2002). Today, it has been shown that most of the cities hosting major events consider that the implementation of their town-planning and urban development objectives is at least as important as the event itself.

The determining factor is whether the bid city - and ultimately host city - manages to use the Olympic one-off format and one-time boost to make changes and improvements which become the cornerstones of a self-sustaining process. The first question a city should address is whether the organisation of a major event is a good response to its development goals. A clear political vision for the future of the city must be agreed on before any attempt to host a major event of an Olympic scale. The Games must be inscribed into a global urban and regional vision of economic, social and ecological development.

In that respect, Barcelona stands as a good example since the city placed its Olympic concept within the *Barcelona 2000* Strategic Plan, aiming to obtain the position of the "gateway to Southern Europe" and using the event as a lever to raise its level of facilities and environment to world standards (Metropolis 2002). The success of the Barcelona 1992 Olympic Games can be summarised in the following quote from the CEO of the organizing committee, "The material legacy of staging the Games a decade ago was a godsend to Barcelona. The city was able to tackle the very hard economic crisis that followed in 1993 far better than other regions of Spain precisely because the Olympic investments had been planned with the permanent needs of the city in mind and with the temporary demands of the Olympic Movements" (Jose-Miguel Abad, *The Daily Telegraph*, 5 Nov. 2002).

Evidence shows today in Athens how much the 2004 Games will also change the face of the city and improve the quality of life for all residents through improved public mobility and air quality, increased number of green areas and leisure space, as well as through the re-connection of the city centre with the entire Faliron coastal zone.

## 4. Contradictions and challenges

The potential contradictions between the principles of sustainable development and the framework of an Olympic Games are now being examined. The concentration in time, space and investment in one host city or even in specific areas within the host city is being studied, keeping in mind the need to ensure the Games' legacy is sustainable. Also, the pressure of fast-track development versus the need for public consultation in major urban projects is discussed as another type of apparent contradiction.

### 4.1 Concentration (vs) dispersion

#### *Financial concentration*

A total of 200,000 accredited people over a period of just two weeks, tens of newly built venues, billions spent on new sporting venues and related Olympic infrastructures, more than 20,000 hotel rooms requested for the Olympic Movement constituent groups, an athletes' and officials' village with 15,000 beds... the list of investments needed in the city hosting the Summer Games is impressive and has continued to grow rapidly over the last few decades. These investments are often concentrated in specific areas of the host city and this may be to the detriment of other urban milieus. For example, the creation of an "Olympic corridor" of Games-related investments has been noted in Sydney between its CBD and the site of Homebush Bay, host of some 15 sports during the 2000 Olympic Games. Some run-down areas of the host city may simply be forgotten as a result of the fast process of "dressing up" the city for the Games. It may be questioned here whether such concentration of public funds can be justified by the governing party. Also, state and/or federal spending in the host city may be challenged by other cities or municipalities which feel neglected in the process. Indeed, money spent on new Olympic venues and related infrastructure has often been questioned by those who would like to see such public funding benefit public health or education, two areas which appear to be more important, though less prestigious, than hosting mega event such as the Olympic Games.

#### *Spatial concentration*

Principles of sustainable development usually argue for a dispersion of impacts and investments over time and space so as to minimise pressure on the environment and avoid the potential for unequal distribution between communities, which could spark resentment and tension. For a city to successfully integrate the concept of an Olympic Games into its long-term urban policy planning, great care must be taken to counter-balance the post-modern tendency for urban socio-spatial polarisation and avoid the creation of ghettos and gated communities.

It is also important to note the challenge posed by the degree of venue concentration. While a cluster of venues allows economies of scale (joint logistics, back-up services, etc.) and may serve some organisational needs, it may also work against the logics of long-term legacy and equitable distribution of the events' benefits across the host city and region.

The suitability of venue distribution and concentration must be given high priority in the conceptualisation of an event the size of an Olympic Games in order to guarantee that future needs of the city residents are met. New venues must support the development of host districts and must be integrated into a long-term vision for a balanced urban development. Also, in the future, more

attention should be paid to the use of temporary facilities to upgrade a venue to the standard required during an Olympic Games.

### *Temporal concentration*

The timeframe in which an Olympic Games is set must also be considered when assessing its impacts. With no possibility of postponing the delivery date, organisers are pushed to deliver venues and infrastructures which could have taken twenty years or more to materialise. This fast-track development has the potential to accelerate impact studies, planning procedures, public consultation and even the construction itself, as well as act against implementing environmentally-friendly solutions or safeguarding heritage areas.

Also, the strict deadlines to which an Olympic Games is subject may be used to justify the centralisation of decision making or the creation of special planning agencies. As noted by Owen, this may even prevent local authorities from resisting particular development initiatives of central agencies, prohibiting the delay of approvals of the development applications and the undertaking of comprehensive community consultation (Owen 2001). The result is a superficial community consultation and a discouragement of dissent.

## *4.2 From tokenistic public consultation to full public participation*

The creation of more “flexible” and “efficient” decision-making processes through the centralisation of decision-making and the dilution of local planning powers has been flagged as a potential risk of fast-track development (Owen 2001). Such limitations to opportunities for community consultation and public participation may undermine fundamental democratic principles. Instead of true public consultation or even participation in the planning of major public projects, community participation may be reduced to a tokenistic experience, occurring late in the development process, at the stage of implementation rather than at the strategic planning stage.

However, fast-track development can also be argued to break administrative barriers and force projects off the ground. As the preparation of the 2004 Olympic Games in Athens has shown, many delays in the construction of Olympic venues and infrastructure came as a consequence of legal complaints and local communities’ petitions that systematically opposed projects that impacted their urban environment. Greek courts have been kept very busy with Olympic-related projects. As a result of such delays, Athens received bad international publicity and the cost of such venues and infrastructure is increasing with every day lost. Hosting the Games in the birthplace of democracy has shown the limits of full public empowerment.

In Sydney, the mission of Games organisers and responsible public bodies was expedited because the State Government was able to pass legislation which exempted the Olympic construction projects from the normal appeal processes. While such amendments or acceleration of the legal procedures may be justified for Olympic projects with overall public interest, they may also represent threats to fundamental democratic principles if abused and left unchecked.

The key to this dilemma may be found in conducting public consultation procedures at the project conceptualisation stage, which may then justify the establishment of special Olympic legislation at the time of the Olympic preparation so as to avoid unnecessary delays and pains. If the long-term interests of the host city’s citizens are properly being taken into account at the earliest stages of Games

preparation, the Olympic Games can prove a godsend event which breaks red-tape and forces the delivery of major venues and infrastructure which could otherwise have taken 20 years to build, or which may never even have materialised, as shown today by the example of Athens.

### *4.3 Permanent (vs) temporary*

The objective many governments and ruling parties are trying to reach through the Games is to leave a permanent legacy in the host city. For many, this means a new Olympic landmark, which may become the symbol of the city and its success. The best examples of such attempts to leave an Olympic landmark are the Olympic Stadia. However, evidence shows that on many occasions, Olympic venues have been oversized because the post-Olympic needs were not sufficiently taken into account. Also, the IOC and its Olympic constituents, especially the International Olympic Sports Federations, have often pushed organisers and host cities to provide state-of-the-art venues under the assumption that such a legacy would be welcomed. Too often in the past, little thought was given to post-Olympic use, a spirit which has changed completely now.

Only when the host communities' permanent needs are taken into account can the investment for a newly built venue be justified. The Games remain a two-week event and more temporary facilities could be used to host the event. Recent examples have shown how this can work. Extra capacity can be temporarily added to venues in order to maximise ticket sales at Games time and movable structures can be set up to cater for several functions. This would allow venues to be scoped according to the city's needs, thus avoiding extra financial burden in terms of maintenance. Such a combination of new Olympic venues as permanent legacies with temporary solutions may guarantee a level of sustainability for the Games.

## **5. The greening of the Games**

The place given to environmental considerations in the preparation and staging of the Games is now being examined, taking recent editions of the Olympic Games as examples. While such concerns for an environmentally friendly way of planning and organising the Games have taken far more importance over recent years, it must be set against the danger of promoters and Games organisers using such mainstream "Green Games" notions for the sake of good reputation. The concept may be a "greenwash" marketing tool just like the concept of "ecotourism" became in the follow-up to the 1992 Rio Earth Summit. However, case studies provide numerous examples of innovative planning concepts which result in legacies for host cities that seized such opportunities.

### *5.1 The Olympic Movement's Agenda 21*

The adoption of Agenda 21 by the Olympic Movement was examined during the third IOC World Conference on Sport and the Environment in Rio in 1999 and was approved by the IOC Session in Seoul in June 1999. The Olympic Movement Agenda 21 establishes an action programme allowing members of the Olympic Movement to play an active part in promoting sustainable development, particularly in relation to sports activities. In order to minimise or eliminate the potential damage that can be the result of hosting the Games, the IOC is attempting to integrate the concept of sustainability

presented during the conference in Rio. Concrete recommendations are given in the area of environmental sustainability such as the use of fewer non-renewable resources, the adoption of energy-saving solutions, the use of fewer dangerous products and the release of fewer pollutants into the air, water and soil, as well as the need for an environmental impact assessment to be conducted before and after the event. Also, infrastructures created must be safe in terms of the quality and durability of materials and resistant to attack or natural disaster. The accommodation must be suitable for healthy living and allow economical use of natural resources (IOC 1999).

However, the principles of the Olympic movement Agenda 21 are wider than just the environmental considerations. The aim is also to increase involvement of the local population, improve the socio-economic and health benefits they derive from it, strengthen international cooperation projects for sustainable development, help combat social exclusion, encourage new consumer habits, promote a sports infrastructure which is even better adapted to social needs, and further improve the integration of development and environment concepts into sports policies (IOC 1999). The implementation of such recommendations is proving more challenging than envisaged, as was the case for Agenda 21 in general. Also, it is important to note that the Olympic Movement's Agenda 21 does not really address the challenges of the Games preparation and organisation. It was meant for members of the Olympic Movement and their regular activities.

## *5.2 A decade of green Games - a few examples*

### *Lillehammer 1994*

Environmental considerations and more general concerns for sustainable development took on a new dimension with the Olympic Winter Games in Lillehammer in 1994. These were the first “ecological” Games, although this statement owes much to a successful pro-active communication strategy. Since then, sustainable development has tended to take on growing importance among the concerns and strategies of event organisers. The Lillehammer Games were the first Olympic Winter Games to initiate and implement a comprehensive, co-operative environmental programme.

### *Sydney 2000*

A significant turning point in the “greening” of the Games took place in 1993 when the Sydney 2000 Games Bid Committee released the *Environmental Guidelines for the Summer Olympic Games* prior to winning the right to host the Games of the XXVII Olympiad. These guidelines not only served as a great selling argument by convincing many IOC members to choose Sydney as the host city, but also guided much of the Games planning and preparation as well as produced an environmental legacy for all future editions of the Olympic Games.

Dubbed the “Green Games”, the Sydney 2000 Olympic Games were the most ecologically responsible in history. Various environmentally friendly technologies and processes were incorporated into the planning and operations stages. Wide spread use of solar energy at the Olympic Village and low-emission public transport were but a few examples. These Games were used as an innovative platform to showcase some of the latest developments in green technologies.

The transformation of the Homebush Bay area from a polluted, industrial wasteland to a revitalised complex of venues, wetlands and parklands by the NSW State Government is one of the most notable

environmental achievements, and legacies, of the Sydney 2000 Olympic Games (Balderstone 2001). Attempts at a wide consultation process were made with the setting up of the Homebush Bay Environmental Reference Group to provide advice on the remediation programmes at Sydney Olympic Park and surrounding areas. It contained community groups, environmental organisations and academics and technicians.

Green groups such as Greenpeace were involved from the early stage of the bid and were then integrated into the overall planning of the Games. This not only helped Sydney to win the bidding contest to host the 2000 Games, but it had some very concrete effects on the organisation of the Games. Environmentalists took an active part in the drafting of the “Environmental Guidelines” adopted by the organising committee.

Also important to note is the involvement of sponsors in the Sydney environmental strategy. Several of them adopted green initiatives and showcased them during the Games. Green groups such as Greenpeace and an environmental watchdog called Green Games Watch 2000 encouraged Games sponsors to go over and above their normal procedures in areas such as recycling, waste management, lighting systems, CFC-free cooling systems, etc.

On World Environment Day 2001 the United Nations awarded Sydney the Global 500 Award for environmental excellence. Even the hard to please green movement gave grudging praise. Indeed the adoption by the Sydney organisers of the “Environmental guidelines for the Summer Olympics” has established a new and high standard of environmental performance for future major events. This genuine commitment and full integration of environmental concerns paved the way to success as well as a partnership approach which emphasised education, training and communication (Doikos et al. 2001).

#### *Athens 2004*

Setting its strategy within the framework of the Olympic Movement’s Agenda 21, the Organising Committee of the Olympic Games Athens 2004 is resolved to use the Games as a material demonstration of environmental sensitivity and environmental practice before the Greek and the international society (Kazantzopoulos 2002).

Several new Olympic installations support the rehabilitation and upgrade of urban and suburban areas. Projects such as the construction of the Olympic Village, the Faliron Coastal Front and the Olympic Sailing Centre are among the best examples of interventions which will contribute to a better quality of life for Athenians. Similarly to Barcelona in 1992, Athens is reconnecting its city center with the sea through the redevelopment of the Faliron Coastal Area, host to several Olympic competition venues.

Also important to note is the regeneration of Athens’ historical centre. Improved accessibility through a new pedestrian link between historical centres should prove to be a significant legacy for the city of Athens.

However, it is transport which is likely to become the biggest and most visible Olympic legacy in Athens, improving the rather poor prevailing mobility conditions of most Athenians and the air quality. Also worthwhile to note is the fact that all transport stakeholders in Athens used to work independently, thus forgetting the overall aim of a public transport system which is to enhance mobility and quality of life. The Olympic experience is now promoting integrated transport operations. The huge effort to upgrade, extend and interconnect highway and public transport infrastructures for the Games could otherwise have taken decades to materialise.

### *Turin 2006*

The Organising Committee for the 2006 Olympic Winter Games in Turin (TOROC) has set as one of its goals the need to ensure that sufficient attention and respect be paid towards the environment both in the organising phase and during the event, “guaranteeing the sustainability of the Olympic System also after the Games time” (TOROC 2002).

As a result of the Italian law 285/00, TOROC had to adopt the SEA (Strategic Environmental Assessment) procedures in its overall project management methodology and must therefore keep all the environmental variables related to preparation for the Olympic Games under control, carry out the project environmental monitoring plan, draw up regular environmental reports, and verify the compliance of projects and building sites with required environmental performances. The adoption of such a Strategic Environmental Assessment process means that “all the effects on the territory must be evaluated: either direct or indirect, overall, synergic, short and long term, permanent and temporary, positive and negative, in order to verify the environmental sustainability of the interventions for the Olympic Winter Games Torino 2006” (TOROC 2002: 9). It is the first time such comprehensive SEA procedures are being applied in Italy.

The set of indicators developed by TOROC have been approved by the Italian Ministry of Environment and by the Piedmont Region. They allow the evaluation of the global impact on the environment through every step of Olympic preparation.

An Environmental Management System (EMS) has also been adopted by TOROC on a voluntary basis. It contains prescriptions from the UNI EN ISO 14001 standard and the 761/2001 EMAS Regulation of the European Commission, and requires external validation. The EMS adopted by TOROC should prove a useful tool to coordinate all activities of the environmental department and more generally all initiatives by TOROC in this area. Also, the adoption of an EMS and of the SEA procedures will lead TOROC into drawing up an annual Environmental Report of the 2006 Olympic Winter Games.

A number of environmental initiatives by TOROC represent a fundamental step towards the sustainability of the Olympic Games. Such initiatives may turn out to be a great legacy for a better understanding of sustainability principles in the framework of event management. The European Commission has in fact shown great interest in TOROC’s adoption of environmental policies and is studying the possibility of allocating a financial support to TOROC, so that Turin 2006 could represent a pilot project for the implementation of Environmental Management Systems as applied to major events.

Very importantly, TOROC also appears to be a pioneer in the sense that sustainability is not limited to environmental aspects only. The social dimension has been taken into account as will be examined in Chapter 6 below.

### *Beijing 2008*

The green ring in Beijing’s bid was one of the strongest elements in its effort to win the right to host the 2008 Games. More than a year after its election by the IOC, the organising committee (BOCOG) and the municipality of Beijing are putting words into practice with a very well defined and ambitious environmental master plan. Beijing is taking the “Green Olympics” theme as one of its three mottos for the 2008 Games. To meet the multiple requirements for green Games set by organisers and city

leaders and to improve the overall environmental conditions in Beijing, the municipal government will spend more than US\$ 12.5 billion between 1998 and 2008.

First, it should be remembered that in the mid-1990s, rapid economic development and expansion of the city put great pressure on the city's environment and Beijing suffered serious environmental degradation with, for example, increasing concentrations of pollutants in the air and water. The concept of Beijing green Olympics is a testimony to the government's strong will to enhance the city's sustainability and provide a clean environment for the Games. Olympic projects and the Games will be taken as models in environmental protection for all construction projects. BOCOG is establishing its Environmental Management System (EMS) in line with ISO 14001 standards. The city of Beijing is currently promoting cleaner production modes and ISO 14001 EMS certification to local industries.

An initial Environmental Impact Assessment framework had already been submitted during the bidding stage by Beijing. Environmental indicators are being developed for Olympic projects, which will cover parameters such as energy consumption, water consumption, environmentally-friendly material, etc. Such indicators will be integrated at the design and tendering stages. Beijing is also launching educational campaigns for sustainable development and is striving to raise the nation's environmental awareness.

The multitude of green initiatives will surely prove to be a great legacy of the 2008 Games for the people of Beijing and for the whole of China. The catalyst effect of the Games on promoting the city's sustainability represents a huge opportunity for the world's most populated country, which is currently facing rapid development and experiencing the challenges of rapid urban growth and expansion.

## **6. The IOC, the Olympic Games and sustainable development**

### *6.1 The IOC and the concept of sustainability*

Baron Pierre de Coubertin revived the spirit of the Olympic Games of ancient Greece and strove to use sport to teach the world's youth basic human values that would enable them to lead better lives and build better communities. Today, the Olympic Charter lists the improvement of human conditions and the promotion of peace and sports as a human right as some of its fundamental principles. In short, the Olympic values are about respect. Respect for universally-accepted rules, respect for oneself, and respect for others. In today's world, this is becoming more and more relevant (Rogge 2003). It appears, therefore, that the Olympic Movement and its leading body, the IOC, are defending values that are perfectly in line with the principles of sustainable development.

#### *The Olympic Movement's Agenda 21*

As discussed above, the Olympic Movement's Agenda 21 does not only promote the protection of the environment. This can only be made possible if and when economic and social conditions allow. The Olympic Agenda 21 thus aims at encouraging its members to play an active part in the sustainable development of our planet as a whole. In line with the United Nations' Agenda 21, it proposes that

action plans should take into account the fight against poverty and the integration of disadvantaged social groups. For this, a climate of respect for different social, economic, geographical, cultural and religious groups, which are characteristic of the diversity of the members of the Olympic Movement, is needed.

Another contribution by the Olympic Movement to global sustainability is in the area of international politics. Indeed, the widely accepted definition of sustainable development often ignores its crucial political aspect. For development to be sustainable you need political stability and this is another area where the IOC is trying to contribute, albeit through symbolic steps. The IOC has been active in the promotion of world peace by giving a new dimension to the ancient notion of “ekecheiria”: the Olympic Truce. This modernised version of the Olympic Truce is endorsed by the UN General Assembly.

The fight against social exclusion and the promotion of respect and peace through participation in sport are key principles promoted by the Olympic Movement. However, Olympic values and the Olympic Agenda 21 do not really address the constraints of mega-events such as the Games.

#### *Transfer of Olympic Knowledge (TOK) and Olympic Games Knowledge Services (OGKS)*

The Transfer of Olympic Knowledge (TOK) Programme was initiated to enhance the transfer of knowledge between Olympic Games organising committees. The TOK is based on a combination of methods to collect, store and use the information on the know-how of organising the Games from previous organising committees.

The purpose of this programme is to provide assistance to future Games organisers and to give them the necessary background and practical examples, thus allowing them to develop and implement the best possible solution in their given environment. While the Olympic Charter, the Host City Contract and IOC guidelines set out the requirements and objectives an organising committee must follow, the TOK programme describes the methods used in the past Olympic Games to realise them. This is a way for organisers and city authorities to avoid making the same mistakes as their predecessors and to start planning from a tangible basis.

Olympic Games Knowledge Services (OGKS) is an IOC-owned company which was set up in December 2001 in collaboration with Monash University in Australia. OGKS represents a further development of the TOK providing a range of education services on the organisation of the Games to OCOGs and other members of the Olympic Family.

As such, OGKS uses the TOK information for the delivery of services and tailors it to the specific needs of the end client. Training sessions, briefings, workshops and research/consulting assignments are only a few examples of the service range that OGKS offers.

#### *The Olympic Games Study Commission*

Before his election as IOC President, Dr Jacques Rogge witnessed first-hand the difficulties organising committees and host cities face when hosting the Games. He chaired the IOC Coordination Commissions for the Sydney 2000 Games and the Athens 2004 Games, bodies which are in charge of supervising and assisting the organising committees in their task. He came to the conclusion that the future of the Games was being jeopardised by the apparently unchecked growth in size, cost and complexity of the event. As a result, the IOC President decided to set up a special commission tasked

with the mission to make proposals on how the Games can be made more streamlined and efficient. The Olympic Games Study Commission will make recommendations on the means by which the costs, complexity and size of the Games can be controlled, while recognising that the Games must remain the foremost sporting event in the world.

Discussions with experts and with various constituents of the Olympic Movement confirmed that today's Games have indeed reached a critical size and any further growth in size and cost could jeopardise the Games' success and sustainability, i.e. the continued success of its organisation and of its power to raise funds from sponsors and broadcasters.

The size, cost and complexity of hosting the Games can also exceed the capacity of most cities to stage them. The expenditure required for the necessary upgrade of existing infrastructure or the construction of new facilities is such that the list of cities which can reasonably consider hosting the Games is thinning out. This is going against the Olympic Movement's principle of solidarity and universality.

The size of the Games has become such that many emerging countries do not have or cannot afford the infrastructure to host such an event. In their comparative analysis of host cities, Essex and Chalkley (1999) stressed that not all cities are suitable to host the Games, which depends primarily on the amount of investment needed to bring the city infrastructure up to Olympic standards and whether such investments are in line with the city's needs and its long-term urban development plans. As a result, they argued for a move towards a more "equitable Olympic geography" which would allow the benefits of the Games to be shared with emerging or developing countries (Essex and Chalkley 1999). Indeed, organising the Olympic Games should not become the luxury of large and rich cities only.

The Olympic Games Study Commission will thus go a long way towards guaranteeing not only a smaller, cheaper and less complex organisation of the Games, but also a more manageable event for host cities to cope with. The IOC has already decided to cap the number of sports, events and participating athletes, a decision which will allow better control of the size and cost of staging the Games.

Fewer or smaller venues to build, reduced pressure on general services such as accommodation, transport or catering, and improved guidance in the organisation, all mean that risks of gigantism should be reduced while opportunities for benefits and legacies are maximised. As a concrete example of its efforts, the Olympic Games Study Commission has recently suggested a change to the Olympic Charter with the addition of a new rule which specifies the need to promote a positive Olympic legacy for the host city and host country.

### *Olympic Games Global Impact (OGGI)*

The IOC decided in 2000 to launch a new project called the "Olympic Games Global Impact" study (OGGI). This project was initiated in order to improve the evaluation of the overall impacts of the Games on the host city, its environment and its citizens, as well as to propose a consistent methodology to capture the Games effects. The IOC commissioned the International Sports Science and Technology Academy (AISTS) to develop this project.

Sustainable development principles lie at the heart of OGGI since all proposed indicators are grouped into three categories: economic, social and environment. Ultimately, it is hoped that a better understanding of the Games impacts will help future host cities plan Games which are integrated into a successful long-term and balanced urban development, thus leaving the most appropriate legacy for the citizens.

### *The notion of Olympic legacy as a new philosophy*

The notion of post-Olympic use of venues now appears as a significant criterion in the bidding process and is mentioned several times in the IOC “Manual for Candidate Cities”. More generally, the mention of Olympic legacy has grown in importance within Olympic circles over the last few years.

In the latest version of the Host City Contract (a tripartite contract signed between the IOC and the host city when it is selected and then by the organising committee) the IOC makes the first mention of the need to strive for a positive Olympic legacy : “It is the mutual desire of the IOC, the City and the NOC that the Games be organised in the best possible manner and take place under the best possible conditions for the benefit of the Olympic athletes of the world, and that the Games leave a positive legacy for the City and the Host Country” (Host City Contract for the XXI Olympic Winter Games in the year 2010 - to be signed in July 2003 when the new host city will be selected).

Even more important is the latest step taken by the IOC Session in Mexico in November 2002 to include a new paragraph in the Olympic Charter under the list of IOC roles:

*“(The IOC) takes measures to promote a positive legacy from the Olympic Games to the host city and the host country, including a reasonable control of the size and cost of the Olympic Games, and encourages the Organizing committees of the Olympic Games (OCOGs), public authorities in the host country and the persons or organisations belonging to the Olympic Movement to act accordingly”* (New rule 2.13 of the Olympic Charter).

Albeit symbolic, this new rule should become a guiding principle for the IOC and for the Olympic Movement as a whole. It shows that from the ring-keepers’ viewpoint, sustainable Games do not only mean financially sustainable Games, but also Games whose benefits will long be remembered and cherished by the host city’s citizens.

The IOC “Manual for Candidate Cities”, the Transfer of Knowledge Programme, the recent creation of the Olympic Games Knowledge Services, the Olympic Games Global Impact project, the Olympic Games Study Commission as well as current changes to IOC’s guiding principles all work towards promoting better Games and a better Olympic legacy for the host city. As such, these recent initiatives from the IOC can be said to be responsible and sustainable “business” practices. They will consist of valuable tools and guidelines for future bidding cities and Games organisers and will help maximise the potential Games benefits, as well as identify risks and potential negative effects.

## *6.2 The example of TOROC*

The Organising Committee for the 2006 Olympic Winter Games in Turin (TOROC) has not only integrated several environmental tools and assessment mechanisms in its planning and strategies, but is also developing a new type of reporting which includes social indicators.

Monitoring social performances alongside the organisation of the Olympic Games has become an integral part of TOROC’s sustainable Games concept. This is the result of TOROC’s attempt at verifying the effects of the activities connected to the Games realisation and to communicate them to the external community: “The preparation and issuing of the Social Report is the result of a process that TOROC uses to measure, evaluate, communicate and improve the social and ethical performance,

by analyzing the social impact on the territory and on the activities and the ethical level of its own organizational behaviours, with regard to its own goals and to the stakeholders' expectations. The Social Report is therefore an accounting tool that supports and completes the Environmental Report, allowing the realisation of an extended and clear communication policy" (TOROC 2002: 14). TOROC is planning to draw up a sustainability report by 2004, which will include both the environmental and social dimensions.

TOROC's Social Report has been developed with existing national and international best practices and standards in mind. Sustainability Reporting Guidelines proposed by the Global Reporting Initiative (GRI) will be examined below as a possible condition for the Games to be labeled "sustainable". It has been proposed that TOROC's Social Report be submitted to a third party assessment which will give a professional opinion towards the Report.

## **7. The way towards sustainable Games**

This section will examine some of the conditions the Olympic Games must fulfill in order to deserve the sustainable label. Several tools can be used to ensure that the Games leave the most positive legacy to the host city and its citizens.

### *7.1 Equality*

Use of global events such as the Olympic Games as a powerful engine of urban development has been shown to be a characteristic of our post-modern civilisation. Such events are the mirror of globalisation and increased competition between metropolises. However, globalisation's weaknesses lie in the sometimes unequal distribution of its benefits. Such a phenomenon is not only taking place between nations or continents, but also on a city scale with the creation of ghettos and fenced communities.

Solidarity is a core value of the Olympic Movement and must materialise not only through policies that bring sport and its benefits to all sections of the population, but also through staging Olympic Games that benefit the largest possible number of host-citizens. The Olympic opportunities and risks as well as its benefits or burden must be shared by the majority.

This can take several meanings at different scales. Competition to host the Games should be accessible not only to the most developed countries, but also to other parts of the globe. On a national scale, the host city should not concentrate all Olympic-related benefits to the detriment of other cities or regions. On the host city scale, equal opportunities of access to the Games' benefits means that communities of different socio-economic status and living in different parts of the city should have access to the new sports and leisure facilities, to new Olympic-related jobs, to the excitement of participating as volunteers, to tickets for the Olympic competitions, etc.

Games organisers and city planners may therefore develop indicators which measure the social and geographical distribution (i.e. concentration (vs) dissemination) of Olympic-related benefits or burden of the event.

## *7.2 Consultation, Accountability and Governance*

The literature on sustainable development clearly stresses the need for major projects to be accompanied by processes of public consultation, by responsible bodies' accountability and by the need for solid and responsible governance. These conditions should help avoid an unequal distribution of the Games' benefits or burden.

### *Consultation*

Because the Games impact one way or another on each host citizen and because the Games can in many ways change the face of the host city, everyone should be given a say. This fundamental democratic condition can be argued to be a key element in guaranteeing fair Games. However, evidence from past experience in hosting prestigious mega-events suggests that public consultation can take many forms - from tokenistic consultation to full public participation in the project - and may also take place too late in the project life-cycle. Lack of true public consultation, particularly during the early stages of preparation, means that city entrepreneurs' agendas lead the planning of the Olympic Games and ultimately the shape the Olympic legacy will take.

Importantly, any form of public involvement not only increases trust in institutions, but can also help reduce opposition to decisions, thus smoothing their implementation. In the Olympic Games context, the significance of early public consultation must not be underestimated as it may help contain some of the delays caused later in the preparation stage by legal opposition to Olympic-related projects.

The most crucial thing for organisers is to be ready on day one to deliver successful Games. Postponing the delivery of the project is simply not an option, as is usually the case in traditional project management. This is the reason why public consultation during the seven years of preparation (i.e. between the time of the election of the city by the IOC Session and the time of the Games) is perceived as an unnecessary hurdle on the way to the Games. Hence the need to consult potential host cities' citizens before the city enters into the bidding race. For its part, the IOC first carried out opinion polls during the candidature procedure for the Games of the XXIX Olympiad in 2008. In subsequent procedures, opinion polls are to be carried out in both phases of the candidature procedure, for evaluation purpose.

Holding a public referendum over the hosting of the Games before or during the bidding phase is certainly the ultimate example of public consultation before a mega-project materialises. However, if the referendum turns bitter and if the margin between the pros and cons is too thin, promoters fear that the IOC would question whether the bid is credible and whether residents are supportive enough.

Another risk implied by open procedures and true public consultation is that of seeing the Games used as a platform by all kinds of groups who want to voice their concerns (e.g. human rights groups, animal rights groups, green extremists, religious groups, etc.). The challenge organisers have to face is to remain focused on the delivery of the event and to avoid the bad publicity such concerns may create. Despite all best efforts, the Games will always remain a prime target for anyone in search of media attention and will continue to be somewhat of a scapegoat.

### *Accountability*

The Games, because of the values they defend and promote, are said to inspire everyone. It can almost be said that they belong to the people of the world and represent the best legacy of the Olympic Movement and of ancient Greeks in our contemporary world. In more economic terms, it can be argued that everyone feels they are a shareholder of the Olympic “brand”. Hence the need for decision-makers, Games organisers and city planners to be accountable and transparent throughout the bidding for and organisation of the Games, just like board members in the corporate world must be accountable to their shareholders. This is a condition for the Games to become sustainable and leave a positive legacy. The OECD states clearly that “accountability is a key pre-requisite for achieving sustainable development” (OECD 2002: 12).

The IOC as the supreme Olympic authority, must also be accountable for its choice in the process of electing Olympic host cities and in the whole process of monitoring the Games preparation and ensuring Olympic legacies are maximised and negative impacts mitigated. A step in this direction has already been made, for instance, with the publication of the IOC Evaluation Commission Report, which assesses the candidatures of cities wishing to organise the Olympic Games.

### *Governance*

To achieve the goals of sustainable development, it is now widely recognised that a new type of governance must foster citizen participation in policy-making and promote integrity, transparency, and accountability in the management of public resources (OECD 2002). These are fundamental conditions for governments to provide a trustworthy and effective framework for the social, environmental, and economic life of their citizens. Such principles should also be applied to the management by public authorities of mega-events such as the Olympic Games.

Governance has been defined as the framework of social and economic systems and legal and political structures through which humanity manages itself (World Humanity Action Trust). It is argued here that a new form of urban governance which puts principles of sustainable development into practice may use the staging of mega-events as a leading example. The Olympic Games, through their significant media impact, can serve as an illustration of new forms of sustainable urban development and new forms of private-public partnerships which are responsible and accountable to the host city’s residents.

The IOC has recognised the theme of governance among the Olympic Games Study Commission’s early recommendations. It is argued that the potential to make the Games leaner and thus leave a better legacy can become a reality if stronger Olympic governance on the part of the IOC can be obtained through a clearer definition of the roles and responsibilities of each Games’ constituent.

## *7.3 Sustainability monitoring and reporting*

Although financial reporting is over half a century old and has developed very elaborate tools and indicators, recent scandals such as the Enron case in the USA in 2002 show that it is now evolving amidst increasing public attention and scrutiny. A growing number of investors demand more than just financial reporting from companies listed on the stock exchange.

However, the formulation of such elaborate reporting practices in the areas of environmental and social development is still in its infancy. In the environmental domain, however, significant progress has been made in the last few years with the emergence of tools such as Environmental Management and Auditing Systems (EMAS) or Strategic Environmental Assessment (SEA).

In the social domain also, new terms such as “Corporate Social Responsibility” (CSR) have now appeared as an indication of companies trying to appear more responsible and accountable. However, these efforts are sometimes driven by the need to be accountable to the shareholders more than to society as a whole and may hence become the tools of a PR-type exercise to appear as politically correct as possible.

The Global Reporting Initiative (GRI) is among the pioneers in proposing overall reporting methods. Working under the umbrella of the United Nations, the GRI is a long-term, multi-stakeholder, international process whose mission is to develop and disseminate globally applicable Sustainability Reporting Guidelines. Any organisation, public or private, may decide to use and apply the proposed methodology for reporting on the economic, environmental, and social dimensions of their activities, products, and services. The GRI guidelines have been developed primarily with the needs of business organisations in mind, but other types of organisations such as government agencies and not-for-profit organisations can apply them. However, the application of these guidelines to the event industry remains to be verified. With its current initiatives in reporting on the efforts and impacts of Games preparation, Turin 2006 is likely to play an important role in developing event-specific guidelines and reporting methods.

Sustainability reporting not only helps sharpen management’s ability to assess an organisation’s or a project’s contribution to natural, human, and social capital, but it can also help management evaluate potentially damaging developments before they develop into unwelcome surprises. Such a 360 degree assessment enlarges the perspective provided by conventional financial accounts to create a more complete picture of long-term prospects (GRI 2002).

While financial reporting is targeted primarily at the shareholder, sustainability reporting has a larger and more diverse audience. It addresses not only expectations of the investors, but also of local authorities and local residents impacted by the presence of a company or a project in their territory. Monitoring and reporting are indeed an important aspect of accountability.

Lack of overall reporting mechanisms as well as poor transparency and accountability in an area as sensitive and emotional as an Olympic Games may give rise to serious public outcry when the seas are getting rough. Examples such as the Salt Lake City bid scandal and the ensuing IOC crisis, as well as the ticketing scandal in Sydney months before the opening ceremony or more recently negative reports from Greenpeace over the environmental performances of the Athens 2004 organisers and the Greek government all testify for the need to apply sustainability reporting in the Games context in order to make organisers and public bodies in charge more accountable for their actions.

The push for more accountability and the application of overall reporting methods should not be limited to the corporate world but should also be applied to the hosting of mega-events like the Olympic Games, which can lead by example. The need for a set of sustainability principles to be applied to the organization of the Olympic Games, such as a new type of reporting structure, is a necessary step in guaranteeing better and enduring effects on the host city. However, it is very important to stress that such principles and tools should be applied to the different phases of the event preparation: conceptualization and feasibility, candidature, strategic planning, operations planning, operations, dissolution, final evaluation

## *7.4 Olympic venue design in the context of sustainable development*

Two main considerations should be addressed here. First, the need to plan venues for other uses than the Olympic Games, and second, the possibility to use temporary infrastructures which alleviate the pressure to deliver gigantic venues for the sake of Olympic ticket sales and so-called legacy for specific Olympic sports.

Evidence from the past shows that many competition venues built for the Games have received poor post-Games usage. The presence and popularity of each sport in the local context has not always been a determining factor and local agendas have often pushed for grandiose landmark legacies to be built.

One solution is found in the design of multi-purpose venues. It is indeed preferable to conceive spaces which can be modified according to the circumstances. The Games last for only 16 days and reusing Olympic facilities is one of the greatest challenges to the host city authorities in terms of both city activity and financial profitability. While the post-Games use of each venue is difficult to plan, its maintenance costs can be more easily calculated.

The long-term use of temporary facilities in the Olympic context is one area that the IOC is currently evaluating in its efforts to make the Games more streamlined and leave a better legacy. Use of temporary products and services is already prevalent in the Olympic Games, typically to modify, expand or enhance permanent structures, whether such structures are existing or newly built. What is now being explored is the concept of long-term use of temporary products and services, that is, for more than one Games. Such a solution has been proposed by former Olympic Games organizing committees which have borne extensive costs for permanent works and have recognized the opportunities for temporary solutions, and by the IOC in its desire to control or even reduce the size, cost and complexity of organizing the Games.

Several benefits may result from the long-term use of temporary products and facilities. Cost savings, reduced environmental impacts, more flexibility in the planning phase, simplicity of the construction programme, less disruption for local residents due to decreased construction time, all these are positive outcomes of such practices. However, the most important benefit is the possibility given to the host city to match Olympic requirements with the city's long-term needs, thus avoiding the construction and maintenance of white elephants.

## *7.5 Mitigating negative impacts*

Responsible Games planning and management from the host city authorities' standpoint not only means that benefits are maximized and equally shared among all layers of citizens, but also that risks are properly identified and mitigating measures taken to address any potential negative impact.

The post-modern evolution of urban milieus offers some evidence of inequalities and socio-spatial polarization with the creation of gated communities and ghettos. If the concept of hosting a mega-event such as an Olympic Games is not set within a broader framework of sustainable policies and long-term strategies, such events may well work towards accelerating or strengthening urban inequity and spatial differentiations. This is why mitigating measures should be taken. However, a wise strategy - although idealistic - may be to place the mega-event into the framework of structural policies designed

to reduce poverty and social exclusion in all aspects (improvement of housing, training for young people, preferential access to jobs linked to the event, improvement of quality of life, etc.) (Metropolis 2002).

While the Games may not be the panacea for a better and more harmonious urban development and improved quality of life in the city, choosing to locate Olympic venues and infrastructures in particularly abandoned districts of the host city and to see them as triggers for urban, social and economic regeneration is a wise view. The Games may become a tool for positive change. For this, they should never be left in the hands of irresponsible city entrepreneurs driven by short-sighted views and personal agendas.

## *7.6 Transferring Olympic cities' urban experiences*

A determining element in ensuring past experiences and expertise is transferred from an event organizer to the next is the creation of a permanent structure such as the Olympic Games Knowledge Services, an IOC-controlled company which provides bidding cities or Games organizers with a large amount of data, recommendations and access to a network of experts. Such an initiative by the IOC does not only work towards ensuring successful hosting of the Games, but also towards providing a wealth of educational material for potential bidders.

It must be noted, however, that such an initiative emanates from the Olympic Movement and is aimed at the Olympic Movement for the sake of the Games success. For the know-how of public authorities and city planners to be accumulated, shared and distributed to other host cities, no such structure seems to exist. It is nevertheless indispensable for the legacy of the Games to be explained to bidding cities' authorities and to train people to maximize benefits and manage risks. The Games will deserve their sustainable label only when recommendations about sustainable development strategies and about the integration of the Games into a long-term urban planning can be shared between cities in a set of structured toolsets and guidelines.

The harsh competition between world cities to host mega-events should not exclude cooperation and solidarity. A new form of permanent cooperation between cities hosting mega-events is needed to transfer experience and best practices. Such a body should embrace sustainable urban development as its driving principle to justify its existence.

Metropolis is one such international cooperation network which aims at offering the benefit of past and current experiences in managing today's urban problems to its member cities. This body is not specialized in mega-event management but a recent Commission on this subject recommended the need for a permanent body to play an advisory role for the member cities which are contemplating submitting their bid for a major event (Metropolis 2002). A network of Olympic cities would be a good means by which a wealth of Games experience can be accumulated and shared.

## **8. Towards a definition of sustainable Olympic Games**

From a self-centred Olympic Movement's point of view, the definition of "sustainable Olympic Games" could be limited to the successful staging of the Games and hence the assurance that funding from broadcast rights fees and sponsors continues. For this to happen, the Games must remain the world's most successful and appealing event and the interest from the public, the media and the sponsors must be maintained. Funding from TV rights and sponsors is essential to the IOC and the Olympic Movement as a whole since it is its sole financial resource. The IOC is a non-governmental organisation and receives no funding from any government. Its redistribution policy means that all National Olympic Committees, International Olympic Sports Federations and thousands of athletes and coaches across the world depend on the IOC's capacity to support financially their efforts. About half of an organising committee's budget for the Olympic Games also comes from the IOC.

Such an Olympic-centred definition of sustainable Games corresponds to one of the definitions of the term "sustain", which is to "keep alive". The Games must be kept alive and healthy in order to allow the IOC to continue to fund the Olympic Movement in different parts of the world and to promote the values and benefits of sport.

This paper, however, has described conditions which should allow the Games to be considered a sustainable event for a host city and its residents, as well as an opportunity to promote sustainable development strategies in urban and regional planning.

Looking at the definition of sustainable tourism may prove to be useful in the context of sustainable event management. The World Tourism Organisation defines sustainable tourism as, "tourism which leads to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support systems". It also mirrors the Brundland definition of sustainable development by defining it as a process which meets the needs of present tourists and host communities whilst protecting and enhancing needs in the future.

Event management has grown as a discipline of its own but may still be found lacking in some areas such as the application of sustainable principles. The definition of sustainable Olympic Games proposed in this paper will be subject to review and refinement in years to come as the understanding of the Olympic Games' impacts on the host context is further improved. For now, the following definition is proposed:

Sustainable Olympic Games must:

- contribute to the sustainable development of the host city and region through their economic, social and environmental legacy,
- be conceived from the outset as an opportunity to address serious urban and regional challenges, and to promote development solutions and innovations which maintain or even improve the quality of life of all residents,
- lead to the management of all local and regional resources (financial, social and environmental) in such a way that Olympic Games' requirements can be fulfilled while maintaining harmonious socio-economic urban and regional milieus and safeguarding at the same time the cultural integrity, biological diversity and life support systems of the host city and region,
- include the public through genuine consultation processes at the earliest stage and beware of local agendas driven by a showcasing need,
- benefit equally all layers of the host population,
- identify and address risks, as well as mitigate distress or drawbacks caused to the residents.

This definition forms the conditions for the Games to deserve the “sustainable” label. Such principles must be integrated into the earliest stages of the Games’ conceptualisation and planning. They must translate into pro-active measures and well-defined policies. Authorities in charge of staging sustainable Olympic Games will need to reveal strong governance based on principles of sustainable development.

## 9. Recommendations

Several facets of sustainable development principles have been examined in the context of the Olympic Games and taking into account the constraints of a mega one-off event. Although several contradictions may appear at first glance such as the concentrated nature of the Games and the fast-track development they usually imply, this paper has described several conditions which, if followed by Games organizers and more importantly by city planners, will help lead the Games towards sustainability.

The following recommendations may be considered by Games organizers and responsible city/region authorities that wish to turn the Games into an example of sustainable practices.

**A voluntary decision** - The inclusion of sustainability policies within the Games organizational concept must be the result of voluntary initiatives on the part of organisers and responsible authorities. Sustainability and the Games must not be an afterthought or a greenwash PR-type strategy, but a genuine effort to maintain or even improve the quality of life for future residents of the host city and region.

**A long-term strategy.** The Games project must be set in a 15-20 year span. Sustainable development principles must be integrated into all phases of the Games’ organization: conceptualization, feasibility, bidding, strategic and operational planning, operations and dissolution. Each phase is different and may require specific tools. Ensure the governments do not treat the Games as a one-off boost but as a catalyst or an opportunity for long-term activities and improvement of the residents’ quality of life.

**An integrated and realistic approach** - Olympic venues and infrastructures must be planned in conjunction with the strategic urban planning of the host city and region. The Games may be used as a tool for positive change - for example to revitalise a part of the host city - but should not be considered a panacea for all urban ills afflicting the host city’s residents.

**Partnerships for sustainability** - Sustainability is a collective effort and strong public-private partnerships are essential.

**Early inclusion of the Games into sustainable urban and regional strategies** - The city or region which contemplates hosting an Olympic Games must develop a vision for the Games and blend it together with its overall vision for the future of the city and region. The key questions are “ why does my city or region need the Games”, “what can the Games bring to us” and “what will be our contribution to the Olympic Movement and to the world through hosting the Games” ?

The key to success is to successfully deliver all temporary demands of the Olympic Movement while focusing on the city's or region's permanent needs.

**Public participation** - Citizens are the key stakeholders of the Olympic legacy. For the Games to become integrated into long-term sustainable urban and regional strategies, citizens must be consulted from the earliest stages of the Games conceptualisation until after the Games.

**Mitigation measures** - Mega-events such as the Olympic Games may have severe impacts upon local communities and the environment if they are not properly managed. Organisers and responsible authorities must be open and honest about all potential negative effects. These must be properly identified, assessed and communicated in order to limit as much as possible the economic, social or environmental pressure on the host citizens.

**Use of sustainability monitoring and reporting tools** – The design of specific indicators that measure progress across all three dimensions of sustainable development will support assessment of sustainability performance by the Games' organising committee and responsible city/regional authorities. Such tools will also help benchmark the hosting of the Games with other events and other similar cities' development. Monitoring and reporting should be performed in conjunction with partners such as NGOs, universities, public or private research institutes and independent watchdogs should be appointed to accompany all efforts towards sustainability.

Use of sustainability monitoring and reporting tools should lead organisers and city leaders to inform the public and other stakeholders about the results.

**Transfer of public knowledge** – There is a need to establish a culture of continual improvement in the event industry by setting up a permanent body in charge of transferring experiences, knowledge, best practices, etc. from current host cities to future generations of host cities.

While the above recommendations focus on the responsible host authorities and Games organisers, the governing body of the Olympic Movement, the IOC, may also consider the following recommendations:

**Pursue current initiatives:** The IOC should pursue its efforts along the lines of the Transfer of Olympic Knowledge programme, the Olympic Games Knowledge Services, the Olympic Games Global Impact study and the Olympic Games Study Commission, which can all contribute to more manageable Games and a better legacy for host cities and their residents.

**Assist organising committees and public authorities:** Having gone through the experience of setting up knowledge transfer programmes between Games organisers, the IOC should be in a position to facilitate such a process among public authorities in charge of different aspects of the Games' organisation. The benefit would be the promotion of a better understanding of the Games' impact among all applicant cities, as well as the development of tools to permit the integration of sustainability principles in Games management.

**Reinforce the sustainability dimension before and during the bidding phase:** The conceptualisation and feasibility phase is crucial in ensuring the Games concept be integrated into an overall sustainable strategy for the development of the host city and region. This dimension should be given more attention by the IOC in the bid evaluation phase. New criteria

should be developed to help experts analyse each bid city's vision for the Games and the way it fits into their long-term strategies.

**Governance:** The IOC should re-enforce its role as the body which determines the standards of facilities and services needed to deliver successful Games. Host cities should no longer be led by local agendas or by Olympic constituent members into building white elephants.

**Education:** The IOC may play an active role in promoting the integration of sustainable principles within the curricula of event management in higher education. There is indeed a need for a more comprehensive event-planning model. The Olympic Games may eventually be looked at as the leading example of sustainable practices and technologies in post-modern cities.

Efforts by the IOC are needed in the area of sustainable development because these will make the organisation of the Games more responsible and accountable. Also, as Preuss noted, "The IOC can only keep its current position in the Olympic Movement as long as the benefits of the Olympics are obvious to host cities" (Preuss 2000: 248). Even more importantly, applicant and bidding cities must understand the opportunities and the risks of hosting a mega event such as the Olympic Games. Hence the need to work towards maximising the Games' benefits and minimising their potential negative effects.

Although the IOC cannot be seen to interfere in the bid and host cities' internal politics, it can nevertheless play a crucial role in coordinating efforts to develop a framework of "recommendations for sustainable Games" aimed at cities which contemplate hosting the Games. This could be considered as a continuation and a materialisation of some of the principles already developed in the Olympic Movement's Agenda 21, this time applied specifically to the hosting of the Games in its city and regional context.

Olympic Games organising committees are provided with a wealth of guidelines and examples from past best-practices via the IOC's Transfer of Olympic Knowledge programme and the Olympic Games Knowledge Services. This assistance in organising successful Games is, however, mostly limited to the actual Games requirements in terms of services, facilities and operations. Host cities and regions are not provided with similar guidelines on how they can best use the Games as leverage for a healthy balanced and sustainable urban and regional development. This points to the need to strengthen solidarity and cooperation among cities hosting mega-events.

## 10. Conclusion

This paper has shown through various examples and through a series of recommendations that hosting an Olympic Games can be conceived as an opportunity for a sustainable form of development for a city or a region. However, lots of efforts remain necessary in order to fully understand how the Games format and requirements can fit into strategies of sustainable urban and regional development.

Public policy and organizational strategies are now adopting sustainable development principles quite widely but the challenge remains of translating the concept into practice. The Games are not only a great opportunity for host cities to face the global challenges of competitiveness and exhibit their best attributes, but they also provide host cities, regions and countries, as well as the IOC, with an opportunity to promote sustainable development. Hallmark events such as the Olympic Games are global businesses which benefit from intense media attention and should therefore be used as an opportunity to encourage innovations in the sphere of sustainable development and advance the sustainability debate a step closer to actual implementation. The Games have the potential to inspire positive actions from governments, businesses, communities and individuals. They can leverage positive changes in traditional consumption modes and construction practices.

Realising sustainable development objectives in an Olympic Games context means overcoming obstacles caused by fast-track development and by the spatial, temporal and financial concentration implied by the Games. It also requires strong Olympic governance and a clear will to lead by example. As a body which places the striving for excellence as one of its founding principles, the IOC should examine ways to make the Games an example of sustainable urban development strategies while, at the same time, ensuring that the timely delivery of the Games project and its success are not undermined.

The IOC has a special responsibility to share in the implementation of this concept of sustainable development. Because of its universality and the global appeal of sport, the Olympic Movement has the ability to play an active part in promoting measures favouring sustainable development. This will imply changes in the nature of Olympic Games planning. However, incorporating sustainability principles into the Games planning does not always have to “cost” more. The return on investment is in the long term and is certainly worth the efforts.

Through planning sustainable Games and then monitoring and reporting on the economic, environmental, and social performance of the preparation, Games organizers and public bodies in charge of the Games will become more responsible and accountable. However, it must be acknowledged that fully integrated sustainability practices in the Games organisation are at the earliest stages of a journey that will continue for many years. The need is now for well defined and broadly accepted sustainability performance indicators. Efforts have started in this area but must now be adapted and applied to the Olympic Games concept.

For the Olympic Games to become an example of sustainability, they must be integrated early into long-term urban and regional policies based on principles of sustainable development. They must also be rooted in inclusiveness and transparency, as well as the pursuit of excellence, which should not only be the motto of athletes but also of organizers and city planners. Long-term and harmonious urban policies must be the driving force in hosting the Games, not the short-sighted views of local agendas. True recognition of the diversity of impacts and of irregular patterns in their spatial distribution within the host city’s social, economic and environmental context should enable the planning of hallmark events which cause fewer negative and inequitable impacts.

A strong partnership between the organisers and local/regional public and private bodies must be created to allow the concept of sustainable Olympic Games to materialise. It must be underlined, however, that public authorities in the host city and region play a unique role in determining long-term strategies towards sustainability that use the Games as a catalyst. By maximising the Games benefits, such authorities also determine the future success of the Olympic Games and of the Olympic Movement as a whole.

One of the dictionary definitions of “develop” is “grow to a maturer state”. Several efforts by the IOC in recent years to transfer knowledge from Games organisers to future organising committees and to better understand and assess the impacts of the Olympic Games on the host city economic, social and environmental contexts illustrate the positive development of the Olympic Games which are growing to a maturer and more responsible state.

Utopian as this may seem to some critics, the hosting of the Olympic Games can be conceived as an opportunity for positive changes and for a better quality of life in urban milieus. As the IOC President Jacques Rogge wrote recently, “The Olympic Games may not make the world a better place all the time, but the IOC will continue to strive to make the Olympic values grow stronger between Games, and thereby play its part in making the world a better place” (Rogge 2003).

## **Bibliography**

BALDERSTONE, S., *2000 PLUS, Environmental Actions and Legacies of the Sydney 2000 Olympic Games*, unpublished

DOIKOS, P. et al., *Sustainability and Large Scale Sport Events*, Minutes of workshop 2 of the 7<sup>th</sup> European Round Table on Cleaner Production, Lund, Sweden, 2 May 2001 ([http://www.iiee.lu.se/ercp/workshops/docs/02\\_large\\_scale\\_events.pdf](http://www.iiee.lu.se/ercp/workshops/docs/02_large_scale_events.pdf))

ESSEX, S. and CHALKLEY, B., *Olympic Locations and Legacies: A Study in Geography and Tourism*, in “Pacific Tourism Review”, Elmsford, 1999, Vol. 3, pp. 185-200

GLOBAL REPORTING INITIATIVE, *Sustainable Reporting Guidelines*, Boston, GRI, 2002 ([http://www.globalreporting.org/GRIGuidelines/2002/gri\\_2002\\_guidelines.pdf](http://www.globalreporting.org/GRIGuidelines/2002/gri_2002_guidelines.pdf))

GRIETHUYSEN, P. (van) and HUG, P.-A., *Projet OGGI Olympic Games Global Impact. Cadre d'analyse pour l'identification de l'impact global des Jeux Olympiques*, Lausanne: AISTS, September 2001.

GRIETHUYSEN, P. (van) and HUG, P.-A., *Projet OGGI Olympic Games Global Impact. Fiches techniques*, Lausanne: AISTS, September 2001

INTERNATIONAL OLYMPIC COMMITTEE, *OLYMPIC CHARTER*, in force as from 14<sup>TH</sup> July 2001, Lausanne, 2001

INTERNATIONAL OLYMPIC COMMITTEE: *Olympic Movement's Agenda 21: Sport for sustainable Development*, International Olympic Committee, Sport and Environment Commission, Lausanne, 1999

KAZANTZOPOULOS, G., *Athens 2004: Environment for Games on a Human Scale*, in “Olympic Review” XXVII-46, August-September 2002, pp. 49-51

METROPOLIS, *The Impact of Major Events on the Development of Large Cities*, Commission 1 Report, Barcelona, World Association of Major Metropolises, 2002 (<http://www.metropolis.org>)

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (OECD), *Working Together Towards Sustainable Development: The OECD Experience*, Paris, OECD Publications Service, 2002

ORGANISING COMMITTEE FOR THE XX OLYMPIC WINTER GAMES (TOROC), *Strategic Plan "Environment"*, working document, Turin, TOROC 2002

OWEN K. A., *The Local Impacts of the Sydney 2000 Olympic Games: Processes and Politics of Venue Preparation*, Sydney, Centre for Olympic Studies, University of New South Wales, 2001

POUND, R. W., Olympic Games Study Commission: Interim Report to the 114 IOC Session, [www.olympic.org](http://www.olympic.org)

PREUSS H., *Economics of the Olympic Games: Hosting the Games 1972-2000*, Petersham, Walla Walla Press, 2000

PRICEWATERHOUSE COOPER (at the request of the New South Wales Department of State and Regional Development (Australia), *Business and Economic Benefits of the Sydney 2000 Games: A Collation of Evidence*, Sydney, 2002, (<http://www.business.nsw.gov.au/olympicsreport>)

ROGGE, J., *Ancient Games for a Modern World* in Harvard International Review, Spring 2003

ROPER, T., *The Sydney Olympics and their Impact on Development*, Cities' Experiences: the Impact of Major Events on the Development of Large Cities, World Association of Major Metropolises, Metropolis 2002, pp. 95-98 (<http://www.metropolis.org>)

SALT LAKE TRIBUNE, *A Successful Games*, October 1<sup>st</sup>, 2002

WAITT G. and FURRER Ph., *Sharing the Spirit? Sociospatial Polarisation and Expressed Enthusiasm for the Olympic Games*, in "Pacific Tourism Review", Elmsford, 1999, Vol. 3, pp. 173-184