MOVING TOWARDS SUSTAINABILITY IN THE OLYMPIC GAMES PLANNING PROCESS

by

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ABSTRACT

Past Olympic planning processes have taken particular tacks to improving the environmental outcomes of Olympic events. However, these approaches have all failed to incorporate sustainability in their Olympic plans. This research examines the change from environmentalism towards sustainability in order to determine what is required for an Olympic planning process that is sustainable, building from the lessons of past events, the promises of the Vancouver Bid Book and the expectations of residents and opinion leaders. Experience from past Olympic Games suggests that if Vancouver wants to fulfill its promise to be the first 'Sustainable Olympics', the Vancouver Organizing Committee will have to focus on five key categories: 1) engagement and partnerships, 2) promotion and education, 3) technology and production, 4) land use and waste management, and 5) urban policy and planning. However, in order to achieve sustainability, Vancouver will have to recognize good governance as a major aspect of sustainability.

Keywords: Sustainability, Olympics, Governance, Planning, Policy

DEDICATION

"We didn't inherit the Earth from our parents; we borrowed it from our children." ~ Kenyan proverb

Para todos mis príncipes y princesas: Con ustedes, el mundo será un lugar mejor.

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LIST OF ACRONYMS

ACOG	-	Atlanta Olympic Organizing Committee
ATHOC	_	Athens Olympic Organizing Committee
BC	_	British Columbia
СР	-	Collaborative Planning
GG	-	Good Governance
IOC	—	International Olympic Committee
LA21	-	Local Agenda 21
LEED	_	Leadership in Energy and Environmental Design
LOOC		Lillehammer Olympic Organizing Committee
Mega-event	-	A massive event such as the Commonwealth Games or the Olympics
NAOC	-	Nagano Olympic Organizing Committee
OCA	-	Olympic Coordination Authority
PEFO	_	Project Environmentally Friendly Olympics (LOOC's watchdog group)
PP	-	Public Participation
SEFC	_	Southeast False Creek (Vancouver 2010's Athlete's Village)
SLOC	_	Salt Lake City Olympic Organizing Committee
SOCOG	-	Sydney Organizing Committee for the Olympic Games
UNEP	_	United Nations Environment Programme
VANOC	-	Vancouver Olympic Organizing Committee
VBC	_	Vancouver 2010 Bid Corporation
WCED	-	World Commission on Environment and Development

х

CHAPTER 1 INTRODUCTION

Commitment to the environment in mega-events, such as the Olympics, is a relatively new phenomenon that has come about in response to a worldwide demand for "greener" projects in the face of increasing environmental degradation. The Olympic Movement, which drives some of the biggest mega-events on earth, has begun to consider the environmental impacts associated with hosting the Games, and has accordingly adopted the environment as its third pillar of focus along with sport and culture. This thesis considers how taking a sustainability-oriented focus during the Olympic planning process can mitigate some of the detrimental impacts otherwise caused by mega-events, and at the same time, promote a more business and community friendly image.

The purpose of this research is to critically assess the major differences between previous Olympic plans (from 1994-2004) that focused on environmental considerations and Vancouver's (2010) Olympic plans that are framed in terms of sustainability, and to develop a model of what sustainability planning could look like in a mega-event planning process. Although no "one size fits all" approach exists, the Vancouver example offers a chance to consider what a comprehensive, sustainability-oriented planning process could offer. This first chapter presents the background of environmentalism and sustainability ideas in the Olympic movement, and then specifies the research problem and describes its significance. This is followed by an overview of the methodology used and the limitations of this research. More attention will be given to the development,

definitions of, benefits and utility of sustainability as a planning concept in the next chapter.

1.1 Background of the Study

Cities have been increasingly looking for ways of promoting themselves in a globalizing world, and one popular means has been through hosting seemingly innocuous mega-events. However, these mega-events have social, environmental and economic consequences that impact communities before, during and after the mega-event. As mega-event promoters and planners have become more aware of these consequences, they have turned towards environmental planning, and more recently, sustainability planning.

Although grassroots organizations and citizens had long been critics of the environmental impacts of the Olympics, it was not until the 1994 Lillehammer Games that Olympic officials seriously considered the environmental impacts of hosting a megaevent. For example, in 1974, local citizens in Denver beat Olympic boosters in a referendum, and subsequently, the City of Denver rejected an offer to host the Olympic Games in 1976 (Chernushenko, 1994). As Chernushenko (1994, 2) writes in *Greening Our Games*, the greening of sports events prior to Lillehammer was:

...taking place underground, at the grassroots level and within organizations, rather than in the public eye. Whether out of desire, public demand, regulatory persuasion or good economic sense, many in the sports industry had begun to realise that the best future for sport was a green one.

As grassroots pressure mounted, the Lillehammer Olympic Organizing Committee (LOOC) decided to seek a compromise between quarrelling environmentalists and developers by using the Olympics as a means of focusing the world's attention on 'green architecture' and 'green' issues. The Lillehammer Games was successful in promoting

environmental concerns worldwide, and, following the event, the International Olympic Committee (IOC) created the Olympic Sport and Environment Commission 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 (IOC, 2005, 'The Sport and Environment Commission').

Although this was a positive step in achieving environmentally-sensitive Olympic planning, the mandates and standards that the IOC created are sufficiently vague that host cities have considerable leeway to interpret and carry out the mandates. These standards require that host cities consider the natural environment in their Olympic plans as one of the three Olympic pillars – sport, culture and environment. However, this directive is implemented at the discretion of the host city, and historically, host cities have chosen different approaches to addressing the environmental impacts of Olympic events. While this ambiguity is necessary for an itinerant event that moves from country to country (for example, different environmental technologies can be inappropriate in different locations), the lack of specific goals and accountability makes delivering optional environmental initiatives less likely, especially in host cities that find themselves facing financial and time constraints. Consequently, there is a gap between the idea and the practice of incorporating environmental and sustainability-oriented processes in Olympic planning.

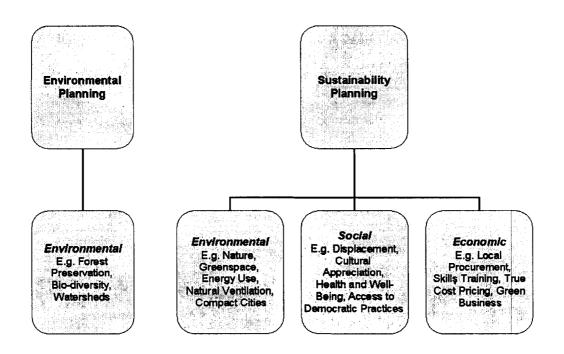
Despite these difficulties, it is imperative for host cities to consider the environment and the effects that the Olympics will have on current and future citizens. Although the events themselves only last for a couple of weeks, the impacts and legacies last for many years. Most host cities since the 1994 Lillehammer Games have succeeded in addressing some particular aspect of environmental planning. However, all past Olympic planning processes to 2004 have failed to incorporate a more

comprehensive, integrated, sustainability-oriented approach towards planning, which would include good governance (GG), and in particular, public participation (PP) and inclusivity. Through attention to the governance and process dimensions of Olympic planning, economic, social and environmental goals can be integrated in a way that is context-sensitive. Further, focusing on governance in the mega-event sustainability planning process empowers both government and citizens to create and integrate local, inward-looking goals, as well as international branding goals.

Although sustainability is distinct from environmentalism in scholarly literature, the two terms are often used interchangeably in mega-event planning literature. Environmentalism is a concept more often associated with the protection of green space or bio-diversity outside city limits, while sustainability is a more encompassing concept that addresses the core issues of social, economic and environmental interaction (for the differences between the two, see Figure 1: The different considerations of environmental planning and traditional sustainability-oriented planning¹). For mega-event planners, this change towards sustainability has meant a switch from thinking about projects in terms of the environment such as green space use, energy consumption and watershed protection, to thinking about projects in more holistic terms that include a combination of environmental, social and economic issues such as natural ventilation, displacement, cultural appreciation and skills development. The next step will be to consider governance and the integration of the three spheres of sustainability as the most important pieces in the planning puzzle.

¹ The information in this figure relates generally to a review of the environmentalism/sustainability literature.

Figure 1: The different considerations of environmental planning and traditional sustainability-oriented planning.



In bidding for the 2010 'Sustainability Olympics', the Vancouver Bid Corporation (VBC) recognised the need for more encompassing sustainability-oriented planning; in

the Bid Book, the organizers state:

Vancouver 2010 is committed to moving beyond environmental stewardship to embrace the economic and social components of sustainability in order to support balanced decision making, a long-term view, inclusiveness, equity and healthy communities. This will be accomplished by the Vancouver OCOG through a Sustainability Management System comprised of policy and commitment, education and awareness, monitoring and reporting, and environmental, social and economic actions (Vancouver 2010 Bid Corporation, 2003c, 55).

According to these promises, the Vancouver Olympic Organizing Committee for the

2010 Olympic and Paralympic Winter Games (VANOC) will have a more rounded

sustainability agenda that addresses difficult social and environmental issues through a

process that includes public participation and inclusivity.

1.2 Research Problem

This research aims to examine the major differences between Olympic planning processes from 1994-2004 that answered the call for environmentally-sensitive planning, and Vancouver's attempt to offer a sustainability-oriented process. Specifically, this research intends to determine how sustainability-oriented planning is different from environmental planning in a mega-event, in order to create a model of sustainability-oriented planning. Thus, this research purports to answer the question – how is sustainability-oriented planning in a mega-event from environmental planning in a mega-event purports to answer the question – how is sustainability-oriented planning different from environmental planning in a mega-event like the Olympics? My hypothesis is that sustainability-oriented planning involves initiatives that include attention to multiple areas including engagement and partnerships, promotion and education, technology and production, land use and waste management, and urban policy and planning.

1.3 Significance of the Study

Significant potential exists for sustainability issues to be addressed worldwide in the aftermath of the 2010 Olympics, since the attention of the media, athletes, locals and tourists alike will be on Vancouver's sustainability initiatives. Sustainability is an important consideration because resources are dwindling at the same time that disparities between the included and the marginalised are increasing. PP and governance are also important areas of study because they offer citizens a chance to voice their desires, concerns, and ultimately, outcomes for their communities (Campbell & Marshall, 2000). Through governance, communities can create plans that positively impact everyone in the community, rather than just elites.

Vancouver's decision to address the environmental pillar of Olympic planning via its sustainability theme offers an opportunity to contribute knowledge to the challenge of

delivering sustainability-oriented planning. By outlining the major differences between past Olympic environmental planning processes and a more inclusive and sustainabilityoriented Olympic planning process in progress, this research will be of use to future Olympic planners as they strive to incorporate more sustainable policies in their Olympic planning. This research will thus be useful on a practical level to aid planners in understanding what is included in a sustainability-oriented event and at a more theoretical level to inform the sustainability planning literature. By examining the differences between environmental and sustainability-oriented planning, a model can be created that highlights the areas that require more resources and effort, as well as areas that need to be closely monitored. This model can be used by future Olympic host cities to ensure that their planning includes sustainability practices, and by city planners who hope to create more sustainability-oriented planning. Further, the examination of the implementation of sustainability theory in a real-life setting will offer an opportunity to examine theory that has been widely accepted, but little tested.

Finally, this research is being conducted concurrently with VANOC's planning process, which offers a unique opportunity to inform the Olympic planning process as it unfolds. Thus, by highlighting promises within sustainability planning theory and within the Vancouver Bid Book, this research can facilitate a critical assessment of VANOC's plans in time to manipulate a more sustainable outcome.

1.4 Overview of Methodology

This research seeks measure the changes toward Olympic environmental planning and compare them with Olympic sustainability-oriented planning activities, and then measure the extent to which VBC and VANOC have achieved sustainability-oriented planning through their promises. Accordingly, there are three phases to this research. Phase One examines sustainability-oriented planning as a distinct approach

to mega-event planning by determining what categories are included in sustainabilityoriented planning in prominent sustainability literature. These categories will then be used to create a 'Sustainability Matrix' as a way to compare Olympic sustainabilityoriented planning processes across time and space. Phase Two uses a comparative case study approach to examine environmental approaches that have been taken by six Olympic cities between 1994 and 2004. These lessons, which have been collected from academic literature, popular literature, information interviews, websites, and 'Olympic watchdog' publications, are identified and reviewed to determine what approaches overlap with sustainability-oriented planning. Phase Three uses a single, in-depth case study to critically examine the new sustainability emphasis of the 2010 Vancouver Olympics by analysing the sustainability promises outlined in the Vancouver Bid Book, survey data collected at community information events before and after the successful Bid competition, and interviews with key opinion leaders in Vancouver. By comparing Vancouver's sustainability-oriented planning to past environmental planning cases, different strategies in the planning processes will be revealed and incorporated into a model of sustainability-oriented planning. The methodology for this project is considered in greater detail in Chapter 3.

1.5 Limitations of the Study

There are some practical limitations to this research due to budget and time constraints. First of all, while every effort has been made to retrieve as much information as possible on former host cities from a remote location, it is not as comprehensive as a methodology that includes visits to these host cities. Secondly, although it was easier to access information about the Vancouver Olympic process, there have been select opinion leaders (e.g. Chief Gibby Jacobs) whose schedules did not allow for an interview. Thirdly, this information has been collected over sixteen

months just after the Bid was won in Vancouver, rather than being collected over multiple years as the planning process comes to fruition. Therefore, the analysis of the Vancouver Games is limited to the bidding and planning phases, and the outcome of the 2010 'Sustainability Games' cannot be analysed.

1.6 Summary

This chapter presented the background of the move towards sustainability in mega-events, and more specifically within the context of the Olympic movement. It specified the problem: what are the different areas of focus that facilitate sustainability-oriented planning rather than environmental planning in a mega-event like the Olympics? This is significant because Vancouver can benefit economically, environmentally and socially through a more sustainability-focused planning process, at the same time that the Olympic sustainability image can promote international action around sustainability issues. By creating a sustainability matrix to assess the content of sustainability planning efforts, and by studying past Olympic cities from 1994-2004 as well as the Vancouver 2010 Olympics, this research seeks to develop a model of sustainability as a planning framework. The next chapter presents three main bodies of literature on this topic: environmentalism and sustainability, Olympic imaging and the environment pillar, and governance, public participation and sustainability.

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

Chapter 1 gave a general overview of this research project, whose aim is to document the shift from environmentalism to sustainability in the Olympic planning process in order to understand how planning and policy can better address the wider view that sustainability offers. In order to understand this shift, it is important to consider three bodies of literature: 1) environmentalism and sustainability, 2) Olympic imaging and the environment pillar, and 3) governance, public participation and sustainability.

Since sustainability in mega-event planning is a relatively new concept, these three areas of literature provide an interesting context for understanding why sustainability has become important in Olympic planning. Although these concepts are at different levels of abstraction, they complement each other in addressing sustainability-oriented planning for mega-events. For example, in order to understand why sustainability-oriented planning is taking precedence over environmental planning in preparations for the 2010 Sustainability Olympics, it is important to understand the differences between environmentalism and sustainability. Similarly, it is important to examine Olympic planning in terms of the effects it has on the environment, since the inclusion of an environmental focus in Olympic planning has been a relatively new phenomenon over the last decade. This phenomenon has not only been a response to global trends and corporate identity formation, but also a response to increased demands from scientists and citizens. The result has impacted Olympic city imaging, and Olympic plans must now include a focus on the environment. By examining Olympic imaging and environmental literature, it is possible to understand the major setbacks, difficulties and initiatives in promoting environmental initiatives and sustainability in Olympic planning.

Finally, to understand how sustainability can be properly implemented in the Olympic planning process, it is necessary to consider governance. Although there is an increasing body of literature about the usefulness of GG to planning, there is little discussion of how GG encourages sustainability by giving citizens and stakeholders a chance to influence future decisions and infrastructure. This is significant as cities often build time-sensitive Olympic infrastructure with little consultation with citizens, relying traditionally on technocratic forms of participation, such as public hearings and comment periods. However, more recently, authorities have sought public support through active involvement of citizens and stakeholders in decision-making processes in order to legitimise their actions.

This chapter will examine the three broad literatures outlined above to expand on the research background and to provide perspective into sustainability-oriented planning trends in the Olympics. In so doing, a better understanding can hopefully be relayed of how Olympic environmental planning considerations can become more sustainable through the incorporation of economic and social considerations, and particularly through public participation.

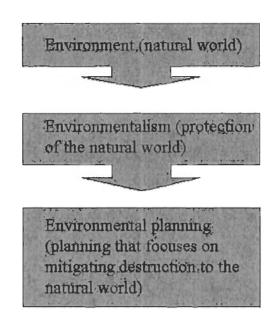
2.2 Environmentalism and Sustainability

Both environmentalism and sustainability thinking have gained increasing popularity in planning and policy literature in recent years due to environmental scientists and development planners who have examined environmental (and later social) destruction in the face of development (Jepson, 2001). While the terms

'environmentalism' and 'sustainability' are often confused and used interchangeably to discuss the environmental impacts of development and actions that can be taken to mediate this destruction (e.g. Jacobs 1991; Myerson & Rydin, 1996; Pearce, 1993; Turner, 1993), my review of the literature suggests that these terms are distinct. As a practice informed by environmental theory, environmentalism usually focuses on a particular issue or area specific to preserving the natural environment (such as reducing point-source pollution). In contrast, sustainability builds on this environmental focus to create a practice that examines multiple issues through a mixture of social, economic and environmental considerations (Lele, 1991; Jepson, 2001).

The term 'environmentalism' first became prominent in the North American vernacular in the sixties following the publication of books such as Rachel Carson's *Silent Spring* (1962), Paul Erlich's *Population Bomb* (1968) and the Club of Rome's *Limits to Growth* (Meadows, et. al., 1972). (See Figure 2 for a depiction of the nuances amongst environment, environmentalism and environmental planning.) These books addressed the role of human interference with nature by first establishing a lived divide between humans and the rest of nature, then discussing the negative impacts that humans have on the environment through technological 'progress' and development. The premise of these books' arguments was that if development were to continue unchecked with the same voracity and without considering the environmental implications of development, then the environment would be destroyed. The depiction of destruction predicted by these books mobilized a new movement of environmentalists who demanded more industrial regulation by conveying "an urgency to the wider society" (Paehlke, 1995, 261).

Figure 2: The nuances amongst environmental, environmentalism and environment.



This need for environmental awareness was built on the premise that there is a dichotomy between humans and nature. Melosi (2003, 187) states, "The differentiation between the natural and the human-made world is a persistent theme in environmental history. Nature is traditionally understood as non-human." By separating the natural world from the environment that urban humans interact with every day, the concept of environmentalism reinforced the notion that the environment was a separate 'thing' that need to be protected from the "destructive, yet apparently rational, actions of people" (Pretty, 2003, 1912). Consequently, human interactions with nature were generally seen as impositions on an otherwise idyllic natural setting.

However, it was soon realised that environmentalism's focus on "a onedimensional 'man versus environment' spectrum [missed] the social conflicts in contemporary environmental disputes" (Campbell, 1996, 298), and a new term – sustainable development (which was later shortened to sustainability) – emerged in the early eighties (Basiago, 1995; Brundtland, 1987; Dixon & Fallon, 1995).

In contrast to environmentalism's goal of attaining and maintaining pristine environments, which some argued was a luxury of the wealthy (Bryant & Bailey, 1997; Campbell, 1996), sustainability referred more expansively to a theory and a practice that looked at the problems of development, and that considered social, economic and environmental responsibilities (Brundtland, 1987; Holtz, 1998; Robinson & Tinker, 1998). This focus on multiple areas of consideration promoted a "more responsible and equitable use of the ecosphere" (Wackernagel & Rees, 1996, 32). At the same time, it offered a unique and appropriate way to approach the problems of specific regional situations by concentrating on social and technological solutions (McMichael, Butler & Folke, 2003). This led the Brundtland Commission to famously define sustainability in their 1987 report, *Our Common Future*, as meeting the needs of the present generation without compromising the ability of future generations to meet their own needs (Brundtland, 1987).

The Brundtland definition gained wide international support since it focused on issues related to harmonious existence between the environment and people's present and future well-being, rather than focusing on the non-human parts of the environment. The idea of sustainability thus spread to most areas of human development, and as Owens (2001, 22-23) relates:

As sustainability started to figure prominently in the language of international policy, due in large part of [sic] the Brundtland Report, the term appeared in a number of principal documents generated by ensuing international summits: the 1992 Rio Earth Summit (United Nations Conference on Environment and Development, or UNCED), which led to the UN Commission on Sustainable Development; the 1993 World Conference on Human Rights in Vienna; the 1994 International Conference on Population and Development in Cairo; the 1995 World Summit on Social Development in Copenhagen; the 1996 Second UN

Conference on Human Settlements in Istanbul; the 1997 World Summit in Rome; and the second UN Conference on Environment and Development in New York in 1997.

It was at the first of these – the United Nations Conference on Environment and Development (more commonly known as the Rio Summit or the Earth Summit) in 1992 – that sustainability came into wide usage by international policy actors (Mah, 2004). At this conference, leaders were confronted with the difficult problem of addressing two seemingly contradictory problems – saving the environment and promoting development (Gibson, 2004). While there was still a strong focus on the environmental aspects, the World Commission on Environment and Development (WCED) also encouraged social change by promoting sustainable development as "green and democratic redevelopment" (Esteva, 1992, 16), and by focusing attention on GG mechanisms such as participatory planning and decision making (UN-Habitat, 2003).

The WCED chose to highlight social sustainability issues through *Agenda 21*, which is a framework for sustainability that serves as "a blueprint for sustainable activity across all areas of human endeavour" (Commonwealth of Australia, 2004). These areas of human endeavour move away from purely human-environment relations pursued under environmental planning, and instead include social and economic development, conservation and resource management, and increased participation of major groups in community planning through governance mechanisms which include citizens as well as governments (UN Sustainable Development, 1992). While the *Local Agenda 21* program (LA21) has been successful in getting 6,416 communities in 113 countries to incorporate the goals of LA21 into their plans and decision-making

processes (ICLEI, 2002, 3), the actual application of LA21 has been more tenuous². ICLEI (2002, 3) states:

Local authorities in all regions and regardless of economic situation list lack of both financial support and national government political commitment as key obstacles to greater success.

Although sustainability is seen as theory that should inform local economic, social, environmental and political practices, its actual application has been much weaker.

Part of the problem stems from the diverse range of definitions and expectations

of sustainability given by various disciplines and groups (Basiago, 1995). As

Wackernagel and Rees (1996, 36) highlight, there has been an array of issues

influencing interpretations of sustainability and how sustainability can be achieved

including "conflicting interests, opposing world views, incompatible analyses, rising

material expectations, and fear of change". Consequently, sustainability is a vague

idealism (Cambell, 1996) that is seen variously as: "a critique, a set of principles implying

positive objectives, and a focus for strategies for change" (Gibson, 2004,

'Sustainability').

Different interpretations of the term 'sustainability' are not necessarily

problematic, however. As Arias-Maldonado (2000, 44) points out:

Sustainability, at a very high level of generality, refers to an ecologically viable social model, that is, a social model whose operation is in balance with the natural systems on which it ultimately depends. Some vagueness in definition is unavoidable at this level: the more precise we make it, the more we opt for a particular version of it, and the harder it is to distinguish between different models and their main goals.

For Arias-Maldonando, sustainability is distinct from environmentalism because of its concern with social systems. However, sustainability cannot be defined more precisely,

² These numbers are the most recent numbers I was able to find, based on a survey completed in 2002 by ICLEI (2002, 3).

because it is not only a theory, but also a process that must adjust to new information and situations. Greider (1997, 448-449) points out that this allows everyone to use sustainability in many contexts, some of which are at odds with each other:

[Sustainability] carries revolutionary implications, but sounds so wholesome that almost everybody can endorse it. Every enlightened politician now supports the goal of sustainable development; so does every leading corporation and financial institution that is sensitive to popular opinion.

Because of the ambiguity of the term 'sustainability', Marcuse (1998) cautions against using the concept of sustainability universally, fearing that universal use of the term will eliminate the value of the term and lead to abuse of the theory that sustainability represents. He contends that rather than positing sustainability as the only worthy goal, communities must consider it to be a criterion amongst competing goals and recognize that, "where the lure of universal acceptance is a powerful attraction...[the] idea of universal acceptance of meaningful goals is a chimera" (Marcuse, 1998, 104-105). Anand and Sen (2000, 2030) underscore this point by emphasizing that "the moral value of *sustaining* what we now have depends on the *quality* of what we have [their emphasis]".

While planners still confuse the terms 'environmentalism' and 'sustainability', the difference between the two in planning and development literature has become more pronounced. Environmentalism has been fostered as a movement to protect "non-human" places (Melosi, 2003), and consequently, it is hard for environmental planning to be used in a city setting because it compartmentalizes the environment. Sustainability-oriented planning, on the other hand, embraces humans' use of and integration with nature, and is therefore more conceptually appropriate to a city setting since it considers human-environment interactions as well as political socio-economic processes.

...instead of merely evoking a misty-eyed vision of a peaceful ecotopia, [sustainable development] acts as a lightning rod to focus conflicting economic, environmental, and social interests.

Although sustainability borrows certain ideals from environmentalism, it also offers a distinct approach to plans and development. As Roseland (1998, 4) points out in *Toward Sustainable Communities,* "Sustainable development must therefore be more than merely 'protecting' the environment: it requires economic and social change to *improve human well-being while reducing the need for environmental protection*" [his emphasis]. Thus, to achieve sustainability, environmental protection must be tempered with inclusive social considerations and strong economic planning, as well as GG mechanisms.

2.3 Olympic Imaging and the Environment Pillar

Local governments pursue major sporting events such as the Olympics as a means to attract financial capital and improve livelihoods. These events are generally seen by planners and city officials as jubilant, large-scale spectacles, offering many benefits from image-building spin-offs and few local risks. However, over the last century, it has been gradually recognised that the revenue and marketing power that is generated from hosting the Games is not usually enough to compensate for the negative social and environmental impacts of these events (Deccio & Balaglu, 2002). To address this failure, the role of the Games has gradually moved from tourism promotion towards a means of stimulating large-scale urban renewal and re-imaging (Smith, 2001; Whitelegg, 2000). The Olympics have thus been used to market place identity, and more recently, to solve urban social and environmental problems.

The Olympic Games are one of the most sought-after mega-events because in addition to urban re-imaging, the Games offers positive symbolism (Andranovich &

Burbank, 2004), world recognition (Ritchie & Smith, 1991; Whitelegg, 2000), civic pride (Ley & Olds, 1988), and financial spin-offs (Ley & Olds, 1988). Hosting the Olympic Games catalyzes urban change (Essex & Chalkey, 1998) and allows cities to promote positive city images for place marketing and branding (Madsen, 1992). Global recognition of the world status of a city and its associated image is important in attracting investment (Ritchie & Smith, 1991), and as Hiller (1989, 120) points out, mega-events have "the potential of providing the vehicle for a city to make a statement about itself and its people to the world." This branding image is often carefully crafted to create an identity that is "consistent with the Olympic ideals of competition and social and technical progress" (Andranovich & Burbank, 2004, 14). Further, the Olympic brand is both prestigious and scarce, which are important advantages in an era of global competition for city recognition (Andranovich & Burbank, 2004). As Hiller (1998, 48) writes, the unique one-time nature of the Olympics:

...inspires vision and innovation rather than bureaucratic routine, and the global focus of the event appeals to the grand and glorious rather than the dullness and intransigence of local problems.

Because cities want to attract investment and promote economic development, attracting the Games is almost as competitive as the Games themselves, and hosting the Games is a "clear demonstration that a city has 'made it' onto the world stage" (Whitelegg, 2000, 803). Even if a city's Bid is defeated, it raises and reaffirms the "international standing" of the city (Sudjic, 1996, 11).

Recently, the Olympic brand has included environmental considerations in its planning process, although concerns about the impact of the Olympics on the environment have spanned the last forty years. At the 1964 Tokyo Games, reductions in pollution levels and improvements to water quality and waste standards were emphasized (Chalkley & Essex, 1999a). At the 1972 Munich Games, National Olympic

Committees from all over the world symbolically planted shrubs from their home countries, and called for "certation sana in natura sana" or "a healthy competition in an intact [healthy] environment" (Planet Drum, 2002a, 'Olympic Greenwashing of the 2002 Winter Games'). By 1974, Denver, Colorado, recognized that the environmental risks posed by hosting the upcoming Olympic Winter games were large enough that the Bid Committee, under pressure from the local public, decided to turn down the IOC's offer to host the 1976 Games (Chernushenko, 1994; Lenskyj, 1998). However, despite these localised considerations of environmental issues, it was not until the early nineties that the IOC officially considered the environment to be "a critical component of the imaging process [of the Olympics]" (Waitt, 1999, 1070).

In 1992, the IOC first officially recognized the importance of environmental considerations in Olympic planning by signing the Earth Pledge, whose mission is to identify and promote "innovative techniques and technologies that restore the balance between human and natural systems" (Earth Pledge, 2005, 'Our Mission'). Two years later, the 1994 Lillehammer Games became the first Olympic Games in the history of the Olympic Movement to promote environmental standards, and subsequently, the IOC decided to adopt the environment as the third pillar of focus along with sport and culture. In officially recognizing the environment as the third dimension to Olympism, the IOC reconfigured the Olympic identity, and host cities are now required to apply the Olympic motto (altius, fortius, and citius [faster, higher, stronger]) to the environmental management of Olympic sporting events (McIntyre, 1995).

Following the creation of the Olympic Sport and Environment Commission in 1995, whose mandate was to "educate all those connected with the Olympic movement as to the importance of sustainable development", (IOC, 2004c, 'Sport and Environment Commission'), the IOC agreed to use the Olympic brand to promote environmental standards:

The Olympic Movement [should] take a leading role with respect to the environment...recognizing the unique opportunity provided by the regular celebration of the Olympic Games to emphasize the importance of the environment (as quoted in Planet Drum, 2002b, 'The Olympic Movement and the Environment').

To accommodate these changes and to protect the Olympic image, the duties of the

Sport and Environment Commission were extended to include the creation of

environmental requirements that potential host cities would have to meet in their

proposed Bids (Kearins & Pavlovich, 2002). (See Appendix B for the complete list of

requirements.)

Since "a brand's value comes from its ability to apply a consistent premium to a

customer transaction" (Kitchin, 2003), cities compete for the Olympics because the

Games offers them a chance to create an identity of progress, of optimism, and more

recently, of being environmentally and socially conscious. As Hiller (1989, 121) points

out:

From an urban point of view, then, it is important to see how a city attempts to transform itself not only to accommodate the event itself, but to portray itself to the rest of the world. The oft-repeated phrase, 'The eyes of the world will be on us,' suggests that appearances are as important as essence, and every effort is made to highlight what are perceived to be the uniqueness and strengths of the city.

In this space, plans and decisions become centred on the particular image that the city chooses to promote. This image includes a wider sphere of urban planning and issues that happen before, after, and concurrently with the mega-event, and must focus on achieving targets that go beyond mitigating environmental destruction towards actually improving the environment and embracing sustainability (IOC, 2005a, 'The Olympic Games and the Environment').

2.4 Governance, Public Participation and Sustainability

Sustainability is often considered to be the effective balancing of the environment, the economy and society (Healy & Shaw, 1993; Jepson, 2001; Meadows, Meadows & Randers, 1992). However, "Many people are frustrated with government's inability to take all their interests into account [...and] are demanding more meaningful input into decisions that directly affect them or the place where they live" (British Columbia Roundtable on the Environment and the Economy, 1992, 11). Thus, many authors (Christie & Warburton, 2001; Evans, et al., 2004; Hemmati, 2002; Lafferty, 2004; Svedin, O'Riordan & Jordan, 2001) argue that a precondition for achieving sustainability is functional, democratic governance that includes democratic values, procedures, and institutions that steer the community. Accordingly, planners and policy makers cannot rely on government-centred, 'scientific' data alone; rather, they must engage in a more holistic means of governing (governance) that includes people-centred approaches, such as public participation (PP) and collaborative planning (CP), as well as more formal traditional governing mechanisms.

Governance is a process in which the government and the public are involved in setting goals and priorities (Artibise & Hill, 1993), or as Evans, et al., (2004,3) write, "Governance is the sphere of public debate, partnership, interaction, dialogue and conflict entered into by local citizens and organizations and by local government". As a process, GG is important for sustainability because it allows for democratic mechanisms in decision-making and for policy implementation to be reached through open discussion, based on shared goals and trust (Christie & Warburton, 2001; Evans, et al., 2004; Hemmati, 2002). As UN-Habitat (2003, 182) reports:

The concept of good governance is now recognized as an all-embracing concept covering effectiveness, inclusiveness and transparency in both government and civil society...It has the 'inclusive city' as its theme,

focusing attention on the needs of the urban poor and on other marginalized groups, and recognizing that participatory planning and decision making are strategic means for realising this vision.

Citizen participation and engagement are not new terms to policy and planning; they go back as far as Aristotle's *Constitution of Athens*, in terms of Western Philosophy. In 1927, John Dewey, a prominent American political philosopher, argued that citizens should be involved in government decision-making since, "government exists to serve its community, and this purpose cannot be achieved unless the community itself shares in [...] determining their policies" (Dewey, 1927, 146). It was not until the mid-1960s, however, that citizen engagement first gained institutional support in planning and policy circles following Davidoff's (1965) article on PP in planning and goal setting. In "Advocacy and Pluralism in Planning", Davidoff (1965) argued that planning practices could increase the relative power of citizens through advocacy planning, and in 1969, Arnstein expanded this idea with her seminal article on PP, entitled "A Ladder of Citizen Participation". Arnstein (1969) contended that the lack of public power in planning and in decision-making needed to be corrected, and classified PP into three areas - nonparticipation, tokenism, and citizen participation. She then broke these areas down further into an eight-rung ladder that included manipulation, therapy, information, consultation, placation, partnership, delegated power and citizen control (Arnstein, 1969).

The rungs at the lower end of the ladder fall into a technocratic, commandcontrol-compliance model, popular under a traditional structure of government that is predominantly "centralized, sectoral, reactive, short-term, adjudicative, adversarial [sic] closed, and elitist" (Artibise & Hill, 1993, 4). Those rungs at the upper end, however, integrate the community into the governmental decision-making process to create a more democratically-determined model, which is often associated with voluntary agreements, informational devices and lasting public input (Lafferty, 2004). The upper end of the ladder is associated with a governance system that is "decentralized, intersectoral, proactive, anticipatory, long-term, participatory, cooperative, open and egalitarian" (Artibise & Hill, 1993, 3). Therefore, while the technocratic model treats information as a stable, inert commodity produced by experts, the GG (or citizen engagement) model recognises that other forms of knowledge and information, such as traditional environmental knowledge and industrial knowledge, are legitimate and even necessary in establishing local and national goals (Evans, et al., 2004; Graham, 2004; Gunton & Day, 2003), and in empowering local people (Evans, et al., 2004; Mitchell, 2002).

Understanding the differences between, and uses of, these two models of planning is important. Under the technocratic model, citizens are educated about decisions that have already been made, and are only superficially involved since information only flows one way: from the experts to the public (Depoe, 2004; Hamilton, 2004). Genuine dialogue is thus difficult to achieve since any involvement of the public is traditionally practiced in "institutional settings with specific mechanisms and forums for engagement with government officials and other stakeholders" (Delicath, 2004, 255). Moreover, because decisions have already been made, public discussions occur too late in the process to have any real effect other than minor revisions, and citizens feel the consultation mechanism is little more than a public relations event designed to convince citizens of the integrity of decisions that have already been made by the experts (Katz & Miller, 1996). Tokenism slightly expands the role of participants in decision-making through informing and consulting citizens about "rights, responsibilities, and options" (Arnstein, 1969, 219), and by allowing citizens to advise the government through "attitude surveys, neighbourhood meetings, and public hearings" (Arnstein, 1969, 219).

Roseland (1998, 182) refers to this tokenistic consultation as the 'decide, educate, announce, defend' (DEAD) process of PP.

The second, more democratically-determined governance model includes mechanisms for decision-making such as community advisory boards, citizen panels, citizen advisory committees, and citizen juries (Applegate & Sarno, 1998; Crosby, 1995; Goldenberg & Frideres, 1986; Vari, 1995). Under this model, citizen participation is based on participatory democracy, which, according to Depoe and Delicath (2004, 3), includes three major assumptions:

(1) people should have a say in decisions that will affect their lives; (2) early and on-going, informed and empowered public participation is the hallmark of sound public policy; and (3) the public must be involved in determining how they will participate in choosing what forums and mechanisms will be used in identifying what resources are needed to ensure informed participation, and in determining how public input will affect decision-making outcomes.

The GG model offers marginalised citizens, who are traditionally excluded from the political and economic processes, to have their views deliberately included in the planning process (Arnstein, 1969; Evans, et al., 2004; Hemmati, 2002). Thus, citizens are invited to share decision-making powers or, in some cases, are even appointed as the dominant decision-makers, guaranteeing that "participants or residents can govern a program or an institution, be in full charge of policy and managerial aspects, and be able to negotiate the conditions under which 'outsiders' may change them" (Arnstein, 1969, 223). Accordingly, citizens are encouraged to "probe, analyse, and debate" through a two-way communication and deliberative process with government experts (Hamilton, 2004, 61), which leads to a process of social construction and negotiation of information (Graham, 1997), as well as better community decisions (Hemmati, 2002).

CP is a highly evolved governance model; it is a multi-way interaction planning technique between government, industry, NGOs, citizens and other stakeholders that

takes an integrated approach to problems that cannot be segregated into distinct categories (Gunton & Day, 2003; Innes & Booher, 2004). All participants must solve problems through negotiation rather than voting (Innes & Booher, 2004; Roseland, 1998), which allows more interests, perceptions and forms of knowledge to be represented (Jamieson, 1985), as well as mitigates some of the problems associated with multiple "publics" competing for recognition and varying levels of participation (DeSario & Langton, 1987; Sirianni & Friedland, 1995). Toker (2004,176) calls this the deliberative approach "whereby rational, authoritative consensus decisions are reached through the free and open deliberation of representative and equal stakeholders."

Both PP and CP are important in sustainability-oriented planning, because citizen involvement allows the community to come to consensus about the value judgements and tradeoffs that need to be made. According to Brower (2000, xi) GG in sustainability-oriented planning:

...blends legal measures with fiscal policy, good science, governance mechanisms, and plain-old civic will to effect durable, indeed sustainable, environmental and social outcomes wedded to a particular community and a particular place.

Although this quote ignores the possibility that a local community may make poor judgements (consider, for example, the case of the "Tragedy of the Commons", Hardin,1968), it does underscore the idea that by incorporating local people into planning decisions, it is more likely that sustainable decisions will be made that reflect the unique economic, environmental and social environment of a particular place (Artibise & Hill, 1993; Evans, et al., 2004; Hemmati, 2002). Local planning "directly subjects decision-makers to the repercussions of their decisions" (McCay & Jentoff, 1996, 246), and uses the attachment people have for a particular place to motivate action (Knopman & Susman, 1999). This allows citizens to feel that they have control over what happens in their community (Bryant & Callewart, 2003), and has led to the conception of governance as the "seat" of the sustainability "stool" (with the three traditional spheres of sustainability – economic, environmental, and social – being the three legs of the stool) (Dorcey, 2002).

However, the GG model is only effective if there is good communication, openness and shared responsibility (Dryzek, 2000; Graham, 2004; Jacobs, 1999), as well as transparency, accountability, efficiency, responsiveness and gender equity amongst the stakeholders in the planning process (Hemmati, 2002). Accomplishing this, however, can be extremely difficult since communities are diverse groups with many different needs and interests, not homogenous entities (Sarin, 1995). Further, some of the difficulty of including the community in planning and policy decisions is that these decisions require an "ever-increasing level of specific scientific and technological knowledge" (Senecah, 2004, 15), and integrating experts and non-experts can be extremely time-consuming (Meadows, 1998). According to Depoe and Delicath (2004, 9):

Efforts by policymakers, environmental advocates, and others to achieve meaningful public participation may be constrained by more deep-seated commitments to institutional rationalities or economic imperatives that are articulated in dominant discourses of expertise, knowledge, risk, and legitimacy.

Moreover, active participation can humanize governance without "rigourously and explicitly addressing issues of equity and justice" (Depoe & Delicath, 2004, 7). For example, the decisions that are made by local power holders may represent the pursuit of "individual agendas inimical to social and ecological sustainability" (Taylor, 2002, 643). Thus, power struggles within groups can interfere with fair representation and good decision-making (Bradshaw, 2003; Clark, et al., 2001), and can lead to a disproportionate representation of elite stakeholders. Even when common goals are

articulated and good communication is achieved, the conflict involved in implementing and realizing these goals is not necessarily lessened (Beierle & Konisky, 2001; Botes & van Rensburg, 2000; Torgerson, 1999). As Depoe and Delicath (2004,9) point out, "...structured opportunities of public input, including innovative mechanisms for public participation, does not in itself guarantee meaningful citizen involvement leading to publicly supportable decisions."

Under a GG model, PP can help realign sustainability away from exclusively legal or regulatory approaches towards more grassroots-based measures that include citizen participation in guiding environmental and social policy. As Evans, et al, (2004, 4) point out, sustainability and GG depend on each other in a cyclical process:

Through consensus and consultation, local authorities should learn from citizens and local organizations; in turn, this process of dialogue and consultation should increase local awareness of sustainability.

This creates greater public buy-in, and, in turn, sustainability goals can be more effectively achieved through community-appropriate tradeoffs.

2.5 Summary

This chapter was a review of literature at the intersection of three domains of research: environmentalism and sustainability, Olympic planning and the environment pillar, and GG, PP and sustainability. While these three areas are quite distinct, studying the points at which they intersect offers a broad picture of how sustainability and public participation theories and practices can move Olympic environmental planning towards being sustainable, rather than simply environmentally sound.

Since the word 'sustainability' became popularised by the Brundtland Commission in 1987, it has been used extensively in a variety of contexts. For example, from business planning initiatives that seek to sustain investment to community environmental protection programs, sustainability has a generic quality. Furthermore, sustainability approaches are "inclusive and holistic" (UN-Habitat, 2003, 165), which ensures the economic, social and environmental implications are considered during the planning process. The Olympic Movement has thus attempted to incorporate sustainability into its rhetoric as part of its ongoing imaging process, and has committed itself to promoting sustainability through its environment pillar. This means that the Olympic Movement is moving away from merely environmental considerations towards sustainability. For example, the Olympic Movement's *Olympic Agenda 21* moves beyond efforts to improve the environment, and specifically outlines measures to include social sustainability in the planning process.

To achieve sustainability-oriented planning, the Olympic Movement needs to encourage GG in the planning process. By involving citizens in the Olympic planning process, communities can feel ownership over the decisions being made, rather than simply feeling hopeless about the expenditures and decisions being made by the Olympic Organizing Committee, the national government and the IOC. Thus, through GG, citizens have a chance to voice their opinions about what is built, which priorities are kept, what expenditures are made, and what community measures are important for sustainability. After all, if sustainability's aim is "to involve everyone and is a continuous process of improvement that never ends" (Veleva and Crumbley, 2001, 243), then achieving sustainability must inherently involve GG and community engagement.

CHAPTER 3 RESEARCH DESIGN AND METHODS

3.1 Introduction

Chapter 2 established the literature in which this research is situated. In this chapter, the three phases of research, which are used to evaluate how sustainability-oriented Olympic planning is different from environmental Olympic planning, are explained. Phase One consists of creating a 'Sustainability Matrix' to measure sustainability across regions. The chapter also examines and explains the case study method used in Phase Two and Three, and then explores document analysis and follow-up interviews as a means of comparing and analysing environmental planning lessons from previous Olympic Games in Phase Two. Finally, the chapter considers document analysis, surveys, formal interviews, and informal interviews as methods of determining the promises and expectations for the Vancouver 'Sustainability Olympics' in Phase Three.

3.2 Phase One: Creating a Sustainability Matrix

Sustainability is an ambiguous term that can be easily adapted for different situations. This ambiguity gives sustainability a generic quality and poses problems for measuring sustainability across and between different cities and regions. Accordingly, it is necessary to determine a specific framework for measuring sustainability by using a common set of criteria, applicable in different locations and relevant to Olympic planning processes in particular. To determine what an appropriate framework might look like, a preliminary review of the prominent current sustainability literature was conducted. The most commonly accepted definition of sustainability is given by the World Commission on Environment and Development (Brundtland, 1987, 24): "meet[ing] the needs of the present without compromising the ability of future generations to meet their own needs". As this definition is quite broad and vague, it was not conceptually useful in analyzing the differences amongst various attempts at sustainability. Further, it does not offer a distinct, universally appropriate set of criteria or baseline requirements. As a result, it was necessary to develop a new framework of sustainability components by which to measure the success of sustainability-oriented planning of different Olympic host cities.

Through a policy and research document review of sustainability literature from international organizations, Canadian organizations, academic research networks and local organizations³, a list of sustainability components was complied. These components ranged from concrete, technical solutions such as energy reduction and waste management, to more abstract ideas such as public participation in decision-making. The components were then coded according to themes, and natural themes were aggregated using a grounded theory approach. In total, there was considerable overlap in fifty-two areas, which formed the content of a comprehensive framework. These fifty-two components were then sorted into a 'Sustainability Matrix' consisting of five key categories: 1) engagement and partnerships, 2) promotion and education, 3) technology and production, 4) land use and waste management, and 5) urban policy and planning. (See Figure 2: The five categories of sustainability-oriented Olympic planning. This figure captures various categories of sustainability rather than focussing on the

³ These organizations included the Local Action 21 Organization, the Canadian Commissioner of the Environment and Sustainable Development, the Sustainable Development Information System, the Sustainable Communities Network, the International Institute for Sustainable Development, Sustainable Calgary, ICLEI, Athens 2004, Requirements for Candidate Cities, the Conservation and Environmentalism Dictionary, the International Environmental Technology Centre, and the Melbourne Principles.

three spheres of sustainability as separate entities.) These categories will now be briefly outlined in order to explain their utility as criteria for assessing different aspects of sustainability.

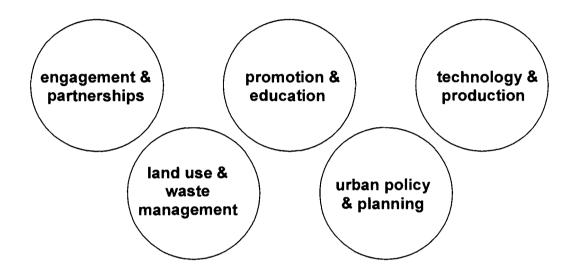


Figure 2: The five categories of sustainability-oriented Olympic planning.

The *engagement and partnerships* category refers to ways in which the public and private sectors are involved in decision-making and business partnerships. Sustainability in this category calls for transparency within the planning and expenditure process, public involvement via consultation with municipal and regional leaders, public participation through plebiscites, and public consultation through forums and community workshops. On the business side, partnerships encourage governments to share costs through corporate cooperation, public-private partnerships and shared monitoring costs.

The *promotion and education* category refers to schemes that instruct and train citizens in environmental and urban sustainability so that they can engage in more sustainable behaviour. Through school programs, awareness seminars at workplaces, and events for the general public, planning committees can encourage environmental

education. Moreover, planners can advertise sustainability initiatives through media such as signage, films, ads, newsletters, chat rooms and commercials. Planning committees can also promote more environmentally-friendly business practices through tendering requirements and can influence consumer consumption behaviour by only endorsing products that disclose their impact on the environment. Furthermore, nongovernmental organizations (NGOs) can influence the general public by circulating promotional material about sustainability.

The *technology and production* category includes environmental innovation and dissemination. Through the nascent production of environmentally-sound technologies, technical solutions can be circulated worldwide. Attention to this category encourages new technologies capable of producing cleaner air and water, more efficient energy and transportation systems, and better building practices including the use of alternative materials and fuels.

The *land use and waste management* category refers to how land is used and how waste is reduced, reused, recycled, and eliminated. Good land use and waste management practices require brownfield redevelopment, land conservation, solid waste disposal, recycling, composting, sanitation, waste water reduction and building material recycling. These criteria also call for monitoring programs and environmental impact assessments for sustainable technological solutions.

Finally, the *urban policy and planning* category addresses social, equity and quality of life issues. This category is comprised of elements such as health, social housing, economic development, agriculture and food security, retention of unique urban and natural characteristics, sustainable development legislation, continued use of knowledge, inclusivity, diversity and equity.

By interrogating the notion of sustainability and critically examining how it might be understood and practiced, the 'Sustainability Matrix' offers a means of comparing Olympic planning across time and space in Phase Two and Three of the research (see Appendix C for the complete 'Sustainability Matrix'). Although all five of these categories are interconnected, by separating them into distinct areas, the relative emphases of themes can be more easily recognised in Olympic host city case studies.

3.3 Rationale for Case Study Method

Phase Two and Three of this research used the case study method to collect and interpret data because the Olympic cases offer the chance to study a fairly new phenomenon that has been sparsely studied. By analysing many different types of data, the case study approach uses a variety of qualitative, and sometimes quantitative, methods to gain a detailed and holistic view of a contemporary phenomenon within its real life context (Gillham, 2000; Yin, 1984). Because of the vast amount of information that is often available, cross-referencing (or triangulation) of information from different sources can add reliability to the evaluation and interpretation of the cases.

The case study approach is unique because it allows researchers to use general questions to guide the gathering of information in the preliminary stages of research. As familiarity with the topic expands and ideas become clearer and more focused, researchers can refine their questions to be more specific (Orum, Feagin, & Sjoberg, 1991). The researcher can generally start to identify the direction he/she wishes to take by carefully selecting potential cases based on logic that links data to propositions (such as pattern-linking), and by establishing the appropriate criteria for evaluating and interpreting findings. At this stage, it is important to understand the differences between single and multiple case study research. The single case study method allows the researcher to examine a particular phenomenon in detail and depth, allowing the

researcher to reach a deep and rich understanding of a particular situation and context (Yin, 2003). The multiple case study method, on the other hand, offers the researcher a chance to compare cases and to draw parallels and differences amongst different case studies. As Yin (2003, 46) points out, "The evidence from multiple cases is often considered more compelling [than a single case study], and the overall study is therefore regarded as being more robust". Through case comparison, the multiple case study method increases the generalizability of the results and blunts criticism often associated with the single case study method.

This research project used both multiple case study design (Phase Two) and single case study design (Phase Three). In Phase Two, a retrospective comparative case study method was used to compare environmental and sustainability-oriented planning processes in past Olympic host cities to identify and assess trends in Olympic planning. In Phase Three, a single, embedded case study was conducted to construct a detailed view of how a sustainability-oriented Olympic planning process evolves.

3.4 Phase Two: Lessons from Previous Olympics

The 'Sustainability Matrix' created in Phase One was used in Phase Two to conduct a comparative case study of the successes and obstacles in the environmental planning of previous Olympic Games. These Games, held between 1994 and 2004, were analysed to determine if Olympic planning processes had learned from previous processes and to determine what the major outcomes and impacts were of Olympic planning. These Games included the 1994 Lillehammer Games, the 1996 Atlanta Games, the 1998 Nagano Games, the 2000 Sydney Games, the 2002 Salt Lake City Games, and the 2004 Athens Games. The 1994 Lillehammer Olympics was chosen as the chronological baseline because the Lillehammer Games was the first Games to

prominently highlight environmental concerns to the world and to the IOC. The 2004 Athens Games was chosen as the final Games to be studied for comparative purposes, as it was the final completed Olympic planning process at the time of data collection⁴.

Phase Two began by collecting and examining documents and literature surrounding past Games, including academic and popular articles, books, minutes, progress reports, policy documents, websites, newsletters, internal and published documents, and information published by watchdog groups. While every effort was made to obtain as much information as possible on each Games, there were limits to the access of information for each Games. Therefore, a city which had more open flows of information would also allow more critical analysis of their Games, and information from various host cities was not of comparable quality.

Once these documents were collected, the data were coded according to the 'Sustainability Matrix' to determine the frequency of use and success of key approaches to sustainability planning in the environmental planning process. Although many of the documents did not refer to sustainability explicitly, they did refer to various categories within the 'Sustainability Matrix', and a separate 'Sustainability Matrix' was calibrated for each city. In most cases, documents supplied sufficient data to corroborate information; however, in cases where gaps developed, key players in the past Games planning processes were contacted for further information. These contacts were found through networking at conferences, by contacting key authors and researchers of primary documents, and by doing internet searches on particular themes, including organizing committee members, government officials and academics (see Appendix D for a complete list of people contacted for further information on past Games). The information from past Olympic Games revealed the strengths and weaknesses of

⁴ Although some information was collected on the 2006 Turin Games and the 2008 Beijing Games, it was not useful for this study because the planning processes had not been completed.

environmental planning for Olympic Games, and, combined together, served to establish environmental approaches to mega-event planning.

3.5 Phase Three: Promises and Expectations for the Vancouver Olympics

The planning of the Vancouver 2010 Olympics was studied as a single case study in Phase Three. This provided an opportunity to study the only Olympic Games to date devoted specifically to sustainability-oriented planning, in a city with a strong sustainability reputation (e.g. Berelowitz, 2005; City of Vancouver, 2005b; GVRD, 2004; Fraser Basin Council, 2004)⁵. Vancouver's City Council adopted a sustainability statement over a decade ago, and many businesses, NGOs, and citizens' groups have taken a leadership role in promoting sustainability, making the commitment to sustainability in the 2010 Games more dynamic. The results for the Vancouver 2010 Games were compared with earlier results, although this was not a perfect comparison, since it was between completed Games (1994-2004) and incomplete Games (2010). Phase Three began with an analysis of the Vancouver Bid Book according to the same criteria presented in the 'Sustainability Matrix'. This was followed by an analysis of surveys collected at the Mayor's forums and the Think 2010 forum, and lastly by interviews with key leaders in Vancouver from government, labour, NGOs, academia and VANOC. Combining these three areas gives a firmer understanding of the promises towards various approaches taken during the Bid Phase, and provides for comparison between current expectations and future plans.

⁵ Although both Whistler and Vancouver are hosting the 2010 Games, this research focuses only on Vancouver.

3.5.1 Surveys

Surveys are used to gather specific data on a particular subject (Community Care Needs Assessment Project, 2001). Because the same instrument is used to solicit responses from a wide range of people, surveys can be representative of entire populations⁶. They are useful because they can be randomly administered, and due to the anonymity of most surveys, respondents usually feel more comfortable responding freely. Survey data that had previously been collected were analysed a second time in this project to build greater understanding of the public's Olympic sustainability expectations. These surveys were designed and administered by two different groups for two rather different purposes, and consequently, the combination of these two sets of survey responses helps ensure the representative nature of this data.

The first set of survey data was collected at the Mayor's Forums in February 2003, before the Bid was accepted, by a group of researchers at UBC⁷. These surveys were filled voluntarily by participants as part of an UBC project entitled 'A Healthy Olympic Games' (2003, 1), whose stated goal was "to ensure that, if the 2010 Games are hosted in this region, they [sic] do so in a way that maximises the benefits and minimises the costs" ⁸. In total, eighty-seven surveys were completed (thirty on February 1, 2003; fifty-seven on February 14, 2003). The format of the surveys included ranking tradeoffs and answering open-ended questions. For the purpose of this research, only

⁶ However, it is possible to have a wide range of people and yet systematically omit certain groups, such that the research is not representative of the entire population. In this case, people who did not have the time, interest or knowledge to attend the forum could not be represented by the results.

⁷ The Mayor's Forums were sponsored by the City of Vancouver Mayor's Office to encourage public input during the Olympic plebiscite process. In total, there were three forums which focused on the three areas of sustainability. The social sustainability forum was held on February 1, 2003, at the Croatian Cultural Centre, 3250 Commercial Drive; the environmental forum was held on February 8, 2003, at the Hellenic Community Centre, 4500 Arbutus Street; and the economic sustainability forum was held on February 15, 2003, at the Vancouver Public Library (downtown), Alice McKay Room (City of Vancouver, 2005b, 'Mayor Larry Campbell Releases Schedule of Community Forums').
⁸ The three principle researchers for this project were Dr Rob VanWynsberghe (UBC Institute of Health

[°] The three principle researchers for this project were Dr Rob VanWynsberghe (UBC Institute of Health Promotion Research), Dr C James Frankish (UBC Institute of Health Promotion Research) and Dr Elvin Wyly (Department of Geography).

the open-ended answers were analysed to determine what sustainability expectations Vancouver residents expected to be addressed by the 2010 Games.

The second set of surveys was distributed by Think City, an organization dedicated to "engaging thousands of citizens in the decisions that affect their daily lives" in Vancouver (Think City, n.d., 'Think Partners'). These surveys were distributed in March 2004, at the Think 2010 Forum, shortly after the Vancouver 2010 Bid won as a means of NGO perception-checking. In total, 60 surveys were voluntarily completed, and the format of the survey was divided into 4 sections: a) a priority ranking of various Olympic planning-related statements, b) a scaled agreement with various Olympic-related statements, c) an open-ended section on Olympic legacies. The results for the first two sections were tabulated to calculate trends, and then a comprehensive list of all issues that were raised was compiled and coded according to the criteria set out in the 'Sustainability Matrix' for the last two questions. The latter part of this analysis was most useful for the purposes of this research in determining what the public's Olympic sustainability expectations were for the 2010 Games.

Overall, the information collected in both sets of surveys acted as a gauge of public awareness of environmental and sustainability goals for the Olympics, and the public perception of the interim conditions necessary to achieve these goals. Data from both of these analyses were useful in preparing the key informant interviews, and also provided a baseline from which to compare and contrast the goals of Olympic sustainability with the opinions expressed by prominent leaders within Vancouver.

However, due to the voluntary nature of this method, there may have been some sampling bias because of a) the type of people attending the forums, b) the people who chose to complete the surveys, and c) the possibility that some people may have

repeated the surveys. Moreover, while the Mayor's Forums had no cost and were easily accessible to a wide range of members of the public, they also occurred before the Bid was won, and may not have elicited as much interest from a less politically active population. On the other hand, the Think 2010 Forum happened after the Bid was won, but people had to purchase \$12 tickets to attend (although some subsidized tickets were available), and the commercial nature of this forum may have excluded particular sectors of the population. Despite these potential biases, however, the survey responses did offer a reasonable data baseline.

3.5.2 Interview Method

To gain a greater understanding of how local aspirations surrounding sustainability would be addressed by the Vancouver 2010 Games, interviews were held with key opinion leaders in Vancouver. For this research, key opinion leaders are defined as individuals in the community who influence local decisions and opinions. This includes politicians, NGO workers, minority group leaders and activists. Like the survey method, interviews offer a chance to gain facts and opinions, but these data are limited to an individual's perception, rather than the broader scope of the public's perception. Key leaders were recruited through networking at local Olympic-related conferences and through the snowball method, which invites key individuals (often interviewees) to name others who would be useful to the research to expand the interview sample (Community Care Needs Assessment Project, 2001). (See Appendix E for the letter to sent organizations requesting an interview with someone in their organization). For this research, respondents were asked at the end of every interview for names of others who should be interviewed. As a result, a wide cross-section of fourteen leaders from many backgrounds was reached, including leaders from government, labour, NGOs, academia and VANOC. (See Appendix F for a list of interviewees.)

This project used an interview guide approach, also known as a semi-structured interview approach (Patton, 1990; Rossman & Rallis, 1998), which allowed me to interview key leaders by following a given set of questions about the various categories outlined in the 'Sustainability Matrix'. At the same time, the interview guide approach allowed some flexibility in exploring ideas, facts and opinions that were not directly broached by my set of questions. This method was particularly useful for interviewing elite leaders who were able to provide a broad overview and history of the 2010 Games from the perspective of their organizations, as well as provide a good understanding of how future plans will unfold. Unfortunately, interviewing only elites also offered some difficulties as well; participants were often very busy and were usually very skilled at avoiding questions they did not want to answer. For example, in one case, the respondent specifically asked to skip an interview question, citing political ramifications, and in another, a respondent skipped questions in the interest of time. As Rossman and Rallis (1998, 134) point out:

Access to elite individuals . . . is often difficult because they are usually busy people operating under demanding time constraints. The researcher may have to adapt the planned-for flow of the interview based on the wishes and predilections of the person interviewed.

All interviewees for this research are considered to be elite since they are the influential, prominent, and well-informed people in the community (Marshall & Rossman, 1995), and the final list of participants was chosen based on demonstrated expertise in sustainability in Vancouver and involvement in the 2010 Games Bid and Olympic planning process.

As public opinion leaders, the people I interviewed are mandated as part of their job to answer questions from the general public, and thus, responses and identities of respondents were not kept confidential. In total, I conducted thirteen interviews and one email interview. The verbal interviews generally lasted between 45-90 minutes and were

conducted in the respondents' offices. While a more neutral space may have been ideal, it was not possible given participants' schedules. Furthermore, interviewing participants in their "natural/at work" setting allowed me to observe the culture of the organizations, as well as interpersonal communication amongst colleagues, which helped me verify the interviewees' responses. When face-to-face interviews were not possible, interviews were conducted via email.

Participants were asked questions about sustainability generally, and the 2010 Olympic planning process specifically. Questions generally followed an open-ended, semi-structured format that focused on the areas outlined in the 'Sustainability Matrix'. These planned and structured questions were complemented by more spontaneous follow-up questions, which allowed clarification, and in some instances, further elaboration and probing (Rossman & Rallis, 1998). The number of questions and amount of probing depended on the reaction of the respondents; interviews that had more leisurely time limits covered more topics in greater depth. (See Appendix G for sample interview questions).

Besides formal interviews, several informal interviews were conducted at various community Olympic related events and sustainability conferences. These interviews were unplanned, and offered me unique chances to probe particular ideas. Sometimes, these informal interviews served as initial points of access to more formal interviews later in the research process. These events also allowed me to understand more deeply how various actors are involved, and how some of them have played different roles. During these events, I jotted down field notes, and compared any previous hypotheses and conclusions with information presented at these events. As Rossman and Rallis (1998, 137) point out:

Observation takes you inside the setting; it helps you discover complexity in social settings by being there...the challenge is to identify the 'big picture' while noting huge amounts of detail in multiple and complex actions.

The informal interviews allowed me to serendipitously test my working theories.

Following the interviews, the interview tapes and notes were transcribed and coded according to the categories in the 'Sustainability Matrix'. The interviews were then analysed and recoded based on expressed reasons for the shift towards sustainability, and I was able to examine the strategies for dealing with this new pillar in the Olympic movement, as well as the degree of resistance to and acceptance of sustainability within the Olympic movement.

3.6 Summary

This chapter has explained the design of this research and methods used in this study. Methods were discussed in three phases, with the second and third phase using the case study method. Phase One of the research focused on defining sustainability, and used a policy and research document review and a coding process to determine common sustainability themes. By analysing the sustainability literature, a 'Sustainability Matrix' was created, which was composed of a comprehensive set of categories that address both technical and social aspects of sustainability. Phase Two used a comparative case study approach to examine sustainability lessons learned from previous Olympic Games. In this phase, the 'Sustainability Matrix' was used to compare and analyse documents and literature surrounding Olympic Games held between 1994 and 2004. Finally, Phase Three used a single, in-depth case study to research the 2010 Vancouver Olympic planning process. In addition to document collection and analysis similar to that conducted in Phase Two, Phase Three included a close examination of the promises outlined in the Vancouver Bid document, a secondary analysis of surveys

and interviews done at Mayor's forums during the Bid process in 2003 and at the THINK 2010 forum in March 2004, and an analysis of interviews carried out with key opinion leaders. The next chapter will begin to examine these Olympic cities by focusing on the second phase of research – reviewing lessons learned from Olympic host cities from 1994 to 2004.

CHAPTER 4 LESSONS FROM PREVIOUS OLYMPICS 1994-2004

4.1 Introduction

In Chapter 3, the three phases of this research were introduced: building a matrix to understand sustainability; looking at past Games to evaluate their environmental, and where possible, sustainability performance; and finally, looking at the Vancouver 2010 Games as a case study of the 'Sustainability Olympics'. This chapter focuses on the second phase of research – examining Olympic Games from 1994 to 2004 in order to evaluate how different host cities have addressed social, environmental and economic issues. One of the initial assumptions underlying this research is that the development of Olympic planning is built upon earlier Games' processes – that Olympic planning processes are in a real sense a part of the Olympic brand that moves from host city to host city along with the event itself. While it is difficult to compare host cities across time and space because of uniqueness of place and cultural identity, geographic, political and cultural determinants, it is necessary to recognize that these processes are built upon earlier processes.

Since the IOC does not have a set of specific criteria that host cities have to follow when they address the environment pillar, this chapter uses the 'Sustainability Matrix' referred to in Chapter 3 to compare cities.⁹ By comparing techniques, initiatives, plans and tools used by various host cities to address requirements laid out by the IOC,

⁹ While the IOC does require host cities to produce and submit an environmental plan, these plans are not binding and vary quite widely from city to city. This means that different host cities highlight different aspects of addressing the environment. For example, while one city may focus on greenspace and biodiversity, another city may just as easily focus exclusively on recycling and energy reduction. However, these environmental plans are not available to the public, and I was not able to make a direct comparison between them.

it is hoped that a picture of the larger process of change within the Olympic movement can be discovered. My hypothesis is that local governance and local initiatives are important parts of the process of change that must also include international standards, policies and protocols set by the IOC.

In this chapter, the achievements of each host city are compared and examined using the 'Sustainability Matrix'. The results are collated in Table 1: Comparison of host cities, 1994-2004. The first column represents the categories that were examined in each Olympic Games, and the subsequent columns represent the commitment of each Olympic city to each category. The assumption is built into the model that if more categories are fulfilled, then the environmental planning was more comprehensive. Positive achievements are represented with the number '1' and negative achievements are represented with the number '-1'. If no information could be found on a particular category for a city, then the cell was given a '0'. For example, if a city was engaged in actions which reduced water consumption, the city would be marked with a number '1' in the 'Water Supply, Management, & Quality' category under the larger Technology and *Production* theme. While it is impossible to quantify how complete this table is, I think that this table captures the majority of issues, and this table is therefore used to compare the relative successes of environmental planning in past host cities. This chapter will examine the initiatives and programs, as well as the failings, of each city, starting with the first environmental Games – the 1994 Lillehammer Olympics.

Table 1: Comparison of host cities, 1994-2004.

				·				
Impact Assessment	0	0	1	0	-	۱	5	۲
Monitoring, Indicator Process	١	0	0	0	0	0		0
Pollution Mitigation	0	0	0	0	0	0	0	0
Toxic Waste Mitigation	۱	0	0	0	4	0	5	0
Sewage Treatment	0	0	0	0	0	0	0	0
Sanitation	1	0	0	0	0	0	ا	0
Brownfield Development	0	0	0	0	ł	-۱	<u>۲</u>	1
Building materials	١	0	0	0	0	0	Ļ	
BuitsoqmoJ	1	0	0	ł	ł	0	3	0
Recycling	L L	0	ŀ	ł	Ļ	۱	S	0
tnemegeneM etseW	٦	0	0	0	0	-1		4
Vatural Environment								
Maintenance of Greenspace/	l-1	0	1	ŀ	1-/1	l-	3	3
Land Use Concerns and Waste Management		-				-		
Indoor Air Quality	١	0	0	0	0	0	ا	0
Energy Management & Efficiency	1	0	0	•	0	l-	5	1
Water Supply, Management, & Quality	0	0	0	ł	ł	ļ-	5	L
Mitigation of Air Pollution/Green-house Gas Emissions	0	0	<u>ا</u>	ł	٢	1-/1	4	L
Solar, Wind, Hydrogen Energy	0	0	0	ł	0	-۱		ł
sleu7 tlA	۱	0	0	ł	0	0	5	0
Environmentally Friendly Transportation	ł	-1	1-11	۱-/۱	ŀ	1-1	S	4
Alt. Materials for Buildings, Packaging, Products	۱	0	l	0	0	l	3	0
Tendering Requirements	ł	0	0	0	0	l-	١	L
zeigolondce WeM to noitdobA	0	0	0	0	0	0	0	0
R&D							· · · · · · ·	
Environmental Tech., Innovation,	L L	0	ا	ŀ	0	l-	3	L L
Technology/Production								
							positive	negative
	Lillehammer	etneltA	onegen	Sydney	SLC	snedtA	of Host Cities	of Host Cities
Category	166t	9661	8661	5000	2002	5004	Number	Number

Socially Inclusive Policies	0	-۱	0	0	0	-۱	0	5
Sustainable Development Legislation	0	0	0	0	0	-1	0	ŀ
Retention of Unique City/Natural Characteristics	ŀ	0	0	0	0	1-/1	5	ŀ
Biodiversity/ Conservation Policy	L-/L	0	٦	0	0	-۱	5	5
Health	0	0	0	0	١	0	4	0
Agriculture/ Food Security	0	0	0	0	1	1	5	0
Economic Development	0	0	0	0	0	0	0	0
Social housing	0	-۱	0	-1	0	0	0	5
Urban Policy/ Planning/ Governance								
							positive	negative
	Lillehammer	Atlanta	onegen	Shqueà	SLC	SnehtA	of Host Cities	of Host Cities
Category	1661	9661	8661	5000	2002	500	Number	Number

4.2 1994 Lillehammer Games

Although the 1994 Lillehammer Games is remembered for being the first Games to focus on environmental concerns in its planning and publicity, the Lillehammer Games did not start off with this reputation. As McIntyre (1995, 391) writes in his review of the Lillehammer Games, "in the initial stages of planning, the 'environment' was not an important consideration". Rather, the Lillehammer Olympic Organizing Committee (LOOC) envisioned the Games as an opportunity to revitalise the economy through the branding of the Olympics and the construction of tourism infrastructure (McIntyre, 1995). However, because of the small area that was to be affected, the 1994 Games was promoted as the 'Compact Games' (Chernushenko, 1994; McIntyre, 1995). In 1988, Lillehammer was officially chosen as the location for the 1994 Games, and local and national controversy mounted over the use of wetlands and forested areas for the construction of Olympic venues.

At this time, Project Environmentally Friendly Olympics (PEFO), a consortium of national and local environmental groups in Norway, started to gain national recognition under the Ministry of the Environment as the environmental watchdog of the Games (Chernushenko, 1994; McIntyre, 1995). This organization of groups demanded that the LOOC include green planning in their Olympic plans, and in 1991, LOOC acceded, resulting in the nickname the 'White-Green Games' by former IOC President Samaranch (IOC, 2004a, 'Lillehammer 1994: Did you know?'). Publicly, LOOC announced that the 1994 Games was, "an ideal time to switch the focus of world sport from commercialism to new values like environmentalism" (Coleman, 1994, 55), and the environment became a key cornerstone to the Lillehammer Olympics. At this time, LOOC billed the Games, "Games with a Green profile" (Chernushenko, 1994, 3), and LOOC (1999, 4) backed this claim by identifying five environmental goals:

- to create environmental awareness
- to take regional considerations into account
- to create sustainable development and business growth
- to take environmental considerations into account in the construction of arenas
- to uphold environmental standards of all stages of the event.

These goals ensured that projects were developed under the rubric of environmentalism, which "resulted in the 'environment' becoming firmly established on the Olympic agenda at both the national and international level" (McIntyre, 1995, 391). Most strikingly, LOOC decided that environmental issues would be given priority above other concerns within the economic framework, and LOOC (1994) recognized that by stipulating environment requirements early in the planning process, the desired results would be achieved within the given budget limits.

The environmental achievements of LOOC were numerous by international standards, including environmental considerations in "construction of venues and accommodation, energy use, waste management, transport, product development, integrity of the regional and national character, choice of building materials and day to day event management" (McIntyre, 1995, 392). Key features of the 'greening' of the Winter Olympics in Norway were "a strong, although belated, commitment to leadership responsibility, best environmental practice and the facilitation of genuine involvement of NGOs in the management of the Games" (McIntyre, 1995, 392). Chernushenko (1994, 3-4) writes in *Greening our Games*:

While hardly perfect, the Lillehammer Games did achieve several remarkable things: they brought to the attention of a broader public the message that sports events can and must be stewards of the environment; they attempted to ensure that the legacy of the event for the host region would be as positive as possible; they showed the sports community that addressing environmental issues need not cost more, and can in many cases actually save money; and they ensured that future sports events from the Olympics on down will be required to include environmental measures as part of their basic mandate.

Energy use was reduced in major facilities, transit use increased during the Games, a regional recycling and composting system was launched, environmental information was printed on tickets and programmes to educate the public, and suppliers were required to meet minimum recycling standards (UNEP, n.d.a.).

Although these were positive steps, the sheer scale of the Olympic Games

caused "negative impacts on the environment [that] cannot [could not] be avoided, only

minimised" (Haugsja, quoted in Coleman, 1994, 54). For example, the influx of 100,000

visitors had a large impact on water and electricity supplies, as well as waste

management from consuming 300,000 meals (Chernushenko, 1994). Further, as

McIntyre (1995, 391) points out, LOOC's environmental pursuits were far from perfect:

The original 'green agenda' became largely lost also under the influence of the Norwegian and international sporting bodies as the areas affected and the number of arenas proposed expanded.

Despite these concessions in Lillehammer's green image, there were many improvements made in the venues and their operation, and the Lillehammer Games was successful in attaining initial Olympic environmental standards and in carrying its message to the world. Coleman (1994, 53) states:

The first 'green games' in Olympic history are intended as nothing less than an object lesson, before an anticipated world television audience of 2 billion, on how sport can promote environmentalism into the next century.

Through media publicity, the legacy of Lillehammer to leverage public and private support in environmental initiatives influenced "those involved in the sponsoring, construction and management of the event" (McIntyre, 1995, 391) worldwide to include environmental considerations in their planning.

Both careful environmental planning and a hugely successful public education campaign allowed LOOC to prove to the world that an itinerant mega-event could aim to be environmentally sustainable. As Coleman (1994, 55) writes, "the fact is that a country like Norway, with its deep environmental streak, had the best shot at greening the games. Anywhere else, it will be a hard act to follow." Indeed, this prediction came true, and on June 5, 1994, the United Nations Environment Programme (UNEP) awarded LOOC and PEFO the Global 500 award (its highest distinction) for groundbreaking work in environmental sustainability (Chernushenko, 1994).

4.3 1996 Atlanta Games

Undeniably, the green image of Lillehammer Games was a difficult act for the Atlanta Games to follow. Since the environment pillar and the *Olympic Agenda 21* did not become an official Olympic consideration until two years before the Atlanta Games, the Atlanta Committee of the Olympic Games (ACOG) was already in its final phases of development, and consequently, there was no obligation for ACOG to address the environment pillar. Accordingly, there was very little commitment to the environment on the part of ACOG¹⁰.

Instead of positive environmental and social messaging, the focus of the Atlanta Games centred on the promotion of Atlanta's world image as an international business destination (Whitelegg, 2000). Even though Atlanta was able to boast that it was one of the busiest convention cities in North America, it was also ranked consistently as the convention city with the shortest stays of conventioneers because of a lack of cultural amenities (Whitelegg, 2000). Business leaders hoped that hosting the Olympic Games

¹⁰ There was also very little information generated on Atlanta's commitment to the environment pillar, and in general, there is little literature on the Atlanta Games themselves. What information does exist focuses mostly on the Centennial Park bombing (by the popular press, for example, the BBC, 2005, '1996: Bomb rocks Atlanta Olympics'), and the eviction of thousands of homeless people from their neighbourhoods (by the alternative, activist press, for example, Dixon, n.d., 'Atlanta Olympics: Poor pay the price').

would add some of these amenities, and in doing so, place Atlanta on the world stage. In the early nineties, the Atlanta business community was thriving, and Atlanta wanted to be seen as a world-class cultural city in order to match its financial reputation.

To achieve this end, the Atlanta Games were conceived of and promoted by the private sector¹¹. For the first time in Olympic history, a coalition of private sector bodies both prepared the Bid and organized the Games without financial support from the government. This shift to more entrepreneurial affairs has been "...a significant feature of more recent years in the way urban elites have tried to tap into the combination of image and financial boost that staging sporting events can potentially bring" (Whitelegg, 2000, 801). Although this meant that there was no responsibility on taxpayers to pay for the Olympics, it also meant that the government had little say in the outcome of various projects. In fact, as the Games approached, "attempts to improve social infrastructure made increasingly little impression on the city's private-run Olympic body" (Whitelegg, 2000, 805). Thus, because Atlanta's Games was privately run, attempts by the Atlanta city government under the leadership of Mayor Maynard Jackson to create an Olympics for all (that included social programs such as affirmative action, healthcare, and training) failed since ACOG resisted firmly, citing business interests as being more important than social pursuits (Acuff, 2004).

Consequently, the Atlanta Olympics focused only on business interests and failed to incorporate the wider needs of the public. For example, in building venues, ACOG dislocated over 70 businesses, four shelters and a thousand homeless people (Whitelegg, 2000, 806)¹². Further, the Centennial Park project, which was created under the auspices of adding environmental amenities in a formerly rundown area, was

¹¹ In fact, the Atlanta Olympics was the first Olympics to be solely funded by the private sector (Acuff, 2004), and given the reaction by some senior IOC members following the Games, likely the last (Whitelegg, 2000). ¹²According to Weber as quoted in Foster in the *Salt Lake Tribune* (March 26, 1999), "Before the Olympics, the city of Atlanta passed six ordinances that essentially made it a crime to be homeless... The city even offered free bus tickets to the homeless to leave the city."

more likely intended by Olympic planners "to remove the unsightly presence of Atlanta's numerous poor and homeless residents" (Whitelegg, 2000, 803). The Director of Games Security confirmed ACOG's purposeful social exclusion when he stressed: "This is not a public park. We will establish conditions of admission" (Turner & Harris, 1995, 1). This is hardly a model of a city that once claimed to be "the city too busy to hate" (Whitelegg, 2000). In fact, rather than being inclusive, "the Olympics Committee was extremely clear and firm...they said – repeatedly – this is the first Olympics to be funded totally by the private sector, and they had no responsibility to anyone" (Acuff, 2004). The message from ACOG was unmistakable: because the Atlanta Games was being run as a business, there would be no community engagement.

The Atlanta Games failed on many fronts¹³. For the first time in Olympic history, IOC President Samaranch noticeably broke with tradition and failed to call the Atlanta Games 'the best Games ever' (Whitelegg, 2000). Further, although the lack of commitment to the environment is somewhat understandable given that the IOC's pledge to the environment occurred just two years prior to the opening of the Atlanta Games, the one possible environmental project – Centennial Park – excluded large segments of the population. Instead of using the Olympics to improve the city by focusing on social and environmental issues, the Atlanta Games proved that business interests could supersede the interests of the public good. Without public or political accountability, the public was not included in decision-making, and populations, such as the homeless population, were purposefully excluded. Since the sole justification for

¹³ For example, in order to promote a more environmentally-friendly image, organizers claimed that spectators could walk from venue to venue, and pointed to average temperatures. However, these temperatures reflect the average of day and night time temperatures, and Atlanta was simply too hot during the day for most spectators to walk between venues (see for example, Sack, 1996, 'Atlanta Scrabbles to Transform Itself for the Olympics').

hosting the Games was to promote private business ventures, the organizers excused themselves from promoting both social and environmental sustainability¹⁴.

4.4 1998 Nagano Games

Although Nagano's steps towards embracing environmentalism do not seem particularly grand by today's standards, the title the 'Environmental Games' (given by Fujiyama Kenji in a *Look Japan* article in January 1998) certainly seems warranted when the event's environmental achievements are compared to Atlanta's extremely limited green achievements. Even though the green goals proposed by the IOC were "optional for organizers whose bid had already been accepted by the IOC, [and] so they didn't apply at Nagano" (Lee, 2001), Nagano's Olympic Organizing Committee (NAOC) pursued many environmental initiatives. These initiatives included a reduction in ammonia levels in the refrigeration of the bobsled track¹⁵, the protection of biodiversity by tracking birds and planting native trees, and a reduction in waste through the use of alternative materials such as uniforms made from a semi-permanent material that could be melted down and re-used (Akio, 1998).

NAOC's green goals were created under the auspices of its basic operating plan that committed NAOC to promoting three main themes: 'promoting the participation of the children', 'realizing a festival of peace and friendship,' and 'coexistence with the beauty and bounty of nature' (Hiromichi, 1998). In particular, this third theme dealt directly with the environment, and addressed the IOC's newest pillar – the environment. According to Hiromichi (1998, 9), this devotion to the environment pillar, despite its

¹⁴ Haarland (1997, 7) argues that part of the reason for the lack of environmental initiatives in the Atlanta Games was that "the environmentalists in the United States [were] hindered by factionalism within the movement, as well as the lack of formal power or decision-making influence in the Olympic Committee." ¹⁵ A new refrigeration system was created which used 1/60th the previous amount of ammonia needed to cool bobsleigh and luge courses (UNEP, n.d.b.).

relatively late introduction into the Nagano Games' planning process, happened because:

The citizens of Nagano are proud of our beautiful natural environment: we regard it as a valuable inheritance from our ancestors and we recognize our responsibility to pass it on to future generations...[if we hope] to create a society that recognizes humanity as being a part of nature – existing alongside it – we've got to make a comprehensive study of the various aspects of our relationship with nature.

To achieve this end, NAOC's Publicity Committee set up its own Environmental Protection Council "to examine each event location from an environmental perspective" (Hiromichi, 1998, 8), which led to Olympic improvements in the way Olympic infrastructure was conceived of and built. For example, venues were relocated when they were found to impinge on endangered bird habitat, and existing facilities and courses were used when possible (Akio, 1998; UNEP, n.d.b). Also, public awareness was fostered through a unique program in which Japanese children planted native trees, and there was an emphasis on low-emission vehicles and public transportation (UNEP, n.d.b).

While internationally this was a positive step forward in Olympic planning (OCA, 2001), the local results were far from successful, and "the net result was the worst ecological disaster in Nagano's history; [...] to top if off, local residents were left to foot the bill for expensive infrastructure projects that did not serve community needs" (Lee, 2001). For example, the location of the luge track not only destroyed formerly forested land, but it also was a superfluous venue that has been left unused following the Games. These types of gratuitous expenditures left many citizens angry, especially since following the Games, each household owed an estimated 5.6 million yen (\$45,100) in taxes for the Olympic Games (Ezawa, 1998 in Tajima, 2004)!

Under the environment pillar, NAOC was able to adopt greener technology and locate venues and courses in locations that minimized ecological impact, which allowed NAOC to consider the environment in a much more serious manner than did ACOG. NAOC was able to engage the public in reforestation and beautification programs (UNEP, n.d.b.), and educate both local and international planners about the importance of taking the location of infrastructure into account when planning Olympic venues. In 1998, many of Nagano's goals were impressive, and these goals, along with the IOC's *Olympic Agenda 21*, became the foundation for Sydney's inspiration in planning a Green Games.

4.5 2000 Sydney Games

In the early ninties, environmental awareness was becoming well-known internationally, and Sydney organizers seized this opportunity during the Bid Phase to make green concerns central to their proposal. The organizers' efforts paid off, and in 1993, Sydney won the right to host the 2000 Olympic Games¹⁶. As part of the Bid, the Sydney Organizing Committee for the Olympic Games (SOCOG) promised to focus on pioneering environmental projects and innovative technical remedial solutions through Sydney's focus on hosting the world's first 'Green' Olympic Games as a branding tactic (Chernushenko, 1994; Digby, 1996; Jeffery & McGee, 1993).

From the beginning, Sydney presented a strong environmental Bid. SOCOG (2001, 1) wrote in its official report on the 2000 Games:

From the earliest days, commitment to the highest standards of environmental achievement were [sic] a hallmark of Sydney's Games, as

¹⁶ Although it is impossible to know how much of a role Sydney's commitment to the environment played in winning the rights to the 2000 Games, former IOC President Samaranch stated that Sydney won "partly because of the consideration given to environmental matters" (Samaranch, as quoted in Chernushenko, 1994, 3), and Haarland (1997, 7) wrote that Sydney's environmental strategy "might have been a key factor in selecting Sydney as the site for the 2000 Summer Games" (Haarland, 1997, 7).

the people behind the bid realised that a strong commitment to environmentalism would give them a unique edge in the process.

SOCOG's environmental strategy included initiatives such as an Olympic Landcare treeplanting program that involved citizens across the country in land-use conservation, and an environmentally friendly Athlete's Village designed by Greenpeace that became a beacon of green building design including the use of green power, plantation timber, dual water conservation systems (for drinking water and recycled waste water), and a heavy emphasis on public transportation. Perhaps Sydney's most widely regarded environmental achievement was the remediation of formerly toxic land in Homebush Bay, the main Olympic site for the 2000 Games. The remediation of this land transformed Homebush Bay "from a land-use liability into a usable public space" and "demonstrated achievements in conservation of resources and species" (Webb, 2001, 169). Part of this process was educating locals and visitors about toxic soil clean-up and about environmentally friendly building design.

To successfully implement all these green ideas, SOCOG formed an Environmental Committee comprised of "independent environmental practitioners and representatives of business, utilities and governmental and non-governmental organizations" (Kearins & Pavlovich, 2002, 158) soon after the Bid was won. Part of the job of this committee was to prepare comprehensive guidelines for the Games' planning and management (Chalkley & Essex, 1999a). Although the guidelines were far reaching, most of them related to venue development, since "as the highest profile activity and the one that could most harm the environment, the construction process was subject to the strictest environmental controls and policies" (SOCOG, 2001, 2). Thus, the guidelines included using existing facilities when possible, using industrial/ commercial sites for new buildings, employing environmentally friendly design, using locations that were transit friendly, conducting environmental and social impact

assessments, engaging the community, minimizing adverse impacts on residents and protecting ecosystems (Digby, 1996).

In addition to greening public venues and educating the public through demonstration projects, the SOCOG also took the initiative to minimize waste through reducing, recycling and composting. Its program was quite successful, and included cooperation by corporations and sponsors, as well as SOCOG employees in addressing everything from reduced packaging to recyclable office furniture (Webb, 2001). This buy-in from partners, on top of SOCOG's public accountability demanded by watch-dog groups, was invaluable in promoting transparency in the 2000 Games. Watchdog groups were comprised of coalitions of environmental groups who were independent from SOCOG, but who were paid to critique the environmental process and to ensure that environmental standards were being met. As Morag Carter (2004, personal interview) from the David Suzuki Foundation points out:

One of the major differences between the Sydney Games, and any other Games since, has been that the organizing committee for the Sydney Games – SOCOG – funded for at least the last 3 years, possibly longer, an NGO network that was supposed to be an oversight body to make sure that the environmental component of the Olympic Games was actually implemented. [...] Sydney was successful because there was a great deal of engagement in the process, lots of transparency, and great Olympic engagement.

A positive outcome of this arrangement was that, in theory, watchdog groups would ensure that more views were represented, and consequently, the Olympic environmental process would be more transparent. In practice, some groups such as the homeless and the indigenous population were still marginalized, but overall there was a greater attempt to involve the public in decisions than there had been in previous Olympic Games¹⁷.

¹⁷ Just how much of an improvement this was is questionable, since as Waitt (1999) claims, "the only form of public participation in the [Australian] bidding process were [sic] opinion polls".

While these were impressive steps in the right direction, and a testament to Sydney's commitment to the environment, there was still much resistance by Australians and environmentalists to many of the Olympic developments (Chalkley & Essex, 1999a). For example, the group 'Bondi Olympic Watch' opposed the social and environmental consequences of the development at Bondi beach. They cited environmental concerns such as erosion and acidified sand, and social concerns such as the increased "pressure on rents, the growing number of evictions and public transport chaos" (Carman & Dickinson, 2000, 'Bondi protests Olympic Impact').

Moreover, critics felt that environmental concerns that were either too difficult to re-conceptualise or too difficult to fit into the existing Olympic planning structure were overlooked by SOCOG, while smaller, more manageable environmental guidelines were handpicked by SOCOG to serve as a 'greenwashing' of Olympic activities. For example, while the venues built in Homebush Bay adhered to wise environmental design, the need for these venues post-Olympics was not considered¹⁸. Thus, as Anthony Vigor (2004, 36) points out, the Sydney Olympics are "widely credited as the best games ever, but Australian authorities are [currently] struggling to find a sustainable use for Stadium Australia". Another example is that while there was emphasis on public transportation for spectators, VIPs and IOC members were given private vehicles that neither used alternative fuels nor were highly efficient (Kearins & Pavlovich, 2002). So, while the SOCOG did manage to raise the bar of Olympic environmental planning to unprecedented levels by incorporating green technology, it failed to adopt a larger concept of the environment by ignoring a larger picture of environmental sustainability, and all projects linked with the Games were "suspended from the usual Environmental

¹⁸ Although the stadium capacity remains a problem, the Homebush Bay Area is being developed as the Sydney Olympic Park township. This township purports to engage in a "strong commitment to best practice environmental management and excellence in sustainable design" (Prattley, 2005, slide 24).

Impact Statements requirements" (Hall, 2001, 172). Thus, some larger environmental questions were left unanswered by Sydney's 'Green Games' performance.

Although some people criticised SOCOG for failing to fully address local environmental concerns, the Sydney Games nonetheless raised both the local and international public's expectations about what types of environmental goals could be achieved. Throughout the development process, Sydney aimed to create an international image as an "ecologically sustainable city" (Chalkley & Essex, 1999a, 300) and raised the bar for future host cities. As the first green summer Games¹⁹, Sydney ambitiously managed to highlight critical environmental considerations to the world, and to create "an environmental agenda that cleaned up a site contaminated with a significant amount of toxic waste, set new standards for ecological design and construction, and piloted integrated waste management and recycling programs" (Webb, 2001, 164). However, like previous Olympic city environmental endeavours, the Sydney Games only began the process of change, and left a need for further environmental and social improvements.

4.6 2002 Salt Lake City Games

Similar to Sydney's role in greening the summer Games, Salt Lake City, the site chosen for the 2002 Winter Games, was the first Winter Games' location to be required to address the environment pillar through an environmental assessment. In the lead-up to the Games, organizers of the 2002 Games boasted that the Salt Lake Olympics would be the first environmentally-sound Winter Games. Diane Conrad Gleason, director of the Salt Lake Organizing Committee's (SLOC) environmental programs, asserted that

¹⁹ Surprisingly, SOCOG did not want their lasting image to be a green image. According to Kearins and Pavlovich (2002, 158), "Shying away from the 'Green Games' label at the 1997 *Green Games Conference* organized by the Centre for Olympic Studies at the University of New South Wales, the SOCOG media relations manager argued it [the Green Games] was a media invention, preferring the tag 'The Athlete's Games'".

the Committee's actions would "improve environmental conditions, not just keep them the same" (Conrad Gleason, as quoted in Lee, 2001, 1).

SLOC began with an ambitious agenda, budgeting \$6 million for addressing environmental concerns. However, as time went on, the money and dedication towards hosting a green Games dwindled. By February 1999, SLOC's environmental budget was reduced to just \$1.5 million, which was "one-tenth of 1% of the [overall] 2002 Olympic budget" (Lee, 2002, 1). While SLOC's two main areas of environmental focus were goals of zero emissions and zero waste (Conrad, n.d.), most of the environmental funds went towards educational projects such as a children's educational video, green themed tourism seminars and an international tree-planting campaign (Lee, 2002). Thus, the zero emissions goal was met through tree planting and donations of energy credits, rather than through any innovative technological energy reductions (Lee, 2002). Likewise, although an impressive amount of waste was recycled and composted, there was still a large amount of superfluous packaging, and the waste reduction goal was only partially achieved (Resource Recycling, 2002).

While it is unlikely that the Salt Lake City Games improved local environmental conditions, it did manage to mitigate some potentially negative consequences. SLOC argued that its Games caused low environmental impact because most venues were already built when the official Olympic Bid was won (Conrad, Planet Drum, n.d.; Burbank, 2005)²⁰. Although the use of existing structures was positive, regrettably, only the three new venues were able to take advantage of SLOC's environmental principles such as energy efficiency and low flow water devices. Furthermore, rather than being clustered, the existing facilities were spread across the region, and SLOC was unable to

²⁰ Although this appears to be a good use of existing resources, in actual fact, due to changes in the United States Olympic Committee (USOC) regulations, most venues had to be built before the Bid could even be considered in the USOC competition (Burbank, 2005; Conrad, Planet Drum, n.d.).

provide sufficient alternative transportation. Instead, SLOC built large temporary parking lots (Osbourne, 2002) and amassed a fleet of 4,000 SUVs, which were exempt from clean air standards (Lee, 2002). Thus, even though public transportation was originally promised by Bid officials (Lee, 2002), SLOC provided very little public transportation, and excused this omission by stating that the venues were "so far apart" (Conrad, Planet Drum, n.d.).

On the social front, SLOC did not match the public involvement or equality strategies initiated by SOCOG. Instead, SLOC attempted to include the public by establishing a volunteer group called the Environmental Advisory Committee, whose purpose was to lobby SLOC to protect sensitive habitat. This group had very little power, however, and its voice did not impact many of the decisions made by SLOC. SLOC also had difficulty promoting equality, and offered few opportunities to engage more marginalized members of the community in the planning process. According to 'Impact 2002 and Beyond', a coalition of Salt Lake City community groups, SLOC itself was composed of "overwhelmingly wealthy white men" (Burbank, Andranovich & Heying, 2001, 139). To combat this negative image, Impact 2002 members provided a list of candidates "who might help diversify the views of the committee" (Burbank, Andranovich & Heying, 2001, 139), including women and minorities. While the Mayor was sympathetic to these concerns, according to Burbank, Andranovich and Heying (2001, 139) the Governor rejected the group's demands:

He [the Utah governor] argued that the task of the organizing committee was not to be representative but to conduct the games [sic] and that there were not enough places on the board of trustees to accommodate all groups that might demand representation.

Ultimately, despite public funding for key venues, preparations for the 2002 Winter Games were conducted "in a fairly closed environment, with limited opportunities for public involvement" (Burbank, Andranovich & Heying, 2001, 140).

Although SLOC did manage to meet some impressive environmental goals in tangible areas such as tree planting, recycling and composting, many of SLOC's projects failed to consider the bigger picture. In the end, many environmental observers were frustrated by the lack of commitment from SLOC towards the environment pillar, especially after the promising possibilities pioneered by the Sydney Games. Unfortunately, SLOC failed to meet its goal of "net positive environmental impacts from the Games" (Gleason, Planet Drum, n.d.), and its hope to host the greenest Winter Games ever was not achieved²¹.

4.7 2004 Athens Games

Both the positive and negative environmental legacies of SLOC inspired the Athens Organising Committee (ATHOC) to promise to host "the greenest Games yet" (Davis, 2004, 'Nature loses at Athens' Games') when Athens won the rights to host the 2004 Games. The Athens' Bid Book (Athens 2004, 2004d, 'Environment') states:

The Athens Organising Committee will be sensitive to the environment in all stages of venue development and operation. All activities will comply with the strict directives of the European Union, and are in line with the organisational principles set by the International Olympic Committee.

These goals operated as "a challenge as well as an opportunity for the broad implementation of programs and actions which are environmentally friendly and in

²¹ In fact, any hope of being remembered as the 'Green Games' was overshadowed by the Bid scandal, which involved the release of a letter to the public by the media in November 1998. This letter discussed SLOC payments for IOC member Rene Essomba's daughter to attend American University in Washington, DC, which eventually led to a series of investigations regarding thousands of dollars that were used to bribe IOC members (Burbank, 2005).

accordance to [sic] the principles of sustainable development" (Greenpeace, 2004)²². The results of the Athens Games, however, were disappointing both locally and internationally, and failed to meet the Bid Book's promise of being sensitive to the environment in all stages of development and operation. Although there were some small local successes under the environment pillar, including positive changes to Athens' public transportation system and recycling practices, many people were discouraged by ATHOC's environmental performance. Part of ATHOC's difficulty in achieving environmental promises was that it lacked a "coherent policy to ensure [that the] strategic development plans of Athens would be honoured" (Zifou, 2004, 9). Instead, the organization of the 2004 Olympic Games reinforced centralized, non-participatory, fragmented planning, rather than "transparent, consensus building and democratic decision making processes" (Zifou, 2004, 9). Even things that seemed to be easy and obvious local environmental solutions (such as solar panels and natural air ventilation in the Athlete's Village and venues²³) were completely disregarded by both ATHOC and venue developers (Davis, 2004)²⁴.

In the face of this type of criticism, ATHOC defended itself by saying it did as much as was possible by citing the few positive legacies. For example, George Kazantopoulos (as quoted in Davis, 2004, 1), Athens 2004's Environmental Chief, notes:

Things could have been done in a better way, that is obvious. But Athens will never be the Amazon. We are proud that we have made a start. We have

²² Organizers put such a strong emphasis on respect for the environment that they boasted on their souvenirs webpage that products "based on the environment" (it is unclear from the website what these products are) were in circulation to "heighten public awareness of ATHENS 2004 environmental initiatives and to highlight the importance of a clean, healthy natural environment" (Athens 2004, 2004b, 'Athens 2004 Olympic Products').
²³ This is particularly frustrating since ATHOC promised in 2001 to be "the first ever Olympiad using 100%

²³ This is particularly frustrating since ATHOC promised in 2001 to be "the first ever Olympiad using 100% Green Energy" (IEMA, 2004). Instead of meeting this promise, renewable energy accounted for almost none of the energy used by the Athens Games, and the need for appliances, such as air conditioners, was grossly over-calculated to be larger than necessary, so appliances used more than using 2.7x the suggested energy for the new infrastructure. This led to needless overuse of energy (IEMA, 2004).
²⁴ IEMA (2004, 'Athens' Olympics 2004') states, "The Olympic Village, which had a raft of official green

²⁴ IEMA (2004, 'Athens' Olympics 2004') states, "The Olympic Village, which had a raft of official green proposals promised for it, ended up using a tender that ignored virtually every green recommendation made."

introduced recycling as a 29th Olympic sport. The tram and the metro are valuable legacies...

While Kazantopoulos clearly acknowledges ATHOC's poor environmental performance, he mitigates any critiques by suggesting that the two areas in which ATHOC showed environmental initiative were impressive. However, Kazantopoulos also suggests that the 2004 Games had international Olympic significance as a Games that adhered to environmentally behaviour such as recycling. Recycling is not a new Olympic endeavour, however; rather, recycling has been a focus of all Olympic Games since Lillehammer, with the exception of Atlanta. Clearly, ATHOC's dismissal of past Olympic achievements helped ATHOC ignore its dismal environmental record. Nikos Haralambidis (quoted in Llanos, 2004, 'No Green Medals...'), Director of Greenpeace in Greece, summed up the public's disappointment with ATHOC following the Games by stating, "Instead of moving forward even just a little bit, Athens has actually gone back, way back, as far as their environmental record is concerned; it is pretty miserable."

While it is easy to dismiss ATHOC's lack of Olympic environmental progress as the result of apathy, ATHOC did face difficult decisions, such as competing priorities between the environment and security in a post-9/11 world (Llanos, 2004). Part of the blame therefore lies with the IOC for not enforcing stricter environmental standards as part of the Olympic Games' process (Davis, 2004; Greenpeace, 2004). As Demetres Karavellas (as quoted in Davis, 2004, 2), head of WWF-Greece pointed out:

Unfortunately, the environment never figured as a priority in the planning of the Athens Olympic Games. While the IOC calls the environment its third pillar of Olympianism, it has done very little to keep this from crumbling under the weight of other priorities.

Greenpeace Greece (2004, 12) was more vocal about the IOC's lack of involvement in environmental initiatives and stated:

As a supervising body, the International Olympics Committee had a responsibility to make sure that its own environmental principles were applied in Athens. Instead, what was more than obvious was IOC's lack of interest on most environmental issues, and its failure to intervene to ensure that the Games' Environmental Guidelines were not breached.

The scathing international reports for Athens prove that rhetoric and precedents are not enough for environmental change; rather there must be strong political will, leadership and community involvement. As Greenpeace Greece (2004, 7) states, "When there is no strong political will, failures will override wins".

ATHOC's commitment to the environment was initially very promising. In fact, the website claims, "For the Athens Games special emphasis is placed on the respect for the Environment, one of the cornerstones of the Athens Olympic Games rationale" (Athens 2004, 2004d, 'Environment'). However, as the Games drew closer, the environment was largely ignored in the rush to complete Olympic venues, and when it was all over, Athens undid much of the progress made by Sydney on environmental issues" (Greenpeace, 2004).

4.8 Lessons Learned

While Lillehammer and Sydney were highly successful in incorporating environmental concerns under public pressure, other cities during the 1994-2004 decade – Atlanta, Nagano, Salt Lake City, and Athens – were less so. Even when clear goals seemed to be laid out, without public accountability and transparency, it was difficult for these promises to be realised under the pressures of time and money. Some blamed the IOC for not enforcing stricter environmental guidelines, and in a 20-page report following the environmentally disappointing Athens Games, the WWF (the Worldwide Fund for Nature, formerly know as the World Wildlife Fund) (Koppel, 2004, 'Athens Olympics is causing irreversible environmental damage') stated: Without positive action by the International Olympic Committee (IOC) and the promoters of candidate sites, the reputation of the games [sic] as a center of excellence will be tarnished by a trail of environmental degradation.

Charalambides, from the World Business Council for Sustainable Development (2004,

'Study says Athens Olympics Loses the Race for Environmental Excellence') was

similarly critical, and stated:

The IOC needs to secure the appropriate resources and show real interest that will make sure clear environmental guidelines are set for each candidate city beforehand and are well respected. If not willing to do so, it should simply stop claiming that the environment is the third pillar of the Olympics because it sounds like a bad joke.

The consensus following the Athens' Games was that the IOC should have had a

greater responsibility in ensuring that environmental plans were carried through.

This desire for more systematised accountability stems from the fact that host

cities take their own paths in addressing the environment. Some host cities, like

Lillehammer and Sydney, engage successfully in sustainability-oriented planning,

because of devotion by leaders to environmental goals and public engagement in projects,

as well as a stricter adherence to international standards, policies, and protocols. Others,

like Athens, fail miserably because of the lack of focus on sustainability by the

leadership. As Chernushenko (1994, 103) points out:

Support for this radical shift to sustainable practices must come from the top. Not only must the most senior people be interested in the cause, they must be seen to be so. They must be 'champions' of the cause, showing vision and leadership.

This is not to say that there have not been positive, sustainability-oriented changes achieved in each host city, but rather that some host cities fall extremely short of the sustainability goals that were promised. Within the context of what has been achieved, then, the most highlighted areas in the Games from 1994-2004 are education through volunteerism, energy and water efficiency, greenhouse gas reductions and air quality, and waste management and recycling. These results show that areas that required a slight modification in technology or behaviour were most easily adopted – things like recycling bins, energy efficient fixtures, and water saving mechanisms – while those areas that were more politically charged or that offered a departure from the traditional role of an elite athletic event – issues like public health and social housing – were largely ignored. Clearly, Olympic environmental planning has been more about appeasing directives through simple goals, than about overhauling conceptions of megaevent planning.

Although this is disappointing from an environmental perspective, as a larger process, the achievements of these Games show that Olympic movement is generally shifting towards increasingly green initiatives that have served to inform the international community and raise the bar for Olympic expectations about what can and should be done in creating an Olympic Games. As international standards, policies and protocols become increasingly green, so too will Olympic events and host cities.

Vancouver, therefore, has the challenge of helping raise the Olympic bar by focusing on its sustainability-oriented planning promises. By building on the technologies and ideas successfully carried out by these host cities and by learning from their unsuccessful plans, the Vancouver 2010 Bid Committee (VBC) has proposed a more rounded sustainability agenda which addresses some of the more difficult, politically charged areas including public participation, social inclusion, and minority skills training. Although the evidence from previous host cities suggests that there are no consequences for breaking Olympic environment pillar promises, the VBC solicited an Olympic Multi-Party Agreement signed by the city, provincial and federal governments to ensure that sustainability promises that are laid out in the Bid will be achieved during the

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building phase. These guarantees, in addition to increasing international pressure, will help to ensure that Vancouver acknowledges its sustainability promises.

4.9 Summary

In this chapter, past Olympic Games were assessed, and the initiatives and opportunities of each city were examined to reveal the strengths and weaknesses of Olympic sustainability-oriented planning. Although local initiatives were a positive catalyst for sustainability-oriented planning, they were not enough to mitigate some of the negative environmental, social, and economic consequences of hosting an Olympic Games. This was especially evident in cities that used business-as-usual approaches in planning for the Olympics. In the two cities that were successful in pushing the environmental agenda – Lillehammer and Sydney – a leadership dedicated to sustainability goals, as well as public input into projects and observance of international standards, policies, and protocols, played a large role in the successful outcome of sustainability-oriented planning initiatives. Vancouver will have to take these lessons into consideration as it prepares for the 2010 Games. The next chapter will examine how Vancouver used these lessons as well as new promises in creating the 'Sustainability Olympics'.

CHAPTER 5 THE VANCOUVER 2010 GAMES: SHIFTING TOWARDS SUSTAINABILITY

5.1 Introduction

Chapter 4 focused on the environmental planning initiatives of past host Olympic cities that have been used to satisfy the environmental dimension of Olympic planning. While these initiatives have positively impacted Olympic planning, they have failed to address some of the negative environmental, social and economic consequences of hosting an Olympic Games. This chapter will examine how Vancouver has built upon these initiatives in the planning stage in order to plan for the 'Sustainability Olympics'. Because it is still early in the 2010 Olympic development process, this chapter will only assess Vancouver's Olympic sustainability according to the VANOC's promises and the visions of several of Vancouver's prominent leaders²⁵.

This chapter begins by looking at the different interpretations and uses of sustainability in Vancouver. It then examines the sustainability promises of the Bid Book and plans of VANOC and considers what the motivation is behind this shift. Next, based on interview results, it focuses on how these promises and plans are helping to shift Olympic planning from focusing on environmental stewardship towards including sustainability considerations. Finally, it considers how social sustainability is a major driving force in moving Olympic planning from environmental planning towards sustainability-oriented planning.

²⁵ This chapter is not intended to be an analysis of Olympic sustainability planning outcomes. As Damian Inwoods (2004, personal interview), a journalist from the *Province* who represents the broader public opinion, points out, "It seems impossible to pre-judge them [the Organizing Committee] on whether the Games will truly be sustainable or not."

5.2 Defining Sustainability: A Vancouver Perspective

Vancouver has a worldwide reputation for its sustainability initiatives (see for example Berelowitz, 2005; City of Vancouver, 2005b; GVRD, 2004; Fraser Basin Council, 2004). Yet, like most places, Vancouver does not have a single, unilateral definition of sustainability. Therefore, exploring the views of sustainability offered by the City of Vancouver, key leaders interviewed in Vancouver, and the literature supplied by the VBC and VANOC will result a working definition for this research on sustainability in Vancouver's Olympic plans.

5.2.1 Sustainability as Conceived by the City of Vancouver

Vancouver has a worldwide reputation as one of the most liveable cities in the world because of its natural beauty, its healthy communities, and its commitment to sustainability (City of Vancouver, 2005e, 'A Sustainable City'). In fact, the City's Mission Statement is, "to create a great city of communities which cares about its people, its environment and the opportunities to live, work and prosper" (City of Vancouver, 2004c, 'City of Vancouver Mission'). This mission statement stems from the City of Vancouver's comprehensive sustainability policy that was created in 2002, to advance sustainability in the larger context of policy processes (City of Vancouver, 2002). These principles reflect the perceived responsibility of the city council to be a major player in local sustainability initiatives, and elaborate on the role of fair resource use, collaboration, diversity and equity, in achieving a healthy community. (See Appendix H for "Vancouver City Principles of Sustainability".)

The City of Vancouver defines its vision of a sustainable Vancouver as a process and writes:

A sustainable Vancouver is a community that meets the needs of the present without compromising the ability of future generations to meet

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their own needs. It is a place where people live, work, and prosper in a vibrant community of communities. In such a community, sustainability is achieved through community participation and the reconciliation of short and long term economic, social, and ecological well-being (City of Vancouver, 2002, 'Policy Report').

Although Vancouver's definition of sustainability comes from the directives of its comprehensive sustainability policy, Vancouver's sustainability focus is also reflected in its Public Involvement Strategy which "provides principles for public participation in civic affairs" (City of Vancouver, 2005c, 'Social Sustainability/Public Participation'), and in its commitment to programs such as the Food Policy Task Force, a city fleet run on bio-diesel, a comprehensive recycling program, and the adoption of the Vancouver Agreement, which has been used to develop programs and strategies around economic development, employment, housing, women's programs, youth, food security and safety²⁶ (Vancouver Agreement, n.d., 'The Agreement').

In November 2005, the City of Vancouver held municipal elections, resulting in a considerable shift in city politics: the Vancouver Civic Non-Partisan Association (NPA), which tends to have a right-of-centre focus, was elected. While the new mayor, Sam Sullivan, reaffirmed the council's commitment to sustainability in his inauguration speech, his vision of sustainability tended to focus more on attracting business than on including citizens in the process and on improving the urban environment (Sullivan, 2005). For example, Sullivan (2005, 'Mayor Sam Sullivan's Inaugural Address') said the following:

Most importantly, the re-establishment of citizen advisory processes should await clarification of the strategic directions this council wants to take for the city [...] The actions of this Council need to demonstrate to the world that we are open for business and are seeking new investment leading up to and beyond 2010.

²⁶ The Vancouver Agreement is an agreement amongst the governments of Canada, British Columbia and Vancouver "to work together, [...] with communities and business in Vancouver, on a coordinated strategy to promote and support sustainable economic, social and community development" (Vancouver Agreement, n.d., 'The Agreement').

Despite concerns that the newly elected city council may reinterpret sustainability and its commitment to citizen involvement in advancing sustainability initiatives, Vancouver's history of inertia in changing policy directives means that Vancouver will probably maintain its commitment to sustainability.

5.2.2 Sustainability in the Minds of Key Leaders in Vancouver

Leaders in Vancouver hold varying opinions about 'sustainability' because of their different backgrounds and experiences. For example, while some leaders see sustainability as a way of perpetuating current practices, others consider sustainability to be a way of increasing a community's quality of life. Based on the interviews conducted, most Vancouver leaders seem to conceptualise sustainability in the same terms as the City of Vancouver - as a means of promoting economic, environmental and social initiatives both now and into the future.

Interestingly, despite the variation in, and broadness of, the definitions of sustainability presented by Vancouver leaders, most leaders specifically acknowledged that using sustainability broadly as an all-encompassing term could have the unintended consequence of lessening the impact of the term sustainability. For example, Geoff Meggs (2004, personal interview), from the City of Vancouver Mayoral Office, states, "Sustainability is a catch-all term that everybody uses to sound virtuous, [even though] it means different things to different people". For these leaders, sustainability is not only being applied to actions and ideas that are contradictory to many environmental and social pursuits, but it is also being used by both companies and governments to make them appear more eco-friendly and socially conscientious. A former City of Vancouver councillor (Price, 2004, personal interview), states:

Sustainability is just that buzzword that gets labelled now to anything of consequence that has to go to the community, really, as a way of

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indicating that we are going to be responsive to quote "the environment"...Some people will broaden it out to social and economic sustainability, but I think it's as much of an attempt to greenwash an issue or the project itself.

Despite these criticisms, the consensus amongst Vancouver leaders seems to be that

sustainability is a necessary process that ensures an ongoing mix of economic, social

and environmental protection and amenities in order to enhance the lives of those in the

communities that are affected. Table 2: 'Major definitions of sustainability from

Vancouver leaders' outlines the major themes of sustainability from Vancouver leaders.

Table 2: Major themes of sustainability from Vancouver leaders.

Definition: Perpetuating something.

Example: "Sustainability...means building things – building physical structures, building economies, building communities – that can perpetuate themselves, that have the inner workings of a machine that can keep it going through the power and existence of itself" (Shoesmith, 2004, personal interview).

Comment: Defining sustainability as a perpetuation of activities is quite a literal conception of the term sustainability. One of the main concerns of leaders who defined sustainability in this way is that current programs are inherently unsustainable, and thus perpetuating them will never lead to sustainability in the classic definition as something that balances economic, environmental and social spheres. Further, the use of the word 'built' in this particular definition seems to suggest that sustainability is a goal that can only be achieved through careful human actions. However, this interpretation is quite limiting, since it precludes the possibility of conceptualising sustainability as a process. Nevertheless, this definition does acknowledge that there are different spheres in which sustainability can operate – in the physical world, through the economy, and within the community.

Definition: Improving equity and the quality of life.

Example: "Another aspect of sustainability is that people have a decent living, and a place to live, and that there's some sense of community and some sense of spinituality and joy in their lives as well. You can't have a sustainable culture without having some collective and cultural being-ness [...] To have a sustainability society, there has to be a sense of people all having food to eat and a decent place to live, and a right to health care, and a right to education" (Burrows, 2004, personal interview).

Comment: Similar to the City of Vancouver's definition, many Vancouver leaders indicated that sustainability is something that ultimately improves the quality of life in communities, although this will require major tradeoffs. Improving the quality of life of all citizens means that everybody will gain from decisions that are made in a net zero loss process, and the betterment of the welfare of a community can be seen as an on-going process to constantly reach an improved state.

Definition: A social movement.

Example: "Becoming sustainable is [...] about justice, and actually being inclusive, and introducing some more openness, and some transparency. So, in general terms, sustainability is a social movement" (VanWynsberghe, 2004, personal interview).

Comment: This definition builds upon the idea that sustainability is about improving people's lives. This specific definition of sustainability also alludes to the fact that the mechanisms of GG – inclusiveness, openness and transparency – are necessary components in a definition of sustainability.

Definition: Economic, social and environmental spheres often conceptualised as a three-legged stool.

Example: As a province and country we need to pursue economic development that meets the test of financial, social and environmental sustainability. The only real reason to hold worldwide spectacles such as the Olympics is to showcase the best in human abilities and performance not only in sport, but also in community and economic development. [...] The real test of sustainability is the long-term commitment to its attainment" (Anderson, 2004, personal interview).

Comment: This is the classic definition of sustainability. However, defining sustainability by these spheres can be difficult since this view of sustainability fails to engage with difficult questions of tradeoffs that are inherent in making sustainability-oriented decisions. For example, focusing on social issues may have economic implications, and these spheres and tradeoffs need to be balanced. Michelle Boyle (2004, personal interview) discusses some of these tradeoffs when she states:

The one [definition] that's often talked about is the 3 legs of the stool – environment, economic and social. I actually think that's okay, but it's not a very complete definition. It doesn't really explicitly talk about scales, talk about trading off between different components...I think sustainability is a lot more about examining tradeoffs in a way that those people that are impacted aren't marginalized completely.

5.2.3 Vancouver 2010 Bid Corporation and the VANOC

The IOC does not have a precise definition of sustainability, and so, during the

bid stage, the VBC relied on Olympic Agenda 21 and existing models of sustainability in

Vancouver and Whistler to guide their sustainability theme (Vancouver 2010 Bid

Corporation, 2003c). From this, the VBC created a sustainability framework to guide

their proposal, which included the following guidelines:

- Ensure we consider citizens needs of today and tomorrow
- Integrate and optimize sport, environmental, social and economic considerations
- Help build community, domestic and international support
- Ensure we create sustainable legacies
- Enable the games to become a showcase of sustainability to the citizens of Canada and the world

 Increase understanding of sustainability through the Olympic medium (Resort Municipality of Whistler, n.d, 'A Sustainable Olympics')²⁷.

The goals in the Bid Book build upon this framework, but are also quite broad and wide-

reaching in their objectives.

The VBC (2003c, 1) defines sustainability in the following way:

Sustainability is about making decisions and choices – making decisions today that don't compromise choices in the future. It's about ensuring that our children and their children have the same or better opportunities and choices than we have today. It's about caring for the planet that supports us and sharing the wealth it provides. It's about taking care of our world, each other and ourselves. Sustainability is also about decision-making that integrates the three critical and interdependent systems supporting human life on this planet – ecological, economic and social.

VANOC similarly conceives of sustainability in terms of the three spheres of

sustainability, and relies on the definition laid out by the Brundtland Commission:

In general, Vancouver 2010 has operated with the common-sense fundamental definition of sustainability as outlined by the Brundtland Commission in 1987 - sustainability is about decision making and actions that meet the needs of the present without compromising the ability of future generations to meet their own needs - while also recognizing the critical interdependence of the ecological, social and economic systems that support life on earth and the need to integrate these three systems in our decision making and actions (personal communication with Vancouver 2010 Information, February 11, 2005).

Most recently, VANOC has expanded the definition of sustainability by posting the

following on their website (Vancouver 2010, n.d.a, 'Focus on Sustainability'):

Vancouver 2010 is broadening and strengthening the focus of sustainability beyond environmental stewardship to include social responsibility, economic opportunity, sport development and health promotion.

²⁷ This information is taken from the Whistler website rather than the VBC itself because there is no reference to the guidelines on VANOC's website, and VBC has dissolved.

While these key definitions are vague, depending on the three spheres of sustainability, they also highlight new areas of focus for mega-event planning including inclusivity, education, citizen involvement and health promotion.

5.3 Sustainability Goals in Vancouver's Olympic Planning Process

In 1998, Vancouver was selected as Canada's choice to bid for the 2010 Games

(personal communication with Vancouver 2010 Information, February 11, 2005). Shortly

after the announcement, the VBC was formed to put together a winning Olympic Bid.

The VBC very quickly decided to build upon the strong foundation of sustainability

initiatives in Vancouver and Whistler, since the reputations of these two cities offered an

incredible opportunity to capitalise on sustainability as a central theme in the Bid

(Vancouver 2010 Bid Corporation, 2003c). In the Bid Book, the VBC wrote:

We need to embrace the social and economic components of sustainability in order to build a winning proposal, support balanced decision-making, build community and international support, create sustainable legacies, increase understanding of sustainability and ensure that we consider the needs of citizens today and tomorrow. Vancouver is perfectly positioned to demonstrate how an outstanding Games can be staged by leveraging the competitive advantage of our local sustainability expertise. We can take the Olympic and Paralympic Games beyond Green and accelerate both the local and global journeys to a sustainable future. The Games can become an engine of sustainability and Vancouver is ready to turn the key and accelerate the journey to a sustainable future (Vancouver 2010 Bid Corporation, 2003c, 8).

Although the VBC had a strong commitment to sustainability in rhetoric, their

vision statement leaves open a devastatingly wide array of possibilities:

Our vision is to: create sustainable legacies for athletes and sport development, our host communities, our province, our country and the global Olympic Family by hosting an outstanding Olympic and Paralympic Winter Games (Vancouver 2010 Bid Corporation, 2003c, 55).

By couching their sustainability vision in the most general terms, no one could disagree with the VBC's vision statement, but likewise, few could blindly agree to all the possibilities that the phrase 'sustainable legacies' elicits. Nevertheless, the vision statement was useful in uniting the VBC to commit to sustainability, and the VBC began to engage experts and stakeholders in Vancouver in dialogue to determine what the best initiatives would be (Baker, 2004). These work groups, combined with "best practices drawn from past Games" (Vancouver 2010 Bid Corporation, 2003b, 3) led the Bid Corporation to develop a sustainability policy based on six key principles:

The principles [in the sustainability policy] define the values and beliefs that form the basis of our understanding of sustainability and include ecological limits, inclusiveness, interdependence, equity, long-term view and healthy communities. (Vancouver 2010 Bid Corporation, 2003c, 3)

Of these six principles, inclusiveness and equity were seen to make the major difference between previously held 'Green Games', and Vancouver's promise to host the 'Sustainability Games'. The VBC (Vancouver 2010 Bid Corporation, 2003b, 55) defined inclusivity as participation and equity:

Participation means that all people – including those of diverse ethnic and cultural backgrounds have the opportunity to be involved in the Games. Equity relates to the integration and improvement of conditions of the disadvantaged, including low and moderate-income people.

The VBC's list of inclusive goals, however, included areas of focus that do not

immediately seem to fit the above definition: accessible Games, affordable Games'

events, affordable recreation and community sport, business development, civil liberties

and public safety, cultural activities, employment and training, environment, financial

guarantees, health and social services, housing, input into decision-making,

neighbourliness and transportation (Vancouver 2010 Bid Corporation, 2003a).

Many of the leaders that were interviewed and citizens that were surveyed complained that all of the sustainability goals in the Bid Book were either too broad or too vague, and raised concerns that sustainability outcomes would fall short of community expectations because of both vagueness and the time constraints demanded by the unmoveable 2010 deadline (Burrows, 2004, personal interview; Campbell, 2004, personal interview; Carter, 2004, personal interview; Litke, 2004, personal interview; Maggs, 2004, personal interview; Mikkelson, 2004, personal interview; Price, 2004, personal interview; Shoesmith, 2004, personal interview; VanWynesberghe, 2004, personal interview). While the imprecision with which the VBC addressed sustainability was not limiting in itself, both the natural inertia towards change and the failure to consider other possibilities were large constraints, leaving little hope for more progressive sustainability initiatives²⁸. The VBC's inclusion of sustainability goals in the Bid Book, without a concrete integrated sustainability plan to realise these goals, has been called both 'greenwashing' and 'social washing' by several leaders (Burrows, 2004, personal interview).

Despite these concerns, the majority (64% of voters) of Vancouver citizens agreed in principle to hosting the 2010 Games in a city-wide referendum on February 22, 2003 (CBC, July 2, 2003, 'Vancouver-Whistler to host 2010 Winter Olympics'). Shortly thereafter, the VBC submitted its bid, and two months following that, on July 2, 2003, thousands of Canadians cheered in Vancouver as IOC president Jacques Rogge announced in Prague that Vancouver had been selected by the IOC to host the 2010 Olympic Games (CBC, July 2, 2003, 'Vancouver-Whistler to host 2010 Winter Olympics'). For the Bid Committee, this meant that five years of hard work and a

²⁸ Cynically, as a member of Vancouver City Mayoral Office (Meggs, 2004, personal interview) points out, this failure to specify goals could be due to the fact that "some of the top sponsors are not what you would call poster children for sustainability, in terms of what they do for their business," and VANOC did not want to alienate them.

commitment to sustainability paid off (CBC, July 2, 2003, 'Vancouver-Whistler to host

2010 Winter Olympics'). However, for the then soon-to-be-appointed Vancouver

Organizing Committee, this meant that the work, albeit laid out by the Bid Committee,

was just beginning. (See Table 3: 'Sustainability initiatives highlighted in the Vancouver

2010 Bid Book'.)

Matrix Category	Vancouver Bid Book Information
Engagement	Consultation and Collaboration
and	"Early in the Bid process, Vancouver 2010 established an Environmental Working Group
Partnerships	with broad-based representation from all levels of government, environmental non-
	governmental organizations (including the Association of Whistler Area Residents for the
	Environment and the Canadian Parks and Wilderness Society), academia and industry
	environmental specialists. The sustainability framework was developed through the
	Environmental Working Group with input from Bid partners, sustainability experts and
	key stakeholder groups. The framework was then communicated through public
	information workshops and has been continuously improved based on input received.
	The Vancouver OCOG will continue the process of consultation and collaboration with
	partners and stakeholders. Vancouver 2010 and the provincial government recognize
	the legal obligation to consult with First Nations on activities that may infringe on their
	Aboriginal rights and title" (55, 58).
	"They [assessments] will provide for participation by the general public" (55).
	"Strengthening community and stakeholder partnerships" (55).
Outro ask and	"Communicating opening and consulting with our stakeholders" (55).
Outreach and	Education and Awareness Programs
Education	"Sustainability themes will be incorporated into educational programs targeting schools, athletes, tounists, sponsors, suppliers and the media throughout the life of the Vancouver
	OCOG. Those involved with the Vancouver OCOG will receive sustainability education
	and skills training that will benefit their communities and workplaces." (57)
	"A Sustainability Management System comprised of policy and commitment, education
	and awareness, monitoring and reporting, and environmental, social and economic
	actions" (55).
	"Increasing understanding of sustainability" (55).
Technology and	Environmental Key Point Action
Production	"North America's most respected green building rating system, Leadership in Energy
	and Environmental Design (LEED), will be used as the standard for all new facilities.
	LEED defines high performance buildings that minimize their environmental footprint in
	five categories: sustainable site selection, water efficiency, energy and atmosphere,
	materials and resources, and indoor environmental quality" (57).
	"Concepts for leading-edge technology and practices to minimize the volume of liquid
	waste introduced into the existing systems will be used for venue and village designs" (57).
	"Vancouver 2010 has identified a number of emission reduction strategies and
	developed a spreadsheet tool to compare emission reduction impacts from options and

 Table 3: Sustainability initiatives highlighted in the Vancouver 2010 Bid Book.

Matrix Category	Vancouver Bid Book Information
	scenarios under consideration and to help develop emission reduction targets. Our goal is to move towards a zero net emissions Games that is climate neutral" (57). "Conserving resources" (55).
	"A multi-modal public transportation system" (59).
	"Energy needed for power, heat, light and air conditioning will be minimized as natural day-lighting and ventilation will be emphasized" (61).
	"Energy required will be sourced through renewable supplies" (61).
	"The Vancouver 2010 Games plans to acquire its power needs from renewable and green sources including micro-hydro installations, photovoltaic technology, fuel cell generators, solar heating and ground-source heat pumps" (61).
	"The Vancouver OCOG will integrate its environmental approach into contracts with
	suppliers and sponsors through a procurement system that will weigh how they will assist the Vancouver OCOG in meeting sustainability objectives" (61).
	• • • • •
	"Air quality and Greenhouse Gas Managementemission reduction strategies" (57). "Our goal is to move towards a zero net emission Games that is climate neutral" (57).
Land Use	Solid and Liquid Waste Management
Concerns and	"Both Vancouver and Whistler have leading-edge solid waste management plans that
Waste	provide the platform to pursue a zero solid waste management strategy during the
Management	Games. The program will focus on reduction, reuse, recycling and rethinking" (57).
Management	"Preventing pollution" (55).
	"Protecting and enhancing natural systems" (55).
	"The Village is located on land historically used for industrial purposes that is being rehabilitated and developed as a model sustainable community" (61).
	"Monitoring and ReportingThe Vancouver OCOG will draft key performance indicators and targets associated with each of the sustainability policy objectives" (57).
	"Many of the improvements to infrastructure or new facilities required for the Vancouver
	2010 Games will be subject to an environmental review pursuant to environmental assessment legislation" (55).
	"Construction and operation of the Games facilities will ensure that significant local
	features and sensitive environments are protected through landscape buffers and careful land development practices" (57).
Urban Policy	"Following the Games, a portion of the Olympic Village will become an important
and Planning	addition to Vancouver's non-market housing supply" (61).
	"Maximizing economic opportunity" (55).
	"Advancing social equity through economic opportunities" (55).
	"Promoting diversity and celebrating cultural heritage" (55).
	"Hosting inclusive and accessible Games" (55).
	"Contributing to sport development and health promotion" (55).
	"Natural and Cultural Heritage ensure that this [BC's] precious natural heritage is
	respected and not diminished" (57).

Because the VBC recognized that VANOC would have no obligation to fulfil the goals outlined in the bid, the VBC took the precaution of backing up its promises through the first ever Olympic Multi-Party Agreement. This agreement has been signed by the Government of Canada, the Province of British Columbia, the City of Vancouver, the Resort Municipality of Whistler and the Canadian Olympic Committee (Vancouver Bid Corporation, 2003b), and as an NGO leader of tenants' rights in Vancouver (Mixx, 2004, personal interview) explains:

We've got the commitments in the commitment statement in the guarantees file – they have to deliver these things [sustainability goals]... [and] there will be checks and balances built into the planning process, in terms of who is responsible for what, and what steps are going to be taken to ensure that these things happen.

Thus, although it may be limited and open to political opportunism, in the case of the 2010 Games, the guarantees file offers another layer of accountability to deliver the promises made by the VBC.

VANOC's promises are impressive in their breadth. For example, under its environmental stewardship programs, VANOC hopes to "conserve resources, prevent pollution, and protect and enhance natural systems" (Resort Municipality of Whistler, n.d, 'A Sustainable Olympics'). VANOC will also investigate the possibilities of using green building technology, clean transportation options, energy efficiency and sustainable energy, solid waste management, liquid waste management, greenhouse gas reductions and air quality promotions, protection and enhancement of natural landscapes, and areen office programs (Baker, 2004; Vancouver Bid Corporation, 2003b). Under its economic pursuits, the VANOC is hoping to promote sustainable economic opportunities, and will focus on showcasing domestic product innovation and expertise, and on diversifying the economy through tourism, trade and investment skills development (Baker, 2004). Finally, the VBC promised in the Bid that VANOC will prepare sustainability indicators, and monitor and publicly report on progress towards goals and objectives under the Sustainability Management System (Vancouver Bid Corporation, 2003c, 3). Table 4: 'Projected projects to fulfill Vancouver's Commitment to Sustainability' outlines projects and programs that are currently being pursued by

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VANOC according to their website and according to interviews with key opinion

leaders²⁹.

Table 4: Projected	projects to fulfill Vancouver's Commitment to Sustainability.
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Category	Example
Engagement	Advice from local NGOs and community groups (Inwoods).
and	Encouraging companies the use sustainable practices (VANOC).
Partnerships	Indicator projects (Litke).
	Partnerships with federal/provincial/municipal governments (Carter, VANOC).
	Public participation (Campbell, Mikkelson, Price).
	Public participation in SEFC developments (Mikkelson).
	Transparency (Meggs).
	United We Can contract for recycling (Burrows).
	Working groups (Mixx).
Outreach and	Educational programs for schools, athletes, tourists, sponsors, suppliers and the media
Education	(VANOC).
	Environmental stewardship centre in SEFC (Mikkelson).
	Information packages supplied by the developers to purchasers (Mikkelson).
	Open house information on sustainability (Inwoods).
	Sustainable condominium presentation project in SEFC (Mikkelson).
	Volunteer training (Litke).
	Water education, storm water retention and mitigation in the schools (Mikkelson).
	Worker training (Meggs, Shoesmith, VANOC).
Technology	Bus technology (Burrows, Meggs).
and Production	Energy efficient appliances in SEFC (Mikkelson).
	Ethical purchasing, no sweat policies (Meggs).
	Expanded Rapid Transit (Anderson, Meggs).
	Fuel Cells (VANOC).
	Geothermal system in SEFC for hot water and radiant floor heating (Mikkelson).
	Green building/LEED standards (Meggs, Mikkelson, Mixx, Shoesmith, VANOC).
	Green power (VANOC).
	Hydrogen highway (Campbell, Inwoods, Meggs, Price).
	Minimum parking spots in SEFC (Mikkelson).
	Priorities for pedestrians, non-motorised communiters (cyclists, roller bladders, skate
	boarders), then transit, and finally, cars (Mikkelson, VANOC).
	Wireless technology – internet and communications (Inwoods).
Land Use Concerns and	Brown development in SEFC (Mikkelson, Carter).
Waste	Habitat planning (Mikkelson). Minimization of new facilities (Price).
Management	Organic collection for composting and biodiesel (Mikkelson).
	Rainwater collection, low flush toilets and showerheads (Mikkelson, VANOC). Recycling (Burrows, Meggs, Price).
	Remediation of contaminated soil (Carter, Meggs).
L	Tremediation of contantinated soli (carter, Meyys).

²⁹ In this table, information given by VANOC is taken from Vancouver 2010 Bid Corporation's 'Projects and Programs' section on their website (see www.vancouver2010.com/En/ AboutVancouver2010/OurPlan/Sustainability/ProjectsPrograms.htm). Other information is taken from

personal interviews, 2004.

Category	Example
	Solar aquatic centre for black water remediation in SEFC (Mikkelson).
	Storm water management (Mikkelson, VANOC).
	Zero Waste Program (VANOC).
Urban Policy	Athlete's Village to be turned into non-market housing (Price).
and Planning	Family sized units in SEFC (Mikkelson).
	High social mix in SEFC (Mikkelson).
	Inculsivity (Meggs, Mixx).
	Natural corridors in SEFC (Mikkelson).
	Reusing buildings after the Olympics (Carter, Mikkelson, VANOC).
	Small businesses linked to the city in SEFC (Mikkelson).
	Social housing (Boyle, Meggs, Mixx, Shoesmith, VANOC).
	Training for aboriginals, women, youth and disadvantaged people of the DTES (Inwoods,
	VANOC).
	Waterfront access in SEFC (Mikkelson).

Although none of the promises are particularly novel from a policy standpoint, they are novel from a mega-event planning standpoint. Even so, VANOC has yet to actually prove the success of its sustainability programs, although its sister corporation, Legacies Now, has begun to implement its legacy programs in sport and recreation, arts, literacy and volunteerism (Legacies Now, n.d., 'Building sustainable legacies'). The Legacies Now programs, combined with the promises in the guarantee file, will constitute the full extent to which VANOC addresses social sustainability. As the Senior Vice President of Service Operations and Ceremonies for the Vancouver 2010 Olympic and Paralympic Winter Games and former Vice President, Bid Development and Operations with the Vancouver 2010 Bid Corporation (Wright, 2004, personal interview) comments:

I would say that it's [social sustainability programs have] already been created a long time ago, to be honest with you. We're [VANOC] not in the creation of ideals right now so much as deliver against those [social sustainability goals] that were set in the last five years when we went through the visioning process of the Bid. So we're far more now into an implementation process then we are into a new goal-setting process.

This prioritisation of implementation over innovation is confirmed by VANOC's vision and mission statements, which are obscure at best. VANOC's vision is: "A stronger Canada

whose spirit is raised by its passion for sport, culture, and sustainability" (Vancouver 2010, 2005, 'Main Page'), and its mission is: "To touch the soul of the nation and inspire the world by creating and delivering an extraordinary Olympic and Parlympic experience with lasting legacies" (Vancouver 2010, 2005, 'Main Page'). Both of these statements appear to be inspirational, yet they leave excessive room for politically motivated tradeoffs.

5.4 Reasons for the Shift Towards a Sustainability-focused Theme

The review of previous Olympic host city environmental planning practices in Chapter 4 indicated that cities usually implement environment policies that are not optimal since they focus on straightforward technical solutions in their planning. Vancouver, on the other hand, is embracing sustainability with all of its challenges, including greater scope and greater accountability, and more intangible scenarios. Why would a host city take on this increased responsibility?

The answer can be found in the Bid Book. Although sustainability was formally adopted by the VBC as a result of the Board's decisions, the Bid Book list four reasons for its sustainability theme:

There are many reasons to embrace sustainability in the Vancouver 2010 Bid. Global reality necessitates it. The Olympic Movement is committed to it. Local communities are increasingly incorporating it and our citizens expect it. We believe that by delivering a sustainable 2010 Winter Games we can accelerate the journey to a sustainable future (Vancouver 2010 Bid Committee, 2003b,1).

The next sections will look at these reasons for Vancouver's shift towards sustainability in Olympic planning, as well as the possibility suggested by several Vancouver leaders that the shift has come about in response to a larger paradigm shift away from pure environmentalism towards sustainability, and the possibility that sustainability is being used simply as a branding technique by the City of Vancouver.

5.4.1 The Global Reality Necessitates Sustainability

Despite the many advances made by science, technology and policy, the world still faces many sustainability crises, including biodiversity loss, pollution, resource mismanagement, inequity, discrimination and income polarization. Although it is unrealistic to believe that the Olympic Games will solve any of these large-scale problems, it is imperative that Olympic leaders (and indeed, leaders worldwide) adopt the concept of sustainability by planning for a healthy environment and social well-being within a stable economy (Litke, 2004, personal interview). Fostering sustainabilityoriented Olympic planning not only offers an opportunity for local engagement in confronting global problems, but it also provides a rare occasion to globally raise the status of sustainability by showcasing the positive outcomes of sustainability-oriented planning through media attention. As a former city councillor (Price, 2004, personal interview) relates:

You are going to be the centre of the planet's attention for at least two weeks, and everything that you do in that respect can demonstrate that you tried to tackle the [environmental, social, and economic] problems and made innovative responses to it.

By taking local steps to engage the public in helping address global problems from air pollution to inequity, Vancouver leaders frequently mention that the 2010 Olympics present an opportunity (and in some cases, a responsibility) to serve as a catalyst for further sustainability-oriented planning and development by using the global limelight offered by the media (Boyle, 2004, personal interview; Burrows, 2004, personal interview; Carter, 2004, personal interview; Mikkelson, 2004, personal interview; Price, 2004, personal interview; Shoesmith, 2004,

personal interview). For example, according to the Programs Manager for the Fraser Basin Council (Litke, 2004, personal interview), the Olympics is an opportunity to make sustainability:

...more mainstream or bring it [sustainability] to a global scale because it's [the global audience] such a huge international audience, and the spotlight will be on, and if sustainability can be part of the material that's broadcast around the world, then it's an amazing opportunity [to highlight sustainability].

By following through with their responsibility "to ensure that the Games have the widest possible positive impact within the context of available resources" (Wright, 2004, personal interview), VANOC will raise the status of the Olympics to become a microcosm of larger global sustainability initiatives (Litke, 2004, personal interview; Mikkelson, 2004, personal interview; Shoesmith, 2004, personal interview).

Although VANOC's actions will not likely be as far reaching as the VBC's literature suggests, Vancouver's commitment to sustainability shifts Olympic planning towards sustainability through the Olympic reputation as "the ultimate sporting event, with the potential to captivate, demonstrate, educate and change behaviour" (Vancouver 2010 Bid Corporation, 2003, 2). Thus, if Vancouver is partly successful in hosting a sustainable Olympics, then the 2010 Games can be used to garner international support for sustainability, as well as being used as the standard to achieve sustainable development worldwide within the Olympic movement, within public policy and within governance mechanisms (Inwoods, 2004, personal interview; Mixx, 2004, personal interview).

5.4.2 The Olympic Movement Demands Sustainability

The Olympic Movement (which includes the IOC and member organizations from participating countries) is increasingly incorporating sustainability initiatives into official

plans and literature. This started with the success of the 1994 Lillehammer Green Games. By 1995, an Olympic Environment and Sport Commission was created, and the IOC expanded their conception of the environment by first officially introducing the phrase 'sustainable development' into the Olympic Charter; (2004d, 'Sport and Environment Commission: History and mission of the Commission'):

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 encourage 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.

Then in 1999, the IOC, under recommendations from this Commission, adopted the

Olympic Agenda 21 (IOC, 1999, 'Olympic Agenda 21'). Although this document was

created under the auspices of satisfying the Olympic Movement's environment pillar, it is

broadly focused on three areas of focus for the sports community: improving socio-

economic conditions, conserving and managing resources, and strengthening the role of

major groups (Topfer, n.d.; Vancouver 2010, n.d., 'Overview: History'). Even though the

Olympic Agenda 21 was not mandatory, it did lay the foundation for sustainability

initiatives, and at the Fourth IOC World Conference on Sport and the Environment on

November 4, 2001, the IOC specifically discussed the role of the Olympic Movement in

promoting the three spheres of sustainability in its resolution:

[The IOC] **Urges** all the members of the Olympic Movement, all participants in sport and enterprises associated with sport to continue and intensify their efforts in implementing environmental, economic and social sustainability in all of their policies and activities [emphasis in original] (Athens Environmental Foundation, 2004b, 'World Conference on Sport and Environment & Agenda 21').

The IOC continues to expand its commitment to sustainability, and as part of this resolution, the IOC has mandated that following the Games, an Olympic Games Global

Impact Study must be conducted to assess environmental, economic, and social impacts on the host city (Center for the Environment, 2005, 'Olympic Games Global Impact Study'). By focusing on sustainability through the environment pillar, *Olympic Agenda 21*, and the Olympic Games Global Impact study, the IOC is including sustainability as an important part of Olympic rhetoric (Mixx, 2004, personal interview; Shoesmith, 2004, personal interview; Wright, 2004, personal interview).

5.4.3 Governments and Communities are Increasingly Incorporating Sustainability

It is not just international policies and institutions that are demanding sustainability; national and local governments are also incorporating sustainability through policies and programs. The City of Vancouver in particular has embraced sustainability in many spheres, from a food security task force to a geothermal energy grid to a drug prevention program. Vancouver hopes to use this image of sustainability to promote its economy as a unique niche for businesses to have their products identified with sustainability (Anderson, 2004, personal interview). Already, Vancouver has engaged in and pursued world-renowned sustainability policies including transportation, building and development planning, energy use, environment, solid waste and storm water management, social sustainability and public participation (City of Vancouver, 2004b, 'Broad City Initiatives'). As a City of Vancouver sustainability planner (Mikkelson, 2004, personal interview) relates,

Really, a lot of the stuff [policy dialogue around promoting sustainability] is about increasing local production, and hopefully local producers will see that opportunity so that we're incubating local businesses as well, and driving prices down. Make some of this stuff [sustainable products] more mainstream.

Thus, Vancouver is incorporating sustainability into its plans for community regeneration, and as a marketing strategy for attracting investment in sustainability-oriented products (Meggs, 2004, personal interview; Mikkelson, 2004, personal interview).

5.4.4 Local Communities Expect Sustainability

Local governments and organizing associations are able to pursue sustainability because local populations both endorse and expect sustainability-oriented planning. This expectation comes from a combination of Vancouver's culture as an internationally recognized sustainability forerunner, citizen frustration with mega-event processes in the past which overlooked citizens' needs, and an increased desire for politicians to be accountable for their actions.

In January 2005, the *New York Times* reported that Canada was 6th in the world in environmental sustainability according to an index made of 75 indicators including "the rate at which children die from respiratory diseases, fertility rates, water quality, overfishing, emission of heat-trapping gases and the export of sodium dioxide" (Barringer, 2005, 'Nations Ranked as Protectors of the Environment'). This high ranking is not surprising given Vancouver's sustainability and green image (City of Vancouver, 2005e, 'A Sustainable City'). Vancouverites are "proud of the fact that this city is very green to the point of pretension" (Price, 2004, personal interview), and Vancouver is home to well-known eco-activist originations such as Greenpeace and the David Suzuki Foundation. Whether this pride is merited is a moot point; Vancouver's green image has been propagated such that many people believe in the unique destiny of sustainability in Vancouver. As an NGO leader of tenant's rights in Vancouver (Mixx, 2004, personal interview) points out:

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We've got a different mindset here [in Vancouver/Whistler] than other past Olympics have had... so I think we have, [pause] a difference of standards than other communities have had in other past Olympics.

Although it is pretentious to think that Vancouver is the only city that cares about the environment or social inclusion, the VBC and VANOC have chosen to highlight sustainability because of Vancouver's sustainability image. The VBC writes:

Pursuing a sustainable future is not a new goal for Vancouver and Whistler. The nature of our place in the world, bounded by the spectacular diversity of the sea, forest and mountain landscapes that define our region, and the culture of our people who know and care deeply about nature, dictate a future that balances economic and social goals with protecting the environment. (Vancouver 2010 Bid Committee, 2003b, 2).

Certainly, most of the leaders interviewed seemed to agree that Vancouver has a culture of sustainability (Boyle, 2004, personal interview; Burrows, 2004, personal interview; Meggs, 2004, personal interview; Mikkelson, 2004, personal interview; Mixx, 2004, personal interview; Price, 2004, personal interview; Wright, 2004, personal interview), and local NGO leaders, such as the Program Manager for the Fraser Basin Sustainability Council (Litke, 2004, personal interview), speculated that the move from environmentalism towards sustainability, "has to do with the amount of research, discussion, and activity around sustainability in the Greater Vancouver area and BC," as well as Vancouver's commitment to PP and social sustainability initiatives.

This activity around sustainability, and in particular, around social sustainability, has been especially potent in relation to mega-events because citizens are frustrated with the provincial funding cuts to social programs and the negative impacts of Expo '86, such as evictions from single room occupancy housing (SROs) (Meggs, 2004, personal interview; Mixx, 2004, personal interview; Shoesmith, 2004, personal interview). The Senior Vice President of Service Operations and Ceremonies for the Vancouver 2010 Olympic and Paralympic Winter Games and former Vice President, Bid Development and Operations with the Vancouver 2010 Bid Corporation (Wright, 2004, personal interview), comments that "the social infrastructure is what we [VBC] heard loudest in those 1400 meetings [with the public]. They wanted the Games to result in a stronger, healthier society from a social perspective". This point of view was shared by many NGOs and civil society organizations, who "wanted to ensure that if the Games did come to Vancouver that we [Vancouver] wouldn't have a repeat of the Expo experience" (Mixx, 2004, personal interview). Consequently, the Impact of the Olympics on the Community Coalition was formed from civil society groups, such as TRAC (Tenants Rights Action Coalition) and BEST (Better Environmentally Sound Transportation), to negotiate with the VBC, resulting in the creation of the Inclusive Intent Statement (Meggs, 2004, personal interview; Shoesmith, 2004, personal interview). This one-page statement encompasses participation and equity in planning and operating the 2010 Games. (See Appendix I for the Inclusive Intent Statement.)

Citizens are demanding that politicians be accountable for their actions and consider the longer-term needs of a community when they create infrastructure; they are expecting new infrastructure to "lead to sustainable regions, sustainable cities, and a sustainable life" (Price, 2004, personal interview). The culture in Vancouver, the demand of civil society groups, and the need for greater accountability have all been important dimensions of sustainability in the Bid, but it has been the push by the public for environmentally and socially acceptable plans that has convinced VANOC to seriously consider sustainability. As the Senior Vice President of Service Operations and Ceremonies for the Vancouver 2010 Olympic and Paralympic Winter Games and former Vice President, Bid Development and Operations with the Vancouver 2010 Bid Corporation (Wright, 2004, personal interview) states, "the Games reflects the

community in which they're staged, and quite clearly, sustainability is important in both Vancouver and Whistler."

5.4.5 The Move Away from Environmentalism

Global, Olympic, community and citizen demand for sustainability are all compelling reasons to incorporate sustainability in Olympic planning. However, the move towards greater sustainability has not been made by demand alone; rather, the shift towards a sustainability-oriented paradigm has been made in conjunction with a move away from the environmentalist paradigm, as it is seen to operate with a limited "nature-only" scope.

The shift towards a sustainability paradigm is a result of increasing acknowledgement that we should make decisions that have positive effects on the entire community. Although the Games themselves only last two weeks, the long-term effects of the Olympics on the environment and community will span decades (Burrows, 2004, personal interview; Campbell, 2004, personal interview, Mikkelson, 2004, personal interview). As the Director of the Labour Environmental Alliance Society and head of United We Can (Burrows, 2004, personal interview) states, "it's not just the Olympics...it's a 20-year transformation of the region...we need to make not just the Olympics sustainable, but to use the Olympics as a spark to make Vancouver sustainable." Further, focusing on sustainability reduces the pressure of being green, since resources can be applied to social and economic pursuits as well as environmental pursuits. This division of resources is attractive to planners because social and economic sustainability initiatives can cost less than the newest green technology, since most of the easily implemented technology has already been adopted (Mikkelson, 2004, personal interview; Price, 2004, personal interview). A City of Vancouver sustainability planner (Mikkelson, 2004, personal interview) points out that the shift away from purely

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environmental considerations makes it easier for the organizing committee to meet its goals, since achieving more stringent environmental goals is difficult:

With sustainability, most people think environmental, but what actually is often put forward, is rationalization for economic sustainability—how is it justifiable, how is it affordable, and how can it be carried on in the future? And for the social, let's make sure there's a good mix, and a diversity, and it provides opportunity. And those things from a policy perspective are generally pretty easy for a city to do. Not super easy, but easier [than environment goals], to do. And so environment still, even though it's the thing that most people think of when they think of sustainability, it's probably the thing that's the hardest place to do well. Because it's expensive and it takes up land, and it takes up space, and it's additional requirements that people aren't used to.

The sustainability paradigm, then, is gaining prominence as social sustainability gains

more importance and as a purely environmental perspective loses favour among

planners.

5.4.6 Sustainability as a City Branding Technique

Positive values and "cultural and emotional attachment" create powerful images

that make the Olympic event "a valuable commodity and ... a packaged, sellable product"

(MacCallum & Spencer, 2004, 5). This translates into the need for host cities to create a

positive image that can be marketed worldwide (Anderson, 2004, personal interview;

Meggs, 2004, personal interview; Price, 2004, personal interview; Shoesmith, 2004,

personal interview). As a member of the former Mayor's Office (Meggs, 2004, personal

interview) states:

The IOC wants [the Games] to be a positive experience because their brand is a multi-billion dollar enterprise. [...] They want people to feel good about it after the fact, and they want to see positive values expressed through the development of the Games.

Vancouver's sustainability theme can thus be interpreted as an image created to sell the Olympics to the world (Inwoods, 2004, personal interview; Meggs, 2004,

personal interview; Mikkelson, 2004, personal interview). Because you are trying to showcase yourself to a wider audience, "you then want to look your very best, and these values become both more important in the business community and elsewhere" (Meggs, 2004, personal interview). The sustainability values that are created for the Olympics are thus transferred to other sectors of society, including government and business. Vancouver's sustainability theme can also be seen as a place-based marketing niche in today's globalized world. This theme is an interpretation of the broad environmental planning mandate of the IOC in the new global reality, yet it also offers a competitive image-building and marketing advantage for the City of Vancouver to make its image identifiable as a distinguished and sustainable world class city (Baker, 2002).

5.5 Summary

This chapter explored the discourse of sustainability used by the City of Vancouver, key leaders in Vancouver, and the VBC and VANOC, and found that most frequently, sustainability in Vancouver is considered to have three spheres: economic, environmental and social. It then examined Vancouver's sustainability goals and found that Vancouver had commitments in all five areas of the 'Sustainability Matrix', and that all groups involved in the Bid (the City of Vancouver, key leaders and citizens of Vancouver, and the Vancouver 2010 Bid Committee) pledged to support the sustainability aspects of Olympics. These goals were then compared and contrasted to leaders' conceptions of sustainability to compose a picture of the shift towards sustainability from environmentalism. This resulted in identifying six key reasons for a shift towards a sustainability focused theme: the global recognition of the sustainability challenge, the Olympic Movement's demand for sustainability, increasing government and community incorporation of sustainability, expectations from locals to include sustainability, a shifting planning paradigm away from environmentalism towards

sustainability, and finally, sustainability as a city branding technique. While these areas of discussion tell us the categories that are being addressed and why the shift towards sustainability is happening, this discussion does not answer the question of what the shift actually entails. This shift is one of governance, and the next chapter will examine this shift by considering the interface between sustainability and governance.

CHAPTER 6 THE SHIFT: GOVERNANCE

6.1 Introduction

In Chapter 5, the role of sustainability in the Vancouver 2010 Olympics was explored by examining VBC and VANOC's sustainability goals and by exploring the reasons for the shift towards a sustainability-oriented planning theme. The new shift entails the incorporation of GG goals early in the planning process. By engaging a myriad of interests in both the Bid and Development phases, the VBC and VANOC hope to approach Olympic planning holistically in order to positively influence both local and global communities. This chapter will examine what that shift entails and will explore why GG is so important in achieving sustainability. It will then offer a new model of sustainability for mega-event planning that focuses on sustainability, and will conclude with an application of this model to a scenario offered by the 2010 Games.

6.2 The Shift

In the past, the discourse surrounding environmental ethics has been important during the bid phase. However, the case studies of Olympic cities in Chapter 4 demonstrate that afterwards – during the building stages – this discourse is no longer seen as being important by the organizing committee. As we can see from Table 1, previous Games' environmental efforts mostly focused on three areas: outreach and education, technology and production, and land use and waste management. In particular, categories that were highlighted by host cities were environmental awareness programs, alternative material use, alternative transportation, GHG mitigation, recycling, and composting. In contrast, the Bid Book's promises and VANOC's projected plans in Tables 3 and 4 highlight all five areas of the matrix. Thus, it can be surmised that according to these matrices, the major difference between environmentally focused planning and sustainability-oriented planning is the commitment to the remaining two categories: a) engagement and partnerships, and b) urban policy and planning. Furthermore, interviews with Vancouver leaders confirm that GG is important in achieving sustainability (Boyle, 2004, personal interview; Carter, 2004, personal interview; Meggs, 2004, personal interview; Mixx, 2004, personal interview).

This is not surprising, given the Bid Book's commitment to moving Olympic planning from environmental planning towards planning that also considers GG and social sustainability. In VBC's publication, *Accelerating the Journey to a Sustainable Future*, the VBC writes:

During the past decade, Games organizers have advanced understanding and practice in hosting environmentally responsible or "green" Games. Different host cities have placed priorities on minimizing waste, conserving water, ensuring efficient use of energy, developing facilities with environmental sensitivity and maximizing use of public transit...As we move into the 21st Century, hosting a "green" Games is not enough. We also need to embrace the social and economic components of sustainability (Vancouver 2010 Bid Corporation, 2003, 2).

The Bid Book elaborates on the need for PP and inclusivity (both elements of GG) as important aspects of VANOC's plans to achieve sustainability. Although some Games, such as Sydney, did offer limited opportunities for citizens to participate in planning, Vancouver is diverging from previous, environmentally-focused Games, and is reframing and repackaging how economic, social and environmental sustainability are addressed.

Organizers have consciously fostered an image of a socially responsible Games by considering non-traditional, politically charged areas of mega-event planning such as public consultation, and by using phrases and terms such as "balanced decision making, long-term planning, inclusiveness, equity and healthier communities" (Vancouver 2010 Bid Corporation, 2003a, 'Introduction'). While this is certainly a change in official rhetoric, many of the programs that fall into VANOC's social sustainability rubric seem to be strikingly similar to previous Olympic programs. For example, VANOC highlights citizen engagement as a key component in its social sustainability strategy. However, Lillehammer, Nagano, Sydney, and Salt Lake City have all included some type of citizen engagement in their planning. Nevertheless, as a member of the former Vancouver Mayoral office (Meggs, 2004, personal interview) points out, the difference is not in the promotion of the idea, but the way the strategy is given:

They'd (the VBC) also talked about an affirmative action program for the aboriginal people, youth, and women...getting people plugged in, a lot of local hiring and procurement ...[and] ethical purchasing. None of these issues are brand new to the Olympics, but it's probably the most intensively possible opportunity...What Vancouver will hopefully bring to the table is an emphasis on social sustainability in addition to environmental sustainability.

The key difference, then, is the strategy offered to engage citizens, and the level of public involvement in all aspects of planning, as well as a comprehensive plan to involve marginalized sectors of the community. As the Vice President, Bid Development and Operations (Wright, 2004, personal interview) points out, "I think where we're trying to break new ground is to pay attention to the social side of it [sustainability]." Thus, whilst Sydney provided a venue for citizen's concerns once the development plans were underway, the VBC proposed a means for citizen engagement from the outset of developing the Bid, and a guarantee that VANOC would also consider inclusivity and PP. By having public involvement earlier in the Olympic planning process, citizens are able to have a greater impact on the outcome of Olympic developments and on the decisions that are important to them. If an Olympic organizing committee decides to consult with citizens when the sustainability agenda is much larger than the budget, then

citizens can help make decisions about the necessary tradeoffs. Thus, they can participate in "what they care about, the standards that they would like to adopt, and the provision of a sustainable future that matters to them...as opposed to some policymaker's dream of sustainability" (VanWynsberghe, 2004, personal interview). This participation needs to be connected with an efficient model of governance that considers how best to incorporate this participation into an effective strategy.

Already, Vancouver has been successful at bringing citizens into the planning process from an early stage through the Mayor's forums and the referendum (Inwoods, 2004, personal interview; Meggs, 2004, personal interview; Shoesmith, 2004, personal interview; Wright, 2004, personal interview). As the Vice President, Bid Development and Operations (Wright, 2004, personal interview) points out:

We've [VANOC] gone a whole step further [than Sydney] in trying to have targeted programs developed in conjunction with them [the indigenous population] that will yield longer-term benefits... The social side of it [Olympic planning] is pretty unique in these events. I don't think it's ever really been focused on, not to the extent it's been focused on here.

VANOC intends to continue its commitment to PP and inclusivity though citizen education about environmental impact assessments and open houses, legacy and affirmative action programs, and a commitment to the Vancouver Agreement (Wright, 2004, personal interview). The Vice President, Bid Development and Operations (Wright, 2004, personal interview) states:

What we're [VANOC] really trying to do is fit in and see where we can bring our sponsors, our own activities to complement that, so we do some public participation around it, but for the most part, we try and leverage the public participation that the Vancouver Agreement is doing in that area... Again, to really not re-invent the wheel, but to leverage off the work they've [the City of Vancouver] been doing, to work off the goals they've set for themselves.

Although it is important to use existing resources in any plan, it is debateable whether depending on these resources will achieve the level of social sustainability that VANOC hopes to present in 2010. Relying on the maintenance of current conditions does not promote sustainability; rather sustainability is an ongoing process that requires constant engagement and re-evaluation. GG, therefore, must be used to achieve sustainability through its focus on areas such as democratic decision-making, local regulatory measures, legal and social rules, transparency, accountability, multi-stakeholder cooperation and responsive leadership (Boyle, 2004, personal interview; Burrows, 2004, personal interview; Litke, 2004, personal interview). GG cannot be seen as a panacea for all the problems faced by mega-event planners, however, since even GG policies can result in poor decisions and outcomes, and the process itself can be flawed because of meeting locations, unequal resources and imbalanced power dynamics (Burrows, 2004, personal interview; Carter, 2004, personal interview; Litke, 2004, personal interview).

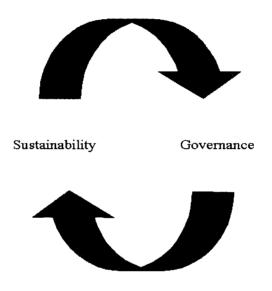
6.3 The Role of Good Governance

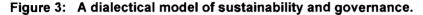
GG uses regulatory and participatory mechanisms to integrate the government and the community into a decision-making body that can address multiple social and environmental problems. By fostering community relationships, leaders can balance and address citizen needs and help citizens improve their quality of life through making decisions that positively impact communities (UN-Habitat, 2003; UN Economic and Social Commission for Asia and the Pacific, n.d.). Consulting and including the greater public in decision-making can help alleviate some unforeseen problems by understanding how people will react to decisions before they are made. Involving the community allows citizens to feel like they have control over policies and plans, which not only leads to better participation in the policies that are created, but also helps diminish feelings of citizen alienation that often results from technocratic government structures.

Encouraging GG also has the potential to increase the imagination factor in planning and policy making. Along with time and money, imagination is usually the biggest barrier to achieving sustainability. For example, sustainability in policy-making and planning is usually approached as a step-by-step process that replicates the status quo. However, this cannot lead to the type of change that sustainability demands. Instead, sustainability must be re-conceptualised to be more cutting-edge, and therefore more successful, by including an element of imagination and creativity to existing structures. To achieve this, sustainability leaders must break out of the old ways of thinking and instead move towards creating something new (Hawken, 1999; McDonough & Braungart, 2003). For planners and policy-makers, this more imaginative conception must entail involving the public in creating more imaginative solutions and previously unconsidered alternatives to the planning and policy-making process. Including the public in the process through PP and GG mechanisms allow more ideas and conceptions of sustainability to be considered and addressed.

GG can thus strengthen the case that leaders make, giving decisions a broader based commitment than might otherwise have been achieved. Leaders must balance "representation and participation, power and accountability, effectiveness with equity and current decisions with future needs" (Artibise & Hill, 1993, 6). Thus, addressing these concerns involves tradeoffs and willingness to make difficult decisions. Sustainability can only happen with dedication, accountability, coordination, negotiation and compromise from leaders and the community, which cycles back and ultimately results in stronger sustainability initiatives (Evans, et al., 2004; Graham, 1997; Hemmati, 2002). At the same time, sustainability ensures that the process of GG considers the needs of

all stakeholders by shifting the focus of local participation "from dominance by narrow special interests toward a more holistic and inclusive view" (Berke, 2002, 34). Thus, the interaction between GG and sustainability is dialectical (see Figure 4: A dialectical model of sustainability and governance).

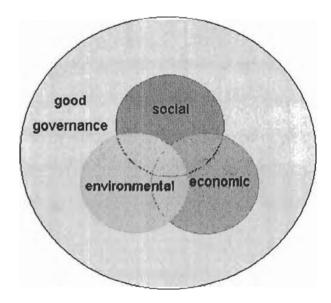




In this cyclical model, the transition to sustainability hinges on GG as a principal goal for sustainability, and through GG, the ever-changing reality of sustainability is adjusted so that sustainability goals are more likely to be achieved. Therefore, it is obvious from this model that sustainability-oriented planning needs to consider more than just environmental, economic and social realms. There needs to be a strong focus on GG as a mechanism that is incorporated and considered in each of the three realms separately and also in the overall conception of a plan in order to achieve a more robust and plausible version of sustainability (see Figure 5: Good governance as an encompassing concept to the three legs of sustainability). While GG will not solve many of the issues facing society today, it can help bring people together to focus on them,

and already, other sustainability researchers are starting to consider the importance of GG in achieving sustainability. Some researchers (e.g. Dorcey, 2002) have even called governance the "seat" of the sustainability "stool" because of the prominence of GG in achieving sustainability goals (Dorcey, 2004; Dorcey & McDaniels , 2001), but this imagery is still quite unusual and has yet to catch on as a fundamental concept.

Figure 4: Good governance as an encompassing concept to the three legs of sustainability.



If this new model of sustainability is applicable, then any discussion of sustainability must consider local governance and the local political climate. In 1915, Patrick Geddes (1949, 99) wrote that involving the public in town planning could cause unnecessary complications:

Yet at this stage the practical man [sic] may, and actually does, say: 'All very well, in theory, no doubt: but when we have as yet scarcely the means to establish the needed technical side, that of town planning, why

increase our difficulties by dragging in civics as well? Why not leave it for the present? It will no doubt come in time.

His response was that without the social and political capacity to deal with questions of purpose, values and ideals, scientific and technological solutions would be useless. Therefore, GG must be used as a process to achieve sustainability, and sustainability must inform the practices of GG in order for both to achieve their desired outcome.

6.4 Applying the Governance Model to Vancouver

The model in Figure 5 shows how sustainability could be most effectively used in Olympic planning generally. So far, Vancouver has put in place the necessary measures to achieve this form of sustainability by promising citizen involvement in the planning phase. However, VANOC's promise lacks detail, and there is little precedence from previous Olympics that promises made during the Bid Phase will be carried through, especially if the opportunity costs of these promises are too high. While Vancouver does have a guarantees file signed by federal, provincial and local governments to ensure that sustainability objectives will be met through public engagement, there is, for example, no specific statement describing how much citizen involvement there should be during the planning process. Moreover, the recent election of the NPA party to Vancouver's city government, combined with the tight timelines that must be met in order to host the Olympics, indicates that the 2010 Games will probably not have a strong commitment to delivering GG during the process of building the Games. However, this is not set in stone, and if VANOC uses its leadership to create a visionary policy to address GG in innovative ways by including both citizens and local business in its decisions, then VANOC will start the dialectical cycle of sustainability and governance in the 2010 Games' process. The expected results from this process would

include stronger urban sustainability policy, wider public acceptance of Olympic expenditures and better decision-making based on inclusiveness, diversity and equity.

To demonstrate the usefulness of the governance model of sustainability to the Vancouver Olympics, the Southeast False Creek (SEFC) planning process will be considered as a planning example. The SEFC example will be broken into three scenarios: what the plan would like if it was a) traditionally planned under the rational comprehensive planning model, b) contemporarily planned under a new urbanism model, and c) planned according to my sustainability/governance model. Since the planners for SEFC have been successful at incorporating various aspects of GG in the initial planning stages, real examples of GG will be cited in the third SEFC scenario.

In the late eighties, the City of Vancouver made a decision to release city-owned industrial land in the SEFC area to create a mixed-use neighbourhood which would give priority to housing near downtown jobs (Bayne, 2005; City of Vancouver, 2005f; City of Vancouver Planning Department, 1999). Following the release of the *Clouds of Change* Report in 1990, plans for using SEFC as a model for sustainable development first transpired, and SEFC plans focused on planning SEFC as a neighbourhood in which people could live, work, play and learn (City of Vancouver, 2002, 'Policy Report: Urban Structure/Environment/Social Development'). Since then, SEFC has become Vancouver's "poster child" for sustainability, and 2005 plans commit the SEFC plans to achieving financial, economic, environmental and social sustainability (Bayne, 2005). Elements of the SEFC vision include green building design, a mixture of social and market housing, economic opportunities for local businesses, and soil remediation and a stabilized foreshore. All development in SEFC must adhere to the SEFC Sustainability Principles which include implementation of sustainability, stewardship of ecosystem health, economic viability and vitality, priorities for social and environmental performance

targets, cultural vitality, liveability, housing diversity and equity, education, participation, accountability, adaptability, integration, spirit of the place and complete community (City of Vancouver, 2005d; City of Vancouver Planning Department, 1999).

The original objective of SEFC was to build a sustainable community that was replicable by the private sector as a market-ready strategy, and in 1999, Vancouver City Council approved the Policy Statement for SEFC (Bayne, 2005). However, when Vancouver won the rights to host the 2010 Games, SEFC was identified as an ideal site for the 2010 Games' Athletes' Village, and consequently, money from federal and provincial sources was dedicated to the project. Subsequently, the City of Vancouver decided in 2004 to adopt amendments to the Policy Statement that allowed the City to reinvest profits from the project into sustainability infrastructure (Smith & Hiebert, 2004). Thus, the SEFC project was to be treated as an incubator for sustainability, rather than a project that created profit outcomes that could be easily replicable by the private sector. Accordingly, the SEFC project turned into a showcase of state-of-the-art sustainability development with the caveat that the SEFC development project should not use city resources to the point that it could "jeopardize achievement of the priorities for the rest of the City" (Bayne, 2005). This state-of-the-art development included a commitment to the LEED (Leadership in Energy and Environmental Design) building standards, a geothermal energy system, on-site storm water management, natural corridors, habitat planning, organic recycling, urban agriculture, energy and water efficient fixtures, paths for pedestrians and cyclists, heritage building protection, childcare centres, local selfreliance, parks initiatives, and a mixture of social, family and market housing (City of Vancouver, 2005d; Mikkelson, 2004, personal interview). Most recently, however, the

change in city council led by Mayor Sam Sullivan means that there will be changes to the SEFC plans including a reduction in social housing (Cooper, 2006)³⁰

6.4.1 Scenario 1: SEFC Traditionally Planned under the Rational Comprehensive Planning Model

The rational comprehensive model first became popular in the mid-1950s under Edward Banfield as a way of embracing rationalism "in the form of general systems theory and the scientific method" (Berke, 2002, 23). Under this model, planners guide state interventions in the market, and decisions are made in a linear and clear manner. Goals are defined, and set objectives allow a logical progression of choices to be made. Planners are thus expected to use quantitative methods to make decisions such as highly technical studies, and more qualitative differences, such as race, class and gender, are overlooked. Furthermore, planners are seen as experts who can make rational decisions without political influence, but this also means that decisions are made without a realistic long-term vision.

Under this model, planners for SEFC would plan a neighbourhood through a regimented planning process that involved clear decisions. Even though the public would be consulted formally because of public hearing and consultation legislation in Canada, as experts, planners would be ultimately responsible for the outcome of SEFC. Little consultation with neighbouring communities and future residents would result in the

³⁰ These changes are not that surprising given that Councillor Sullivan opposed many of the SEFC initiatives. For example, in the Vancouver city council minutes of December 14, 2004 (City of Vancouver, 2004d, 'Regular Council Minutes of December 14, 2004'), at the time Councillor Sullivan (now Mayor Sullivan), opposed the following:

A. THAT Council refer the proposed South East [sic] False Creek Official Development Plan (ODP) to public hearing; and

FURTHER THAT the Director of Legal Services be instructed to prepare the necessary ODP By-Law for public hearing along with any ancillary by-laws the Director of Legal Services considers necessary;

B. THAT Council acknowledge the contributions of the Southeast False Creek Stewardship Group in the preparation of the Official Development Plan (ODP) and that staff report back on the continued participation of community advisory groups through the sub-area rezonings and development of the new community.

design of a neighbourhood that may not be appropriate for Vancouver's needs, and the focus of planners would likely be on bringing the city the highest financial return on its investment. Further, the lack of genuine consultation with citizens and stakeholders would result in a fast design and development process. Buildings and infrastructure would adhere to legislated building codes, but planners would ignore any non-legislated environmental innovations or social policies since these would be unlikely to offer any immediate financial return. For example, planners would probably design high-income apartment buildings built for one or two person occupancy, due to the success of this design in other parts of Vancouver's downtown such as Coal Harbour. Consequently, there would be no direct concern for building a socially mixed community, and the SEFC development would focus more on form, beauty and financial return, than on function and green goals.

6.4.2 Scenario 2: SEFC Contemporarily Planned under a New Urbanism Model

In comparison to the rational comprehensive model, the new urbanism model is a model that uses a more integrated vision of what a community should look like. The new urbanism model is based on Ebenezer Howard's vision of a garden city that included "self-contained, self-sufficient communities surrounded by greenbelts" (Berke, 2002, 25). New urbanism focuses on combating low-density sprawl by designing and developing denser developments that incorporate a mix of uses and income levels at a human, pedestrian-friendly scale (Berke, 2002). Development is created that encourages community interaction through design features such as front porches and short setbacks from the street rather than garages and long driveways (Berke, 2002), and key strategies under new urbanism include "regional character and identity, integrated open space and resource protection, equity in affordable housing and job opportunities, land

use and transportation connections, regional tax sharing, and economic development" (Berke, 2002, 26). However, like the rational comprehensive model, the new urbanism model only requires a level of citizen participation mandated by legislation, and new urbanism has also been critiqued for failing to fully address ecological and equity issues.

Nevertheless, under the new urbanism model, SEFC planning would begin to adopt sustainability initiatives such as liveable buildings, park space, public transit, energy efficiency, local production and proximity between living and working. However, the lack of comprehensive citizen involvement would mean that the plans for SEFC would be limited to the scope of knowledge of green amenities and social infrastructure that the planners possessed, and there would still be an emphasis on the planner as an expert. While environmental and social infrastructure would be a priority, the design, need and use of the infrastructure would not be considered fully. For example, planners may create a road infrastructure that calms traffic through tools such as multiple cul-desacs, but that fails to consider the needs of the overall community to be integrated into the existing infrastructure grid. Plans would thus focus narrowly on the principle of the liveable built environment, but they would lack a holistic and inclusive view that embraces a civic vision for the common good.

6.4.3 Scenario 3: SEFC Planned according to the Sustainability/ Governance Model

The sustainability/governance model combines both the sustainability gains sought under the new urbanism model to create a green, profitable and equitable community, and the gains achieved through incorporating GG mechanisms throughout the process such as proactive citizen involvement and inclusive policies. Through the proposed sustainability/governance model, regulatory and participatory mechanisms would integrate the government and the community into a decision-making body that would be responsible for the planning of SEFC as a sustainable community. This model thus harnesses the power and creativity of all stakeholders in the community to create a liveable urban space in which all stakeholders feel they have ownership and in which the spheres of social, economic and environmental sustainability have all been addressed.

Because there has been a decline in public trust of technocratic, expert-driven planning, the sustainability/governance model is especially important for the long-term legitimacy of a project such as SEFC (Berke, 2002; Hester, 1996). The proposed sustainability/governance model seeks input from all stakeholders to design the best possible community that includes a wide social and business mix, as well as attention to environmental factors. For example, shortly after city council approved the SEFC planning program in 1997, meetings were held with "adjacent communities, business owners and groups actively interested in the redevelopment of this site" (City of Vancouver Planning Department, 1999, 6) to advise city planners on the plans for SEFC. Out of these meetings, an advisory group was formed to represent these varied interests, including the Heritage Commission, Urban Design Panel, Disabled and Seniors Committee, Vancouver City Planning Commission, the Bicycle Advisory Committee, public information meetings and the SEFC Stewardship Group (Smith & Hiebert, 2004). This last group is a watchdog group which works closely with city planners and consultants on drafting documents such as the SEFC Policy Statement (City of Vancouver Planning Department, 1999). To ensure that all interests were being represented, there was a formal public review of the policy statement in 1998 that included open houses, public workshops, and meetings with adjacent landowners, surrounding communities, interest groups, senior governments and academics (City of Vancouver Planning Department, 1999). The SEFC Stewardship Group continues to act as a watchdog group for the SEFC planning development process to ensure that the

plans are inclusive of all who live, work and play in SEFC and to ensure the on-going monitoring and performance evaluation of SEFC (Smith & Petri, 2005).

GG does not only include PP in the planning process, but also strong and equitable leadership. Local leaders and politicians need possess the leadership skills to make difficult decisions that ensure all points of view are considered, including those that are traditionally marginalized, and to ensure that all spheres of sustainability are equally considered. Thus, through the advice offered by partners, such as the SEFC Stewardship Group and city consultants, leaders can make decisions that balance the needs of the city with the desires of local citizens. Through this balance, social, economic and environmental sustainability objectives can also be balanced and prioritised in a manner that resonates with the desires of all stakeholders.

By including the community in negotiating the decision-making process, the process is more transparent, and there is greater support from the community, who in turn demonstrate a larger buy-in into the sustainability initiatives in SEFC. The plans for SEFC need to continue to incorporate stakeholders in the planning process, even as the project moves from development to habitation phase, especially since the success of sustainability initiatives in SEFC will be dependent on the habits and choices of residents, business owners, employees and visitors (Smith & Petri, 2005).

6.5 Summary

This chapter determined that the biggest change in the shift towards sustainability is social sustainability, and in part, engagement and partnerships, and urban policy and planning. Vancouver has already created a strategy to include citizens in the bidding phase, but its inclusion of citizens in decision-making during the building phase is more tenuous since VANOC hopes to use existing mechanisms (for example, development

application meetings) rather than continuing to incorporate citizens in the decisionmaking process. The chapter then explored the role of governance in sustainability and suggested that governance has a dialectical relationship with sustainability. Thus, any discussion of sustainability must also include attention to local governance structures. Finally, this model was used to assess various planning scenarios for SEFC. The next chapter reviews the results of this research, and offers concluding remarks.

CHAPTER 7 CONCLUSION

7.1 Introduction

Chapter 6 considered the importance of governance in achieving sustainabilityoriented planning, and suggested that successful sustainability and governance processes operate in a dialectical relationship. This final chapter reviews the methods and main arguments of this project and sums up its key findings. It also highlights the aspects of this research that contribute to sustainability-oriented planning and considers future research questions.

7.2 Review of the Research

In 1994, after the success of the Lillehammer Environmental Winter Games, the Centennial Olympic Congress created a Sport and Environment Commission to recommend and coordinate measures for environmental protection and sustainable development. Since then, Olympic planning processes have taken particular tacks, with varying success, to improving the environmental outcomes of Olympic events, at the same time that sustainability has gained corporate support. However, because of sustainability's vague definition and far-reaching goals, there are no exact parameters within which cities must prove their devotion to sustainability when bidding for the Olympics. The outcome has been a myriad of Olympic environmental planning processes that lack an identifiable, sustainable approach towards planning. This is problematic since global expectations have shifted; rather than merely demanding a reduction in negative environmental externalities and maximization of positive environmental externalities, people are anticipating a more sustainable environmental planning process that incorporates economic and social considerations.

In bidding for the 2010 'Sustainability Olympics', the VBC seems to have recognised this need by ensuring that the promises that were included in the Bid Book and Olympic guarantee file go beyond the traditional acceptance of environmental measures to include public participation and inclusivity. By couching the 2010 Games in terms of sustainability, the VBC made a bold move away from environmental planning towards sustainability-oriented planning in the Olympics. This research investigated this shift by answering the question "what are the different areas of focus that facilitate sustainability-oriented planning rather than environmental planning in a mega-event like the Olympics?"

My hypothesis, based on sustainability literature, was that a sustainable Olympic planning process would have to satisfy five dimensions – engagement and partnerships, promotion and education, technology and production, land use and waste management, and urban policy and planning, rather than just technical environmental categories. To test this hypothesis, three phases of research were conducted. In the first phase of research, a 'Sustainability Matrix' was created in order to measure sustainability across time and space. This matrix was created through a coding process to determine common sustainability themes in policy and academic sustainability literature. The result was a comprehensive set of categories that addresses both technical and social aspects of sustainability, in five general categories. The second phase used a retrospective comparative case study approach to examine sustainability lessons learned from previous Olympic Games. In this phase, the 'Sustainability Matrix' was used to compare and analyse documents and literature surrounding Olympic Games held between 1994 and 2004. The result was Table 1, which compares various social and environmental

endeavours across host cities. Finally, the third phase used a single, in-depth case study to explore the 2010 Vancouver Olympic planning process and its sustainability promises. This was the most ambitious stage, relying on documents, surveys, and interviews to create a picture of sustainability-oriented planning in Vancouver. In this phase, documents were once again analysed according to the 'Sustainability Matrix'. Additionally, a secondary analysis of surveys and interviews done at Mayor's forums during the Bid process in 2003, and at the THINK 2010 forum in March 2004, was conducted, as well as a coded analysis of the interviews carried out with key opinion leaders in Vancouver. This resulted in the creation of Tables 3 and 4, which show the sustainability goals in Vancouver. From this, a model of sustainability-oriented planning was created that considers governance to be an important, encompassing concept.

7.3 Summary of Results

The Olympics are an itinerant event that moves from city to city and that brings with it standards of planning and implementation on which host cities have little, if any, influence. However, this research demonstrates that host cities have considerable leeway within the interpretation and process of carrying out the mandates and standards of the IOC. Thus, many previous host cities have focused on fostering specific environmental projects in addressing the environment pillar in their Olympic planning.

In contrast, Vancouver has chosen to address the environment pillar by taking a wider view of the environment, and by embracing sustainability as a holistic approach to planning. Under the sustainability rubric, VANOC intends to address social, environmental and economic issues. This has occurred for six main reasons. First, the global state of environmental and social affairs demands that governments, corporations, and organizations assume responsibility for their actions as natural resources are dwindling while consumer demand is increasing. Second, the Olympic

movement in general, and the IOC in particular, has a high profile status internationally as the protector of an unrivalled, multimillion dollar mega-event. As a large, global organization which captures the imagination of the world, the IOC feels responsible for promoting sustainability, and already, the IOC has created an Olympic Agenda 21, which lays the foundation for host cities to strive for sustainability. Third, communities and local governments in the GVRD are depending on sustainability as a means to attract financial capital for sustainability-oriented products, and as a concept that can be incorporated into policies to improve the livelihoods of citizens. Forth, local communities expect sustainability because of the progressive green culture of Vancouver and because of the dialogue around the environment and social issues in the aftermath of Expo '86. Fifth, there has been a paradigm shift away from environmentalism as something that isolates nature, towards a larger conception of the natural, social and economic environment. Paradoxically, by focusing on a larger conception of sustainability, the focus on the environment diminishes. Finally, sustainability is a branding technique that the city of Vancouver is using to prove its place as a world-class city in an increasingly globalized world.

The shift itself entails recognizing the importance of GG, and in particular, PP and inclusivity, in the planning process. PP includes everything from public forums to decision-making, and inclusivity includes policies aimed at equity and at engaging more marginalized populations in the planning process and in programs. The combination of PP, inclusivity and other GG mechanisms as tools in sustainability-oriented planning allows leaders to more thoroughly engage in, address, and balance the needs of citizens, resulting in stronger sustainability initiatives. At the same time, sustainability is important for GG because it ensures that stakeholders who are interested in all three

spheres of sustainability are represented. There is thus a dialectical relationship between sustainability and governance.

Using this dialectical hypothesis as a base, a case-based model of the difference between an environmental and sustainability-oriented planning process was produced. The research concluded that achieving sustainability-oriented planning would entail a wider conception of sustainability that considers governance as an overarching concept intrinsic to the success of sustainability. Through governance measures such as PP, inclusivity, accountability, transparency and strong leadership, urban mega-event planning processes can consider an extremely diverse set of needs, including those of international and local communities.

Sustainability is an important theoretical pursuit for Vancouver's long-term planning vision and for the image of the IOC. However, sustainability is more challenging as a practical pursuit since it requires tradeoffs to be made politically, economically, socially and environmentally. Social and economic aspirations for sustainability are newer to mega-event planning, so there are easier gains to be made by the organizing committee. The next targets for environmental sustainability are more difficult to achieve, however, so there may be less dedication to environmental aspirations. For example, political and economic pursuits may take precedence over environmental and social goals; public apathy and blurred goals may make large achievements moot; and the unsustainable aspects of the Olympics may overshadow the positive impacts. Ultimately, time, money and imagination will be the biggest limits to a sustainabilityoriented process.

Although it will be difficult for VANOC to achieve its sustainability goals without a stronger commitment to sustainability, the impact of including the public in the Olympic planning process should not be underestimated. By setting an example of using social

sustainability, and in particular, PP, in mega-event planning, Vancouver is raising the bar for Olympic planning expectations, and is ensuring that future host cities will at least recognize that governance is useful in devising sustainability-oriented infrastructure. Therefore, even though our ideas about sustainability are time-dependent and must constantly be adjusted, governance issues should be at the core of a mega-event planning process that aims to be sustainable. Hosting the Olympics signals to the world that Vancouver is crossing the threshold into becoming a city of global significance, and consequently, if Vancouver embraces the role of governance in sustainability, then the strength of Olympic planning will provide the motivating force to increase the sustainability-oriented planning successes. Further, including the public in the governance structure will increase the imagination of what the Olympics can achieve in urban sustainability planning by involving many people with many different interests and ideas in the process. Through sharing vastly different opinions and ideas, new conceptions of what the Olympics can offer will be developed.

7.4 Contributions to Research Area

The Vancouver experience shows that PP, inclusivity and a strong leadership are necessary components in sustainability. If Vancouver hosts a 'Sustainability Olympics' that genuinely takes governance into account, Vancouver can set a policy-oriented definition of urban sustainable development which could impact planning worldwide for the next 20 years, much as the WCED did for the term 'sustainable development' in 1987. Furthermore, through the engagement of key opinion leaders and citizens, VANOC's commitment to sustainability will stimulate the development of a prominent discourse of sustainability-oriented planning in Vancouver. Ideally, Vancouver's incorporation of the concept of sustainability into planning will also serve to change the way Olympic events unfold in other localities. Already, Vancouver's commitment to

sustainability will impact the Olympic imaging process, and force other cities to consider what should be addressed under the environment pillar. This will up the ante about what a host city should deliver to the community.

Recognizing the importance of governance to sustainability also has important practical policy implications: if the governance model is accepted, then sustainability policies will require a commitment from the government to include the public in any decisions that are made. This offers a new lens with which to view sustainability planning both in Vancouver and in urban policy and planning more generally. Sustainability-oriented planning cannot focus solely on implementing solutions to social, economic and environmental problems associated with development; rather, sustainability-oriented planning must carefully consider the tradeoffs associated with sustainability through decision-making that considers the values and interests of all stakeholders.

Finally, this research has theoretical implications, since there is a dearth of literature on governance and sustainability within the Olympic planning process. Accordingly, this research seeks to address this gap in Olympic planning literature by presenting the need to incorporate governance mechanisms in the Olympic planning process. By emphasizing the vague and overt differences between environmentalism and sustainability, this research creates a clearer policy-oriented definition of urban sustainable development in which governance is an important aspect.

7.5 Recommendations for New Research

This research intends to be incorporated into a larger project that will ensure that the Olympics lead to a healthy, sustainable city. Hopefully, this larger project will contribute to the agenda-setting and organizing of a comprehensive sustainabilityoriented Winter Games, in which Olympic leaders are held accountable for sustainabilityoriented decision-making. Thus, additional research needs to be done surrounding the 2010 Games including assessing Vancouver's sustainability goals, creating sustainability indicators for the 2010 Games and assessing the performance of governance mechanisms in the 2010 Games. Research also needs to be done surrounding sustainability and mega-events more generally, including applying the 'Sustainability Matrix' to future host cities and assessing the results, and measuring future cities' commitment to sustainability. Finally, there is still more theoretical research that needs to be done on creating an effective model of governance and sustainability, and on defining sustainability, especially as it applies to urban policy and planning.

7.6 Summary

In 1994, Lillehammer shifted Olympic planning from producing world class infrastructure towards considering environmentally-friendly infrastructure. Vancouver's focus on sustainability has once again put Olympic planning on the brink of a major paradigm shift towards more environmentally and socially inclusive planning. This new conception of planning relies on PP and inclusivity to help decision-makers prioritise sustainability goals. Governance is thus an overarching concept in sustainability, which exists in a dialectical relationship: GG relies on sustainability to ensure that all interests are represented in the planning process, and sustainability relies on governance to ensure that effective goals and tradeoffs are being made. Governance will thus be perhaps the most important goal for VANOC in achieving the 'Sustainability Olympics', and for cities seeking to implement urban sustainability policies.

APPENDIX A: OLYMPIC ENVIRONMENTAL MILESTONES

The following table lists some of the prominent milestones in the promotion of the environment by the IOC and the Olympic Movement.

Olympic Environmental milestones			
1992	IOC/Olympic Movement sign the Earth Pledge at the 1992 Olympic games		
1993	Sydney selected to host 2000 Olympics under with a commitment to follow a set of strict environmental guidelines		
1994	Lillehammer hosts the first "Green Games", which has a strong emphasis on environmental management and education		
	Environment is adopted as the third dimension of Olympism [along with sport and culture]		
	UNEP/IOC sign agreement on Sport and the Environment		
1995	2002 Bid cities are the first cities to be officially evaluated on their		
	environmental plans as part of the bidding process		
	UNEP/IOC host the First World Conference on Sport and the		
	Environment		
1996	Creation of Sport and Environment Commission		
	Olympic Charter modified to refer to environment		
1997	UNEP/IOC host the Second World Conference on Sport and the		
	Environment		
1999	Creation of Olympic Agenda 21		
2000	Sydney sets new global Olympic standard		

Olympic Environmental Milestones

Sources:

- Athens Environmental Foundation (2004). Environmental Milestones. Retrieved October 13, 2004, from www.athensenvironmental.org/environment/environmental_milestones.asp
- Baker, K. (July 12, 2004). Accelerating the Journey to a Sustainable Future: why is sustainability important in the 2010 Winter and Paralymic Games? Presentation to the Pacific NorthWest Economic Region Annual Summit in Victoria, BC. Retrieved October 22, 2005, from http://www.pnwer.org/meetings/Summer2004/Presentations/sust%20development%20-%20Baker.pdf
- UNEP (n.d.) Overview. Retrieved March 15, 2004, from www.unep.org/cpi/sport_env/Sport_challenge/overview/sportonenv.html.

APPENDIX B: REQUIREMENTS FOR CANDIDATE CITIES

According to the IOC, candidate cities must fulfil the following requirements:

- Prepare charts and explain briefly the system of natural resource and environment management put in place by the public authorities and their responsibilities towards the OCOG.

- Provide an overview, including maps and tables, if possible, of the local situation with respect to the state of the environment, protected areas, cultural monuments and potential natural risks.

- Obtain from the competent authorities an official guarantee confirming that all work needed to stage the Games will comply with local, regional and national legislation and rules as well as international agreements and protocols on town and country planning, construction and protection of the environment.

- State whether impact studies have been performed by the competent authorities for all venues and facilities.

- Provide an environmental plan of action for the Games, indicate the objectives and priorities and describe briefly the environmental management system envisaged by the OCOG.

- Indicate whether there is, within the candidature committee, an environmental protection awareness programme and state what the OCOG's plans are in this respect.

- Describe what efforts will be made to protect and improve the particular characteristics of the natural environment and cultural heritage during preparations for the Games.

- Give details of the intended plans for managing solid waste, sewage treatment and energy management, and state how you hope that this will influence the city and region in the future.

- Describe your environmental pilot projects and development plans, as well as how environmentally-friendly technology will be applied in relation to the Games.

- Mention any specific points not covered in this questionnaire that the candidature committee wishes to raise.

Source:

International Olympic Committee (n.d.) Requirements for Candidate Cities. Retrieved February 13, 2004, from www.olympic.org/uk/organisation/commissions/envrionment/games_uk.asp

APPENDIX C: SUSTAINABILITY MATRIX

Catagony	Code
Category	100
Engagement and Partnerships	100
Transparency in	101
Planning and	
Expenditure	
Leadership	102
Consultation	
Public Participation	103
Public Forums &	104
Plebiscites	
	-
Network Fundin	_
Corporate	107
<u>Cooperation</u>	<u>_</u>
Shared Monitoring	108
Costs	400 -
P3 Agreements	109
NGO coalition	<u>110</u>
Outreach and	200
Education	
Natural and Cultural	201
Areas of Focus	_
Consumer	202
education	
Organizations,	203
Education Tables. etc, at Events	
Education in	
Schools	204
Education in	205
Workplace	205
Information in	206
Athlete's Village	200
Awareness	207
Programs/ Events	201
Advertising	208
Electronic Means,	209
Websites, Chat	
Rooms	
Newsletters &	210
	·

Brochures	L
Media	211
Education for	212
Olympic Workers	
Corporate	213
Education	
-	
Technology/	300
Production	
Environmental	301
Tech., Innovation,	
<u>R&D</u>	
Adoption of New	302
Technologies	
Tendering	303
Requirements	L
Alternate Materials	304
for Buildings,	
Packaging,	
Products	
Environmentally	305
Friendly	
Transportation	1
Alt Fuels	306
Solar, Wind,	307
<u>Hydrogen Energy</u>	
Mitigation of Air	308
Pollution/Green-	
house Gas	
Emissions	
Water Supply,	309
Management, &	
Quality	
Energy	310
Management &	
_Efficiency	044
_Indoor Air Quality	311
<u> </u>	
Land Use	400
Concerns and	
Waste	
Management	!

Maintenance of	401
Greenspace/	
Natural	
Environment	-
Waste Management	402
Recycling	403
Composting	404
Building materials	405
Reusing	406
Sanitation	407
_	
Toxic Waste Mitigation	_
Pollution Mitigation	410
Monitoring, Indicator	411
Process	
Impact Assessment	412
Brownfield	413
Development	
Urban Policy and	500
Planning	
Planning Social housing	501
Planning	
Planning Social housing Economic Development	501
Planning Social housing Economic Development Agriculture/ Food	501
Planning Social housing Economic Development Agriculture/ Food Security	501 502
Planning Social housing Economic Development Agriculture/ Food Security Health	501 502 503
Planning Social housing Economic Development Agriculture/ Food Security	501 502
Planning Social housing Economic Development Agriculture/ Food Security Health	501 502 503 504 505
Planning Social housing Economic Development Agriculture/ Food Security Health Biodiversity/ Conservation Policy Retention of Unique	501 502 503
Planning Social housing Economic Development Agriculture/ Food Security Health Biodiversity/ Conservation Policy Retention of Unique City/Natural	501 502 503 504 505
Planning Social housing Economic Development Agriculture/ Food Security Health Biodiversity/ Conservation Policy Retention of Unique City/Natural Characteristics	501 502 503 504 505 506
Planning Social housing Economic Development Agriculture/ Food Security Health Biodiversity/ Conservation Policy Retention of Unique City/Natural Characteristics Sustainable	501 502 503 504 505
Planning Social housing Economic Development Agriculture/ Food Security Health Biodiversity/ Conservation Policy Retention of Unique City/Natural Characteristics Sustainable Development	501 502 503 504 505 506
Planning Social housing Economic Development Agriculture/ Food Security Health Biodiversity/ Conservation Policy Retention of Unique City/Natural Characteristics Sustainable Development Legislation	501 502 503 504 505 506 507
Planning Social housing Economic Development Agriculture/ Food Security Health Biodiversity/ Conservation Policy Retention of Unique City/Natural Characteristics Sustainable Development Legislation Socially Inclusive	501 502 503 504 505 506
Planning Social housing Economic Development Agriculture/ Food Security Health Biodiversity/ Conservation Policy Retention of Unique City/Natural Characteristics Sustainable Development Legislation	501 502 503 504 505 506 507
Planning Social housing Economic Development Agriculture/ Food Security Health Biodiversity/ Conservation Policy Retention of Unique City/Natural Characteristics Sustainable Development Legislation Socially Inclusive	501 502 503 504 505 506 507

APPENDIX D: PEOPLE CONTACTED FOR FURTHER OLYMPIC INFORMATION

Person	Organization	Position	Relevant Olympics
Administrator	City of Athens: Information	Public Information Officer	Athens
Administrator	Australia Planning Association	Information Officer	Sydney
Byron Mah	Western Economic Diversification Canada	Senior Business Officer	Vancouver
David Hocking	David Suzuki Foundation	Senior Communications Manager	Vancouver
David Low	City of Sydney	Organizing committee Member	Sydney
David White	City Government	Council Member	SLC
David Workman	SLOC	Environmental Programs Manager	SLC
Debbie Lecourt	Canadian Olympic Authority	Information Officer	Vancouver
Debra Curran	West Coast Environmental Law	Lawyer	Vancouver
Diane Conrad Gleason	SLOC	Director – Environmental Planning	SLC
Diane Gleason	Athens Environmental Organization	Administrator	SLC/Athens
Dr. Kondo	Univ. of Tsukuba	Professor	Nagano
Administrator	Green Games Watch	Information Officer	Sydney
Hanwen Liao	Sheffield University	Academic – Olympic Specialist	all
lgor Mianenko	City of Sydney	City Transport Planning	Sydney
Jane Spring	Sydney Olympic Park Authority	Freedom of Information Officer	Sydney

Person	Organization	Position	Relevant Olympics
Janice Jardine	City Council	Councillor	SLC
Janice Matsumura	SFU	Professor	Nagano
Japanese Consulate	Vancouver	Information Officer	Nagano
John Sinner	Salt Lake City Government	Councillor	SLC
Joy McPhail	BC Legislature	MLA Vancouver-Hastings	Vancouver
Julian Dierkes	UBC Centre for Japanese Research	Keidanren Chair in Japanese Research	Nagano
Kazu Matsumura	University of Tsukuba	Professor	Nagano
Larry Campbell	City of Vancouver	Mayor	Vancouver
Masae Sato	Japanese Embassy Ottawa	Information Officer	Nagano
Mayor Anderson	Salt Lake City Government	Mayor	SLC
Myles Rademan	Park City Government	Councillor	SLC
Nik Midlam	City of Sydney	Environmental Officer	Sydney
Nina Davis	AFLCIO	Information Officer	Atlanta
Peter Berg	Planet Drum	President	Nagano; SLC
Peter Harding	City of Sydney	Environmental Health Officer	Sydney
Peter Ladner	City of Vancouver	Councillor	Vancouver
Peter Nosco	UBC Centre for Japanese Research	Professor	Nagano
Stephen Owen	Minister of State for Sport and Western Economic Diversification	Member of Parliament	Vancouver
Susan Schooley	Western Diversification Canada	WD Olympic Communication Committee	Vancouver

Person	Organization	Position	Relevant Olympics
Administrator	Sydney Olympic Park Authority information	Information Officer	Sydney
Administrator	Torino Environment Department	Information Officer	Torino
Tsuyoshi Kawasaki	SFU Asia-Canada Program	Professor	Nagano
Vicki Bennett	SLOC	Senior Environmental Advisor	SLC
Wolfram Manzenreiter	University of Vienna, Department of East Asian Studies, Japanese Division	Professor	Nagano

APPENDIX E: LETTER SENT TO ORGANIZATIONS

Department of Geography Simon Fraser University 8888 University Drive Burnaby, B.C.



Dear Sir or Madam:

Simon Fraser Universitu

I am conducting a research study for my master's thesis on the change from environmentalism [which focuses only on environmental considerations] towards sustainability [which focuses on social and economic considerations in addition to environmental ones] within the Olympic environmental planning process. Even though past Olympic planning processes have failed to incorporate a comprehensive approach towards environmental planning which would drive this change, prominent Canadian leaders have committed Vancouver to hosting the "Sustainable Olympics" in 2010. Consequently, it is necessary to construct a model of what is required for an Olympic planning process in Vancouver that is sustainable, building from the lessons of past events, the promises of the Vancouver Bid Book, and the expectations of residents and opinion leaders.

In the next few weeks, I will be contacting someone in your organization to request an interview with them about the incorporation of environmentalism and sustainability into the 2010 Olympic planning process. This data is vital in building a model which will ensure that the 2010 Olympics offer a lasting legacy of sustainability- oriented planning. Under the ethics approval process at SFU, I am mandated to inform you of the possible participation of one or more of your employees in my data collection. If I do not hear back from you within two weeks, I will assume that you agree to allowing your employee[s] to participate in this study. If you wish to contact either me or my supervisor now, or at any point over the course of the research study, you may due so at the contact information given below.

Julia MacKenzie Principal Investigator M.A. Candidate, Department of Geography Simon Fraser University 8888 University Drive Burnaby, BC V5A 1S6 jdmacken@sfu.ca Tel. 604.291.4558

Dr. Meg Holden Supervisor Assistant Professor, Graduate Program in Urban Studies and Geography Simon Fraser University at Harbour Centre 515 W. Hastings St. Vancouver, BC V6B 5K3 mholden@sfu.ca Tel: 604.268.7888

APPENDIX F: INTERVIEWEES

Category	Name	Association
City Government	Geoff Meggs	Executive Assistant to the Mayor
		City of Vancouver
City Government	Dale Mikkelsen	Planner
City Government	Gordon Price	Retired city counsellor
Federal	David Anderson	MP and Former Minister of
Government		Environment
NGO/Labour	Mae Burrows	United We Can Director/ Labour
		Environmental Alliance Society
		Director
NGO	Linda Mix	Tenants Rights Action Coalition
NGO	Richard Campbell	Better Environmentally Sound
		Transportation
NGO	Steve Litke	Fraser Basin Council
NGO	Morag Carter	David Suzuki Foundation
Media	Damian Inwood	Vancouver Sun/ Province
		newspapers
Academia	Dr. Rob	UBC
	VanWynsberghe	
Academia	Michelle Boyle	UBC - SDRI
Vancouver Bid	Terry Wright	VANOC
Committee		
IOCC	Kevin Shoesmith	Impact of the Olympics on the
		Community Coalition

APPENDIX G: SAMPLE INTERVIEW QUESTIONS

- 1. How far back is the story of your involvement or interest in the 2010 Games?
- 2. What interest do you have in achieving the 'Sustainable Olympics'?
- 3. The Vancouver 2010 Olympics are calling themselves the 'Sustainable Olympics'. What do you see as the integral role for (your organization/profession) in this process?

Sustainability

- 4. Who have been the significant players in putting 'sustainable' in the catch phrase 'Sustainable Olympics'?*
- 5. Sustainability is a vague term. What categories would you use to define sustainable development/planning?
- 6. How important to the success of Vancouver/Whistler's Bid was the Bid Book's understanding of and commitment to sustainability?
- 7. What Olympic environmental sustainability goals that VANOC has set are the most significant in your opinion so far, and what goals need to be further developed? How can Vancouver actualise these goals?
- 8. Some people have critiqued the VANOC's goals as being extremely vague. Do you think this is a problem or is it more of an opportunity?
- 9. One of the frustrating aspects for a lot of people has been that some of the Bid Supporters have been corporations and companies that adhere to unsustainable practices. How do you think VANOC can pursue an image of sustainability, while at the same time, appeasing their corporate sponsors?

Public Engagement

- 10. Would you say that public engagement is necessary to achieve a sustainable Olympics?
- 11. Do you have any ideas of how VANOC could incorporate public participation into their plans?

Education

- 12. Education is an important part of changing behaviour and norms. In what ways can the Olympics use its power to educate the public, athletes and tourists about sustainability?
- 13. If you could somehow change the VANOC, or suggest other ways for them to move forward and to include that community development and education, what types of things would you do?

Technology

- 14. In your opinion, what have been the most interesting technologies or major innovations to promote sustainability for the 2010 Olympics?
- 15. Do you think that the Olympics per se has more obligation to use sustainable practices because it's using infrastructure that's funded by the public?

Waste Management/Land Use

16. Do you think Vancouver will play a significant role in defining urban sustainable development for the Vancouver Olympics?

Urban Policy and Planning

17. What other specific policy/planning initiatives can the Olympics spur in Vancouver?

18. The City of Vancouver and VANOC are aiming to make the SEFC area one of the most sustainable developments in the world. Do you think they will be able to achieve their goal?

Conclusion

- 19. As an academic, will you evaluate/critique the Olympics according to sustainability measures?
- 20. What will be the biggest factor in moving the Olympics from being environmental which other cities have done like Sydney, to being sustainable, which is the catch phrase that follows Vancouver?
- 21. Do you have any further comments?

APPENDIX H: VANCOUVER CITY PRINCIPLES OF SUSTAINABILITY

The following is a list of Vancouver City Principles of Sustainability.

1. Today's decisions must not compromise the choices of our children and future generations.

2. We are all accountable for our individual and collective actions.

3. Resources must be used fairly and efficiently without compromising the sustainability of one community for another.

4. Using renewable resources is encouraged and supported, while the use of non-renewable resources should be minimized.

5. Renewable resource consumption should not exceed the rate of regeneration.

6. Strong collaboration and open communication between the public, the business sector, and all levels of government are important.

7. We value cultural, economic, and environmental diversity.

8. A community should provide a safe, healthy, and viable setting for human interaction, education, employment, recreation, and cultural development.

9. A sustainable Vancouver contributes to, and provides leadership towards, regional, provincial, national, and global sustainability.

10. The Vancouver economy should move forward from its dependence on nonrenewable carbon based fuels, particularly for transportation, which are likely to fluctuate dramatically in price and supply.

Source:

City of Vancouver (2004). Vancouver City Principles of Sustainability. Retrieved January 25, 2005, from www.city.vancouver.bc.ca/sustainability

APPENDIX I: VANCOUVER BID CORPORATION INCLUSIVE INTENT STATEMENT

The following is Vancouver's Inclusive Intent Statement:

2010 Olympic Winter Games and Paralympic Winter Games

The Inclusive Intent Statement is an integral part of the Vancouver's 2010 Bid Corporation's core values and guiding principles that include: lasting community legacies, fiscal responsibility, sustainability, open communication, and inclusive representation.

The Vancouver Bid is committed to incorporating sustainable and inclusive practices in the planning and operating of the 2010 Winter Games. Sustainability refers to social, economic and environmental best practices with inclusivity encompassing participation and equity. Participation means that all people – including those of diverse ethnic and cultural backgrounds have the opportunity to be involved in the Games. Equity relates to the integration and improvement of conditions of the disadvantaged, including low and moderate-income people.

The Bid Corporation and its Member Partners are committed to hosting a winter games that create benefits for all British Columbians. A number of issues have been identified including affordable housing, employment, economic opportunities, governance, civil liberties, and accessibility that will be addressed in a number of ways as part of the planning throughout BC and Canada for the 2010 Winter Games by the Bid Corporation, the Organizing Committee of the Olympic Games (OCOG) and its Member Partners. In particular, special efforts will be taken by the Bid Corporation, OCOG and its Member Partners to ensure the interests of those living in Vancouver's inner-city neighbourhoods are addressed.

To implement the Inclusive Intent Statement, the Bid Corporation and its Member Partners will work with communities to identify goals and objectives for the Organizing Phase. Should the Bid be successful, the Member Partners are committed to working with the OCOG to develop specific programs and policies as part of the planning for the 2010 Winter Games.

Source:

Vancouver Agreement (n.d.) The Agreement. Retrieved January 5, 2006, from www.vancouveragreement.ca/Attached%20Documents/INTENT%20STATEMENT%20FINAL.pdf

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