Impacts of the Olympic Games on the biosphere and on the communities that host them are significant. Increasing size, scope and costs, rising security concerns, cultural and environmental impacts are some of the key issues facing host cities and those cities bidding or considering bidding for the Olympic Games.

One of the ideals of the Olympic Charter is to place sport at the service of the harmonious development of mankind and the three pillars of the Olympic movement are sport, culture and environment. This paper examines the IOC’s options for sustainability in its primary question: In what way could the International Olympic Committee (IOC) contribute to a global movement towards socio-ecological sustainability?

The hypothesis that the IOC is an agent for social/cultural and environmental change is explored. The paper uses a principled definition of success for socio-ecological sustainability and presents a vision of a sustainable IOC and Olympic Movement within a sustainable society. From that vision specific IOC strategies along with past, present and short-term future actions are analysed to determine the obstacles and deficiencies in moving the IOC toward complying with scientifically relevant principles for socio-ecological sustainability.

Systems thinking is used to identify obstacles and opportunities within the Olympic Movement. These obstacles and opportunities to strategically move the IOC toward sustainability are identified, analysed and discussed. The paper concludes with examples of possible actions the IOC could take to strategically move towards sustainability.

Key words:
Olympic Movement, International Olympic Committee, Sustainability, Strategy, Backcasting
Authors’ note to the reader

This thesis study was undertaken as a learning opportunity for its authors. All aspects of this thesis were conducted in an approximately four-month period beginning in late January 2005 and ending in early June 2005. The timeframe restricted our scope from being as comprehensive and as detailed as we would have liked.

We’ve travelled to Switzerland, Italy, Germany, England and Norway in our quest for evidence and connected with people elsewhere by phone. Any errors, omissions, inconsistencies or just plain incorrect grammar and spelling are solely our responsibility and in no way reflects upon the competency of the people we contacted, interviewed or on our advisors and others who assisted us.

In the spirit of dialog and learning, we welcome all readers to contact us, by email, with suggestions on our how thesis report could have been improved and advice on how we might further our research. Thank you.

Sincerely,

Birte Berlemann
Mitch Rhodes

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Executive summary

Introduction

Citius, Altius, Fortius—Faster, higher, stronger. Placing the imagination in success and learning to focus on a goal, no matter how impossible reaching it looks to others, is the essence of the Olympic motto. ‘Throw your heart over the hurdle and your horse will follow’ is a common expression in equestrian competition. When head and heart align, almost everything is possible.

The International Olympic Committee (IOC) has the potential to become a world leader in moving society toward sustainability. While they might not perceive such lofty ambitions as their role, undertaking such a task could be the Olympic Movement’s ultimate legacy to humanity.

Physical activity and sports training generally begin by developing capabilities in a non-threatening, non-competitive atmosphere. A child picks up a ball, throws it and chases after it. Later they might learn to dribble the ball and toss it through a hoop.

As the child’s skills become more proficient, they desire to participate with more structure and begin playing basketball. With that comes learning the rules of the game, including a defined meaning of success (putting more scoring points through the hoop than the opponent). Through an iterative process and in collaboration with a coach, skills and strategies on how to better play the game are developed. With a shared mental model of the game’s rules, the players and coaches engage to achieve success.

Developing competence in sustainable development can be thought of in much the same way as learning to play a sport. Success is defined by the rules of the game, players develop their skills, strategize and start to play the game.

In sports, so too with sustainability, winning requires more proficient levels of play. Increasing environmental and social degradation makes learning how to play the game even more crucial. Acting strategically while at the same time maintaining a spirit of learning is a way to play the sustainability game.
In appropriately defining success and with athletic-like determination to succeed, the IOC is strategically positioned to address the challenges facing humanity.

As with the athletes that come to compete at the Olympic Games, faster, higher, stronger is an internal motivator rather than external. The future will determine how aligned the IOC and the Olympic Movement are to the values of Olympism and the notion it bestows upon the athletes of exceeding their own expectations rather than focusing on the external demands of the competition.

**Research questions and methods**

In this study we ask the primary question:

_In what way could the IOC contribute to a global movement towards socio-ecological sustainability?_

Section I
The following hypothesis is the foundation for asking the primary question: _The IOC is an agent of social / cultural / environmental change._

We scrutinize this hypothesis by asking: _Does the IOC impact society?_

Other secondary questions form the structure for our results:

Section II
_How would the IOC operate in a society that complies with scientifically relevant principles for socio-ecological sustainability?_

Section III
A) _How does the IOC currently describe success in the system?_

B) _What are the obstacles and discrepancies between complying with scientifically relevant principles for socio-ecological sustainability in comparison to the IOC’s strategies and its past, present and short-term future actions?_
C) What are the general obstacles for the IOC’s strategic movement towards compliance with scientifically relevant principles for socio-ecological sustainability?

Section IV
Given the obstacles, what are the opportunities for the IOC to contribute to a societal movement toward sustainability?

Methods employed to answer our research questions include literature review, interviews, backcasting, a method for planning in complex systems and systems thinking.

Results section I

In our research, we found numerous studies supporting the hypothesis that the IOC is an agent of social / cultural / environmental change.

Findings from our literature review led us to identifying various layers within society that are impacted by the Olympics. These layers are not discrete, they overlap and impacts do not solely occur within one layer (see figure below). Our study draws its conclusions from case studies and former research that indicates that impacts occur at all layers.

![Figure 1: Layers of society](image-url)
Results section II

In this section we develop a vision of how the IOC operates in a society that complies with principles for sustainability, framing the vision of success for the Olympic Movement as follows:

“When the Olympic Movement is sustainable, it no longer contributes to…

1. …systematic increases in concentrations of substances from the earth’s crust.
2. …systematic increases in concentrations of substances produced by society.
3. …the systematic physical degradation of nature.
4. …the systematic undermining of human’s capacity to meet their needs worldwide.”[1]

A structured vision, has the following components: core purpose, core values and strategic goals. For a sustainable vision, those components are framed by the principles for sustainability.

We identified two core purpose statements in the Olympic Charter, one for the whole Olympic Movement and one specifically for the IOC:

- The Olympic Movement contributes to building a peaceful and better world by educating youth through sport practised in accordance with Olympism and its values
- The IOC promotes Olympism throughout the world and leads the Olympic Movement

The principles of Olympism are the core values of the Olympic Movement. They too are found in the Olympic Charter and can be paraphrased as:

- Combining in a balanced whole the qualities of body, will and mind while blending sport with education
- Placing sport at the service of the harmonious development of man to promoting a peaceful society concerned with the preservation of human dignity
The practice of sport is a human right requiring mutual understanding with a spirit of friendship, solidarity and fair play

Any form of discrimination is incompatible with belonging to the Olympic Movement

Section II of our results outlines nine examples of potential strategic goals that we believe the IOC should explore when envisioning how they might operate in a sustainable society. Four of the nine examples are:

- All actors in the Olympic Movement share a common purpose, vision and values, all informed by a principled definition of socio-ecological sustainability
- Credibility is maintained internationally. A gap in public perception between stated values of Olympism and the actions of the IOC are minimal to non-existent and transparency exists in all IOC activity
- Doping among athletes at the Olympic Games is eliminated
- The scope, complexity and cost of the Olympic Games are operated within the context of development without growth

To capture our structured thinking in a way that can be useful for communication in an organisational network as complex as the Olympic Movement, we developed a vision statement for the IOC:

“All athletes worldwide can train and compete in a healthy social and ecological environment, supported by an Olympic Movement that is united by Olympism and the passion for sport, celebrating their achievements in the world's most important sporting event: The Olympic Games”

Results section III

To structure our thinking for this section we use the five level model for planning in complex systems as referred to in the methods section. To gain a better understanding of the system, as well as to determine the ways in which the IOC describes success, this section analyses the IOC at the
systems and success level of the five level model. We use systems thinking to develop a causal loop diagram (CLD) to aid in our analysis.

The Olympic Movement can be described as a subsystem of society. As such, it faces implications of changing values and symptoms of unsustainable practices rooted in other parts of society. The Olympic Movement itself can be described as a network of organisations, which in turn are networks of actors with individual agendas.

The IOC addresses sustainability policies in three places: the Olympic Charter, the manual on Sport and the Environment and in the Olympic Movement’s Agenda 21. Our analysis revealed that all IOC activities are at the strategy, actions and tools level and are not framed by a principled definition of success in moving toward sustainability.

Our research did not uncover any documented IOC strategic goals. Based on an identified cluster of actions, we deduced *de facto* strategic goals related to sustainability for the IOC as:

- always have the best Games possible
- financial viability
- increasing connectedness, participation, diversity in the Olympic Movement
- be a positive catalyst to foster environmentally sound actions that go beyond the Olympic Games and reach the sport community at large
- maintain credibility in international public perception

We then analysed the above current strategies and actions in relation to the principled definition of success to determine the specific obstacles and deficiencies that might exist in moving the IOC toward sustainability. For the five *de facto* strategic goals above, collectively, our study identified twenty-six obstacles and/or deficiencies in moving the IOC toward sustainability.

Several overarching obstacles, ones not related to a specific strategy or action, are also as identified and discussed in this section.
Results section IV

Five key opportunities exist for the IOC to help move both the Olympic Movement and society toward sustainability. They are:

- Awarding the Games to one of the bidding cities
- Deciding which sports are part of the Olympic Games
- Selecting which NOCs have the right to send athletes to participate at the Games
- Creating a culture of sustainability
- Promoting the Olympic image

Conclusions

The ideals and values of Olympism and social sustainability are partly overlapping and complementary. With worldwide networks firmly established, the IOC is well positioned to take a leading role in helping move society towards sustainability and potentially leave a legacy to humanity even greater than that of the Olympic Games and Olympism.

While the opportunity for such a leadership role exists, there is little evidence to support that IOC will become strategic and use its influences to help move society toward sustainability. If the decline of societal and environmental capacity continues, at some point in the future, conditions will be such that the staging of the Olympic Games will be difficult or even impossible.

Acceptance of the potential for the IOC becoming a world leader in moving society toward sustainability resides in the limits of imagination. The will and commitment to achieve what may seem to be the unachievable lies in the values of Olympism, in the staging of the Games, and in the hearts and minds of all athletes, coaches, IOC members, spectators and every child who has ever kicked a ball.
Contents

Abstract .......................................................................................................................... i
Authors’ note to the reader .......................................................................................... ii
Acknowledgements ..................................................................................................... iii
Executive summary ...................................................................................................... vi
Contents ...................................................................................................................... xiii
List of Figures ............................................................................................................. xvi
Foreword ...................................................................................................................... xvii
  Ancient Olympics ....................................................................................................... xvii
  Modern Olympics ....................................................................................................... xvii
  Olympism ................................................................................................................... xx
  Why this paper should be read ................................................................................... xxi
  Primary reasons for the IOC becoming a leader in sustainability ....................... xxii
  Foreword references ................................................................................................ xxvi

1. Introduction ............................................................................................................. 1
  1.1 The Olympic Movement in the context of sustainability ............................... 1
  1.2 Rationale for doing the study .......................................................................... 2
  1.3 Relevance of the Olympic Movement ............................................................. 3
  1.4 Particularly interesting about the Olympic Movement .................................... 3
  1.5 The basic principles for sustainability .............................................................. 4
    1.5.1 In the context of the Olympic Games ....................................................... 5
    1.5.2 Relation of Olympism and social sustainability ...................................... 6
  1.6 Value added by this study .................................................................................. 7
  1.7 Purpose of the study .......................................................................................... 8
    1.7.1 Scope ......................................................................................................... 8
    1.7.2 Limitations ................................................................................................ 8

2. Research questions and methods ......................................................................... 10
  2.1 Section I ............................................................................................................ 10
  2.2 Section II .......................................................................................................... 10
  2.3 Section III ......................................................................................................... 11
  2.4 Section IV ......................................................................................................... 12
5.2.4 Discussion for success level assessment ........................................52
5.3 Question B .........................................................................................53
  5.3.1 Strategy and Actions Level...........................................................53
  5.3.2 Tools Level ..................................................................................66
5.4 Question C .........................................................................................67
5.5 Discussion Section III..........................................................................68

6. Results section IV..................................................................................69
  6.1 Introduction.........................................................................................69
  6.2 Opportunities directly related to the Games .......................................69
  6.3 Opportunities related to the Olympic Movement...............................71
  6.4 Discussion for section IV....................................................................73

7. Discussion...............................................................................................74
  7.1 The methods.......................................................................................74
  7.2 Applicability .....................................................................................74
  7.3 Key findings and significance.........................................................75

8. Conclusions............................................................................................77
  8.1 Recommendations based on research findings ...................................78
  8.2 Opportunities for further research ..................................................79

List of Abbreviations and Acronyms.........................................................81

References...............................................................................................82

Appendices.............................................................................................89
  Appendix I: History of the Olympic Movement’s environmental efforts
  ..............................................................................................................89
  Appendix II: Organisational chart of the IOC........................................93
  Appendix III: Allocation of broadcasting funds......................................94
  Appendix IV: List of common interview questions .............................95
List of Figures

Figure 1: Layers of society................................................................. viii
Figure 2: System boundaries............................................................... 2
Figure 3: Layers of society................................................................. 22
Figure 4: Structure of the vision......................................................... 35
Figure 5: Influences on the IOC’s sustainability performance ............ 46
Foreword

Ancient Olympics

The history of Olympic Games starts in ancient Greece, where Olympic victories are documented from 776 BC until 385 AD. At the time, sport held an important place in Greek education and the Olympic Games provided an arena for the best athletes to compete. While the links between sport and education resonated throughout Greek culture, the Games did not display any educational goals on their own.

By honouring competitiveness and excluding non-Greeks, women and slaves, the Olympic Games reflected the values of ancient Greek culture.

Winners of the Olympic games only gained a crown of leaves for their efforts. However, for representing their hometown with such distinction, they were frequently awarded large sums of money. Their popularity and secure financial position often led them into a political career. Winning was significant to the ancient Greek athletes.

Modern Olympics

After the identification of the ancient Olympic stadium’s ruins in 1766 and influenced by romantic poems about the Olympics, a movement to re-establish Olympic Games was initiated in Greece. The first attempts of that movement failed, but eventually sports events on a national level called “Olympic Games” were introduced towards the end of the 19th century. Due to an increasing grecophilia in Europe around the turn from the 19th to the 20th century, conversations about Olympic games became more popular and several regional and national sporting events were labelled “Olympics”.

Pierre de Coubertin, a Frenchman, took the idea of the Olympics further than anyone of his time. His Olympic model contained two major new aspects: the Olympics should be democratic and international. These ideas arose from the thinking, discourses and political struggles at his own
lifetime, rather than from his limited knowledge about ancient Greek
history or the Olympic Games. [8]

Pierre de Coubertin was born in Paris on New Year’s Day in 1863 as
descentant of an old aristocratic family. [9] His aristocratic background had
a strong influence on his values, as the paradigm for action for aristocrats
was to maintain the good name and honneur of the family by finding an
appropriate vocation. Only disinterested actions for “the love of faith, the
Motherland, nature, art or humanity” were thought to be appropriate and
credible as noble work. [10]

As a result of a very unstable political situation in parts of Europe and
particularly France, Pierre de Coubertin experienced vast social changes
during his lifetime. He described the situation as follows: “Three
monarchies, two empires and three republics in less than a century, that was
a lot, (…)” And he continued: “Nothing troubled my national amour propre
more than the cohabitation in my pocket of coins bearing different effigies.
Didn’t this underline our repeated disorders and didn’t it accentuate the
ridiculous nature of our instability?” [11] This inner instability in
connection to losing the French-Prussian war in 1870 / 1871 strongly
nagged on the French national pride.

Subsequently, Pierre de Coubertin experienced the victory of the
democratic political reform, the industrialization of economy, the spread of
socialism and the rise of “modernism” in literature, music and plastic art.
This situation lead him to think about reforming the educational system in
France, which was mainly based on learning by heart at the time and did
not seem appropriate to the changed environment. [12]

He studied political sciences and undertook study trips to England and other
countries to learn about different educational systems. Coubertin was
deeply impressed by the system of school sports, student self-government
and post-graduate athletic associations in English public schools. He saw
great value in an education that is as homologous as possible with the adult
world and stated that “education must be the preface to life”. [13] He
concluded that such an educational system could be used to create a lasting
democratic society in France. [14] He saw the role of sports being “at once
physical, moral and social” and therefore claimed a far more important role
for sports in the French school system. [15]
To achieve his vision of a changed educational system and a unified, strong France he decided to reintroduce Olympic Games, carried by Olympism. The basis for his idea of Olympism was

- to be a religion, that means to "adhere to an ideal of a higher life, to strive for perfection";
- to represent an elite "whose origins are completely egalitarian" and at the same time "chivalry" with its moral qualities;
- to create a truce "a four-yearly festival of the springtime of mankind";
- to glorify beauty by the "involvement of the philosophic arts in the Games".[16]

The Olympic Games should make sports more popular and international competition was supposed to be an incentive for France to become more active in sports. Reinitiating the Olympics did not “arise as much from pride over French sporting achievements as from annoyance about the lack thereof”. [17]

In 1894 a congress to study and promote amateurism took place in Paris and re-establishing the Olympic Games became the main agenda topic of the congress. Finally, a decision to celebrate the Olympic Games on an international level was made.

Since then, the Olympic Games have evolved from a regional interest to an international cultural performance. [18] They have “blossomed beyond the sports dimension into a competition site showcasing the national strength of participating countries and serving as an opportunity for political, diplomatic, economic, social and cultural exchanges and an exhibition centre for all kinds of products.” [19]
Olympism

“Olympism is not a system; it is a state of mind. The most diverse educational forms may be penetrated by it, and no one race or epoch can claim an exclusive monopoly of it.”

Pierre de Coubertin 1918

[20]

A clear definition of the word “Olympism” is rather difficult to find, as even Pierre de Coubertin did not want to define it exactly. The word “Olympism” is used to describe the set of ideas and values that the Olympic Movement is supposed to promote.

Based on the work of Coubertin and Carl Diem, Otto Grupe identifies five tenets of the original Olympism:

- Unity of body and soul
- Self-completion through sports performance
- Amateurism
- Connection of sports to ethical rules, fairness, justice
- Idea of peace in sports [21]

Under Juan Antonio Samaranch the IOC dropped the idea of amateurism. Differing to the original Olympism is also today’s incorporation of women’s emancipation in the values of Olympism.

Today’s Olympic Charter states about Olympism that it is “a philosophy of life, exalting and combining in a balanced whole the qualities of body, will and mind. Blending sport with culture and education, Olympism seeks to create a way of life based on the joy of effort, the educational value of good example and respect for universal fundamental ethical principles.” [22]
Why this paper should be read

“Citius, Altius, Fortius—Faster, Higher, Stronger.”

Human society is a relatively new addition to the planet Earth. In relation to a calendar year, if the earth formed during the opening seconds of January 1, the last ice age ended on December 31 11:58.45 p.m. [23]. Human society now faces some of its greatest challenges. Can the values of Olympism inspire opportunities for change to help move society in meeting these challenges?

The above Olympic motto is used to help embrace the Olympic spirit and to spur athletes to perform to the best of their abilities. From ancient Greece to modern day, sport has been embodied in society.

Pierre de Coubertin’s dream of reconstituting the Olympics came to fruition, with the hosting of the first Olympic Games of the modern era, in Athens in 1896. 311 competitors from thirteen countries participated and 60,000 spectators watched. One hundred and eight years later in 2004 in Athens, 11,099 competitors from 202 countries participated in the XXVIII Olympic Games [24], millions attended and more than 3.9 billion people had access to watching the Olympics on television [25].

The Olympic Games are the world’s largest peaceful event, bringing people and countries together in celebration. The Olympic Rings and the Flame of the Olympic Torch are internationally recognized symbols that capture the ideals and spirit of Olympism. From modest beginnings, the Olympics have grown in size and influence. It is likely that only a small percentage of the world’s adult population is not aware of the Olympics.

The Olympic creed:

"The most important thing in the Olympic Games is not to win but to take part, just as the most important thing in life is not the triumph but the struggle. The essential thing is not to have conquered but to have fought well."[26]
The fundamental principles of Olympism have remained a main characteristic of the Olympic Movement. Identification with such ideals, in some way, has contributed to the growth and success of the Olympic Movement and its ability to continually attract more athletes, spectators and sponsorship. It appears that the Olympic spirit and ideals hold a place of distinction in our collective consciousness and throughout international society.

This thesis will be of interest to those seeking:

1. an understanding of the Olympics and the Olympic Moment’s influences, impacts and relevancy to human society;

2. an understanding of the socio-ecological principles for sustainability and principled definition of success in the context of the Olympics and the Olympic Movement;

3. to affect change by identifying high leverage points within a complex organizational structure;

4. an environmental history of the Olympics and the Olympic Movement;

5. a current state-of-affairs on environmental and sustainability initiatives within the Olympic Movement.

**Primary reasons for the IOC becoming a leader in sustainability**

During our research interviewees commented that the IOC’s role in society is related to sports. This may indeed be so and yet it remains that the Olympic Movement has the potential to help move society toward sustainability and leave a legacy to humanity even greater than that of the Olympic Games and Olympism.

Acceptance of the potential for the IOC becoming a world leader in moving society toward sustainability resides in the limits of imagination. The will and determination to achieve what may seem to be the unachievable lie in
the values of Olympism, in the staging of the Games and in the hearts and minds of all athletes, coaches, IOC members, spectators and every child who has ever kicked a ball.

While such ideas may appear grandiose to some, there are practical matters to consider as well.

Human societies, especially industrial ones, are a highly manipulated part of natural ecosystems. They are governed by the same basic laws of nature as natural systems and are dependent upon those natural systems for resources. An ever-growing part of nature is being drawn upon to meet the consumptive demands of society. Degradation of the environment goes on due to insufficient proactivity for sustainability in business and politics. The room for society to manoeuvre will decrease more and more the longer it takes for the society to become sustainable. The prices for resources are likely to increase, and so will the costs to manage the growing amounts of waste. In a world where soon ten billion people will seek to meet their needs, many people are coming to the realization that the market place is going to be greatly affected.[27]

Conditions such as climate change, air pollution, lack of safe drinking water, viral epidemics, wars, terrorism and many other ecological and social factors threaten the continuance of Olympic Games as a part of societal systems at large. If the trend of degradation of ecological and social systems continues, as does the demand for resources within those same systems, at some point in the future the staging of the Olympic Games will not be possible. The following specific points are provided to highlight the concept.

The Games cannot occur in the midst of war. The two primary aspects of this reality are the need for a peaceful location to stage the Games and the availability of people to participate. In 1916 the sixth Olympic Games (Berlin), in 1940 the twelfth Olympic Games (Tokyo and then Helsinki), and in 1944 the thirteenth Olympic Games (London) were all cancelled due to war.

Terrorist attacks have twice threatened the Games. In the 1972 Games in Munich terrorists took athletes hostage and later killed them. The Games were halted for several days with consideration given to their cancellation. Also, after the terrorist attacks in the United States on September 11, 2001,
serious consideration was given to cancelling the Salt Lake City Winter Olympic Games being hosted in February 2002.

Rising security costs are becoming prohibitive in staging the Olympic Games. In 1984 at the Los Angeles Olympics, US$ 79.4 million or $11,677 per athlete were spent on security. Comparatively, in Athens in 2004 US$ 1.5 billion or $142,857 per athlete were spent.[28]

Usage of fossil fuel in the staging of the games, and in particular all the travel involved, is significant and poses two threats to the Games. The first is economic. As the world supply of fossil fuel decreases, not only will the price of using the remaining reserves become prohibitive for transportation usage, and society will be less likely to decide that “luxury travel” (to and from the Games) is a priority and an appropriate use of the remaining reserves. The second is ecological. The burning of fossil fuels contributes to climate change and that, among other effects, threatens the snow and glacier cover in alpine regions. [29].

“The Games have reached a critical size, which may put their future success at risk if size continues to increase. Steps must be undertaken and serious consideration given to manage future growth, while at the same time preserving the attractiveness of the Games.”[30] This was one of the Olympic Games Study Commission’s interim report conclusions.

The Olympic Games Study Commission also concluded that, “If unchecked, the current growth of the games could discourage many cities from bidding to host the Games.” [31] Sentiments of the modern Olympic Games’ founder still ring as true today as they did in his time.

As Pierre de Coubertin noted in 1911 already, “It would be very unfortunate, if the often exaggerated expenses incurred for the most recent Olympiads, a sizeable part of which represent the construction of permanent buildings, which were moreover unnecessary—temporary structures would fully suffice, and the only consequence is to then encourage use of these permanent buildings by increasing the number of occasions to drawn in the crowds—it would be very unfortunate if these expense were to deter (small) countries from putting themselves forward to host the Olympic Games in the future”. [32]
The Olympic Games study Commission’s recommendations are financially focused. In addition with ecological and social considerations they would complement other sustainability efforts. Considering the Olympic Games study Commission’s recommendations, among the other activities and policies the IOC already has in place, the IOC is well positioned to become a leader in sustainability, using a principled definition of success for sustainability.

On a more philosophical level, motivation within the IOC can at once be both narrowly focused—desiring that the Olympic Games continue, as well as being broadly focused—desiring that society continues.
Foreword references


1. Introduction

1.1 The Olympic Movement in the context of sustainability

The Olympic Games (Games) are perhaps the only peaceful event where the world comes together in celebration. The Games are managed by the IOC, a non-governmental, non-profit organization (NGO), which is the ultimate authority of the “Olympic Movement”. The three main constituents of the Olympic Movement are the IOC, the International Sports Federations (IFs) and the National Olympic Committees (NOCs). In addition, the Olympic Movement also encompasses the Organising Committees of the Olympic Games (OCOGs) as well as additional organisations, athletes and other persons who agree to be guided by the Olympic Charter.[33]

The three pillars of the Olympic Movement are sport, culture and environment. The goal is to contribute to building a peaceful and better world by educating youth through sport and is practised in accordance with Olympism and its values.

“Olympism is a philosophy of life, exalting and combining in a balanced whole the qualities of body, will and mind. Blending sport with culture and education, Olympism seeks to create a way of life based on the joy of effort, the educational value of good example and respect for universal fundamental ethical principles. The goal of Olympism is to place sport at the service of the harmonious development of man, with a view to promoting a peaceful society concerned with the preservation of human dignity.”[34]

The mission of the IOC is to promote Olympism throughout the world and to lead the Olympic Movement. One way in which the IOC fulfils its mission is to ensure the regular celebration of the Games, which alternate between summer and winter and are held in a different location every two years. In simple terms, the IOC and the Olympic Movement operate within human society on worldwide scale and that human society operates within the biosphere. The topic of this thesis is to explore how the IOC can contribute to society’s progress towards sustainability within the biosphere.
1.2 Rationale for doing the study

Ecosystems that provide essential life-supporting resources for society's continued existence, such as clean air, clean water, and productive topsoil, etc. are in decline. At the same time, through population growth and increased consumption, society’s demand for these same resources is increasing. As this situation continues, human society faces diminishing options for the future.

As the demand for resources increases and the supply of those same resources diminishes, the need for leadership regarding sustainable development is becoming ever more apparent. Given the worldwide visibility and scope of the Olympic Movement along with the universality of both Olympism and sustainability principles, the IOC seems ideally positioned to be a leader in helping move society toward sustainability.
1.3 Relevance of the Olympic Movement

The Games are the pinnacle of sporting achievement and sportsmanship. For approximately sixteen days every other year, the Games are a high profile event attended or watched on television and/or the Internet by a majority of people throughout the world. In 2004, in Athens, 3.9 billion people had access to television coverage of the Games. [35]

The Games are one of the most successful international corporate marketing platforms, reaching billions of people in over 200 countries and territories throughout the world. With this level of market recognition the Olympic rings have become a highly prized brand. For 600 million US dollars ‘top’ sponsors of the Olympic Games get the trademark rights to use the Olympic rings in their worldwide marketing campaigns and for product labelling reaching people in their daily lives. [36]

The amount of financial and human resources, energy and materials to bid for and to stage the Games is significant. Resources consumed to bid for and to host the Games have been steadily growing and hosting the Olympics now requires tens of billions of U.S. dollars in infrastructure and operations spending.

1.4 Particularly interesting about the Olympic Movement

One of the goals of Olympism is to place sport at the service of the harmonious development of man. This conforms to the promotion of sustainable development, which is now one of the fundamental objectives of the Olympic Movement. The IOC believes that “the Olympic Movement has the ability to play an active part in the taking of measures favouring sustainable development.” [37]

The IOC has prepared its own Agenda 21 based on the model adopted by the UNCED. This Agenda 21 was adopted by the IOC at its Session in June 1999 in Seoul and subsequently endorsed by the entire Olympic Movement at the Third World Conference on Sport and the Environment in Rio de Janeiro in October 1999.
Olympic bids and ultimately the staging of the Games can expand awareness about sustainability to cities around the world, as legacies showcasing sustainable development remain in host cities—providing a message and a model for residents, visitors, businesses and other communities around the world.

These, and other unique, aspects of the IOC hold the potential for it to become a leader in a global movement towards socio-ecological sustainability.

1.5 The basic principles for sustainability

At a fundamental level, sustainability is about maintaining life on earth and the ecosystems required to support that life. If degradation of ecological and social systems continue, leading to fewer and fewer options for human society, at some point in the future, the overall degradation will also prevent the Olympic Games from being staged.

Ecological systems are degraded in three basic ways:

1. By systematically increasing concentrations of matter extracted from the earth’s crust;
2. By systematically increasing substances produced by society; and
3. By degradation by physical means.

Social systems are degraded at a basic level by:

4. systematically undermining the capacity of humans to meet their needs worldwide.[38]

Considering that the satisfaction of human needs is a necessary element of creating a sustainable society, the capacity for meeting such needs worldwide, is one of the socio-ecological conditions required for sustainability.

The three ecological conditions focus on interactions between humans and the planet and are based on an understanding that life requires natural
processes, such as the capturing of energy from the sun by photosynthetic organisms and the purification of air and water. Human society is altering the life-supporting ecosystems and reducing their capacity to provide services. Some examples of how ecosystems are degraded include:

- Society mines and disperses materials at a faster rate than they are re-deposited back into the Earth's crust (examples of these materials are oil, coal, and metals such as lead);

- Society produces substances faster than they can be broken down by natural processes, if they can be broken down at all (examples of such substances include dioxins, DDT, and PCBs); and,

- Society extracts resources at a faster rate than they are replenished (for example, over harvesting trees or fish), or by other forms of ecosystem manipulation [39]

1.5.1 In the context of the Olympic Games

Impacts of the Games on the biosphere and on the communities that host them are significant. Since the advent of the modern Olympics in 1894, the bidding, planning, organizing and hosting of the Games has become a large and complex undertaking, requiring ever more resources. Increasing costs to bid for and to stage the Games, rising security concerns, socio-cultural and environmental impacts are some of the key issues facing host cities. These issues, and others, have resulted in citizens voting against the Games being held in their community.¹

The expanding scope and infrastructure requirements of the Games demand increasing levels of funding to sustain the IOC and the Olympic Movement. Larger and greater numbers of corporate sponsorship programs have contributed to the financial success of the Olympic Movement. With expanding corporate involvement and visibility, there seems to be a growing sense among the general public that perhaps the Olympic Movement has shifted its focus away from the core values of Olympism.

¹ After being awarded the right to host the 1976 Winter Olympics, on November 7, 1972 the citizens of Colorado, by 59.4 percent majority, said they weren't willing to spend tax dollars to have the Games in their state. In 2002 the citizens of Bern rejected by over three to one a call by organizers for cash to help pay for the 2010 Winter Olympics.
This perceived shift of focus has the potential to make the Games less relevant to people’s lives. Such disenfranchisement could lead to greater numbers of people disapproving of the Games and more advocates suggesting that funds be spent on health care, education and other social programs rather than on hosting the Olympics. These issues are linked to social sustainability, as is Olympism.

1.5.2 Relation of Olympism and social sustainability

To explain how the Olympic Movement addresses social sustainability from a principle perspective, we illustrate the relation of Olympism to social sustainability, which is described in the fourth sustainability principle:

**In a sustainable society, people are not subject to conditions that systematically undermine their capacity to meet their needs.**

The Olympic Charter states six fundamental principles of Olympism. Four of these can be directly linked to sustainability (the others deal with organisational matters):

1. Olympism is a philosophy of life, exalting and combining in a balanced whole the qualities of body, will and mind. Blending sport with culture and education, Olympism seeks to create a way of life based on the joy of effort, the educational value of good example and respect for universal fundamental ethical principles.

2. The goal of Olympism is to place sport at the service of the harmonious development of man, with a view to promoting a peaceful society concerned with the preservation of human dignity.

3. The practice of sport is a human right. Every individual must have the possibility of practising sport, without discrimination of any kind and in the Olympic spirit, which requires mutual understanding with a spirit of friendship, solidarity and fair play. …

4. Any form of discrimination with regard to a country or a person on grounds of race, religion, politics, gender or otherwise is incompatible with belonging to the Olympic Movement. [40]
The ideas of respect for universal fundamental principles, harmonious development of man, peaceful society, preservation of human dignity and abolished discrimination can be interpreted as descriptions of some of the complementary aspects to “conditions that systematically undermine people’s capacity to meet their needs.” While the sustainability principle tries to capture which features a sustainable society should not have, the principles of Olympism attempt to capture some of the features it should have. The principles of Olympism also give indications of how the Olympic Movement is supposed to address those ideas: blending sport with culture and education, cherishing effort and good examples, placing sport at the service of human development, promoting peace, friendship, solidarity and fair play and refraining from any kind of discrimination. These proposed actions can be interpreted as examples for possible stepping stones, leading towards a status in which the fourth sustainability principle is no longer violated. We see this close link between the principles of Olympism and the definition of social sustainability used here as a head start for the Olympic Movement in becoming a leader in moving society towards sustainability. Still, sustainability can only be reached if good ideas are also manifested in the operations.

1.6 Value added by this study

This thesis is the first research study undertaken that uses a strategic approach based on the full scope of socio-ecological sustainability for addressing sustainability in the Olympic Movement. ‘Backcasting from a principled definition of success’, as a method, is used to analyse and assess the Olympic Movement. Systems thinking is also one of the methods used in this research. A causal loop diagram (CLD) was created to aid the analysis of the Olympic Movement and to identify key leverage points for change.

Another unique feature of this report is that Olympic Movement has been assessed by using the five level model—a structured comprehensive method for planning and decision-making in complex systems.
1.7 Purpose of the study

The purpose of this study is to determine in what way the IOC could contribute to a global movement towards socio-ecological sustainability. The idea is to try and keep all the good steps the IOC has already taken and enhance their effectiveness by fitting them into a strategic approach for sustainability, as well as proposing some more steps. In addition, we want to point out some of the difficulties the IOC has in moving towards sustainability and see whether those can be overcome or even removed.

We first assess whether the IOC can influence society in general. In a second step, we apply a principled vision of success with regards to sustainability in combination with a strategic approach to reach the vision. The strategic approach includes assessing the difference between the current situation and having reached the vision (by backcasting), as well as finding obstacles and opportunities in getting there. Our specific research questions are explained below in the section on methods.

1.7.1 Scope

This study focuses on the IOC as the supreme authority in the Olympic Movement. As the IOC interacts with society directly as well as indirectly through organisations in the Olympic Movement, the scope of the report includes those organisations where necessary. Generally, we try to provide an overview rather than detailed descriptions, which is why examples are used as opposed to a comprehensive listing.

1.7.2 Limitations

The study does not explicitly include considerations about the Paralympics and Special Olympics, but we consider the Olympic Games to include those.

Given the size and scale of the Olympic Movement’s operations it was not possible to make an assessment of all operations during the limited time of this study. As a consequence we limited our efforts to a high level analysis of current activities that have a sustainability focus. Many significant impacts on society in the biosphere, for example the staging of the Olympic
Games, are not direct IOC activities, but involve other actors of the Olympic Movement, and so we broaden our analysis to include those type of activities.
2. Research questions and methods

The primary research question for this study is:

In what way could the IOC contribute to a global movement towards socio-ecological sustainability?

To address our primary research question, we developed four subsections of questions, which build on each other.

2.1 Section I

The first section lays the groundwork in assessing whether the IOC is capable of impacting society at all. The research question for this section arises from the following hypothesis:

The IOC is an agent of social / cultural / environmental change.

In acquiring evidence, we surveyed studies to find examples that prove an impact by the IOC on society for specific cases. The goal was to find indications for changes in diverse societal layers. The question guiding this survey was:

Does the IOC impact society?

To answer this question, we reviewed former research and interviewed different stakeholders of the Olympic Movement.

2.2 Section II

In the second section we used principles to describe success with regards to sustainability (as described in the introduction), and asked the question for this section:

How would the IOC operate in a society that complies with scientifically relevant principles for socio-ecological sustainability?
To answer the question we first related the parts of the Olympic Charter, which have characteristics of a vision, to a concept of visioning framed by basic sustainability principles\(^2\) [41]. The vision contains the core purpose and core values for the Olympic Movement. We also developed a set of potential strategic goals for striving towards the vision and compliance with the principles.

### 2.3 Section III

Section III compares the IOC’s current reality with compliance with the sustainability principles. We used the Five Level Model (for detailed description see below) for planning in complex systems to structure the thinking. The five levels are system, success, strategy, action and tools. Our question for the first two levels was:

**A) How does the IOC currently describe success in the system?**

On the systems level, we looked at the IOC as a subsystem of the Olympic Movement, which in turn is a subsystem of society in the biosphere. To display this non-linear type of assessment, we used a systems analysis tool called causal loop diagram (CLD). On the success level we examined the IOC’s description of success with regards to sustainability. For the strategy and action level we asked the question:

**B) What are the obstacles and discrepancies between complying with scientifically relevant principles for socio-ecological sustainability in comparison to the IOC’s strategies and its past, present and short-term future actions?**

As the strategic goals of the IOC are numerous, we only analysed some of them in connection to the actions taken to achieve them. We applied definitions of obstacles and discrepancies to the IOC’s strategies and actions related to sustainability to assess its progress. On the tool level we identified some important tools that the IOC uses in relation to the mentioned actions.

\(^2\) developed by scientists in cooperation with The Natural Step
After determining success in section II and assessing the current situation as described above, we applied strategic thinking to determine how the IOC could move towards sustainability. So the third question in this section was:

C) What are the general obstacles for the IOC’s strategic movement towards compliance with scientifically relevant principles for socio-ecological sustainability?

Methods to identify obstacles were to interview Olympic Movement stakeholders and review literature on the Olympic Movement. We also used the causal loop diagram developed for the description of the systems level.

2.4 Section IV

As we do not only want to show what is missing for reaching the vision of success, but also want to illustrate what the Olympic Movement can build on in its work towards sustainability, we asked the question:

Given the obstacles, what are the opportunities for the IOC to contribute to a societal movement toward sustainability?

Answering this question builds on the findings from the assessment of the current situation as well as on the systems analysis. We applied a rigid definition of what an opportunity is, and outlined what we believe, based on our research, are the key opportunities available to the IOC. Based on the opportunities, we give some examples of what actions could be taken in order to approach sustainability despite possible obstacles.

2.5 Specifics of the methods

2.5.1 Literature review

Finding and categorizing relevant data
To determine the structures and actors within the Olympic Movement we searched websites provided by organizations that are a part of the Olympic Movement. In addition, we developed an overview of the current situation
including actions of the IOC as well as their impacts by reviewing previous research. We specifically looked for evidence in the following categories:

- Official documentation of the IOC
- Official Reports of the Olympic Games (produced by OCOGS after the Games)
- Official Bid Books
- Studies from research institutions (case studies, research papers, articles, masters’ theses)
- Studies undertaken by NGOs

Data analysis techniques
To log data in a structured way to answer the research questions, we developed a template for recording information, which is framed by the questions.

2.5.2 Interviews

Finding and categorizing relevant data
We interviewed people from different segments of the Olympic Movement, trying to reach people with diverse responsibilities. These responsibilities are: IOC executive board member, IOC member, IOC project manager, NOC executive, NOC environmental manager, National Sports Federation environmental manager, International Sports Federation executive, environmental advisor for an International Sports Federation, Olympic Solidarity staff, OCOG representative, bid committee representative, and member of the IOC commission for sport and the environment.

We also interviewed external people related to the Olympic Movement with the following responsibilities: UNDP staff and an environment consultant to the IOC.

Process for developing interview questions
- First we developed objectives for the interviews: What do we want to achieve by conducting these interviews? These objectives were:
  - To get the interviewees perspective on how the IOC influences society
  - To find out about their perspective on the issue of sustainability
- To find out whether organisations in the Olympic Movement have stated a vision of success regarding sustainability
- To understand the inter-relation of actors within the Olympic Movement (to be used for the assessment of the current situation and as basis for analysis of obstacles and opportunities)
- To explore how a new idea does or might penetrate the whole Olympic Movement
- To discover whether the IOC is perceived as a leader or laggard in terms of environment and sustainability initiatives
- To get the interviewees perspective on whether sport affects peoples attitudes

The next step was to develop questions for the interviewees that achieve the objectives in an oral interview, face-to-face or via phone call.

We clustered the questions around the following themes:
- responsibilities and activities in a typical day
- connection of organization with other Olympic Movement actors
- sustainability activities and awareness within organization and the Olympic Movement
- effect of sports/Olympics/IOC on society
- Perception of the IOC’s efforts
- interest in speaking with us

This clustering is meant to make it easier for the interviewees to follow the flow of the interview. We ordered the questions in a way that avoided confusion for the interviewees grouping related questions close to each other and clearly introducing the beginning of each cluster.

Two interviewees requested that we send the questions in advance, and we satisfied this request.

The questions were partly identical for all interviewees, partly specific to the organization and personal experience of the respective interviewee. We checked the responsibilities in advance (as far as possible), to get an idea of experience and background of interviewee and adjusted the specific questions accordingly.
Data analysis techniques

- The answers were recorded either on digital recording or in notes, depending on technical possibilities (phone interviews could not be recorded digitally).
- For documentation, we transcribed the interviews into summary bullet points.
- The understanding we gained from interviewees’ descriptions of their organisation’s interaction with other parts of the Olympic Movement was crucial for developing the causal loop diagram, which is explained below.

2.5.3 Backcasting

Backcasting is a planning methodology that uses a vision of success as point of reference, as opposed to forecasting, which uses past trends as points of reference for extrapolation of future developments and possible effects of actions.

Backcasting is particularly helpful for planning in complex situations, when trends are not clearly determinable. Backcasting is also helpful when the possibility of reaching a system’s thresholds make prediction of future events difficult. The current global social and environmental situation as referred to in previous sections is complex and likely to encounter unforeseen changes. Basing strategies on (inherently unsure) predictions would be risky in such circumstances.

Another risk with forecasting is that the trends used for extrapolation might be part of the problem that is intended to be solved by the strategy based on the extrapolation. In that case, a strategy based on forecasting will not succeed in solving the problem, but rather carry it on into the future.

Backcasting leaves room for radical innovations and systematic and coordinated ways of assessing the current situation in relation to the vision without restricting the thinking to current trends and practices. The vision describes a status to attain in the future without prescribing the way to get there.
A vision for sustainability needs to address relevant aspects of sustainability and at the same time be general enough to be helpful for the coordination of all organisations and individuals striving for its realisation. It should be formed on the basis of principles of success rather than on a detailed picture. Principles in this context have the following advantages:

- they can be scrutinized scientifically
- agreements between groups with different values and interests can be found easier on a principle level than on a detailed level
- a principled definition of success does not need specific assumptions about the best technologies and cultural solutions in a distant future
- principles do not need to be reinvented for each specific endeavour

We therefore use scientifically relevant principles for socio-ecological sustainability as the frame for developing the vision.

After creating the vision, the current situation is assessed in relation to the envisioned future and then a step-by-step approach is taken for the transition towards achieving the vision. Each step is assessed on:

- whether it helps attaining the vision
- whether it provides a flexible platform to allow for future steps to be taken in an adjusted direction, if necessary
- whether it provides an adequate return on social, environmental and financial investment.[42]

The methodology of backcasting is built into research sections II and III as mentioned above. In section II, we create a vision of the IOC in a future sustainable society. The vision is framed by basic principles for socio-ecological sustainability. As these principles only provide the notion of basic constraints for any sustainable operation, the vision also contains the core purpose, core values and some strategic goals that are unique for the Olympic Movement.

To assess the current situation in relation to the vision, we use the five level model explained below. For the first part of the assessment we take a broad view and examine the Olympic Movement as a subsystem of society in the biosphere, as well as assessing the definition of success for sustainability in the Olympic Movement. For the other parts of the assessment we focus on

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3 for the principles themselves see the section in the introduction on the basic principles for sustainability
strategies, actions and tools that we identified as possible stepping stones towards the vision and — as opposed to the backcasting methodology for sustainable development\(^4\) — do not take other influences on the sustainability performance into account.

The step-by-step approach towards the vision cannot be laid out in detail in this paper. We refrained from prescribing the way the IOC should take to attain the vision and instead point out discrepancies and obstacles on the way, but also the opportunities the IOC has for moving towards sustainability, and include a few recommendations for possible steps.

### 2.5.4 The five level model

To describe complex systems, five interdependent levels can be discerned. For planning in such systems it is crucial to not confuse these levels with each other. It is important to note that the five level model represents a structured comprehension for understanding and planning in complex systems, not a sequential process leading from one level to the next.

The levels are:
- System
- Success
- Strategy
- Actions
- Tools

On the systems level the system as such is described with its parts and processes, interrelationships and functions. Reductionism is to be avoided; so rather than assessing the system on a detailed level and selecting which details to leave out, the idea is to reduce the overall level of detail and assess the system from a “bird’s eye view”.

On the success level, it is important to understand that success is defined here as a state, where cultural and biological evolution is sustained, not as a process of getting there, and described by principles. This allows for the use of the methodology of backcasting described above.

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\(^4\) developed by scientists in cooperation with The Natural Step
On the strategic level, the principles for achieving success are determined. These principles describe a process to reach success and offer guidelines for a step-by-step approach towards success.

The actions level describes what tangibly occurs following the strategic guidelines. This level is about what people and organisations do when they are strategic.

Tools and concepts should be used to perform and monitor the actions in line with the planning. Monitoring means to check that following the plan is really leading to the desirable results in the system, and it helps building capacity in the planning team or community. [43]

We use the five level model for assessing the current situation of the IOC with regards to sustainable development. First, we take a look at the IOC within the Olympic Movement, within society, within the biosphere (systems level). We then apply a principled definition of success to the IOC. Due to the lack of publicly available information we deduce de facto strategies from IOC actions and assess the strategy and actions level together. From the many tools used by the IOC, we select a few examples.

### 2.5.5 Systems thinking

Systems thinking in general terms is “a science that deals with the organisation of logic and integration of disciplines for understanding patterns and relations of complex problems. … It is a science, based on understanding connections and relations between seemingly isolated things.”[44]

In this thesis, we use a specific systems thinking concept that is called causal loop diagram (CLD) [45]. Its function is to provide a map of the structure of a system, as well as showing the interrelations of its parts. In our study, the system is defined as the influences on the IOC’s compliance with a principled definition of success for sustainability.

In addition, connections to other systems can be displayed by influences coming into the described system. A causal loop diagram can be further analysed to examine the behaviour of each variable in it. We do not use further analysis techniques, as the goal of developing the CLD in this
context was to give a visual aid to understanding the system and thereby finding obstacles and opportunities for moving it towards sustainability.

A CLD generally does not show how a system will change, rather how it currently operates. This can be useful for discovering points where change can be induced.

In a CLD, variables can be stocks, flows or rates. The variables are linked with arrows that show how two variables are connected. The variable at the tail of the arrow influences the variable at the head of the arrow. A plus sign next to an arrow indicates that the two variables change in the same direction, that means if the variable at the tail increases, the variable at the head increases as well. A minus sign means that they change in opposite directions, so if the one at the tail increases, the one at the head decreases. For example:

\[ \text{popularity of the sport} \rightarrow + \rightarrow \text{number of spectators} \]

“The more popular the sport is, the more spectators will watch it.”

\[ \text{number of injured athletes} \rightarrow - \rightarrow \text{number of competitors} \]

“The more injuries of athletes occur, the less athletes will be left to compete”.

The plus and minus sign do not imply any judgement on whether the displayed effect is positive or negative.

Sometimes the variables are linked in a way that causes feedbacks. This means that if one variable affects another, the other in turn has an effect on the first. This can be the case either directly or through a couple of other steps. These feedbacks are displayed as loops in the CLD.
2.6 Discussion of the methods

The first section of the results, dealing with the IOC’s influence on society, is based on a literature review. The studies we found about the IOC’s influence on society do not explicitly deal with the question of whether that influence is related to sustainability issues.

We had variations in how structured the interviews were, in other words, variations in how strictly we followed a question-and-answer scheme with a preset questionnaire. The level of structure for each interview depended upon the interviewees’ preferences, ranging from highly structured interviews, where the interviewees asked to receive the questions in advance, to open dialogue where the interviewees preferred talked about their personal experiences and perspectives.

Differences among the interviews would only interfere with our analysis if we required a statistical assessment. As that was not our goal, the differences in the level of structure, in the questions themselves, in the medium used (direct meeting or phone interview) and in the recording method do not devalue our analysis. We mainly used the interviews to support our own understanding of the system by acknowledging different perspectives on it.

Unfortunately, we were unable to interview stakeholders from all segments of the Olympic Movement. We did not interview athletes, coaches or judges or IOC staff from two out of three departments that we know are responsible for aspects of sustainability work. Their perspectives are acknowledged to be missing from this report.

If we strictly followed the methodology of backcasting from principles for sustainability referred to above, assessment of the current situation should include all IOC’s actions relating to sustainability performance. To properly manage the scope of this study, the assessment of the current situation focuses on key strategies and actions that we believe are stepping-stones towards sustainability.
3. Results section I

Does the IOC impact society?

3.1 Introduction

The main question of this research “In what way could the IOC contribute to a global movement towards socio-ecological sustainability?” is based on the hypothesis, that the IOC has an impact on society and therefore can contribute to a global movement of society. We want to stress that we aim to support the hypothesis that the IOC impacts society in general, as opposed to proving that all IOC actions impact society. Our approach is to identify studies in which an impact of the IOC on society has been demonstrated, and to use those studies as indications that the hypothesis is true. The evidence we chose does not necessarily have a sustainability component, as the question is plainly:

Does the IOC impact society?

The term *society* is used here to describe “the aggregate of people living together in a more or less ordered community” [46]. It refers to the interconnection of the economic, cultural and political dimensions of that community’s life. [47] The term *impact* in this context can either mean inducing change or preserving something which otherwise would have changed.

To address the question above, we focus consecutively on the following layers of society:

- global
- international
- national
- regional
- individual
These layers are not discrete, but overlap (see figure below). The distinction between the layers is used to describe the focus of the impact. This means that the described impact does not solely, but predominantly happen within one specific layer. The two displayed national layers represent all nations who send athletes to the Olympic Games.

![Diagram of layers of society]

**Figure 3: Layers of society**

Impacts in the global layer affect society independent of national boundaries. The international layer incorporates impacts that appear in the relations between nations. The national layer is defined as a society of people united by common descent, culture, or language, inhabiting a particular state or territory. [48] The described impact affects these people particularly because of their affiliation to a specific nation. Regional impacts affect society within a specific territory smaller than a state. Impacts on the individual level affect specific people, but are not necessarily linked to the heritage.

### 3.2 Global Influence of the IOC

#### 3.2.1 Reasoning for global influence

First we want to determine the basis on which we assume that the IOC has global influence. We think it has the ability to create a “social legacy”, because of the Olympic Games’ current status as a significantly inclusive
popular cultural form. [49] Considering the number of attending nations and the number of people involved in Olympic sports, the Olympic Movement is one of the biggest global social movements of this era. [50]

- As the Olympics are no island for the blissful people\(^5\), but part of global society, they are very much entangled with social processes and situations. [51] The Olympic Movement can therefore be understood as an element in the development of global culture. [52]

- Sports in general and the Olympics in particular have their own set of values and principles of behaviour. For the Olympic Games this can be ascribed to their “ancient religious, philosophical and strictly practical genesis”, which makes them a “unique, autonomous phenomenon” on a global scale. [53]

- The Olympic Games create the opportunity for people from different cultural backgrounds to interact. They work as a force of cultural exchange and change in two ways: through direct contact of the hosting and visiting countries and through intermediate contact with media as middle step. [54]

### 3.2.2 Examples of global influence

- Due to its periodic reality of simultaneous worldwide mass spectatorship the Olympic Games create a unique cultural space and provide opportunities to dissolve spatial and temporal distance. Thereby they help spectators develop an awareness of the world as a singular place rather than an aggregate of spatially and politically distinct places. [55] The broadcasting of the Olympic Games worldwide therefore results in a sense of global collective memory and history, the intertwining of national and global narratives. [56]

- On one hand, the Olympic Games work in favour of global standardization (for example by the repetitive and ritualistic character of opening and closing ceremony, having universal rules, promoting universal values / ideology, TV transmission…). This

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\(^5\) expression by interviewee, quoting from Willi Daume (translated by the authors)
mechanism can be explained with the basic globalisation theory which assumes that globalisation requires standardisation and uniformity in all spheres of life. [57] The complex globalisation perspective on the other hand suggests that worldwide interconnection can also result in diversification. [58] In this regard, the uniqueness of each games (due to special champions, uniqueness of host, …) and the opportunities the Games give to re-assert and re-configure national identities and differences help building the awareness of locality [59] and thereby strengthen the pride in being unique and the will to maintain special aspects.

- In association with increasingly fast transport possibilities and communication technologies, contemporary social life has an increasing pace, which can be argued to resolve in an over-emphasis of present and short-term future. Periodic extraordinary events like the Olympic Games can be used to recover the experience of temporal depth and continuity by offering the possibility to share stories about past events on a global level, as well as anticipation of future events, thereby providing a counterpart to the overemphasis of the present. [60] In this sense, the legacy of the Games can be argued to be their successful and popular dramatisation and communication of the very idea of legacy itself as an experience in global culture. [61]

### 3.3 International influence of the IOC

#### 3.3.1 Direct influence on international relations

- International sports events can raise awareness about political conflicts, for example the boycott of the 1980 Games in Moscow sparked a peace movement of high level athletes, who used their publicity and network to influence the people in their country, as they realized peace was in their very own interest. [62]

- In 2002, the IOC organized six round tables with NOC representatives from countries in conflict situations (for example sports officials from Palestine, Israel and Lebanon, Greece, Rwanda and Burundi, Turkey and Cyprus, India and Pakistan) to talk about
how sport and the Olympic ideal could be effectively used in their countries for the following issues:

- as an instrument to promote a culture of peace
- to build up inter-community trust and cooperation

Also on the agenda were recommendations for concrete actions the Olympic Movement should carry out nationally. In the meetings became evident that sports people are already cooperating across borders beyond political obstacles and foreign policy constraints, laying the groundwork for dialogue and diplomacy on other subjects. Outcomes were many recommendations to the IOC and triggering a series of activities for peace by the NOCs, national broadcasters and educational institutions, supported by Heads of States. A successful follow-up was the signing of a cooperation agreement between the USA’s and the Cuban NOC. Concrete steps have been taken since. [63]

- A Polish study on the effects of sports on international relations concluded that “sports have become one of the primary elements on whose basis the Republic of Poland signs international agreements with its neighbours.” [64]

### 3.3.2 Indirect / cultural influence on international relations

All athletes compete under the same regulations, no matter who they are. Internationally accepted rules as basis for a peaceful meeting can bring hope to the idea that international understanding is possible on a global scale. In addition, global events are an opportunity to gain a more informed view on other cultures.

Staging the Olympic Games offers the possibility to a country to demonstrate its economical, cultural and organizational capabilities to its own citizens as well as to the world. This can enhance national pride as well as international recognition, like Korea was able to demonstrate in 1988 (see below).

- For Korea, hosting the Games in 1988 was widely interpreted as a symbol of national economic prosperity, as the Olympic Games had mainly been hosted by industrial countries and the
capital intensity of hosting an event as big as the Games is obvious. [65]

- The Seoul Games had a significant impact on the diplomacy, security, politics, administration, society, culture and economy of Korea, because they were held when Korea was on the verge of becoming an advanced society. [66]

- Especially in the area of diplomacy, the effect of the Games in Korea was visible. The relations with (then) socialist countries were improved, such as China and the Soviet Union. New ties with Hungary were created and Yugoslavia, Poland and Czechoslovakia showed interest in establishing trade offices shortly after the Games. These new international ties resulted in advantages for the relations with Northern Korea. [67]

- As a result of these new ties, human and material exchanges increased, which meant more direct trade and increasing numbers of joint ventures and joint resources development projects were created between Korea and other countries. [68]

- Even though the relations with the USA were partially damaged during the Seoul Games due to the unfriendly behaviour of Koreans towards USA citizens as reaction to the biased NBC broadcasting [69], a study conducted in 1993 found that the number of favourable articles about Korea in the American Times had increased two years after the Games (in relation to two years before the Games). This indicates that the public image of Korea was at least not permanently negatively affected. [70] Based on this study, no conclusion can be drawn about the public image during the irritation in the Games.

- As indication of Korea’s increased recognition in the world, more developing countries turned to Korea for loans and aid after the Olympic Games. [71]

- Japan used the Olympic Games in 1964 to present itself as a powerful, non-threatening, artistically refined and up-to-date nation, overcoming the effects of World War II. [72]
3.4 National influence of the IOC

Although the national principle is not built into the Olympic Movement’s principles, it is built into the Olympic Games’ practices (national hosts, national flags, etc.) As a result, the Olympic Games often provided an arena for the display of nation-building and also competitive national identities and their ideologies. [73] In addition, competing against other nations on the Olympic stage is a symbol of nationhood and of a community’s particularity and of national identity. [74]

Examples for effects of the Olympics on the host country are listed below. We found research on effects on countries other than the host only in connection to the relationship with the host, so these effects are mentioned above on an international level.

- Before the Olympic Games took place in Korea, “changes in the social structure, accompanied by rapid industrialisation, have triggered confusion in the society’s sense of values, which in turn have created social instability”. Hosting the Games meant an effort for the country towards a common goal, calling for unity among all citizens. The successful staging then, in turn, contributed to national pride, as the goal had been accomplished together. [75]

- The cultural events of the Games, accompanied with the wish to make the own Games unique in the long history of the Olympic Games, reawakened interest in the traditional culture in the Korean people. [76]

- Being aware of a global spectatorship during the Olympic Games in Seoul helped to build a national consensus for more democratisation ahead of the Games. Koreans feared that if the Games would fail due to the political struggles in the country, “grave political, economic and diplomatic blows” would be inflicted to the country, which made political actors more open to consensus-building. [77]

- The negative effects of the Seoul Olympics were the diplomatic issues with the USA, inefficient investments, an increased demand for expensive consumer goods in the country and the side-effects of a rapid accelerated economic growth. [78]
3.5 Regional influence on host of the Games

Even though national governments are involved (financially and ceremonially) in staging the Games, they are awarded to a city or region [79] which results in strong involvement of regional stakeholders in the staging of the Games.

The Olympic Games Study Commission states that "The Olympic Games are often a force for positive change and/or infrastructure development in the host city." [80] A study from 1998 analysed the Olympic Games as catalysts of urban change and differentiated between “low impact”, “sports facility impact” and “new urban build and development”. They found that until the Games became a global TV event in 1984, they were mainly on the “low” or “sports facility” impact side. The American Games (1984 and 1996) also fall into these categories. In contrast, the 1988 (Seoul), and 1992 (Barcelona) Games left some demonstrable and specific Olympic legacy in the built environment and socio-economic conditions of the host city. [81] Examples of these legacies are listed below.

- The goal for the Barcelona Olympics was from the beginning to accelerate development in the town and to change mental attitudes. The Games were meant by the organisers to “create a more open, more tolerant, more communicative and happier society.” [82]

- Before the Games people in the region around Barcelona were rather reserved and sceptical about the outcome of the Games. The “dazzling” opening ceremony and the visible structural changes in the town helped people believe in success, which revealed the collective energy that had been held back. [83]

- Objectives for structural changes were to open the town to the sea, turn the old port into a place for public use and to decrease urban density to create more urban and “human” space. As result, citizens start to change their habits in a way that can be called “new urban culture”. [84]

- New urban meeting spaces, along with a ring road around Barcelona that reveals poorer neighbourhoods to the driver, helped to increase awareness in the different societal groupings about each other. The
opposing groups of Catalan bourgeoisie and immigrant population see and meet each other more than before, which sparked communication and in effect might help the development of progressive ideas. [85]

- These changes in the town had been planned before the Olympic bid, but the resources to make the change would not have been generated so quickly or not at all without the Games. The Olympics therefore can be said not necessarily to have transformed the city, but rather helped to complete it. [86]

- As in Barcelona, Seoul could utilize a lot of existing infrastructure, and used investments related to the Olympics for projects which were necessary for the further development regardless of the Games. [87]

- National identity is a difficult issue in Barcelona, as it is part of Catalonia. Catalonia is a part of Spain, but nevertheless its own entity. For Barcelona’s citizens it was therefore crucial to re-develop a strong urban identity to gain back the spirit they had lost over time. [88]

- Two of the lasting benefits of the Olympic Games in Barcelona were new knowledge and improvements in the intellectual and professional wealth in the country, due to the necessity of solving new problems, and the recovery of Barcelona’s citizens’ pride of belonging. [89] The gains in knowledge and communication channels, which had to be developed in the region for the Games remain. Three of our interviewees mentioned this point, as well as adding, that those benefits are often achieved by bidding cities even if ultimately they are not awarded the Games.

3.6 Olympic influence on individuals

The Olympics influence individuals on a large scale in two categories: athletes and spectators. Below are examples from studies about such influences.
3.6.1 Athletes

- Due to incentive-based recruiting for high-level sports, talented young sports people are attracted away from their school and family environments with promises of vast profits - if they continue to excel in sports. They are treated in an instrumental manner without regard to their educational needs. [90] Their moral education as well as their relation to social values is therefore questionable.

- “Pathological behaviour in sports is a growing phenomenon, based on lack of respect for the ancient and modern principles inherent in Olympic anthropology, which call for the harmonious development of body and spirit. This gives rise to dangers of personality deformation and degradation; helped along by instrumental treatment of the human body and health, it may lead to serious injury and chronic illness, internal conflicts and difficulty with social adjustment and integration.” [91]

- Different studies on young athletes in high-level sport show that they develop a clearer image of themselves than other teenagers do. They have a more accurate judgement on their physical as well as on their intellectual abilities, which can lead to more emotional stability. [92]

- Young high-level athletes judge their trainer’s actions as well as their personal situation based on performance-oriented values. [93]. Given that they mainly interact with other sports people who have similar values, an ethical education in connection to the physical education is necessary to promote values like fairness. Otherwise the sports education can lead to a decrease in social orientation. [94]

- The combination of a very early and strong focus on sport with the pressure to keep on winning and early peak in the career can lead to social and material difficulties after ending the career. [95]

- Interviewees mentioned that sports can help to cope with stressful situations and can be an entry door for environmental considerations, connected to health and the beauty of nature.
3.6.2 Spectators

- Watching sports inherently generates possibilities for social interaction - be it in the stadium itself, in a sports bar or with friends at home. [96]

- Studies in the USA found an increasing importance of bars as locations for viewing sports events [97], so that watching sports on TV becomes more of a social event than the activity of single people.

- Sport stars are supposed and communicated by the media as role models, particularly for young and teenage spectators. The values manifested in their behaviour and media coverage illustrate what is socially legitimate and what is not.

3.7 Discussion for section I

Given the research findings it can definitely be argued that the IOC impacts society. The impacts can be described as appearing at different layers of society, even though an action the IOC takes can impact society on different levels at the same time.

*Global influence*
Influences on a global scale are difficult to measure. The research we found connected to this layer of society was therefore mainly based on reasoning rather than on studies of manifestations in real life.

Some authors claim that the Olympic Truce has positive effects for peace on a global scale. During the ancient Olympic Games, no wars could take place in within Greece to allow for safe travelling of all athletes and spectators. [98] Today the Olympic Truce is a large scale peace project of the Olympic Movement. One of the concrete actions of this project was to carry the Olympic Torch through areas in war. So far, effects have not been proven.[99]
Regional influence
Especially for the regional impact the scale of the IOC’s influence can be questioned. When it comes to staging the Games, the bid committee, as well as the organising committee have far-reaching competences and possibilities. Nevertheless they are bound by the IOC regulation, which establishes the frame for any action. It can be argued that this frame allows for the OCOG to have a regional influence, but does not force it to use that potential. This argument is based on the mentioned fact that the Barcelona Games 1992 had a lasting impact, while the Games in Atlanta 1996 had little effect on the hosting community. The IOC regulation for the Games is only one of the mechanisms the IOC has implemented to control the Games. The other is the IOC’s authority to choose the host of the Games from the competing applicant cities, which strengthens the IOC’s influence on the Games and on the influence the Games have on society.

Influence on individuals
The influence of the IOC on individuals seems to be an issue on which scientists have not come to a consensus. The concept of role models referred to above can be questioned in two ways:

Firstly, the role model concept implies a rather intimate knowledge about the model, which is generally not the case for sport stars. In addition, “the multiplicity of outlets, the fragmentation of media messages that stems from our selective options and channel-hopping habits, … produce practices of … consumption that simply do not allow for the fantasy of a single unproblematic figure to ever stand isolated and pure in representational form.” [100]

Secondly, due to the perception of specificity of the sport-values a transfer might take place for the sports activities of the spectator, but not to other aspects of life. One interviewee illustrated the issue this way: “Fair play in rush-hour traffic, I’d like to see that, but I don’t believe it.” Several studies support this hypothesis. [101]

So rather than one person being perceived as a model, the specific actions as examples for behaviour should be taken into account. This relies partly on the documentation and commenting of sports. If, for example, violent actions as foul-techniques in soccer are not publicly condemned, the spectator might develop the perception that violence is acceptable to achieve specific goals. Outstanding moral and symbolic behaviour on the
other side can be stressed as being “good”, for example when Dertartu Tulu - the first African woman to earn an Olympic Medal - waited for the second-placed Elena Meyer - a white South African - after the 10 000 meter run to set off hand in hand for a collective victory lap (Barcelona 1992).[102]

We see the Olympics as offering a platform for telling stories that can build a counterpart to the overwhelming mass of bad news presented in the media. It can be argued that telling nice stories, as well as a sports festival in itself, promotes escapism of some sort. On the other hand, these stories can help to keep up optimism and hope. An example that some interviewees mentioned in this regard was the athletes from both parts of Korea marching into the stadium collectively under one flag (Sydney 2000).

Apart from the different opinions researchers seem to have around the idea of role models, the categories of athletes and spectators do not capture the whole range of possible influences of the IOC on individuals. Several interviewees noted that an important legacy of the Olympic Games is the learning for the people involved in organising and staging them, but our research did not reveal other evidence in this matter.

The IOC’s influence on individuals practicing sports on the level of a hobby takes place through the Olympic Movement. This influence is restricted to the influence the values of Olympism can have on individuals, as providing the means for an actual practising of sports is the responsibility of the International Sports Federations (IFs). We found research on whether particular values are transferred from sports settings to other social settings with differing outcomes.

**Innovations**

The Olympic Games sparked several innovations and the spreading of innovations, as they require new and unusual problems to be solved. These innovations can have an influence on society. As this way of influencing society is a rather indirect one and difficult to assess, innovations are not incorporated in the examples above. However, for reasons of completeness we would like to mention some here.

- For instance, during the Stockholm Games in 1912, the American innovation of the “sport page” in daily newspapers was used as a
communication tool for the Games. [103] Since then, most newspapers in the world incorporate a sports section and thereby facilitate thinking and talking about sports in their own country as well as internationally.

- Often, these innovations are of a more technical nature, like slow motion filming (Berlin 1936) and advanced Computers (Munich and Sapporo 1972) and communication devices (Sapporo 1972). Another innovation is the pictograms (Munich 1972), a system of recognizable symbols for athletic events, which is now used globally. [104]

- A major non-technical innovation was the Olympic Village (Los Angeles 1932). The idea was born to create the possibility for world-wide participation despite the depression, as staying in the village was cheap. In this village, athletes could meet and learn to know each other. The Organizing Committee was credited with promoting international brotherhood and was recommended for a Nobel Peace Prize. [105]
4. Results Section II

How would the IOC operate in a society that complies with scientifically relevant principles for socio-ecological sustainability?

4.1 Introduction

In this section we develop a vision of how the IOC operates in a society that complies with principles for sustainability. We use the approach of a structured vision. A structured vision is framed by the principles for sustainability and has the following components: core purpose, core values and strategic goals. We also develop a vision statement, as we want to capture our structured thinking in a way that can be useful for communication in an organisational network as complex as the Olympic Movement. We incorporate the Olympic Movement in the vision, because the IOC influences society and the biosphere mainly through the Movement, as indicated in section I.

Figure 4: Structure of the vision
4.2 Principles for sustainability

The sustainability principles framing the vision of success for the Olympic Movement are:

“When the Olympic Movement is sustainable, it no longer contributes to…

1. …systematic increases in concentrations of substances from the earth’s crust.
2. …systematic increases in concentrations of substances produced by society.
3. …the systematic physical degradation of nature.
4. …the systematic undermining of human’s capacity to meet their needs worldwide.”

4.3 Core Purpose

The core purpose of an organisation communicates the timeless and enduring benefits of the operation. It highlights the importance of the organisation and justifies the existence of the organisation in society. [106]

We identified two of the core statements in the charter as matching these criteria, one for the whole movement and one specifically for the IOC:

“The Olympic Movement contributes to building a peaceful and better world by educating youth through sport practised in accordance with Olympism and its values.” [107]

“The IOC promotes Olympism throughout the world and leads the Olympic Movement.” [108]

4.4 Core Values

Core values describe what the organisation represents today and what its members would like it to represent in the future. They describe the uniqueness of the organisation’s personality.
The core values of the Olympic Movement are based on Olympism and listed in the Olympic Charter as “fundamental principles of Olympism”:

1. Olympism is a philosophy of life, exalting and combining in a balanced whole the qualities of body, will and mind. Blending sport with culture and education, Olympism seeks to create a way of life based on the joy of effort, the educational value of good example and respect for universal fundamental ethical principles.

2. The goal of Olympism is to place sport at the service of the harmonious development of man, with a view to promoting a peaceful society concerned with the preservation of human dignity.

3. The practice of sport is a human right. Every individual must have the possibility of practising sport, without discrimination of any kind and in the Olympic spirit, which requires mutual understanding with a spirit of friendship, solidarity and fair play. …

4. Any form of discrimination with regard to a country or a person on grounds of race, religion, politics, gender or otherwise is incompatible with belonging to the Olympic Movement. [109]

### 4.5 Vision Statement

We developed the vision statement based on the structured vision above and a speech that Juan Antonio Samaranch gave at the Olympic Games in 2000 in Sydney. It is meant to be used for internal and external communication, incorporating the following elements: reaching socio-ecological sustainability, having a common goal, placing priority on the well-being of athletes and maintaining the Games as the premier sporting event in the world. So the statement reads:

“All athletes worldwide can train and compete in a healthy social and ecological environment, supported by an Olympic Movement that is united by Olympism and the passion for sport, celebrating their achievements in the world's most important sporting event: The Olympic Games”
4.6 Strategic Goals

The purpose of strategic goals is to develop the operation in line with the core purpose. In the section about the discrepancy between today’s strategies and actions and the vision, we assess current strategies in their ability to help move the organization towards sustainability. We see possibilities to build on existing goals, provided that they are embraced by the strategic approach of backcasting from principles that cover the full scope of socio-ecological sustainability.

*How does the IOC operate in a sustainable society?*

As we look at human society today, it may be difficult to believe that sustainability will ever be achieved and therefore the IOC might never have an opportunity to operate in such conditions. It’s important to suspend such ideas around the possibility and probability when constructing the thought experiment of placing the IOC in sustainable society and proceeding to assess various aspects of its actions.

Setting core purpose, core values and strategic goals within the system boundaries of a principled definition of success for sustainability is constraining. Such constraints act as the minimum requirements to be sustainable.

All strategies, actions, goals and objectives would be framed and managed to move toward a principled definition of success as outlined by the above minimum requirements for sustainability.

Beyond that, imagination and intent are the only limits for achieving success. With almost unlimited possibilities for how the IOC could operate in a sustainable society, this section is not and could never be prescriptive. The points raised below are meant to be examples of potential strategic goals that we believe the IOC should explore when envisioning how they might operate in a sustainable society.
In a sustainable society…

- All actors in the Olympic Movement share a common purpose, vision and values, which includes a principled definition of success for sustainability.

- The shared purpose, vision and values are achieved by ensuring that all IOC members and staff are educated and trained in a principled definition of success for sustainability.

- Credibility is maintained internationally. A gap in public perception between stated values of Olympism and the actions of the IOC are minimal to non-existent and transparency exists in all IOC activity.

- A principled definition of success for sustainability, and the means for moving toward it are a part of the stated criteria in bidding for the rights to host the Olympic Games.

- IOC members are democratically elected (method and process to be determined by the IOC Congress).

- Doping among athletes at the Olympic Games is eliminated.

- The scope, complexity and cost of the Olympic Games are operated within the context of development without growth.

- Knowledge from the experience of past and current Games organizers is maintained and is readily available to encourage cities and countries to bid to host the Games.

- Conditions would prevail so that any country would have equal opportunity to become a host, having a city with the capacity to host the Olympic Games.
4.7 Discussion for section II

The overall premise to this section is that, on a principle level, a sustainable society is imaginable and therefore possible and that features of a future Olympic Movement can be described. In that imagined future society, the IOC basically operates in a way that complies with sustainability principles.

The excerpt from the Olympic Charter that we used for the purpose statement does not match our approach for visioning in one respect: The vision should describe a preferred state to allow for backcasting from that imagined future state. The word “better” in the purpose statement indicates a process of moving from a current state towards a future one that is better in relation to the current reality. This resembles the idea of forecasting. Nevertheless, we think the statement is useful as a description of what service the Olympic Movement is meant to provide to society, especially as the IOC itself already connects the concept of a “better world” to sustainability. [110]

For the Olympic Movement to have a vision that is truly grounded in its members’ beliefs and hopes, we suggest a consensus-based process within the Olympic Movement to develop a structured vision of their own. For any organisation, claiming ownership of the vision is an important aspect of its development. It is the IOC’s responsibility to decide on how process should work. Our example of an IOC vision might facilitate an internal process of how to apply the methodology in the development of a structured vision, framed by principles of success for sustainability.
5. Results Section III

A) How is success in the system currently described for the IOC?

B) What are the obstacles and discrepancies between complying with scientifically relevant principles for socio-ecological sustainability in comparison to the IOC’s strategies and its past, present and short-term future actions?

C) What are the general obstacles for the IOC’s strategic movement towards compliance with scientifically relevant principles for socio-ecological sustainability?

5.1 Introduction

To assess the current situation in relation to the vision, we use a generic five level hierarchy for planning and decision-making in complex systems, called the five level model. This model distinguishes the system, success, strategy, action and tools level and was used to identify and assess the IOC’s strategic thinking around sustainability. [111]

Generally, backcasting from principles for sustainability as referred to in the methods section includes a complete assessment of the current situation from the perspective of the vision. The timeframe of this study did not allow for a complete assessment of the Olympic Movement on all five levels.

5.2 Question A

How is success in the system currently described for the IOC?

5.2.1 Systems level assessment

At the system level, we examine first the global system of the biosphere, focusing on society, then on the Olympic Movement (within society) and
then on the IOC (within the Olympic Movement). In addition, we use a causal loop diagram to display some key elements of the system.

*Society as part of the biosphere*

Ecosystems that provide essential life-supporting resources for society's continued existence, such as clean air, clean water, and productive topsoil, etc. are in decline, while at the same time through population growth and increased consumption, society’s demand for these same resources is increasing. As this situation continues, human society faces diminishing options for the future.

Given this global trend, operations requiring large amount resources, especially non-renewable resources, are going to become harder and harder for society to justify. In the future, resource-demanding events, such as the Olympic Games, could be threatened.

*The Olympic Movement as part of society*

The Olympic Movement is not distinct from society, but rather a sub-system of it. This study has shown that it has the ability to influence society for changing the situation outlined above. It is in turn influenced by society. In the context of the connection between society and the Olympic Movement, we look critically at what effect the increasing importance of revenues in relation to ethical values in society might have on values of Olympism and their meaning to the Olympic Movement.

The Olympic Charter states that Olympism is “a philosophy of life, exalting and combining in a balanced whole the qualities of body, will and mind. Blending sport with culture and education, Olympism seeks to create a way of life based on the joy of effort, the educational value of good example and respect for universal fundamental ethical principles.” [112]

Critical voices note that even if Olympism itself remains, the Olympic Movement does not necessarily promote it anymore. Crowther goes as far as claiming the Olympic Games were in some ways the opposite of the Olympic ideals they are supposed to represent. [113]

As success in the Olympic arena becomes a stepping stone to receiving vast income from advertising and affects the value of professional contracts later, it can be argued that promoting “joy in the effort” may lose its credibility. [114]
Recently, the IOC started to assess Olympism from a marketing perspective. In a survey in different countries, it found that from the complex idea of Olympism mainly four concepts are commonly associated with the Olympic Movement and the Olympic Games: hope, dreams and inspiration, friendship and fair play and joy in the effort. The Olympic Image was developed based on these “core values that the Olympic Games immediately communicate to the people of the world” and it shall now be used “similar to a commercial brand.” [115]

The Olympic Image only contains those parts of Olympism, which are easily promoted - as has been assessed in the survey mentioned above. Considering an Olympic Image that differs from Olympism for marketing reasons allows the conclusion that Olympism - or rather parts of it - are now mainly used to make the Olympic Games a unique sporting event and thereby increase the revenues. [116]

Adapting Olympism - not officially, but in thought - to fit a marketing strategy rather than adapting operations and communication strategies to Olympism, puts the fulfilment of the basic task of the Olympic Movement at question, which is “contributing to building a peaceful and better world by educating youth through sport practised in accordance with Olympism and its values”. [117]

Symptoms of a decay of the Olympic Spirit in the Movement are doping and cheating. If Olympism was really the value base of every part of the Movement, those symptoms would be exceptional issues, not the systematic problems they now are. Ben Johnson’s former coach Charlie Francis illustrated the doping issue this way: “I don’t call it cheating. My definition of cheating is doing something nobody else is doing.” [118]

Given the increasing importance of revenues for athletes, the competitions begin to resemble more a movement to overcome each other and be citissimus, altissimus, fortissimus (the fastest, the highest, the strongest) as opposed to adherence to the appeal by Henri Didon to exceed your own expectation of what you are capable of.  

6 Henri Didon was a teacher and friend of Pierre de Coubertin. The appeal originally says: “(…) strive always to go one step further than you were aiming for: citius, altius, fortius”; seen on a panel in the permanent exhibition of the Olympic Museum in Lausanne on March 12, 2005
We see this as a threat to the integrity of the Olympic Movement, as the mindset of winning at all cost opens the door for doping and other types of cheating, which is in turn “destructive of the essential ethical values in sport” [119]. It takes away part of what creates the special flair of the Olympics: the celebration of how far humans can reach.

The Olympic Movement

The Olympic Movement consists of a number of interrelated organisations (as referred to in the introduction). It can be seen as a dynamic network of organisations, which in turn are networks of people with a loosely defined common purpose. Taking this perspective, the relations between the different units (be it individuals or organisations) come into focus. [120]

The different parts of the Olympic Movement are linked through accepting the guidance of the charter and the IOC as supreme authority. Accepting the charter includes sharing and promoting the idea of Olympism. The Olympic Movement, and all the organisations in it, are intended to “contribute to building a peaceful and better world by educating youth through sport practised in accordance with Olympism and its values” [121]. This shared purpose is intended to connect all parts of the Movement with each other and to determine what the actions of the parts look like.

In talking to different stakeholders in the Olympic Movement we found that some of them perceived the links between the parts of the Movement, and especially to the IOC, as less strong links. One interviewee was convinced that his organisation had only to comply with some parts of the charter and that the IOC just assumes everybody working with sports to be part of the Olympic Movement, which conflicts with the following statement in the Olympic Charter: “Belonging to the Olympic Movement requires compliance with the Olympic Charter and recognition by the IOC.” [122]

When we asked the interviewees on how their organisation interacts with the IOC, we had the following range of answers:

- no interaction with the IOC
- personal or professional relation to IOC members
- personal commitment in the IOC (interviewee is also IOC member)
- interaction through other organisations, like regional NOC associations or IF associations
- interaction as relates to the Olympic Games (technical issues of regulation and choice of sports to be part of the Games)
- advisory function for the IOC on possible hosts: “We know where the snow is.”

Most interviewees stated that their organisation interacts more with organisations in the same category—NOCs with NOCs, Sports Federations with Sports Federations and so on—than with other parts of the Olympic Movement.

Overall the Olympic Movement utilizes conferences as its primary formal communication strategy. Interviewees stress the importance of personal connections, even when it comes to the conferences. Many people in the Olympic Movement hold, at once, a variety of responsibilities within different organizations. This seems to be an informal, but critically important, method of communicating and connecting Olympic Movement actors.

The division of duties and responsibilities between volunteers (IOC members and commissions) and IOC staff, at times, presents challenges. In particular, the strict allocation of responsibilities in the staff part can hinder the implementation of innovative and overarching ideas that might be developed on the differently structured volunteer level (for details on the IOC’s structure see appendix II).

**Visualising the system**

To display some of the key links that are relevant for the IOC’s movement towards sustainability, we use a systems thinking tool called causal loop diagram (CLD). We do not analyse the behaviour of the variables over time specifically with a graphical representation.

The question we asked as terms of reference to frame our thinking and create the CLD was:

*What are the major influences on the IOC’s ability to move towards compliance with principles for socio-ecological sustainability?*
Figure 5: Influences on the IOC’s sustainability performance
The CLD illustrates major influences on the sustainability performance of the IOC. Therefore the central variable is the IOC’s degree of compliance with sustainability principles. The variables that are particularly closely linked to its compliance with the principles are shown with a grey font. These variables influence the variables related to other parts of the Olympic Movement or, in the case of the IOC’s capacity to lead by example, to variables related to actors outside the Movement.

We assume a basic level of environmental and social awareness in the general public – especially since the World Summit in Rio in 1992. This assumption lead to the inclusion of variables linked to the credibility of the IOC in public perception. It is also the reason for linking the IOC’s role as societal leader towards sustainability to TOP Sponsorship program satisfaction. Given that the general public is concerned about the status of society within the biosphere, it is especially attractive for sponsors to associate with an organisation that is taking a leading role in addressing those concerns.

Links between the system we examined and other systems are displayed by variables that are not part of any loop. The links we examined are: UNEP environmental influence, TOP Sponsorship satisfaction, transparency of IOC governance, visible corporate influence, degree of detected doping, sustainability influence of NGOs and local sponsorship influence.

5.2.2 Discussion of Systems level assessment

The Olympic Movement can be described as a subsystem of society. As such, it faces the implications of changing values and symptoms of unsustainable practices rooted in other parts of society. The Olympic Movement itself can be described as a network of actors with individual agendas.

This assessment focuses on issues related to socio-ecological sustainability and particularities in the structure of the Olympic Movement that might interfere with attempts to move towards sustainability. By focusing on these aspects we could have missed some issues or features of the system.

7 The variable ”importance of sustainability in the charter” appears twice solely because it is part of two different loops.
Our understanding of the system as displayed in the CLD is mainly based on information conveyed in interviews. The number and choice of interviewees does not hold up to a statistically valid assessment. However, since we are only using the CLD to describe the structures and processes of the Olympic Movement, to have a statistically valid sample is not necessary for the purposes of this study.

5.2.3 Success Level

The IOC has recognized the importance of sustainability and its role in bringing such ideals to society. In 1999, in the foreword to the Olympic Movement’s Agenda 21 then President Juan Antonio Samaranch states:

“the promotion of sustainable development became [after the Charter changed in 1996] one of the fundamental objectives of the Olympic Movement. This is totally in conformity with the goal of Olympism, which is to place everywhere sport at the harmonious development of man.” And further, “... the Olympic Movement has the ability to play an active part in the taking of measures favouring sustainable development.” [123]

The IOC has three primary places for defining success: the Olympic Charter, the Manual on Sport and the Environment and the Olympic Movement’s Agenda 21. Each of the three documents, where the IOC describes or outlines its approach to achieve success, is dealt with in turn.

The Olympic Charter

The Olympic Charter⁸ states:

The IOC’s role is to encourage and support a responsible concern for environmental issues, to promote sustainable development in sport and to require that the Olympic Games are held accordingly.

Rule 2, paragraph 13

The IOC’s role is to promote a positive legacy from the Olympic Games to the host cities and host countries.

Rule 2 paragraph 14 [124]

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⁸ in force as from 1 September 2004
The above rules are the only places in the Charter where environmental and sustainability issues are specifically addressed. ‘Responsible concern for the environment’ and promoting sustainable development and positive legacies suggests actions in a certain direction, but they do not define success. The evidence as gathered indicates that a principled definition of success for sustainability is not present in the Olympic Charter.

*Manual on Sport and the Environment*\(^9\)

This manual is a booklet that is structured into three chapters:

I. Key Concepts and Issues Concerning Sport and the Environment  
II. Environmental Recommendations  
III. Environmental Policies and Actions

The issues and concepts identified and described in the first Chapter as key are:

- biodiversity conservation  
- protection of ecosystems  
- land use and landscape  
- pollution  
- resource and waste management  
- health and safety  
- nuisances  
- safeguard of cultural heritage.

The second chapter makes recommendations in five general areas and in subsection 2.3.2 ‘Basic Principles for Environmentally Sound Practices in the Sports Community’ are highlighted as:

- prevent pollution  
- reduce waste  
- use water energy, and other resources efficiently  
- manage the use of natural resources prudently  
- respect the fauna and its habitat  
- commemorate, protect and respect the world’s natural, cultural, indigenous, and historical heritage

\(^9\) published 1997
- contribute to environmental education and training through sport
- support local action and community participation
- promote practices, methods and technologies that reduce negative impacts on the environment

In subsection 2.5.3, ‘Areas for Action for Environmentally Sound Event Management’ are identified as:

- Location and Landscaping
- Sports Facilities
- Sports Equipment
- Transportation
- Energy
- Accommodation and Catering
- Water Management and Sanitation
- Waste Management [125]

Details of the manual’s content have been provided to illustrate that the objectives for all the areas of action are framed by “sound environmental” principles (such as reduce, respect, manage, support).

All of the material in the manual is relevant for strategies and actions in moving towards sustainability. Yet nowhere in the manual is a principled definition of success addressed. There is no ‘end in mind’ as to what constitutes success in the context of sport, society and the environment.

*Olympic Movement’s Agenda 21*

The Olympic Movement Agenda 21 was prepared by the Sport and Environment Commission and adopted by the IOC Session in Seoul in June 1999. In October of that year, the Olympic Movement endorsed the document at the Third World Conference on Sport and the Environment held in Rio de Janeiro.

First we will briefly outline the content of the Olympic Agenda 21 document and then comment on how it relates to the success level in the five level model.

The first section of The Olympic Movement’s Agenda 21 begins with a quote: "Sustainable development satisfies the needs of the present
generation without compromising the chance of future generations to satisfy theirs.” [126]

The first paragraph also states: “The starting point of sustainable development is the idea that the long-term preservation of our environment, our habitat as well as its biodiversity and natural resources and the environment will only be possible if combined simultaneously with economic, social and political development.” [127]

The section concludes by stating: “In accordance with the philosophy of Olympism, the Olympic Charter and in view of its universal nature, the Olympic Movement accepts that it has a special responsibility to share in the implementation of this concept of sustainable development.”[128]

The second section deals with the objectives of the Olympic Movement’s Agenda 21:

- setting out basic concepts and actions inspired by the UNCED’s Agenda 21 and calling it a theoretical and practical guide for members of the Olympic Movement
- suggesting to governing bodies areas in which sustainable development could be integrated into their policies
- noting that implementation must be done in a climate of respect for different social, economic, geographical, climate, cultural, and religious context which are characteristic of the diversity of the members of the Olympic Movement [129]

Section three lays out the Olympic Movement’s Action Programme for Sustainable Development and identifies means for:

- Improve socio-economic conditions
- Conservation and management of resources for sustainable development
- Strengthen the role of major groups [130]
In the three sections, twenty different action processes are identified and addressed for improving, conserving and strengthening sustainable development. While they may be considered strategic measures, they are not framed by a definition of success.

5.2.4 Discussion for success level assessment

The Olympic Movement Agenda 21 document is a strong attempt at applying a principled definition of success to sustainability. By beginning the document with the Brundtland Report’s definition of sustainability and making statements such as “The earth is our habitat, our biosphere, the only one we have. Our future is totally dependent on the preservation of the natural, physical and biological resources of the biosphere.”[131], the document makes the connection between actions of the Olympic Movement and the biosphere.

Furthermore, the second section of the Agenda 21 document suggests that the objectives of the Agenda must be considered in relation to the differing social, economic, geographical, climate, cultural, and religious contexts that exist in the diversity of the Olympic Movement. [132]

While this is true, it also means that the definition of success, as presented in the Agenda 21 document, is not broad enough in scope to be effective for the entire system (the biosphere) and is open for interpretation at the success level. For success to be achieved within the biosphere, a principled definition of success for socio-ecological sustainability needs to be broad enough in scope as not to exclude any human activity from the system boundaries and also concrete enough to actually guide thinking and planning.

The current definition of success for sustainability in the Olympic Movement’s Agenda 21 does not fulfil these requirements, as it does not use a definition based on principles that are based on a scientifically relevant world-view, necessary for achieving sustainability, sufficient to cover all aspects of the sustainability concept, general enough to include all activities relevant to sustainability, concrete enough to guide action and non-overlapping in order to enable comprehension and a structured
analysis. Principles employing these features allow for a scope broad enough to include all activities of the Olympic Movement. The means by which both ecological and social systems can be degraded were outlined in the Basic Principles for Sustainability section of this paper. It’s clearly the intent of the Olympic Movement’s Agenda 21 document not to be a problem in the system. A logical way to translate this intent into success criteria is to eliminate the Olympic Movement’s contribution to the problem and to comply with the minimum requirements for sustainability as outlined in the “How does the IOC operate in a sustainable society”-section of this paper.

5.3 Question B

What are the obstacles and discrepancies between complying with scientifically relevant principles for socio-ecological sustainability in comparison to the IOC’s strategies and its past, present and short-term future actions?

We chose a general definition of the term obstacle: “something that blocks one’s way or makes movement, progress, etc. difficult”. [134] We refined this definition to be used for this case, so it reads: “obstacles are conditions that impede the IOC from achieving compliance with principles for socio-ecological sustainability”

We define discrepancy as the incapability of an action or strategy to lead towards sustainability, even though it might be aimed at doing so. We believe it would be valuable for strategic planning to distinguish between obstacles and discrepancies, because they need to be addressed in different ways. To perform this distinction on the strategy and actions level requires a specific knowledge of the organisation that could not be gained while conducting our research. So discrepancies and obstacles are treated here as if they were one and the same category.

5.3.1 Strategy and Actions Level

Our evidence did not reveal any published strategic goals for the IOC. The de facto strategic goals that have been specifically identified for the
purposes of this section have been developed by deductive reasoning based on our analysis of past, present and short-term future IOC actions, interviews, and descriptions in documents.

We limited this section of the paper to those *de facto* strategic goals that we believe have a sustainability focus. While the goals we have selected are not framed in a principled definition of success (as outlined in the vision), they primarily move the IOC in that direction. The *de facto* goals that we have identified are:

- always have the best Games possible
- financial viability
- increasing connectedness, participation and diversity in the Olympic Movement
- be a positive catalyst to foster environmentally sound actions that go beyond the Olympic Games and reach the sport community at large
- maintain credibility in international public perception

Since actions were a significant component in deducing the *de facto* strategic goals, we have included both the strategy and actions level of the five level model, together in our assessment of the current situation.

As part of a strategic planning process for sustainability, before deciding whether identified actions should be taken or not, it is important to answer three questions:

- does the action move the organization towards sustainability?
- can the action serve as a flexible platform for further moves towards sustainability?
- does the action provide an adequate financial, social and political return on investment? [135]

For any considered action, if one of these questions is answered with “no” there needs to be further analysis on whether the action can be adjusted to provide a ‘yes’ answer to all three questions or whether the action should be taken at all.

Given the lack of publicly available information on the *de facto* strategic goals we identified, we did not attempt to answer the third question about return on investment in analysing our results. The first two questions
provided “yes” answers for the actions we had identified. This signals that the actions can help move the IOC towards sustainability and that they can serve as flexible platforms for further moves in that direction.

**De facto strategic goal I:** *Always have the best games possible*

In a report presented to the 115th IOC Session in Prague in 2002, the Olympic Games Study Commission states, “never lose sight of the objective of delivering the best games possible for the least amount of money.” [136]

**Identified actions - toward goal I**

- Creating a system whereby cities compete for hosting the Games. The competition drives innovation and helps to make each Games unique.

- Establishing an evaluation committee without IOC members on it.

- Defining rules and evaluation criteria for bids. These rules and criteria include aspects relevant to sustainability:
  
  - The bids are evaluated on the following environmental areas:
    
    - Environmental Heritage
    - Air Quality
    - Drinking Water
    - Environmental and Natural Resource Management
    - Environmental Management Plan
    - Environmental Impact Assessment
    - Guarantees
    - Environmental Showcasing
    - Environmental Contractual Requirements
    - Special Environmental Features
  
  - The requirements also lay out the weighting of the current environmental condition in relation to future impacts:

    Environmental Condition  40%
    Environmental Impact  60%  [137]
The main areas of the bid evaluation also include aspects relevant to sustainability. The areas are weighted with values between one and five:

- Government support, legal issues and public opinion 2
- General infrastructure 5
- Sports venues 4
- Olympic Village 4
- Environmental conditions and impact 2
- Accommodation 5
- Transport concept 3
- Safety and security 3
- Experience from past sports events 2
- Finance 3
- Overall project and legacy 3 [138]

The above criteria and weightings are valid for the evaluation of the 2012 Games only. They change over time. Once the ‘long list’ of bid cities is decided, the bid committees meet collectively with the IOC and are informed of the assessment results of their particular bid, which helps them to improve their bid for the final evaluation.

To deal with uncertain and unknown data for the assessment criteria (for example, future plans and financing are inherently uncertain), the evaluation utilizes ‘fuzzy logic’. This permits the evaluation committee to input ‘fuzzy’ grades for subjective criteria, criteria for which information is incomplete, or criteria for which only estimates can be given.[139]

Organizing Committees often take the lead and establish best practises for future hosts. While these practises may not officially be established as bidding criteria, however, in the keeping with goal of having the best games possible, Bids recognize the competitive advantage of including such best practises into their bid.

For example, Torino 2008 Winter Games worked with EMAS to establish specific standards for certification for events such as the Olympic Games. Torino’s Olympic Games will be both EMAS and
ISO 14001 certified. Torino’s Organizing Committee is hopeful that following their lead, certification will become standard practice for OGOCs.

- Strengthening the requirement of the OCOGs to comply with the bid (examples in past are Barcelona and Sydney that link the process of bidding to delivery).

- Establishing the Olympic Games Global Impact Assessment.
  - objectives: measure the global impact of the Olympic Games, create a comparable benchmark across all future Olympic Games editions and help bidding cities and future organisers identify potential legacies to maximise the Olympic Games’ benefits
  - key elements: a set of more than 150 indicators in the areas of environment, society and economy, measured over a period of eleven years, distinction between activities directly related to the Olympic Games and the context of the event [140]

**Obstacles and deficiencies of the de facto strategic goal I and identified actions in taking the IOC to the vision:**

- The relative merit of each competing bid, and whether or not the bids are progressively moving toward a common vision (sustainability), could be better measured with a principled definition of success.

- The Olympic Games Global Impact Assessment (OGGI) is a useful tool for measuring the impact of the Games on a triple bottom line basis. It is a significant undertaking for Olympic Hosts. Athens had to report on 25% of the indicators, Torino will report on 50%, and Beijing will be the first host to report on 100%)

- The OGGI reports will produce enormous quantities of data. Their deficiency lies in the difficulty of assessing and displaying social issues (like the flair of the city or changes in the inhabitants’ culture) in a report. In addition, the IOC has limited capacity to analyse, interpret (on both a quantitative and qualitative basis) and then make recommendations based on the data it will be receiving from these assessments.
Due to the long planning phase from initial bidding to actual hosting (commonly 10 years or more), OCOGs often become attached to actions and technologies that are far from best practises by the time the Games are hosted. Once the Games are secured little incentive exists to go beyond commitments made in the bid and apply updated best practises.

Rather than updated best practices being applied, often as deadlines draw near and budgets get squeezed, it is the ecological and social actions that are eliminated or reduced. This occurs since there is still no mechanism to bind bid promises with OCOG delivery.

**De facto strategic goal II: financial viability**

“The nightmare Olympic case study is that of the Montreal Olympics in 1976, which lost money and left the Canadian city’s taxpayers to pick up the bill. Montreal’s Olympic stadium was finally completed in 1987, eleven years after the event. The final Montreal debt payment will be made in 2005-2006.” [141]

With the financial debt of Montreal, cities were reluctant to host the Olympic Games and the 1984 Olympics were awarded to Los Angeles uncontested. The LA Olympics were financed purely from the private sector without any government financing—an important and relevant stage in the financial history of the movement. The Los Angeles Olympic Organization Committee (LAOOC), with the backing of several major sponsors, assured the event ran smoothly, and the Games eventually made a profit of $150 million dollars. The L.A. experience ushered in an era of unprecedented corporate involvement.

One of the objectives of the IOC for the third Millennium is to provide meaningful financial support of the Olympic Movement. [142] Financial viability allows for “positive legacies” for the host city and country [143], which have both social, economic and environmental components.

**Identified actions - toward goal II**

- Raise money through sponsorship, TV rights, licensing and ticketing. The IOC’s estimated sources of revenue for the period 2001-2004 were as follows [144]:

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58
<table>
<thead>
<tr>
<th></th>
<th>US $ Millions</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadcast Rights</td>
<td>2.236</td>
<td>52</td>
</tr>
<tr>
<td>Sponsorship</td>
<td>1.339</td>
<td>32</td>
</tr>
<tr>
<td>Ticketing</td>
<td>0.608</td>
<td>14</td>
</tr>
<tr>
<td>Licensing and other</td>
<td>0.081</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4.264</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

- For the year ending on December 31, 2000, the IOC had assets in excess of liabilities of approximately US$ 184 million. [145]

- Implementing strict ethical rules and transparency of its financial operations
  - The IOC held an extraordinary session in 1999 to discuss and vote on the IOC 2000 Reform Committee’s recommendations. The IOC membership unanimously adopted all 50 reforms recommended by IOC 2000 Reform Committee. Two of the financial reforms that passed were:
    - the publishing of additional financial reports that clearly illustrate the flow of the sources and uses of IOC revenues in order to enhance its financial transparency
    - the eventual requirement that every entity receiving funds from the IOC provide the IOC an accounting of the use of those funds, again, to enhance financial transparency [146]
  - Throughout the reform process, the IOC steadily increased its transparency and at the 108th Session, the IOC published its financial accounts, audited by PriceWaterhouseCoopers. [147]

- Adopting the recommendations of the Olympic Games Study Commission for controlling size and scope of Olympic Games (in the areas Games format, venues and facilities, Games management, number of accredited persons and service levels)
  - “The Olympic Games Study Commission was established … to propose solutions to help manage the inherent size, complexity and cost of staging the Olympic Games in the future; and to assess how the Games can be made more streamlined and efficient. The decision of the IOC President recognized the desire to maintain the position of the Games as the most important sporting event in the world, while, at the same time,
balancing the need to keep the costs associated with the Games under reasonable control.” [148]

- The Olympic Games Study Commission’s conclusion is that “the control of Games costs must begin long before Games organizers come into existence. The control must begin with a well-understood and well-communicated Games "template," which specifies the real needs for the Games, and which identifies anything in excess of those needs, so that the public and the bidding cities know exactly what is required and, perhaps even more importantly, what is not required. The IOC must make it clear that it does not subscribe to a view that "bigger is better." The IOC must also make it clear that any such attitude will likely be a handicap, rather than an advantage, for any bid.”[149]

- In 2002 the IOC decided to cap the number of sports at an Olympic Games at twenty-eight, the number of events at 301 and the number of athletes at 10,500. At the IOC session set for July, 2005 in Singapore, separate votes will be taken to approve each of the sports participation in the 2012 Games. [150]

**Obstacles and deficiencies of the de facto strategic goal II and identified actions in taking the IOC to the vision:**

- The reduction in size and scope of the Games is not seen as a means to achieving sustainability, but as only as means to reduce costs. The word “cost” throughout the Commission’s report and recommendations is limited to a financial context and does not specifically include either ecological and/or social elements. The commission’s report could have been expanded to include an overall sustainability perspective in addressing the scope and size of the Games.

- With the Olympic Games Study Commission’s primary focus on financial matters, mostly excluding environment and social issues, the IOC is lagging rather than leading its corporate sponsors. By comparison, there are eleven corporations in the top sponsorship programme. Most of them have both environmental and corporate social responsibility departments. Two of the companies, Kodak and Manulife, were among the Global 100 Most Sustainable Companies as reported by the World Economic Forum in January 2005 and
General Electric uses the Global Reporting Index (GRI) to report on its sustainable reporting guidelines.

**De facto strategic goal III: increasing connectedness, participation, and diversity within the Olympic Movement**

Vibrancy and diversity increase as more countries and athletes participate. Sharing the common experience of participating in the Olympic Games, as athletes or coaches or preparing for the Olympic Games at the NOC or IF level connects a diverse mix of peoples and cultures. Showcasing the unique cultures of the host city and country is also a prominent feature of the Games for both athletes and spectators alike. Participation in sport has the potential to be a unifying force that transcends national and cultural boundaries.

**Identified actions - toward goal III**

- Providing support to NOC associations and regional conferences to strengthen the communication and participation between various actors of the Olympic Movement.

- Creating the Olympic Solidarity, a subsidiary organisation that administers programmes for the distribution of funds from broadcasting rights. The Solidarity’s programmes are developed by the Solidarity Commission.
  - “Olympic Solidarity was not only created to help but also to create closer ties between the IOC and the NOCs. It is through the Olympic Solidarity that we are able to try and overcome imbalances and inequalities. The IOC too needs the understanding and the backing of the NOCs. The purpose is therefore both to help and unite” [151]
  - The total 2003 budget for Olympic Solidarity programmes was US$ 54.7 million.  

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10 For details on the Solidarity’s programmes see Appendix III
Obstacles and deficiencies of the *de facto* strategic goal III and identified actions in taking the IOC to the vision:

- Achieving common goals and creating a sense of connectedness, between all the actors of the Olympic Movement, is difficult without a shared vision of success.

- The conceptual framework of Olympic Solidarity, as an organization and in the way it operates, supports the conditions for social sustainability. However, the specific allocation of funds from Olympic Solidarity accrues in programmes not based on sustainability criteria.

- Given the current reality of scope, cost and security required to stage the Olympic Games, participation and diversity of host city locations is limited.

*De facto strategic goal IV: To be a positive catalyst to foster environmentally sound actions that go beyond the Olympic Games themselves and reach the sport community at large.* [152]

Identified actions - toward goal IV

- Modification of the Olympic Charter with having the environment as the third pillar of the Olympic Movement, producing a Manual on Sport and the Environment and creating an Olympic Movement Agenda 21 were actions taken by the IOC to help it frame success (see section with assessment of the success level).

- Inclusion of environmental criteria in the bidding process

- Creating communication platforms in the form of international and regional conferences that address environmental issues

- Developing educational programmes that build awareness about environmental topics (such as tree planting in host cities)

- Establishing the Sports and Environment Commission

- Informing IOC members on most important current actions for environment
Celebrating successes with regards to sustainability openly, communicating successes from the top level (for example Juan Antonio Samaranch speaking in Sydney, and Jacques Rogge speaking in Vancouver)

- Requiring an environmental assessment to be included in the official report to the IOC after the Games

- Developing the Olympic Games Global Impact Assessment and requiring OCOGs to assess and report on the Games’ impact

- Recommending to find appropriate partner organisations to work with (see Sport and Environment Manual) [153] and supporting cooperations of OCOGs and bids with NGOs (two examples are Sydney 2000 and their involvement with Greenpeace, and London 2012 and their involvement with WWF and BioRegional

- Requiring OCOGs to have representatives of various organisations on their managing board and to work with a range of different stakeholders

**Obstacles and deficiencies of the *de facto* strategic goal IV and identified actions in taking the IOC to the vision:**

- The environmental efforts and initiatives of the IOC are not bounded by principles of success for sustainability.

- The level of funding for environmental actions is not representative of the importance environmental considerations are given in speech (of US $ 54.7 million total Olympic Solidarity budget for 2003, only US$ 250,000 went into the programme for sport and environment, that represents 0.45 %) [154]

- In addition, there does not appear to be any environmental or sustainability experts being part of the IOC’s Sport and Environment Commission and the lack of authority of that commission to direct staff and implement programmes significantly limits the effectiveness of the commission.

- At the administration level, the IOC does not have a dedicated department or even a dedicated manager for environmental and
sustainability issues. The responsibilities fall loosely among three departments: International Cooperation, Control & Coordination of Operations and Sports Games Coordination.

- The IOC does not provide training to members of the Olympic Movement on principles of success for sustainability (IOC members, commissions, staff, nor IFs, NOCs, OCOGs).

- A formal comprehensive measure for passing on of best practices of OCOGs has just been implemented (see 2012 Candidature procedure and questionnaire: Olympic Games Global Impact Assessment, as recommended by the Olympic Games Study Commission for financial reasons)

**De facto strategic goal V:** Maintain credibility in international public perception (including athletes, television audiences, media, and spectators)

**Identified actions - toward goal V:**

- The IOC has established and maintains a relationship with two United Nations departments: the UN Development Program (UNDP) and the UN Environmental Protection (UNEP). The relationships leverage assets and promote common programmes.

- In 1967 the IOC instituted its first list of prohibited substances and in 1974 introduced a reliable system of anti-doping tests. The complexity and sophistication of anti-doping testing techniques continue to try and keep pace with the doping substances and methods.

- In 1999 the IOC undertook a leading role in the establishment of the World Anti Doping Agency [155] and committed to providing seed capital in the amount of US$ 25 million. [156]

- Reconstituting the makeup of IOC membership (as recommended by the IOC 2000 commission)

- Enhancing governing and financial transparency (as recommended by the IOC 2000 Commission)
• Requiring the OCOGs to produce official reports within two years after the Games

• Promoting the Olympic Image via the worldwide “celebrate humanity” campaign in 2000

• Working to ensure that most nations have the capacity to participate in the Games. This promotes the idea of the Games being a truly global event.

• Maintaining specific symbols and rituals (rings, torch and oaths) of the Olympic Games, thereby creating a sense of stability, tradition and continuity.

**Obstacles and deficiencies of the *de facto* strategic goal V and identified actions in taking the IOC to the vision:**

• Sustainability is not addressed in sponsorship relations, thereby missing a chance for contributing to a societal movement towards sustainability. Corporate Social Responsibility (CSR) is already gaining prominence with most multinational corporations, so taking action in this regard would not be a disadvantage to the IOC.

• With increasing corporate visibility, escalating revenues from selling the broadcasting rights and commercial use of licensing, more and more people suspect that revenues are the goal of Olympic operations.

• To enhance the notion of democratic governance and transparency in the IOC, members should be democratically elected.

• Until all 50 recommendations of IOC 2000 Reform Commission’s are fully implemented, a lack of transparency will linger. Instituting an appropriate, functional and transparent governance model is perceived to be one of the biggest challenges facing the IOC.

• Some of the traditions and rituals don’t necessarily match stated Olympic values. (Examples include: winners are presented with medals while standing on a higher podium than other competitors, even though values say that taking part is more important than
winning; Games are supposed to be about individual athletes competing, not nations, but in practice there are national parades in the opening ceremony, national symbols on athletes and national anthems for medals).

- Doping is dealt with downstream, at the end of long process, in the form of testing, while doping actually begins long before the actual competition. Putting more comprehensive and sophisticated testing at the end point, while necessary, is not likely to solve the problem. A shift in societal values that prompt athletes to dope is required to eliminate the problem. Without an ethical education alongside with the physical education of athletes, the problem cannot be solved. It takes ‘teaching’ on the front end, as well as ‘policing’ on the back end.

### 5.3.2 Tools Level

Tools or concepts are useful to assess and monitor the current situation as well as ongoing processes. This section will only identify some of the tools and concepts used by the IOC and will not evaluate the applicability or any strength or weakness of using such tools. In general terms, tools and concepts that are used should be examined for their applicability and appropriateness in measuring progress towards success of the vision.

The following list of tools illustrates examples and does not serve as a complete list:

- Template setting out the basic requirements for bidding (as proposed by the Olympic Games Study Commission)
- Assessment report of the evaluation committee
- Official reports (of the Games after they have taken place)
- Sponsorship programmes (TOP and regional ones)
- Olympic Solidarity programmes
- Programmes with UNDP and UNEP
- Manual on Sport and the Environment
- Olympic Movement’s Agenda 21
- Conferences on Sport and the Environment / Conference on Peace and Development
- Anti-doping campaigns
- Reports from the World Conferences on Sport and Environment
5.4 Question C

*What are the general obstacles for the IOC’s strategic movement towards compliance with scientifically relevant principles for socio-ecological sustainability?*

As the IOC operates within society within the biosphere, it is inherently constrained from moving far quicker towards a vision of sustainability than the rest of society. As society is currently unsustainable, so too are the IOC and the Olympic Movement.

Whereas the strategy and actions levels identified obstacles and deficiencies related to those specific actions in moving the IOC toward sustainability, in this section we identify obstacles that are more overarching in nature. They relate to the organizational structure of the IOC and the Olympic Movement.

- In a diverse organisational structure such as the Olympic Movement, with each organization acting fairly independently, instituting changes in processes and operations is difficult. Structural complexity and goal incongruence lead to diversity in motivation and direction taken.

- The IOC operates globally yet the Games cause a significant local impact and many decisions, including ones about sustainability, are left to the IFs, NOCs, and OCOGs to address and deal with. Since they have differing missions, goals and objectives, the outcomes are not necessarily congruent.

- The main influence of the IOC on other parts of the Olympic Movement is through the awarding and staging of the Games. The IOC’s influence in countries, which currently are unable to host the Games for a variety of socio-economic reasons, is less significant than on countries who desire to host the Games.

- The IOC has little influence on the IFs except for choosing which sports are included in the Olympic Games. Despite the political pressure to the contrary, the IOC is planning to proceed with a vote
at its July 2005 session to individually approve all twenty-eight IFs’ participation at the Summer 2012 Games.

- Due to the competitive atmosphere, a culture of communication between bids does not exist. Also, since only the host’s practices are documented, the best practices of losing bids are not retained and exchanged to future bids.

5.5 Discussion Section III

We focused our research on actions that relate to sustainability and deduced *de facto* strategies based on an analysis of those actions. This approach identified many obstacles and discrepancies for the IOC to strategically move towards compliance with scientifically relevant principles of socio-ecological sustainability.

In answering the research questions in this section, we were limited to publicly available information and thus to the main strategies, actions, and tools of the IOC. Regardless of this limitation, we do not believe our results, would vary greatly if we had had access to more than non-public documentation.

It is often put forward that one of the obstacles for the Olympic Games being sustainable is that that they are held in a different location each time and that to be more sustainable the Games should be held in the same location. Such an approach would reduce and/or eliminate many of the opportunities of the IOC has at becoming a global leader in helping move society toward sustainability.

The ability to influence many different cities and countries in the bidding process and the possibility to showcase living models of sustainable development throughout the world should not be lost. The uniqueness of each Olympics games is distinguished by its location. Having one location would end this exciting feature of the Olympic Games and could ultimately result in the loss of interest in the Games themselves.
6. Results section IV

*Given the obstacles, what are the opportunities for the IOC to contribute to a societal movement toward sustainability?*

## 6.1 Introduction

We use the following definition of opportunity: “a favourable time, occasion or set of circumstances for taking actions towards sustainability, that are unique for the IOC” [157]. In addition, we want to point out actions, which would help the IOC to overcome or mitigate specific obstacles.

## 6.2 Opportunities directly related to the Games

The IOC has the opportunity to influence society through the staging of the Olympic Games. The IOC can use to utilize the Olympic Games to influence society by the following means:

- Awarding the right to host the Games to one of the bidding cities
- Deciding on the sports that participate in the Olympic Games
- Deciding on the NOCs (countries) that have the right to send athletes to participate in the Olympic Games

*Awarding the right to host the Games to one of the bidding cities*

The competitive process of bidding, in connection to sustainability related criteria for choosing the host, would lead to a rise in the sustainability standards of the bids. Backcasting from a principled vision of success would then become a key driver in moving the Games towards sustainability.

Although only one city is awarded the Olympic Games, there are usually two rounds (long list and short list) of cities that bid to host the Games. For example, for 2012, there were nine cities on the long list and five were
short-listed. The IOC’s criteria for awarding the games have an impact in all bidding cities. Even the cities that do not become host often implement sustainability programmes as part of the bidding process, as well as establish new networks between local, regional and national stakeholders, helping to promote sustainability.

If the IOC adopted backcasting from a principled vision of success and ensured that all OCOGs work towards non-violation of the principles, the OCOGs would not be locked into the details of what they committed to in their bids. It would create a flexible platform from the beginning, and allow for future progress in moving towards the vision.

Many of the best practices around sustainability from the bids are only recorded in the bid books, but are not accumulated centrally to be passed on and incorporated into future bids. The IOC could use its authority and facilities (like the Olympic Academies and the Olympic Museum) to facilitate that accumulation and storage of information.

If the Games were downsized in scope and complexity, based on the ideas introduced in the recommendations the Olympic Games Study Commission [158], more cities worldwide would have the capacity to host. This would widen the potential for promoting sustainable development to a global community.

The Olympic Games Global Impact assessment (OGGI) is already established as a tool to measure the staging of the Games’ progress towards sustainability. The IOC has the opportunity to improve qualitative analysis of the tool and its applicability for building on best practices from previous Games.

Deciding the sports that participate in the Olympic Games
Currently, the contact between the IOC and IFs is limited (as mentioned in the assessment of the current situation, system level) even though the IFs agree to be guided by the Olympic charter. If the criteria the IOC has for deciding on which sports participate in the Olympics were expanded to require adopting principles of success for sustainability, there is a potential to move many sports organisations in the direction of sustainability.
Deciding the NOCs (countries) that have the right to send athletes to participate in the Olympic Games

NOCs must comply with the Olympic Charter before athletes from their country can be sent to the Olympic Games. [159] If sustainability principles for success were part of the charter, the NOCs would be required to develop their policies accordingly.

Staging the Games

Staging the Olympic Games is an opportunity to showcase best practices in sustainability (as shown in the Sydney Games in 2000). Showing innovations around sustainability every second year in the Olympic Games provides the message that moving towards sustainability is possible on a large scale. It also promotes the innovations themselves, by finding ways to showcase and educate through living examples in the context of an Olympic multimedia event.

The task of the Olympic Games Study Commission was to analyse the current scale and scope of the Olympic Games with a focus on maintaining financial viability. The IOC members approved the recommendations of the commission based on their understanding of the challenges. We believe that this analysis could be broadened to include all the challenges associated with achieving socio-ecological sustainability, not just the economic ones.

6.3 Opportunities related to the Olympic Movement

Creating a culture of sustainability

The IOC can also influence society through the Olympic Movement. To utilize this potential effectively, all actors in the Olympic Movement should share a vision of success. As the supreme authority of the Olympic Movement, the IOC has the capacity to unite the Movement behind such a common vision.

IOC members share an understanding of Olympism and through the Olympic Charter have the ability to influence the Olympic Movement and, in effect, society by incorporating a strategic framework for sustainability that is based on backcasting from principles for success.
The philosophy of Olympism is completely compatible with sustainability (as explained in the foreword). As the IOC has been promoting a universal concept (which is Olympism) for over a hundred years, they have the experience in leading and representing such concepts and, therefore, are well positioned to promote sustainability. The IOC can use its existing worldwide network to do so.

Our evidence revealed no formal opposition in the sports community to sustainability efforts. Interviewees noted for many sports to take place, the natural environment has to have a certain quality (for example rowing in non-polluted rivers). Performing outdoor-sports can inspire thinking about the quality of the environment in which they take place.

Olympic solidarity establishes and funds programs for the benefit of NOCs. The source of the funds is broadcasting rights. NOCs apply for funding under various programs. We suggest that the Olympic Solidarity develops a program to help NOCs fund actions within their organizations that move them towards sustainability. If, as previously recommended, the charter requires the NOCs to implement actions that move them towards sustainability, there should be financial support for them to do so.

The Olympic Games tend to spark and help promote technical as well as non-technical innovations, because they create the need to solve new and often complex problems. This potential can be utilized to promote sustainability, as Sydney has shown. Entrepreneurs found their niche in, for example, ecologically sound building during the Games and started viable companies, as the demand was created through environmental education related to the Games.

Olympic Image
The Olympics have an image that attracts top sponsors. They contribute hundreds of millions of US dollars in sponsorship programmes. The disconnect between Olympic values and the commercialisation of the Games, creates the perception of a lack of transparency and credibility and has the potential to put the sponsorship programmes at risk. Aligning Olympism with principles of socio-ecological sustainability could frame

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11 Information provided by interviewee
initiatives already under way and provide a more strategic approach to sustainability, allowing the IOC to lead by example.

6.4 Discussion for section IV

The identified opportunities are “favourable times, occasions or sets of circumstances” that we believe are existing platforms that can be used for quick and easy moves towards sustainability, grounded in the leading aspects of current reality.

It is crucial to think of strategic planning, looking at today’s situation from a successful future perspective to determine the direction for moving, and the determination of actual steps the IOC takes to get to the successful future as being separate issues. They are different processes, but complementary:

- The opportunities we point out are part of today’s situation and therefore existing foundations to build upon.
- The actions we propose are linked to the vision, as they are meant to move the IOC towards that vision. Using existing platforms does not necessarily mean using existing ideas.

Nevertheless, using existing ideas can be a “low hanging fruit”, which enable easy first steps towards sustainability. We therefore refer to some existing ideas for actions, but we also want to point out that even though we do not propose radical innovations for the IOC in this section, such innovations might be necessary to actually reach success.
7. Discussion

7.1 The methods

We used a framework for strategic planning for sustainability for this study. Taking an overview rather than assessing details allowed us to go through the whole planning process and to incorporate our findings with the Olympic Movement where it seemed appropriate.

Using a methodology for strategic planning might be unconventional for a scientific paper, especially when it comes to the visioning part. As our visioning is framed by scientifically derived basic principles for sustainability and the reasoning is based on logic and inference, it can be considered a scientifically valid approach.

The five level hierarchy we used for assessing the current reality of the Olympic movement is a tool to help structuring thinking around an issue. The hierarchical order does not indicate that the thinking process has to have a specific sequence. We find it helpful to use the tool, especially for an assessment of an organisation as large and diverse as the Olympic Movement as it provides a structure for thinking about complex systems.

7.2 Applicability

Our results can be used as food for thought in an internal planning process of the IOC. We believe that a visioning process should be initiated and grounded by the organisation itself. A more thorough assessment than ours should be given by actors in the Olympic Movement, who also are the best people to decide on most appropriate actions to implement. It is generally helpful to have external facilitators for such a process, as they are less attached to the organisation and current processes.

Our study can also be helpful as a demonstration of how to apply systems thinking and strategic thinking.
7.3 Key findings and significance

Looking at society as a system within the larger system of the biosphere reveals interconnected problems in how society deals with the natural environment and how society itself functions. Even though these problems are systematic and can be overwhelming, we believe that there are ways of addressing them, necessarily including contributions from numerous actors in all kinds of organisations, on all scales and in all corners of the world.

Education and a global sense of “we are all in one boat” is crucial for a wider understanding of the issues pertaining to sustainability. Even though the Olympic Movement is—as most organisations today are—a contributor to the systematic degradation of ecological and social systems, it has great opportunities for contributing to a change towards a sustainable society in harmony with ecological processes. This is especially the case, as the Olympics have a strong foundation in valuing humanity and educational ideals; and the Games allow for otherwise unconnected people from all over the world to connect.

In the first section we have gathered evidence supporting our hypothesis “The IOC is an agent of social / cultural / environmental change”. The evidence was—just as the hypothesis—not necessarily related to sustainability issues, but nevertheless laid the groundwork for the other sections, as the results show the possibility of the IOC inducing change.

By using a structured vision we showed that on a principle level it is possible to imagine a sustainable future, even for organisations with numerous actors and different operations. Framing the vision by principles for sustainability allows us to consider what might be achievable over and above those minimum requirements for a sustainable society.

Assessing the current situation of the IOC in connection to the vision resulted in clarification of the following key points:

- the IOC does not have a clear definition of success based on basic principles for sustainability, so actions and tools are not necessarily strategically leading towards success in the system
- the actors in the Olympic Movement do not clearly share a vision of a desirable future, which leads to possible incongruencies between various sustainability initiatives in the Olympic Movement
the principles and objectives of the Olympic Movement’s Agenda 21 are not supported in meaningful financial terms, which brings the commitment of the IOC to stated objectives into question.

Due to its genesis as a means for a “better” society and the focus on the wholeness of humanity in Coubertin’s work, we see a special link between the Olympic values (Olympism) and the social aspects of sustainability. This is the foundation on which the Olympic Movement developed its opportunities for contributing to a societal Movement towards sustainability.

We believe a strategic approach for sustainability is key for using these opportunities effectively, as well as developing new ones is essential. This paper therefore provides the application of a strategic planning methodology to recommend the Olympic Movement’s potential contributions to a societal movement towards sustainability. Using this methodology in practice can frame the IOC’s operations and thereby support a leadership role for the IOC, meeting its potential as a positive influence on society.
8. Conclusions

The ideals and values of Olympism and social sustainability are overlapping and complementary. With worldwide networks firmly established, the IOC is well positioned to take a leading role in helping move society towards sustainability. While the opportunity for such a leadership role exists, there is little current evidence to support that the IOC will become strategic and use its influences to help move society toward sustainability.

If the decline of societal and environmental capacity continues, at some point in the future, conditions will be such that the staging of the Olympic Games will not be possible. In strategic terms, the IOC has choices. One choice being, to take a narrow view of its role in society and define itself as the manager of the Olympic Games and Olympism. The other choice being, to broaden its view by being proactive and becoming a leader in addressing the challenges that it shares with society.

If the IOC ultimately decides to embark upon a leadership role in helping to move society toward sustainability, various obstacles and discrepancies challenge its movement. Section III of this report addresses numerous obstacles and discrepancies, which can be summarized into a few broad categories:

- The IOC and the Olympic Movement do not have a principled definition of success in moving toward sustainability
- There is goal incongruence and lack of a shared or common vision among Olympic Movement actors
- The size and scope of the Games (including both bidding and staging) is reaching a threshold
- There seems to be an inability to eliminate (or significantly reduce) doping and cheating in the Olympic Games
- A lack of educational or training programs specifically addressing a principled definition of success for sustainability and IOC staff assigned specifically with this responsibility
• Losses in credibility due to organisational structures and governance practices which are not perceived as democratic and transparent

The evidence in this report suggests that the way the IOC can contribute to a global movement toward socio-ecological sustainability is to embrace its leadership potential in moving society. Such an undertaking could be the IOC’s ultimate legacy to humanity.

8.1 Recommendations based on research findings

The points below are not prescriptive nor are they comprehensive. They arise from our research and are put forward as suggestions for ways the IOC might either remove or bypass some of the obstacles and deficiencies it faces in becoming a leader in moving society to toward sustainability.

• develop a structured vision that is clearly grounded by principles of socio-ecological sustainability with all stakeholders of the Olympic Movement. This would include a common purpose, values and strategic goals

• provide and promote sustainability training for IOC members and staff as well as the rest of the Olympic Movement

• promote the principles of sustainability in the sponsorship programs and as tool for building relationship with sponsors

• include a principled definition of success in sustainability in all IOC documents including the Olympic Charter, the Olympic Agenda 21 and all publications related to sports and the environment.

• Downsize the scope and complexity of the Games with goal to expand the number of cities that are able to bid for the Games

• Include sustainability criteria for countries (NOCs) and sports (IFs) to participate at the Olympic Games
- Revise the scope of the Olympic Games Study Commission to include both ecological and social ‘costs’ in addition to financial costs when examining the size and scale of the Games

- develop Olympic Solidarity programmes that build capacity in the NOCs to move them toward sustainability

- frame all Olympic Solidarity programmes in sustainability principles

- lead by example and create a culture of sustainability throughout the Olympic Movement

8.2 Opportunities for further research

As with most research projects, we found a lot of questions in addition to the answers we could give. We suggest further research on the following subjects:

- What effect would training IOC members in a strategic framework for sustainability have? What effect would a rise in awareness in the IOC about the complexity of global sustainability issues have?

- What is the current status of the IOC’s / the Olympic Movement’s integrity in public perception? How credible are their stated values?

- How can the formal and informal links between individual actors in the Olympic Movement be displayed? What recommendations for structural changes could be derived from such a map?

- Which hindering items for the move towards sustainability are discrepancies (shortcomings of strategies and actions) and which are obstacles (conditions that impede the IOC from achieving compliance with sustainability principles)? What exactly would be the difference in addressing them?
What exactly is the relation between sport and human needs? In which regard does sport hinder satisfying human needs and in which does it help to satisfy human needs?
# List of Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>IOC</td>
<td>International Olympic Committee</td>
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<tr>
<td>NOC</td>
<td>National Olympic Committee</td>
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<tr>
<td>OCOG</td>
<td>Olympic Games Organising Committee</td>
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<tr>
<td>IF</td>
<td>International Sports Federation</td>
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<tr>
<td>OGGI</td>
<td>Olympic Games Global Impact</td>
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<tr>
<td>WADA</td>
<td>World Anti Doping Agency</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organisation</td>
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<tr>
<td>UNEP</td>
<td>United Nations Environmental Programme</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<tr>
<td>UNCED</td>
<td>United Nations Conference on Environment and Development</td>
</tr>
</tbody>
</table>
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[42] ibid


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82


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[84] *ibid*


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[95] Kristina Bohnstedt, 2003. Über die Umsetzung ethischer Forderungen im Jugendhochleistungssport (*About the implementation of ethical requests in high performance youth sport*, in German) (Mainz: Johannes Gutenberg Universität), 47, quoting from several other authors, especially Oerter, 1982. Hochleistungssport unter entwicklungspsychologischer Perspektive (*High performance sport from a psychological development perspective*, in German), in Leistungssport 12


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[127] International Olympic Committee (Sport and Environment Commission), 1999. Olympic Movement’s Agenda 21 (Lausanne: IOC)
[128] ibid
[129] ibid
[130] ibid
[131] ibid
[132] ibid
[133] Karl-Henrik Robèrt et al. (2004), Strategic Leadership towards Sustainability (Karlskrona: Blekinge Tekniska Högskola),

[138] ibid


[143] ibid, quoting from the Olympic Charter, 12


[151] IOC president Mr. Samaranch in 1981 at the XI Olympic Congress in Baden-Baden, quoted from a panel in the Olympic Museum’s permanent exhibition, accessed on March 12, 2005


Appendices

Appendix I: History of the Olympic Movement’s environmental efforts

Prior to 1992

- It is difficult to pinpoint exactly when environmental ideas found their way into sport and the Olympic movement. In 1968, in Mexico City ‘bad’ air quality became an issue. In 1972 in Munich a Green Olympic Park in the middle of the city was developed and an Olympic ‘forest’ was planted with trees from all around the world. The 1984 (Los Angles) and 1988 (Seoul) organizing committees discussed environmental issues but no actions were taken.

1992

- The 1992 Rio Summit is generally thought to have been the ‘real’ beginning of getting people within Olympic Movement to start thinking about environmental issues within the context of sport and the Olympic Games.

- Barcelona’s Organizing Committee (1992 Olympic Games) participated in the Rio Summit and signed the “Earth Pledge”. As a result of the 1992 Winter Olympics in Albertville, the French government put a moratorium on building new ski resorts in the French Alps.

- Greenpeace took advantage of Sydney’s 2000 Olympic Bid’s open and anonymous contest for the best Olympic Athletes Village design to show that, with commitment, a city could showcase environmental solutions by submitting a design based on best practices.

The design focused key areas such as solar energy, energy conservation, public transportation, toxic waste remediation, PCV-free building materials, waste reduction, non-toxic disposal, water conservation, reuse, protection of endangered area and species, and responsible use of timber and building materials. Greenpeace’s design was within the top 5 winners.
Greenpeace asked to help Sydney’s Bid Committee to develop a specific set of Environmental Guidelines for the Games.

- The IOC developed an Environmental Policy and Action Plan as a draft policy document.

1993
- Sydney’s bid to Host the 2000 Olympics Games was the ‘greenest’ bid ever put forward. Greenpeace joined the Sydney Olympic Committee in Monaco for the IOC’s selection process for the 2000 Games to promote the “Green Games”.

- Sydney was awarded the right to host the Games in 1993 and Greenpeace began a seven year campaign to ensure that the City of Sydney, Sydney Organizing Committee of the Olympic Games, and the Olympic Co-ordination Authority lived up to the environmental promises made during the bidding process.

1994
- A Norwegian NGOs pressured the government to ensure that the Lillehammer Winter Olympic Games followed an ecological sustainable development strategy to stage the games and became part of the day-to-day planning process, resulting in more than 20 environmental conscious projects being associated with the games.

- Lillehammer presented the first ‘Green Games’ in the history of the Olympics.

- The Lillehammer Organizing Committee and the Norwegian NOC pressed the IOC to have environment become the third pillar of the Olympic Movement.

- The IOC and the United Nations Environmental Programme (UNEP) signed a memorandum of understanding, which covers future Olympic Games and other international sporting events.

- At its congress in Rio de Janeiro, the International Ski Federation (FIS) pledged to conduct its sport in an environmental friendly way.
The FIS was the first sports federation to take such action, and it wanted to prove that sport and nature can live in harmony.

- The Centennial Olympic Congress, Congress of Unity, held in Paris in 1994, recognized the importance of the environment and sustainable development, which led to the Charter being changed in 1996.

- UNEP and the IOC signed a co-operative agreement, in which both organizations agreed to jointly undertake international actions to promote sustainable development.

1995

- The IOC, having acknowledged its particular responsibility in terms of promoting sustainable development, and accepting the environment as the third dimension of Olympism alongside sport and culture, made a decision to create a Sport and Environment Commission. Its role is to advise the IOC Executive Board on what policy the IOC and Olympic Movement should adopt in terms of environmental protection and support for sustainable development, and to coordinate the application of this policy.

- The IOC hosts the first World Conference on Sport and Environment in Lausanne. An agreement is taken to hold a conference on Sport and Environment every two years. As a result, the second one was held in Kuwait (1997), the third in Rio de Janeiro (1999), the fourth in Nagano (2001), the fifth in Torino (2003) and the sixth will be held in Nairobi (2005).

1996

- Based on the decision from 1994, the charter was changed to include the following paragraph: "The International Olympic Committee (IOC) sees to it that the Olympic Games are held in conditions which demonstrate a responsible concern for environmental issues and encourages the Olympic Movement to demonstrate a responsible concern for environmental issues, takes measures to reflect such concern in its activities and educates all those connected with the Olympic Movement as to the importance of sustainable development." (Rule 2, paragraph 13, Olympic Charter)
1997
- The Manual on Sport and the Environment was published by the IOC.

1999
- The Olympic Agenda 21 was adopted by the IOC session in Seoul and later endorsed by the whole Olympic Movement at the third World Conference on Sport and Environment.

2000
- Sydney hosted the 2000 Olympic Games, which were coined “the Green Games”.

2004
- Torino’s OCOG (2006 Games) developed a new category for EMAS (the European Eco-Management and Audit Scheme) and had it approved and adopted for EMAS certification. TOROC’s operations are also accredited according to ISO 14001 and use the reporting standards suggested by the Global Reporting Initiative (GRI).

Post 2005
- Addressing environmental issues is now considered a competitive advantage in the bidding process and most of the cities bidding to host the Summer Olympics in 2010 have strong sustainability aspects in their bids.
Appendix II: Organisational chart of the IOC

Commissions and Working Groups:
- Athletes
- Culture and Olympic Education
- Olympic Games
- Ethics
- Finance
- International Relations
- Juridical
- Marketing
- Medical
- Nomination
- Olympic Philately, Numismatic and Memorabilia
- Olympic Programme
- Press
- Radio and Television
- Sport and Environment
- Sport and Law
- Sport for all
- TV Rights and New Media
- Women and Sport

IOC administration departments:
- International Cooperation
- Control and Coordination of Operations
- Relation with the IFs
- Relations with the NOCs
- Technology
- Communication
- Marketing
- Legal Affairs
- Medical Department
## Appendix III: Allocation of broadcasting funds

### Olympic Solidarity Budget 2003

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<tr>
<td>Continental Programmes</td>
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<td>Olympic Games and Forums</td>
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<td>Administration/Communication</td>
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### World Programmes budget

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### Continental Programmes budget

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<td>ONOC (Oceania)</td>
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<td>ANOC</td>
<td>1.800</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>17.846</strong></td>
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Appendix IV: List of common interview questions

Responsibilities and activities
What are your responsibilities?
What do you do during a typical work day?

Connection to other actors
How do you and your organisation interact with the IOC?
How do you and your organisation interact with other organisations within the Olympic Movement?
What is the process for having a new initiative adopted by the whole Olympic Movement?
How is compliance with the Olympic Charter monitored and enforced?

Sustainability activities and awareness within organization and the Olympic Movement
Does your Organisation have a vision or a mission statement?
Does your organisation have an environmental policy?
What was the process for developing the environmental policy?
What does sustainable development mean to you?
How does your organisation address sustainable development?
What would have to change for your organisation to be sustainable?

Effects of the Olympic Movement / sports in general on society
In your opinion, in what way has the Olympic Movement changed society?
How do you see sports in general affect people’s attitudes?

Perception of the IOC’s efforts
Why do you think the IOC puts so much emphasis on Agenda 21 or World Conferences on Sport and the Environment?
Would you consider going or sending someone to a World Conference for Sport and the Environment?
If you have been there, what was your impression?

Interest in speaking with us
What made you interested in talking to us?