# SPORTS MEGA-EVENTS, SUSTAINABILITY & IMPACT ASSESSMENT

vancouver, BC february 18 2010

#### **SUMMARY REPORT**

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# INTRODUCTION

### ABOUT THE CENTRE FOR SPORT AND SUSTAINABILITY

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#### About the Centre for Sport and Sustainability

The University of British Columbia's newly founded Centre for Sport and Sustainability was established as a global resource to capture and transfer knowledge on how sport can create sustainable benefits locally, regionally, and internationally. The Centre is focused on improving understanding of how sport can help advance economic and social development, urban renewal, cultural identity and ecological well-being. Researchers and students from a variety of academic fields at UBC are engaging the increasing global demand for information, analysis and evaluation on these and related issues. The UBC Centre has also formed alliances with other major educational institutions and organizations that are investigating the roles of sport in sustainable development.

Given the increased popularity, size, and competition for major sport events around the world, part of the Centre's mandate is to ensure that new knowledge is made available to local, national and international event organizers and host cities so they might optimize their planning and provide an enduring legacy. With its comprehensive approach, UBC's Centre for Sport and Sustainability is an important international hub for knowledge on the interplay of sport and sustainability. Ultimately, the Centre's contribution to the information, analysis, and evaluation of sport mega-events and sustainability is intended to help hosts and organizers realize targeted event-related benefits and deliver sustainable legacies.

#### An Invitation

The 2010 Winter Olympic Games provided the perfect opportunity for the Centre to launch a Think Tank deidcated to understanding the impacts of sport mega-events in relation to sustainability goals. The Centre jointly sponsored this venture along with The University of British Columbia and the Vancouver Organizing Committee for the 2010 Olympic and Paralympic Winter Games (VANOC) with the objective of brigning together panelists from around the world and from a variety of specialties. The Think Tank on Sports Mega-Events, Sustainability, and Impact Assessment focused on the ways in which event impacts can be assessed and can contribute to sustainability goals. The goals of the Think Tank were identified as follows:

- 2 Critically review current analytical frameworks for assessing impacts
- **3** Provide a set of working guidelines for:
  - **a**) establishing global standards in event-related indicator research and impact assessment
  - **b**) linking indicators to policy
  - c) ensuring the continued evolution of event impact research

Seven panelists were invited to present on one or more of the following topics:

- Issues and alternatives in indicator-based impact assessment
- The use of sustainability indicators in securing future Olympic bids
- The limits of mega-event sustainability
- Creating a precednet of mega-event sustainability

With help from the following organizers, planners, and facilitators, the Think Tank was formed.

Ken Baker (VANOC & SEE Solutions)

Dan Beatty (UBC)

Linda Coady (VANOC)

Matt Dolf (AISTS)

Chris McKay (UBC)

Nicole Freeman (UBC/AISTS)

Elizabeth Maurer (UBC)

Hilda Tan (UBC)

Bernice Urbaniak (UBC)

Rob VanWynsberghe (UBC)

Barry Warne (UBC)

#### **About the Panelists**

#### Philippe Bovy, Swiss Federal Institute of Technology (EPFL) Lausanne, Switzerland

Prof. Philippe Bovy is an Emeritus Professor of Transportation at the Swiss Federal Institute of Technology in Lausanne (EPFL) Switzerland. He is a lecturer at AISTS's Postgraduate Program in Sport Management and Technology in Lausanne, Switzerland. Bovy has forty years of activity and experience in transport planning and traffic system management teaching. He has conducted research and consulting in Switzerland, France, Portugal and the U.S. with project development and academic involvement in 20 other countries, covering all continents. Bovy has specialized in mega event transport planning and design since 1980. He played an important role in the preparations for the 1984 Sarajevo Olympic Winter Games and the 1998 Nagano Winter Games. He has been a transport IOC advisor since 1996. He has done Olympic transportation system development monitoring of Sydney, Salt Lake City, Athens, Turin, Beijing, London and the Sochi Olympic Games. He is an Evaluation Committee member for applicant and candidate cities for the 2012, 2014 and 2016 Olympic Games and for the 2010 and 2012 Youth Olympic Games.

### Dr. Jean-Loup Chappelet, Swiss Graduate School of Public Administration (IDHEAP) Lausanne, Switzerland

Dr. Jean-Loup Chappelet PhD has been a professor of public management at the Swiss Graduate School of Public Administration (IDHEAP) of the University of Lausanne, since 1993. He has served as the IDHEAP Dean since 2003. He received his PhD from the University of Montpellier in France and a MSc from Cornell University in New York, where he also held teaching and research positions (Fulbright Fellow). Dr. Chappelet specializes in sport management and sport policy with a particular emphasis on the organization of Olympic Games and other sporting events as regional and national public policies. He is the director of the MEMOS (Master Exécutif en Management des Organisatons Sportives) program supported by Olympic Solidarity. Dr. Chappelet has authored several books and many scientific articles on sport management and the organization of the Olympic Games. He is a member of the editorial boards of the journal of Sport Management and of the European Sport Management Quarterly. He was a member of the original team which conceived the OGI (Olympic Games Impact) framework.

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#### Dr. Scarlett Cornelissen, University of Stellenbosch Cape Town, South Africa

Scarlett Cornelissen is an Associate Professor in the Department of Political Science, and Interim Director of the Centre for Chinese Studies at Stellenbosch University, South Africa. She holds a PhD (Urban Studies) from the University of Glasgow (UK); a Master's degree (International Studies; Cum Laude) from Stellenbosch University; and a BSocSci from the University of Cape Town. In 2009 she was named a recipient of the National Research Foundation of South Africa's Presidential Award. In 2007 she was selected for a research award from the International Olympic Committee, the first African recipient of the award since its inception. Scarlett is the author of one book (The Global Tourism System: Governance, Development and Lessons from South Africa, Ashgate, 2005) and has co-edited three others. She is regional editor for Africa of the international journal, Leisure Studies. She is currently working on three book projects on various aspects of African international relations, politics and society.

#### Dr. Holger Preuss, Johannes Gutenberg-University Mainz, Germany

Dr. Holger Preuss is Professor of Sport Economics and Sport Sociology at the Johannes Gutenberg-University in Mainz, Germany and for Event Management at the Molde University College, Norway. He studied sport science and economics in Göttingen and taught at the German Sport University in Cologne and the University of Frankfurt. He was visiting professor (2005-2008) at the "School of Management" at the Beijing Sport University and is international scholar at the State University of New York (Suny, Cortland) since 2006. His research focuses on the management and economic impacts of mega sport events, especially the economic implications of hosting the Olympic Games from Munich 1972 to Salt Lake City 2002. He has written many articles and most recently the book The Impact and Evaluation of Major Sporting Events.

#### Dr. Kamilla Swart, Cape Peninsula Unversity of Technology (CPUT) Cape Town, South Africa

Dr. Kamilla Swart is an Associate Professor in the Faculty of Business and heads the Centre for Tourism Research in Africa, Cape Peninsula University of Technology (from 2003). Her research interests include sport and event tourism, with a specific focus on the 2010 FIFA World Cup™ and event policies, strategies and evaluations. Kamilla has been invited to participate in various 2010 initiatives, including the HSRC 2010 research project, the 2010 GCIS Communication Partnership and the Western Cape Tourism partnership 2010 Sub-committee. Kamilla currently serves as a Project Manager for a universityled research consortium to undertake contract research for Cape Town Routes Unlimited, in addition to managing the event evaluation and delegate tracking components of this research programme (2006/7-2008/9). She supervises Masters and Doctoral students and lectures on tourism development and the management of events.

#### Dr. Eleni Theodoraki, Edinburgh Napier Unversity Edinburgh, Scotland

Dr. Eleni Theodoraki is Director of the Edinburgh Institute for Festival and Event Management where she oversees a range of research and continuing professional development programmes, and she is Reader in Festival and Event Management at Edinburgh Napier University's Business School. She is visiting staff at Lumsa University in Rome, Université Claude Bernard Lyon in France and Member of the Vancouver 2010 Olympic Games Impacts Expert Resource Group. She is author of 'Olympic Event Organisation' published in 2007 by Elsevier and has worked for the London 2012 Olympic Games Bid Committee and Athens 2004 Olympic Games Organising Committee on Olympic education and strategic planning and development issues, respectively. Other commissioned / funded work was undertaken for the Arab League Development Organisation on senior event managers' training needs, the Edinburgh Festival Theatres Trust on organisational growth, the International Olympic Committee on the role of women in management, the British Academy on sport development overseas, and East Potential on the impacts of the London Olympic Games preparations on social housing. In 2001 she received the International Year of Volunteers IOC Diploma for her contribution to the development of sport and Olympism. Numerous PhD studies have involved her supervision in the following areas: Civil rights and the London 2012 Olympic Games; Marketing of the Edinburgh Fringe; Sporting impacts of the 2008 Beijing Olympic Games; Evolution of Modern Olympism and Olympic Values; Structural configurations of the Sydney Olympic Games Organising Committee; Olympic solidarity: global order and the diffusion of modern sport between 1961 to 1980.

#### Dr. Rob Van Wynsberghe, University of British Columbia Vancouver, Canada

Dr. Rob VanWynsberghe is an Assistant Professor in Educational Studies at the University of British Columbia, and is the UBC Lead on the Olympic Games Impact (OGI) Study, a five-year project funded by VANOC in accordance with technical guidelines developed by the International Olympic Committee (IOC). OGI is intended to monitor, measure and report on the overall social, economic, and environmental impacts of the Olympic and Paralympic Games on a host city, region, and country in a series of reports that capture and assess changes over a period of twelve years. This research involves data collection and analysis and methodology development to support an indicator-based analysis of the environmental, social and economic impacts of the Games. A Pre-Games report was produced in May, 2009, and two reports will follow. Dr. VanWynsberghe also conducts research and teaches in the area of urban sustainability using interdisciplinary approaches and pedagogical strategies to bridge research with social policy. His current research program examines the

2010 Games as a regional and international lever for sustainability. This research utilizes the localized, Vancouver context to apply new scholarly approaches such as regime theory to the socio-political dynamics and community relations of mobile, transnational "mega-events" including the mobilization of community capacity within the Olympic Games sustainability mandate.

#### **An Overview**

Think Tank presenters gathered with thirty invited university, government, and non-governmental organization representatives on the University of British Columbia's campus. After informal meetings over coffee and breakfast and an introduction from Centre director Dr. Robert Sparks, the first two presentations of the first panel were delivered live via telecoference. With audio and video feeds streaming to Vancouver from Dr. Cornellissen and Dr. Swart in South Africa and Dr. Theodoraki in Scotland, the Think Tank was underway. The second panel of presentations from Dr. Preuss and Bovy followed. speakers Ann Duffy and Matt Dolf followed the morning presentations with a working lunch demonstration, highlighting the capabilities of the Sustainable Sport and Event Toolkit (SSET) initiative. Post lunch presnetations from Dr. Chappelet and Dr. VanWynsberghe rounded out the third panel. unique combination of a wide variety of theoretical frameworks and practical questions from audience members challenged all participants to ask tough questions about mega-event impacts and their relationship to sustainability.

The purpose of this report is to gather and summarize related Think Tank information and materials, to provide an account of the proceedings, and to re-distribute it to panelists and participants. This report is broken down by panel presentations and is accompanied by a recapitulation of the discussions that ensued between panelists and particpants.

To borrow a phrase from indicator-based assessmnets, this report will serve as the benchmark for future discussions and enhance the way we as researchers and academics gather, interpret, analyze information related to the impacts of sports mega-events.

#### About the Facilitator

Dr. Robert Sparks, University of British Columbia Vancouver, Canada

Dr. Robert Sparks is Professor and Director of the School of Human Kinetics at the University of British Columbia. He received his Ph.D. and M.S. in Sport Studies from the University of Massachusetts in Amherst, and a B.A. in French from Wesleyan University in Connecticut. His research over the last 15 years has been focused on sport marketing, mass communication, policy analysis and public health. He is the Director of the UBC Centre for Sport and Sustainability, and has taught courses on sport sponsorship and communication, consumer culture, body politics, and ethics. Dr. Sparks helped negotiate the terms of the UBC-VANOC Olympic Games Impact (OGI) research agreement on behalf of UBC. He is the UBC administrator responsible for the OGI project, and also serves as a member of the advisory team that provides project oversight.

#### **Opening Remarks**

Dr. Sparks provided the opening remarks for the Think Tank, welcoming the panelists participating via teleconference and in person as well as delegates representing industry, government, and the non-governmental sector. Dr. Sparks made a few brief points about the Centre for Sport and Sustainability, a legacy project resulting from the International Olympic Committee's involvement with the Olympic Games Impact study.

Dr. Sparks identified the Think Tank's primary objectives, principal among which was to assemble a group who could critically discuss issues pertaining to impact assessment and review current analytic frameworks. Dr. Sparks set the problematic, with an eye to 'thinking big': following the conclusion of the Think Tank, participants would entertain the possibility of developing global standards. The bar was set higher yet again as Dr. Sparks challenged participants to link indicators to policy in a meaningful way while also ensuring that this topic remains on the research agenda both locally and internationally.

Panelists were asked to identify critical research, key issues, and potential areas for development. Delegates were assigned the task of working critically with the material presented, while keeping in mind the context of sport, sustainability, and impact assessment.

Dr. Sparks' opening remarks concluded with a quotation from University of British Columbia President Stephen Toope:

"Sport can transform people, communities, even cultures delivering lasting economic, social and health benefits. There is a growing need to better understand the opportunities and effects created by sport and sport events. Which key factors combine so that they might contribute to local and global sustainability?"

## PANEL ONE

# CONTEXTUAL AND THEORETICAL CONSIDERATIONS

# USING MEGA-EVENT SUSTAINABILITY INDICATORS TO INFORM LEGACY PRACTICE: LESSONS FROM SOUTH AFRICA

Scarlett Cornelissen, University of Stellenbosch Kamilla Swart, Cape Peninsula University of Technology

# INSTITUTIONAL CHALLENGES TO OLYMPIC GAMES SUSTAINABILITY

Eleni Theodoraki, Edinburgh Napier University

#### Using Mega-Event Sustainability Indicators to Inform Legacy Practice: Lessons from South **Africa**

Scarlett Cornelissen, University of Stellenbosch Kamilla Swart, Cape Peninsula University of Technology

Dr. Cornellissen's presentation began with a description of the conceptual frameworks employed by mega-event impact assessments. By first examining the context in which sustainability methodologies were developed, prevailing assumptions surrounding the use of such assessments can be better understood. The conventional wisdom surrounding mega-events suggests that what works for one host can be successfully translated to future hosts, allowing for accumulated knowledge to be passed on to the next. Dr. Cornellissen questioned the existence of such a universally generalizable template, not only for planning and hosting a mega-event, but for assessing mega-event impacts as well. Despite the existence of a shared experience common to hosts, fundamental differences between developing and developed countries prevent the persistence and utility of a global template.

Dr. Cornellissen elaborated on the key elements present in indicator assessment in the context of mega-events, using the Balanced Scorecard approach to event evaluation, the Olympic Games Impact study, and the Impact Model used for the 2008 Euro Games as examples. Across all three frameworks, the importance of multi-faceted dimensions such as environmental, social, and economic impacts was recognized, as was the need for the accumulation and dissemination of knowledge. While all three emphasize knowledge management, they also share a common origin, having been created in a framework specific to developed and industrialized countries. This raises a seminal question: are the assumptions underpinning these models relevant to the context of a developing country?

To illustrate her point, Dr. Cornellissen pointed to the economic sphere to show how certain impacts are more relevant to certain contexts. Economic impacts tend to be exaggerated or inflated in a developing country, simply because of the structure of the country's economic system. While impacts are significant for all hosts across contexts, developing or developed, there must be a more nuanced way of identifying how different countries are affected by different impacts.

Dr. Cornelissen followed with a discussion on the ways in which mega-event impacts have been thought about in development and international discourse. In order to understand and assess mega-event impacts in the developing world, Dr. Cornellissen described the challenges such events pose to conventional development theory. Mega-events take place on a large scale and are concentrated and sectorally focused, making the need to have differentiation between direct, indirect, and induced impacts clear. Further examination into the context, kinds of impacts, and relationship to different sectors and how they are affected is required.

To some extent, the discourse on mega-event impacts has been divorced from the related discourse on mega-event legacies. Further, the discourse on sustainability has been framed in a different context from those surrounding events and legacy. While the avenue for linking these different praxes is possible, developing a framework able to capture the comprehensiveness and complexity of impact assessment, legacy, and sustainability discourses represents the greatest challenge to the field.

Following Dr. Cornelissen's conceptual analysis, Dr. Swart applied a case study in the form of South Africa's experience in developing impact assessment indicators for the 2010 World Cup. The South African Cities Network Agency (SACN) constructed an indicator framework for World Cup assessment by forming a collaborative between nine South African host cities and governmental partners. This indicator framework's overall aim was to encourage the exchange of information and best practices relevant to urban development and city management with the objective of assisting cities in better management of their development strategies in light of hosting a World Cup event.

SACN faced several challenges even before starting analysis. FIFA's World Cup, while ranking among the world's largest and most prestigious sports mega-events, has not experienced nearly the level of debate and research on legacy as the Olympic Games. Even the existing knowledge on sport megaevent legacy planning and indicator frameworks – applied nearly exclusively in developed countries – would not be applicable to the South African context. Despite these challenges, the legacy imperatives surrounding the 2010 World Cup required an attempt to systematically check and examine legacy impacts. In South Africa's case, the concept of legacy was expanded and applied not only to the local, regional, and national levels, but to the continental as well. With lofty objectives such as nation building, improving the lives of South Africans, and delivering widespread benefits in the form of a sporting legacy for all of Africa, the 2010 World Cup provided the ideal opportunity to develop and refine an indicator-based impact assessment with an eye towards legacy.

SACN was part of a broader movement geared towards increasing the awareness of measuring impacts of the 2010 World Cup, serving as an important mechanism for assessing legacy and development impacts. SACN was comprised of four core themes: governance, productivity, inclusivity, and sustainability. Two types of impacts were assessed: direct and catalytic. Using

an approach designed to include as many indicators as possible and then reducing the number of indicators based on the availability of information and type of data available, SACN was applied to national and city legacies.

Dr. Swart concluded with insights gleaned from the experience relevant to the content of indicators. Indicators ought to reflect a range of impacts while also having clarity on how assessments will be undertaken, including benchmark creation. A clear time frame for analysis is key, as is the prioritization of indicators and consideration of primary and secondary methods for data collection. Dr. Cornelissen and Dr. Swart's conceptual analysis combined with an applied case study contributed to Think Tank presenters' understanding of an indicator framework developed outside of the context of a developed country.

#### Institutional Challenges to Olympic Games Sustainability

Eleni Theodoraki, Edinburgh Napier University

Dr. Theodoraki's presentation on institutional challenges to sustainability in the Olympic Games emphasized the importance of considering the broader institutional context of the Olympic movement. Dr. Theodoraki's presentation considered the obstacles preventing the Olympic Games from being staged in a sustainable manner: contractual obligations, the structure and modus operandi of the organizations involved, and forces of gigantism and commercialism at work in the global context of Games operations.

Two conceptual frameworks were introduced: institutionalism and phronetic planning. Dr. Theodoraki began by explaining the nature of blind love affair of the Olympic Games and its unsurpassed levels of positive brand equity. With ever expanding popularity and increasing sponsorship use, the Olympic Games have fallen into what Dr. Theodoraki describes as the "too big to fail" phenomena. The institutionalism at work involves the process of structuration in the field and its configuration. With the establishment of procedures and assumptions, the process of isomorphism has exerted its power on the organizational field of the Olympic movement. Isomorphism, a concept explored by DiMaggio and Powell (1983), identifies three types of forces at work in the Olympic movement that have led to increasing homogeneity – coercive, normative, and mimetic. The second concept introduced by Dr. Theodoraki involves phronesis, or acting morally and with a long-term perspective. As an intellectual virtue, an ethical practice can be applied to the context of staging mega-events.

Dr. Theodoraki explained six challenges currently threatening sustainability in the Olympic movement. The first, event owner bureaucratization, stems from external control of Organizing Committees of the Olympic Games (OCOG) exerted by the International Olympic Committee (IOC). The automatization of activities is perpetuated by knowledge transfer, presenting a challenge to the event owner's external control of the organizing committee. With a host city contract also contributing to rigidity in structure, the OCOG's ability to respond to aspects of environmental planning is limited. Responsiveness to environmental changes is similarly curtailed, leaving little room for control on behalf of the OCOG.

Dr. Theodoraki revisited isomorphism as the second challenge to Olympic sustainability. As assumptions and practices among various parts of the Olympic corporation are established, OCOGs face difficulty in breaking away due to the strength of the model presented by the IOC. Rules, norms, and modeling

after previous OCOGs is reused and accepted, often occurring at expense of alternative activities. The strength of the organizational field is reinforced, leading to similar behavior across various OCOGs and the perpetuation of a model advocating one-size-fits-all.

A third challenge, presented by Olympic Games inflation, reinforces the pressures felt by OCOGs to put forward "the best Games ever." One-upmanship ensues and greed, political vanity, and commercial interests prevent hosts from limiting their spending. This in turn produces unauthorized spending and an underestimation of resources, both of which prevent the Games from being operated in a sustainable manner.

The centralization of host government control comprised the fourth challenge to sustainability. Under the intense pressure of the global spotlight, governments translate this uncertainty of outcomes into elitist decision making processes and retreat from market and control forces.

Dr. Theodoraki pointed to supply chain interdependencies as the fifth challenge to sustainability's incorporation into the Olympic Games. As the number and complexity of interactions between agencies, stakeholders, and contractors expands, exacting control over such a massive supply chain is limited. Despite best intentions, due process is undermined for the sake of urgency, allowing Games operation to become susceptible to scandalous behavior and moral liability.

A sixth and final challenge was described by the ways in which impact assessment has only serving as window dressing. The complex multidimenstionality of sustainability and impacts spanning the thematic, temporal, and geographic realms leads to inaccuracies in planning and opens the door for potential post-event whitewashing. Ex-post studies seeking to quantify impacts risk the future of the Games as an event while protectionism manifested in the Olympic movement seeks to eliminate dangers presented.

Dr. Theodoraki presented a strong effort to diagnose the challenges undermining attempts at sustainability in the Olympic Games and offered a chance to provide guidance to stakeholders. By considering the constitutional, legal, and ideological circumstances responsible for generating such threats, Dr. Theodoraki also provided a means for Games' organizers to call for legacy planning instead of being restricted to Olympic requirements.

# DISCUSSION

Dr. Robert Sparks, facilitator

Dr. Scarlett Cornelissen

Dr. Camilla Swart

Dr. Holger Preuss

Dr. Eleni Theodoraki

Dr. Harry Hiller University of Calgary

Dr. Rob Van Wynsberghe

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**SPARKS** opened the floor for discussion by introducing the theme of localisms and particularities relevant to conducting an indicator-based impact assessment. Sparks posed the following questions for discussion:

In attempting to establish a set of standards and procedures, is it possible to deal with localisms and particularities?

Are there grounds for creating adaptable global standards that can occur while also accomodating local conditions and challenges?

Is it possible to customize indicator-based impact assessments such as OGI to accomodate national and cultural differences?

Is the creating of a useful, but flexible and adaptable standard a possibility?

CORNELISSEN responded to the opening remarks, stating such global standards are neither feasible nor desirable. The importance of context was highlighted, and in terms of establishing adaptability and assessment frameworks, a case can be made for keeping frameworks context determined. The idea of having global standards is problematized, asking the question, what are these global standards for? While creating a roster of 'good practice' examples is one explanation, what exactly are the assumptions underlying standards of 'good practice'?

**SWART** explained how some assessment questions can be adapted to context. Even when looking back to assessments used for the 2006 World Cup, questions had to be adapted to fit the South African context. In the case of the 2010 World Cup, legacy was a very important component. Such indicators pertaining to African legacy extended beyond the national context and its importance to South Africa. Swart supported global standards while also stressing the critical importance of local specificity.

PREUSS offered commentary related to the application of global standards in particular areas of observation: the environment, economics, brand awareness, and image. While there are many, many indicators that can be locally colored, there is potential for implementing global standards across a few key areas. Preuss described the circumstances under which different host cities could apply different standards relevant to their particular context. Varying levels of infrastructure needs, different legacy plans, and diverse social needs would make comparing hosts such as Germany and South Africa very difficult. In particular areas, it is important for political frameworks to look to the local. CORNELISSEN agreed with Preuss's suggestions, noting that the process is not anywhere near ready to be institutionalized. Cornelissen noted it is important to emphasize there are few incentives to develop or share ideas across contexts within organizing bodies such as FIFA. Knowledge sharing and event management would benefit from stronger institutionalization. Advances have been made within the Olympic Movement, but challenges in the international football sphere persist.

SPARKS posed a second point for discussion. Is it possible performance made in combatting assess and progress challenges outlined Theodoraki's presentation? institutional by

 $\textbf{THEODORAKI} \ explained \ how it would be possible to \ create \ a \ hypothesis$ predicting how these challenges to sustain a bility can be addressed. By establishing an anatomy of the creation of impact, it would be possible to capture the impact as it is being created, allowing reserachers to consider whether steps can be taken to mitigate the structures that created this negative impact in the first place.

**HILLER** joined the discussion, noting how the business of trying to understand such an issue is extremely complex. Researchers should not frame task of impact assessment as though impacts were easy to measure and all that was needed was the right formula leading to the right outcome. Hiller raised two major issues: attribution and nuances. In attribution, asking 'what caused what?' and attempting to find the issue of causation is much more complex than the IOC or anyone present would like to accept. To say that the Olympics caused a particular outcome can be transposed from one perspective to another. Such impacts also have to do with what was happening before and what happened after the event, adding to this exceedingly complex issue. Explaining the relationship of one thing to another requires a high degree of nuancing, something that we as researchers might often wish was not there. Hiller stressed the importance of keeping these two elements in perspective.

THEODORAKI agreed with Hiller's points, also noting how it is absolutely necessary to emphasize causality. Theodoraki complimented the Vancouver OGI team on their robust methodologies for attribution and level of nuanced writing. Such an example presents a landmark and something for future studies to aspire to as researchers continue to engage in impact assessmnet.

**SPARKS** commented that all sides of impact assessment remain highly complex, making it difficult to state that one particular element will be easier to assess than any other. Attribution is exceedingly difficult, but is not unsolvable.

VanWYNSBERGHE asked a question to the group. If Theodoraki is correct and the franchisee is becoming more and more aware of exactly what it is that it has rented, has this relationship become more complicated, or less so? VanWynsberghe does not see these complexities as properties of the mega-event, but in the complexities of the host. The host is a receptor site, and how it receives the franchise seems to be the source of complication in hosting and staging a mega-event. The event is becoming less and less a part of the phenomena it represents; less of a sporting megaevent and much, much more about host aims, objectives, and legacies.

**CORNELISSEN** responded by drawing attention to issues of ownership and proprietorship – who owns the event, what is its corporate structure, and what are the interests of major corporate role players who increasingly shape events. Growing importance is placed on the dynamic in which events are portrayed in the media and how they are projected in terms of international status.

VanWYNSBERGHE was asked to clarify the second half of his question, rephrasing his suggestion that the franchisee knows well what it is they are renting. VanWynsberghe explained his position as being less clear that researchers have gained full awareness of the complexity represented by a host, who has an incredible number of ambitions they impose upon the renting process.

CORNELISSEN agreed with VanWynsberghe's suggestion, but countered by explaining how ambitions set by a host at the time of initial bidding can look much different from the ambitions a host may have closer to the time an event takes place or even immediately after. There is a morphing process involved that is even more complex. Capturing that kind of learning process or dynamic as it relates to a political agenda, stakeholders, and interest groups is a challenging issue. An analytic means, or additional level of examination offering an overarching context for all of these elements would be required. Do we as researchers have the abilities and the tools to really understand the kinds of dynamics involved with changing host city ambitions?

Cornelissen provided the example of the 2010 World Cup. At the beginning of the bid stage, the bid was about vaguely stated objectives of nation building. The economic argument and rationale for hosting was only hastily put together as an afterthought by the government. In the mean time, societal expectations were raised and the government and bid promoters could not ignore the fact that they had to present a feasible plan to ensure that the World Cup would not leave a deficit. Political interplay also became important at this stage. This level of analysis is both intriguing and interesting, pointing towards what is happening at the level of the host city. To return to the question of whether or not it is possible to have global standards, Cornelissen offered her experience in the South African context. Cornelissen was unsure if it is even possible to think about national standards in terms of measuring event impacts. There tends to be a fragmentation of events, interests, and agendas also within a national context.

**THEODORAKI** stated the possibility of a toxic mix at work. The local organizing committee– the franchisee– has a recipe while a host country has its own massive wish list. Both sets of objectives are hard to deliver, and Theodoraki was unsure if the franchisee fully understands what they are in for in brining a mega-event to a city. Without proper expertise, there is an even greater call for further advancement of event management education so that all parties involved can better understand the issues at hand. In terms of mega-event management, such advancement is important so that people can understand more fully what it is they are dealing with and the implications of such actions.

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CHAPPELET commented that it is essential to distinguish event and context indicators. By definition, context indicators depend on context: the location or country of the event. These context indicators can evolve or be adapted to suit the event. However, event indicators ought to remain as stable as possible for a given event. Olympic Games need to be compared from one edition to the next, and stable indicators are necessary in order to see change over the long run. The prospect of combating the challenge of Games' inflation or gigantism also led Chappelet to argue for very stable event indicators.

## **PANEL TWO**

# ISSUES AND CHALLENGES

#### ISSUES AND ALTERNATIVES IN INDICATOR-BASED IMPACT ASSESSMENT

Holger Preuss, Johannes Gutenberg University

### OLYMPIC TRANSPORT CONTRIBUTIONS TO SUSTAINABILITY

Philippe Bovy, Swiss Federal Institute of Technology (EPFL)

#### Issues and Alternatives in Indicator Based **Impact Assessment**

Holger Preuss, Johannes Gutenberg University

Supporters and opponents of economic impact analyses differ on their use, or abuse, of the mega-event's perceived impacts for the host city. Dr. Preuss's presentation began by highlighting the pros and cons established by participants in the controversial debate surrounding economic impact analysis. Supporters point to the attraction of autonomous money, the accelerated reconstruction and modernization of city infrastructure, and the typical widespread popular support of hosting as rationalizations of such analysis. Conversely, opponents cite the inefficient use of scarce public resources, unsustainable and unnecessary infrastructure, and limited, small, or nonexistent impacts as counterpoints.

Despite such disagreement, indicator-based impact analysis has persisted, albeit without consensus on how such assessments ought to be executed. Difficulties in determining the "right" data and framework, the lack of established methodology, and the mistakes accompanying such analysis explain varied results of impact analysis. Establishing the method of data collection – bottom-up or top-down – as well as the context and time frame for analysis are only a few of the issues requiring attention. The degree of completeness, the precision with which the assessment will be conducted, and the methodology for detecting and analyzing impact must also be addressed. With exceedingly difficult measurements to collect, the presence of intangibles, and potential crowding-out effects, those left with the task of conducting an economic impact assessment face considerable challenges.

Establishing an appropriate methodology is critical to influencing the overall impact of the study, which as Dr. Preuss noted, can be manipulated to show positive or negative impacts depending on indicators and methodologies selected. The basic requirement of an economic impact analysis is to measure the total change of the city structure due to staging an event. Determining resources entering, leaving, rejected, or exchanged is crucial, as is determining new or lost infrastructural projects due to investments being diverted.

Preuss continued by establishing the difficulties associated with pursuing a topdown approach. Identifying the event case from the non-event case is one of the first issues needing attention when determining if there has been an economic impact on the host economy. Not only is a static approach (comparing an event case to a without event case scenario) possible, but a dynamic approach comparing the event case to a control case or an econometric approach comparing the event case to a reference case is possible as well. Conducting an assessment while other events are occurring concurrently and identifying

intangible impacts such as up-skilling, entertainment value, city image, and civic pride represent problems associated with identifying event impact. With smaller events and less direct impacts, it is increasingly difficult to find the right data for collection. For these reasons, the top-down approach is limited for impact measurement, especially when considering larger host regions.

The bottom-up approach remains the preferable option for impact assessment; however, it is not without its own challenges. Gathering data ex-ante or ex-post, identifying impact interaction, determining redistribution effects, and measuring intangible impacts represent some of the most significant issues present when conducting an impact analysis. Consideration of opportunity cost in a bottom-up approach varies in conjunction with stakeholders' perspective as productive investments can carry different values varying by each individual. Extremely high efforts to gather the right data are needed, as well as a new and better validated method for measurement, in order to complete a bottom-up assessment.

Dr. Preuss's presentation concluded with an explanation of the mistakes and limitations arising in conducting an indicator-based impact assessment. The quality of economic impact analysis depends on the method selected to evaluate the primary impact. Only a bottom-up approach provides an opportunity to measure such impact, but is not without obstacles. Perspective, time, completeness, and region for analysis represent the frameworks that must be selected before analysis. Clearly defined frameworks will eliminate the potential for result manipulation. Forecasting remains a challenge as accurately predicting future impacts is impossible. While Dr. Preuss's presentation demonstrated that a variety of methodological challenges persist, improved methods for measuring intangibles are continuously being developed.

#### Olympic Transport Contributions to Sustainability

Philippe Bovy, Swiss Federal Institute of Technology (EPFL)

Bovy's presentation offered closer examination of global and Olympic transport systems and their relationship to city development and the environment. Olympic transport represents only one of thirty-four Olympic organization functions and remains a marginal component relative to the entire undertaking of hosting the Olympic Games. While its short duration may allow for immediate impacts to be measured, the sustainability of Olympic transport into the medium- and long- term remains a significant issue in need of attention. On both qualitative and quantitative fronts, reliable and affordable ways to measure the impact of localized projects on entire metropolitan systems remain elusive despite recent attempts. In 2000, the IOC developed OGGI (Olympic Games Global Impact, later modified to become OGI, Olympic Games Impact) Study to measure the social, environmental and economic impacts of the Games; however, systematic impact monitoring is yet too recent to provide quantitative answers.

Sustainability in the Olympic Movement gained visibility with the XXIIIth Olympic Congress held in Copenhagen in 2009. Recommendation 19 was passed, which stated that the IOC should "accelerate integration of sustainability principles in the hosting of the Olympic Games" and acknowledged the importance of embedding key values of environmental protection within the Olympic ideals. The growth of the Olympic Games has had considerable impact on transport, travel demands, logistical organization, and operational costs of the Games. Such increased travel and mobility demands have lead to longer Olympic travel distances, greater number of venues holding larger capacities, higher levels of service in terms of quality, quantity, and security, and increased the Games' complexity as travel demands have been extended to accommodate a twenty-four hour operation during the Games period.

City transport systems are subject to a massive overload in demand during the Olympic Games, making the Games the largest temporary two-week traffic generator. As the Summer Olympic Games are the world's largest sport megaevent, staging the Olympic Games represents a significant challenge even for cities with strong preexisting public transport systems. Bovy described the 2000 Summer Olympic Games hosted by Sydney as the beginning of a new era in Olympic transport. With 100% of spectators, workforce, and volunteers traveling by public transit, a new set of mega-event behavior was introduced. Only 5% of Games visitors accessed the Sydney Olympic Park by car and the Games were deemed environmentally sound by Greenpeace Australia, turning Sydney into an innovative example of low impact transport management. Despite the new era in Olympic transport, long-term mobility and sustainability did not translate over to the post-Games phase.

The next two Summer Olympic Games also incorporated innovative transport management. Athens delivered the first dedicated Olympic traffic lane system, replacing a serious road congestion concern with the fastest road and bus system ever used by an Olympic host. While an improved rail system did achieve lasting effects, the majority of transport upgrades were temporary measures without sustainable long-term improvements. Beijing invested 20 billion USD to clean up its metropolitan environment and upgrade its vehicle fleet. The host of the 2008 Summer Olympic Games underwent considerable motorway and expressway extensions, tripled public transport and airport capacity, and installed the largest ever Olympic-Lane network. While all such measures were included on Beijing's municipal master plan, projects were accelerated an estimated five to ten years ahead of schedule. Beijing underwent a massive effort to reduce automobile traffic during the Games period, reducing the total number of cars by 45 to 55 percent. By only allowing odd or even license plates numbers during 60 consecutive days covering the Olympic and Paralympic Games period, Beijing succeeded in substantially reducing air pollution during the Games period.

Looking ahead, both London and Rio plan to use innovative transport systems in areas of the city with urban regeneration needs. improvements will center around East London, home to the new Olympic Park and biggest urban industrial land rehabilitation program in Europe. Rio's ambitious transport plan includes a high performance public transport ring connecting all four city quadrants, each with diverse socio-economic and urban characteristics.

Bovy explained the different challenges with examining sustainability impacts for the Summer and Winter Games. The Summer Olympic Games are much bigger, offering a greater opportunity to understand, analyze, and assess the Games in terms of logistics and transport. Since the Summer Games take place in only one city and a single metropolitan area, tracking the impacts of one system of governance is less daunting of a task compared to the Winter Games. The Winter Olympic Games are usually at least a two-location event, with traffic split between venues for ice sports and venues for snow sports. The "Ice Games" typically take place in a medium to large city of low to medium elevation whereas the "Snow Games" are held in some variation of a small town, village, or resort community at the highest elevation possible. The Snow Games provide significant challenge to Games organizers since existing transport services usually have lower capacities, are weather sensitive, and are not diversified due to their location. Snow Games hosts require additional transport infrastructure improvements and generally accelerate long planned

regional transport links. Sochi, host of the 2014 Winter Olympic Games, presents a very different and unusual situation as more than 85% of the required Ice and Snow sport venues, transport networks, and Olympic support structures will be built specifically for the Games. With a brand new city-tomountain rail system, the longevity and sustainability of Sochi's snow venues will be enhanced, but at a very high cost.

Bovy's presentation concluded with insights on transport's overall contribution to Olympic sustainability. The fierce competition between bid cities has triggered a race for the best possible Olympic transport system and has led to improved concepts of traffic management for host cities. As such, the use of public transport systems has become an indispensable aspect of staging the Olympic Games. This is especially true for Summer Games host cities, where long-term contributions to sustainability appear more tangible and feasible. Hosts investing in high performance public transport systems are seeking to gain more sustainable transport and mobility patterns, and often have the opportunity to accelerate transport projects or incorporate them into the city's master plan. The increased competition for legacy-driven Games coupled with the sophistication of the bid process has led to the inclusion of more than 100 questions relating to transport and legacy in a bid to host the Games. However, despite such attention, how transport impacts extend into the long-term remains a serious question, with potential answers coming from the OGI Study.

# **WORKING LUNCH**

# SUSTAINABILITY IN ACTION

#### SUSTAINABLE SPORT AND EVENT TOOLKIT

Ann Duffy,

Vancouver Organizing Committee for the 2010 Olympic and Paralympic Winter Games (VANOC)

Matt Dolf,

International Academy of Sport Sceince and Technology (AiSTS)

#### Sustainabile Sport and Event Toolkit (SSET)

Ann Duffy, VANOC Matt Dolf, AiSTS

Duffy and Dolf delivered a joint presentation on the SSET initiative over a "working lunch" held between Think Tank sessions. SSET was designed in collaboration by VANOC and AiSTS to give sport organizations the tools required to incorporate sustainability into the planning, programming, and execution of sporting events.

Vancouver earned the distinction of the first Olympic host to plan and convene the Games on a sustainability platform. Duffy described VANOC's sustainability origins dating back to original conversations of how to link pledges and priorities announced in the bid phase to VANOC's operating mandate. With an objective of delivering in six key areas- accountability, environment, social inclusion, aboriginal participation, economic innovation, and sport for sustainable living- VANOC successfully incorporated all three spheres of sustainability into their mission, vision, and values. In doing so, sustainability became a core element of developing and delivering the 2010 Winter Olympic Games.

Duffy described some of the ways in which VANOC has laid "fresh tracks," not only for the host region, but for future Olympic bid and host cities as well. VANOC made an exceptional effort to incorporate indigenous peoples into positions of meaningful governance and decision making through the awarding of Olympic contracts and by engaging in purchasing with economic development in mind. A second "track" relates to the math and choreography used by VANOC to ensure accountability and provide instruction for how to transparently track, report, and engage with stakeholders on sustainability VANOC's Sustainability Management and Reporting System assigned over 100 performance measures across 52 units of the organizing committee, 34 of which were highlighted and reported on in an annual basis.

Such collaboration, learning, and integration was transferred to the SSET initiative, a hybrid and practical "sustainability how to" guide for organizers of international and domestic sporting events. In explaining the architecture of the SSET initiative, Duffy described some of the preexisting management and sustainability practices that contributed to SSET's development. SSET integrates ISO 14001-14006, Global Reporting Initiative (GRI) G3, and BSI 8900-8901 as well as practices advocated by the IOC including IOC Agenda 21, the IOC Guide on Sport, Environment, and Sustainable Development, and VANOC's own Sustainability Management and Reporting System. Using a triple bottom line approach, SSET incorporates environmental, social, and economic sustainability and aims to guide sports events that foster lasting positive local and global legacies.

Dolf explained SSET's practical application as an open-source document designed to provide guidance on how to maintain sustainable practices in hosting a small- to medium-sized sporting events. As a "rubber meets the road" guideline, SSET's collaborative partners set out to include preexisting sustainability standards in a sport-specific and user-friendly document that is freely available for download in both English and French. Using a quality management approach, SSET provides objectives, action items, and performance indicators across nine content areas specific to the organizational structure of sports events. With an explicit goal of enhancing knowledge transfer and lessons learned between past and future Olympic bid and host cities, SSET has enhanced the definition and meaning of sustainability within and across sport organizing bodies.

### **PANEL THREE**

# PERSPECTIVES AND LESSONS

# SPORTS MEGA-EVENTS INDICATOR BASED ASSESSMENT: EXAMPLES AND PERSPECTIVE

Jean-Loup Chappelet, Swiss Graduate School of Public Administration (IDHEAP)

OLYMPIC GAMES IMPACT (OGI) STUDY: RESULTS AND LESSONS FROM THE PRE-GAMES REPORT Rob Van Wynsberghe, UBC

#### Sports Mega-Events Indicator Based Assessment: Examples and Perspective

Jean-Loup Chappelet, Swiss Graduate School of Public Administration (IDHEAP)

Dr. Chappelet's presentation provided an overview of indicator based impact assessments beginning with economic impact studies of the 1980s and finishing with an overview of the more nuanced sustainability minded assessments currently in use.

Dr. Chappelet began by listing the qualifying characteristics of a sport megaevent. Such events attract large audiences and media attention, enjoy high status and prestige, boast a strong international profile, and have an itinerant location. Assessments are conducted for a variety of reasons: to justify or oppose a bid, to rationalize expenditures, or to gain knowledge for the purpose of future bidding.

Assessment studies originated with economic impact studies, gradually taking on a wider scope for analysis. The 1968 Winter Games hosted by Grenoble, the 1980 Winter Games hosted by Lake Placid, and the 1988 Winter Games hosted by Calgary are alike in that all were the first of their kind to take on economic, environmental, and social impact assessments respectively. Early attempts at gauging economic impacts involved macro and micro methods and depended heavily on the usage of two main indicators: total income and number of jobs created. However, such formats left room for miscalculation, misinterpretation, and controversy.

Assessments conducted in the environmental sphere represented more qualitative work compared to economic impact studies. With an orientation towards avoiding, limiting, reducing, or compensating for environmental harm, environmental impact assessments steadily evolved into an integral component of Games planning. Socio-cultural impact studies faced the daunting task of assigning value to many impacts that are largely intangible. Gauging subjective perspectives centered on civic pride or city image continue to make indicator-based assessment exceedingly difficult.

This first attempt at conducting an integrated impact analysis linking economic, environmental, and social impacts was completed by Torino, host of the 2006 Winter Olympic Games. Torino was the first host to publish its sustainability report jointly with the United Nations Environmental Program. integrated methods of assessment combining the impacts felt in the economic, environmental and socio-cultural arenas are now considered the norm.

As Dr. Chappelet explained, indicators have become an integral part of assessment as they are used to gauge the size and overall impact of a megaevent. Ideas surrounding the concept of mega-event impact have become a

recent preoccupation in Olympic circles; however, no consensus on exactly how to execute an accurate impact assessment has been reached.

Dr. Chappelet provided three examples of assessments to show how indicators are being used in impact studies. The first was Event-Scorecard, a Swiss method that has been applied to many Swiss events, including the World Alpine Championships held in St. Moritz in 2003. Using 12 economic, 6 environmental, and 5 social indicators, the Event-Scorecard collects 6 ratios that are then benchmarked with other events. The next example, the Olympic Games Impact Study (OGI), was commissioned by the IOC and developed in 2000 by the International Academy of Sports Science and Technology (AISTS) in Lausanne, Switzerland. As part of the Host City Contract, Olympic Organizing Committees are required to conduct OGI in conjunction with a local university. OGI was instituted partially by Athens and Beijing and is now fully operational for Vancouver 2010. Covering a wide range of impacts, OGI consists of 44 economic, 34 environmental, and 48 socio-cultural indicators from the time the bid is won to two years following the Games' conclusion. A third example, East London Lives 2012, is a smaller tool that is specifically focused on 7 performance indicators to measure London 2012's main legacy goals. Concentrated in the five east London "Olympic Boroughs" around the Olympic Park, East London Lives 2012 is part of a project orchestrated by East London University.

Dr. Chappelet's presentation concluded with a brief glimpse towards the future of impact assessment, this time in the form of the Global Reporting Initiative (GRI). A leader in the field of sustainability reporting, GRI is used by multinational corporations reporting annually on a total of 74 indicators spanning economic, environmental, labor practices, human rights, society, and product responsibility. The Vancouver Organizing Committee for the 2010 Olympic and Paralympic Winter Games (VANOC) was the first organizing committee to adopt GRI performance reporting. A special Event Sector Supplement is being drafted in time for London 2012, one of the partners responsible for initiating the supplement.

While an Olympic Games cannot be solely judged by the numbers indicatorbased assessments provide, sports mega-events continue to serve as a catalyst for accelerated change. Deeper and more delayed qualitative and quantitative study will be necessary in order to fully appreciate mega-event impacts.

#### Olympic Games Impact (OGI) Study: Results and Lessons from the Pre-Games Report

Rob Van Wynsberghe, University of British Columbia

Lead researcher on Vancouver 2010's Olympic Games Impact (OGI) study Dr. VanWynsberghe delivered a presentation on the results and lessons learned from the OGI Pre-Games Report. Pointing towards an overall message demonstrating OGI's feasibility despite its immensity, Dr. VanWynsberghe began by explaining the objectives and context of the project. OGI was designed to measure the global impact of the Olympic Games, to create a comparable benchmark across all upcoming Olympic Games, and to help future bid and organizing committees identify potential legacies in order to maximize Games' benefits. As Dr. VanWynsberghe explained, a key point of OGI from the perspective of the IOC is to allow hosts to begin to identify legacies and help hosts realize a vision for the region. OGI represents an IOC mandated attempt at independent and objective observation of the overall impacts of the Games with the hopes of guiding sustainable Olympic practices in the future.

Sporting mega-events offer a unique opportunity to consolidate policy in the host region, offering a chance to consolidate curriculum, programming, and policies in a certain direction. In Vancouver, an escalating trend towards livability and the role of the environment is still underway, and was a high level objective in the region when the Games were originally sought. In writing a new story of progress, sustainability has come to represent a positive program for living within our collective means. As Dr. VanWynsberghe explained, sustainability offers a counter-narrative against the negative impacts of unrelenting progress, which until recently, was defined in terms of growth. Historical notions of growth as they have been previously conceptualized must be challenged, and organizations are now attempting to write a new story of progress, one that requires living within our limits.

The size and depth of OGI is vast, drawing on 126 indicators – each with its own subset of variables- designed to measure impacts felt in the economic, environmental, and social spheres. OGI's complexity is further compounded by the requisite12-year period of evaluation. Dr. VanWynsberghe noted an absolutely crucial element of the study: the differentiation between a context and an event indicator. Context seeks to evaluate the host city region separate from the event itself, identified as the environment in which the Games will be staged, regardless of the event itself. Impacts occurring well before the event extend into broader economic, environmental, and social setting of the host region. In positioning the Games as a kind of intervention into the host region, the methods established for determining context indicators is very different from the methodology applied to event indicators.

Dr. VanWynsberghe explained the concept of bundling, a technique applied to data analysis in which similar indicators within a policy framework are examined as a whole. Indicators bundled from the same sphere can provide insight into how the indicators relate to one another and how these bundled indicators contribute to sustainability. Most critically, such a process allows researchers to see how efforts in planning and programming have been applied in order to leverage the Games. Dr. VanWynsberghe's team found 83 different policies employed by levels of government to leverage the Games, 50 of which have explicitly named the Olympic Games as a lever being used to exact a particular outcome. The results of bundling analysis suggest that the Games are not held in isolation; rather, they are generally a part of, and have implications for, public life. The effect of targeted, strategic planning on policy outcomes as observed through the use of bundling provides an important backdrop for indicator data and explains trends. As Dr. VanWynsberghe explained, such analysis allows the OGI research team to recognize investments, programs, and services undertaken to achieve broader goals while also demonstrating the interrelated interests and activities of government agencies. In applying the results of bundling to a scorecard designed to show attribution, each indicator was scored, rolled into a bundle, and each bundle was rolled into a sustainability sphere. Finally, all spheres were examined, forming an overall score for Games impact assessed in terms of sustainability.

The methodologies developed and employed by the OGI team allowed Dr. VanWynsberghe and his team to analyze the overall impacts of the Games in time for the Pre-Games Report, responsible for the reporting period 2001-2006. With a positive impact experienced in the socio-cultural sphere, a negative assessment of impacts in the environmental arena, and a positive impact felt in the economic realm, OGI was able to determine the impacts felt on the host region four years prior to the start of the Games.

Dr. VanWynsberghe concluded with a glimpse at lessons gleaned from his experience researching and drafting the Pre-Games Report. OGI can be feasible when carried out in conjunction with a research partner having broad expertise and with a solid research agreement carefully outlining deliverables and responsibilities of the partners involved. The lack of detailed information from a methodological perspective relating to how the OGI indicators were developed represents a shortfall of OGI, also reflected by the lack of depth found in the IOC's technical manual on how to execute the study. However, Dr. VanWynsberghe's OGI team was able to make significant contributions towards developing a methodology for indicator analysis and examining the ways in which bundling analysis contributed to the overall sustainability assessment of the Games.

# DISCUSSION

Dr. Robert Sparks, facilitator

Dr. Holger Preuss

Dr. Rob Van Wynsberghe

Elizabeth Maurer University of British Columbia

Philippe Bovy

Ken Baker

Vancouver Organizing Committee for the 2010 Olympic and Paralympic Winter Games (VANOC)

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**SPARKS** opened the floor for discussion following the conclusion of the final presentation.

PREUSS raised an issue on the struggles associated with calculating impact. Whenever we as researchers talk about indicators and how we measure them, whether top-down or bottom-up, there must be a reference to value and compare against. Reference cases from other cities, states, or other games are necessary. Reference cases must share the same level of development and social infrastructure or else the reference case might not be applicable. Reference cases offer a way of showing comparison, but are becoming more complicated. Even the best econometric modeling will not help.

VanWYNSBERGHE responded to Pruess's comment, noting that comparisons work in surprising circumstances. For example, when comparing Vancouver and Toronto on tourism, Toronto isn't hosting the Games, but yet Toronto's tourism numbers go up, as does the host city's. Only then can researchers identify factors that may be responsible for non-Games related increases. VanWynsberghe described the elaborate reliability measure created by the OGI team using scorecards. An ongoing reliability rating was compiled, which all team members contributed to. A separate manager for data assembly examined what the data represented, and there were several iterations of this process. The conclusivity rating used by the team may have been the most subjective, but it was also the most conservative. Data, when inconclusive or consisting of conflicting information, was 'kicked out' from the scorecard for that particular edition of the OGI report. The OGI team pushed themselves to remember their ultimate goal of representing sustainability in the Olympic Games and kept the scorecard in mind from the beginning.

MAURER, an OGI team member, offered several comments on the themes of the day's presentations. The local vs. global (or context vs. universal standards) debate was revisited. The need to understand the local while also having a need for universality was apparent across presentations.

The 'toxic cocktail' forming when the needs and aspirations of the event franchiser and local franchisee collide make the need for a fuller understanding of mega-event management all the more pressing.

Maurer asked, while there is clearly a need for stable event indicators, is a standard desirable or necessary? If local-specific studies take precedent, will we ever see the bigger picture? Will this preclude the establishment of a global set of indicators?

Maurer also found overlapping concerns in the day's presentations relating to issues of prioritizing and prediction. With prioritization, there seems to be an implicit hierarchy in weighing the economic, environmental, and social spheres. Do we care about social impacts if we can't meausre the bottom line?

PREUSS questioned how impacts can be assessed across such diverse contexts. How can adding a road or stadium be of the same positive or negative value in a developing country such as South Africa when compared to a city like Vancouver? Since every city has its own standard, what is developed through the event is of different value. From a cultural background, things are considered differently. Every host city and region holds its own values, so how can assessment be standardized? Should impact assessments be target dependent? Preuss remained skeptical of standard indicators geared towards legacy. Determining political and cultural targets first, and then determining how to reach those targets faster could be a potential solution.

**DOLF** offered a response from pragmatic perspective. Using standardized indicators can at least get people to be thinking about certain areas, even if the assessment isn't perfect. Having an established set of indicators would help an event go through the process associated with carrying out each one and then organizers could decide how it could be implemented. At least sharing a common set of indicators could help the event move forward. The process of deciding on the applicability of each indicator and then designing its legacy plans to suit would be one approach.

**BOVY** reminded the group that it is one thing to measure an indicator—which has to be done to some extent- but it it is another thing entirely to interpret, especially giving the high level of difficulties surrounding qualitiative analysis.

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**BAKER** spoke to the question posed by a fellow audience member on how to evaluate an unused sports venue. Baker reiterated one of the key promises that an organizing committee makes: a responsibility to deliver on winter sports. Part of this pledge entails constructing venues that could face little post-Games use. The speed skating oval will be an example of transforming a one-time use facility into a lasting legacy having a functional multi-use solution. While the Canadian National Team will continue to train in Calgary at an existing worldclass facility, the Richmond Oval would be transformed from Olympic venue to community resource. When considering the installation of a temporary versus permanent ski jump and sliding centre, VANOC officials found that the cost of constructing either facility would have come at the same price. In order to sustain the legacy operation of Winter Olympic venues, the Canadian and British Columbian governments created an endownment fund to sustain the sliding centre, Nordic centre, and Oval. The returns on investment will continue into the future so as to not burden tax payers with the cost of these facilities. Since VANOC was tasked with answering so many questions like this, the organizing committee responded by being comprehensive in their calculations and outlook and thinking into the long-term.

MAURER addressed the assumption in the room that megaevents carry negative impacts and someone must be responsible for mitigating them. Maurer raised questions on whose responsibility it is to predict Games' impact so that we might mitigate negative impacts?

Do we compromise the accuracy of our data so that we can more effectively manage under constraints of time and money? Opportunities to mobilize these types of events can lead to innovative thinking and more opportunities. Changing the way we consider, write about, and act on these challenges can also help achieve goals and seek new opportunities.

Maurer concluded the discussion with several important questions plaguing researchers and mega-event organizers alike. Certainly there are opportunity costs, but how can choices be adapted around research in order to mobilize opportunities? How do we mobilize them as researchers, and how can they be mitigated? Will this in turn influence how we design and implement our studies?

# CONCLUSION

Caitlin Pentifallo
University of British Columbia

Dr. Robert Sparks

The panel of presenters contributing to the Think Tank provided a range of diverse lessons, experiences, and perspectives in a field that is still very much under development. Indicator-based impact assessment for sporting mega-events offers the promise of objectively accounting for the changes that an event brings to a city, region, and country. Nevertheless, questions clearly remain about the efficacy of this approach and its methodological and theoretical foundations. As this Think Tank demonstrated, debate over the utility and applicability of a localized versus globalized template is likely to continue.

The use of context and event indicators is a potential step forward, to the extent that the combination of fixed event indicators and dynamic, adaptable context indicators may enable researchers to more readily capture local and specific variables in an event's impacts. The ability to examine mega-event impacts over time makes the demand for stabilized indicators all the more pressing. At the same time, no two hosts are identical, making a universally generalizable template unlikely. Examples of indicator-based impact assessments coming from Vancouver and South Africa's experiences hosting the Winter Games and World Cup, respectively, show promise for the future of impact assessment. The robust methodologies developed by the South African Cities Network and the Olympic Games Impact research group are examples of this. Nevertheless, attribution of causality stands to remain a trenchant issue for any indicator-based assessment, no matter how extensive and rigourous its methodology.

Beyond the debate surrounding data collection and interpretation, it is also clear there is a pressing need for enhanced event management education, particularly in the areas of planning for and managing impacts. By fully understanding the mega-event a city is buying into, there is greater potential for hosts to more fully realize their goals and expectations. The challenges surrounding indicator-based impact assessments for sporting mega-events are daunting, however, it is readily apparent that the benefits of such research outweigh the challenges.

As legacy promises and price tags for hosts continue to rise, there is a profound need to better understand the impacts and implications of sports mega-events.

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