2018 POCOG Sustainability Framework

Creating a New Horizon for Sustainable 2018 PyeongChang Olympic and Paralympic Winter Games:

Furthering Benefits to Human and Nature





The PyeongChang Organizing Committee for the 2018 Olympic & Paralympic Winter Games

Dear colleagues and stakeholders

Republic of Korea, the host of the 2018 PyeongChang Olympic and Paralympic Games has become the 6th country to achieve sports grand slam by hosting both Winter and Summer Games. This is one of the major milestones for enhancing the country's position in the international community.

Over the history, the Olympics have contributed to regional and national development in various social areas including community, culture, economy, environment, etc. as well as to the promotion of the world's peace and human dignity.

Furthermore, more recently the Olympics have exhibited increased endeavors to integrate sustainable development as a new paradigm for the humanity's common prosperity in response to the global challenges related to climate change and resource depletions etc.

PyeongChang 2018 will actively take part in this movement: The Games will strive to maintain sustainability along the overall process of hosting the Games, based on the balanced human development and enhanced human dignity, key principles of the Olympism. Through this, PyeongChang 2018 will further the benefits to both humans and to the nature.

As a starter, "New Horizon", Pyeong Chang 2018' vision, will be translated into concrete action plans with a set of specific sustainability goals and targets, constituting a new paradigm for sustainable development through the Olympic Games.

Secondly, POCOG is working hard to ensure consistent application of social and environmental sustainability principles to the entire process of preparation, hosting and decommissioning of the Games' events. POCOG's efforts will scale-up over time as the Games' opening comes nearer.

POCOG will establish a sustainable Games management plan, as a solid foundation for balanced performance between economic, social and environmental aspects. Management activities shall be disclosed and communicated to its key stakeholders and the public transparently. In this way, POCOG will enhance its status in the global Olympic community.

In addition, POCOG developed CSR Guidelines for PyeongChang 2018' participating entities for sustainable operation of the Games in three pillars of sustainable development, namely environmental, social and economic. Through this, POCOG

aims not only to host sustainable Games but also promote social responsibility of participating corporations and other entities and raise public awareness on the importance of CSR.

In addition to this Framework Paper, POCOG plans to publish two other Sustainability reports for PyeongChang 2018 in 2016 and 2018 respectively. These two reports will present POCOG's and host cities' sustainability performances and achievements to the Games' stakeholders, seeking for continued cooperations for successful management of the Games. The 2nd Sustainablity Report shall be verified by an authorized third-party.

POCOG plans to achieve ISO 20121(Event sustainability management systems). All activities of the Games will also comply with GRI G4 EOSD, ISO 26000 and the UNGC principles.

POCOG will continue to make utmost efforts to position itself as a socially responsible entity that are complying with key principles in human rights, labor, environment and anti-corruption. It will strengthen stakeholder consultation and communication and boost public's confidence in PyeongChang 2018. Through this POCOG will strive to fulfil its goal of sustainable management of the Games meeting the needs and expectations of its various stakeholders.

For this, we would like to seek for our stakeholders' continued attention and support to achieve the goal of making PyeongChang 2018 the most sustainable Winter Games in history.

Thank you,

July 2015

The PyeongChang Organising Committee for the 2018 Olympic and Paralympic Winter Games $\label{eq:committee}$

Chairman Yang Ho, Cho





	In	tro	oduction ·····	09
	1.	Oly	mpic and Sustainable development	11
	2.	Sus	stainability Plan for PyeongChang 2018 ·····	14
	3.		public of Korea: Conditions and Capacity ····································	15
	4.	Руе	eongChang, a City of Peace and New Hope ·····	17
	5.		e Key Sustainability Principles of ······eongChang 2018	18
			Direction of the vision formulation: Expansion of the overall vision of PyeongChang 2018	18
		5.2.	Content of the Vision; "New Horizon of the Sustainability" of PyeongChang 2018	21
	6.		nciples for actualizing the Sustainability Vision PyeongChang 2018	22
		6.1.	Participation and Cooperation-based Preparation of the Events	22
		6.2.	. Creation of Multi-dimensional Legacy of the Games	23
	7.		gacy and Olympic Games Impact of ······eongChang 2018	24
		7.1.	Balance among Environmental, Social and Economic Legacy	24
		7.2.	Olympic Games Impacts	25
	8.	Sus	stainability Themes of PyeongChang 2018	26
	9.	Inti	roducing this Report ······	27
П	. 5	Ke	y Themes of Sustainability	29
	1.	Sus	stainability Theme 1: Low Carbon Green Olympics	30
		1.1.	Minimization of GHG emissions and Clean and Renewable Energy Use	32
		1.2.	Establishment of Green Transport Systems	33
		1.3	Facilitation of Resource Circulation and Green Procurement	34
		1.4	Environment-friendly construction and wrban space formation	36
	2.	Sus	stainability Theme 2: Stewardship of the Nature	42
		2.1.	Preserving biodiversity ·····	43
		2.2.	. Restoration of ecological environment and reforestation \cdots	45
		2.3.	. Improvement of water quality and	47

3.	Sus	stainability Theme 3: Good Life	51
	3.1	Sustainable construction and operation ofOlympic facilities	55
	3.2	Revitalization of local economy through designation of specialized zones and developing tourism items based on local characteristics of the host regions	59
	3.3	Improvement of living environment through balanced ······regional development and expansion of SOCs such as road, housing and transportation system	70
4.			76
	Pro	oud People with Tradition and Culture	
	4.1	Globalization: globalization of the culture based ona deep sense of tradition and cultural heritages	78
	4.2	Preparing the Games with inclusion: through participation of minority groups in respect of social diversity	83
	4.3	Creating innovative platforms for public consultation, $\cdots\cdots$ communication and participation	91
5.	Glo	balizing PyeongChang: Opening to the World	97
	5.1	Creating a winter sports hub in East Asia byconstructing world-class infrastructure and facilities	98
	5.2	Improving Inter-Korea relationship throughsport partnerships	99
	5.3	Highest level of safety and security	103
	5.4	Compliance the CSR requirements of participating entities	104
			109
1.		Olympic facilities 3.2 Revitalization of local economy through designation	
2.	The	e Organizations ·····	112
		Strategic goals for Sustainability Management of	
	2.2.	Collaboration with Key Stakeholders	117

ADP Actualising the Dream Project

ANOC Association of National Olympic Committees

BEEC Building Energy Efficiency Certificate

BPA British Paralympic Association

CBD The Convention of Biological Diversity

COP Conference of the Parties

CSR Corporate Social Responsibility

CTPED Crime Prevention through Environmental Design

DAC Development Assistance Committee

DMZ Demilitarized Zone

DP Dream Program

EIA Environmental Impact Assessment

EOSD Event Organizer Sector Disclosure

FAs Football Associations

FIS International Ski Federation

GCC Green Climate Cities

GCF Green Climate Fund

GGGI Global Green Growth Institute

GHG greenhouse gas

GRDP Gross Regional Domestic Product

GRI Global Reporting Initiative

G-SEED Green Standard for Energy and Environmental Design

HDI Human Development Index

IBC International Broadcasting Center

ICLEI International Council for Local Environmental

Initiatives

IFS International Sports Federations

IHT International Herald Tribune

IIHF International Ice Hockey Federation

Abbreviations

IOC International Olympic Committee

IPC International Paralympic Committee

IPSFs Paralympic International Sport Federations

KOC Korean Olympic Committee

KPC Korean Paralympic Committee

MDG Millennium Development Goal

MPC Main Press Center

NGO Non-Governmental Organization

NOCs National Olympics Committees

ODA Official Development Aid

OECD The Organisation for Economic Co-operation and

Development

OGI Olympic Games Impact

OGKM Olympic Games knowledge Management

PASO Pan American Sports Organization

POCOG The PyeongChang Organising Committee for

the 2018 Olympic and Paralympic Winter Games

SOC Social Overhead Capital

TM Technical Manual

UNCED UN Conference on Environment and Development

UNDP United Nations Development Programme

UNEP United Nations Environment Programme

UNESCO The United Nations Educational, Scientific and Cultural

Organization

UNGC United Nations Global Compact

WADA World Anti-Doping Agency

- 1. Olympic and Sustainable development
- 2. Sustainability Plan for PyeongChang 2018
- 3. Republic of Korea: Conditions and Capacity for Sustainable Development
- 4. PyeongChang, a City of Peace and New Hope
- 5. Five Key Sustainability Principles of PyeongChang 2018
- 6. Principles for actualizing the Sustainability Vision for PyeongChang 2018
- 7. Legacy and Olympic Games Impact of PyeongChang 2018
- 8. Sustainability Themes of PyeongChang 2018
- 9. Introducing this Report



"A glorious announcement of PyeongChang as the host city for the 2018 Winter Olympics made in Durban in South Africa on 6th July 2011 indicates a splendid achievement as well as a new challenge in sustainability for PyeongChang and the Republic of Korea."

PyeongChang, Republic of Korea has been elected as the host city of the 2018 Olympic Winter Games. This shows that the international community recognized years of endeavors and preparation made by PyeongChang and the Republic of Korea for hosting the Games. Based on the capacity and expertise that have been accumulated through hosting over decades of years a number of global-scale sport events including Seoul Summer Olympics in 1988, the successful bidding for PyeongChang 2018 was only possible through enhanced national strength, status and global leadership of the Republic of Korea and mature citizenship of its people.

As the global society has come up with the concept of sustainable development as a new paradigm for promoting peace and prosperity against the challenges surrounding climate change and depletion of natural resources, the world is expecting the host city to play a leading role in materializing sustainable Olympics.

Executive Board of PyeongChang Olympic and Paralympic Games (Hereinafter, EB) set

the Sustainability Plan to prepare and operate the Games in a sustainable manner while creating renewable legacy thereby. Sustainability plan of PyeongChang 2018 specifies and expands the vision of the city, so-called "New Horizon". By suggesting a detailed implementation plan of accomplishing visions and goals of the Olympics, Korea and PyeongChang will show their capability in promoting a new paradigm of sustainable development.

In this context, this foundational report attempts to provide with core subjects and sustainable visions of PyeongChang 2018 and to propose the background information about preparation and implementation frameworks for the Sustainability Plan.

Sustainable vision of PyeongChang 2018 is as follows:

"Creating a New Horizon for Sustainable PyeongChang Winter Olympics and Paralympics in 2018-Furthering Benefits to Human and Nature"

To understand an idea of sustainable vision, it is important first of all to look at the connection between sustainable development and Olympic Games along with the meaning of sustainable Games in terms of PyeongChang 2018.

1. Games and Sustainable development

Sustainability and sustainable development are new notions that emerged from a new paradigm for development and prosperity aiming to overcome limitations of the existent paradigms. The concept reflects the realization that the climate-related natural disasters, destructions to the ecosystem and following demolitions of ecosystems and rapid depletion of natural resources are threatening the very foundation of the safe, healthy and prosperous life of the mankind and others. Now become common terms used in our everyday life, the notions of sustainability and sustainable development are not easy to clearly define.

According to the World Commission on Environment and Development (WCED) Report (aka. "Bruntland Commission Report") issued in 1987, the notion of sustainability was(first) defined as "the kind of development that meets the needs of the present without compromising the ability of future generations to meet their own needs." While easy to understand conceptually, a range of different views and approaches exist on how to achieve it.

UN Agenda 21 has been established in Rio, Brazil in 1992 in the UN Conference on Environment and Development (UNCED, aka. the "Earth Summit") with participation of 108 head of states, 172 country representatives as well as about 20,000 NGOs including IOC with attendances of a number of scientists and journalists. UN Agenda 21 is an action plan for the Planet Earth's environmental conservation and sustainable development. This historic moment of the "Earth Summit" provided a highly significant momentum for the global community to adopt as a global political agenda creating social, economic and environment-related issues for global environmental conservation and sustainable development. Since then the notion of sustainable development has been expanded to a wide range of areas and fields related to our economic and development activities, social issues and the Lebenswelt of the people.

A key premise to sustainable development is that lasting prosperity of the mankind requires our ability to make a fine balance and harmony amongst environmental, economic and social dimensions of our endeavors. This clearly warns against a lop-sided development focusing only on one or two dimensions.

International sports event of a large scale, including the Olympic Games, engenders scalable social and environmental impacts. Thus there has been growing recognition that the Olympic Games (and other mega sports events) should also be carried out in the framework of sustainable development. Reflecting this, 3 years after the establishment of the UN Agenda 21, IOC set up the Sport and Environment Commission and signed an MOU with UNEP in order to strengthen environmental soundness in the overall affairs of and to apply sustainable development principles to the Olympic event management. In the following year, the IOC proclaimed the environment as the third key principles to the Olympism after sports and culture.

Since then sustainability, with environmental, social and economic dimensions as its three key pillars, has become increasingly important agenda to the Olympics. Recent attention to climate change is reinvigorating the trend. It is a fact by now that the global community expects the Olympic Games and other sport events proactively address such a global challenges and issues.

IOC requests hosting cities to consistently apply the key sustainability principles to all stages from preparation, opening and decommissioning of the event. In the context of the Olympic Games, sustainability is more specifically defined as "The benefits can and should always outweigh the impacts and costs." Moreover, growing emphasis is made on creating lasting tangible and intangible legacy through the Olympics.

In a nutshell, sustainability is an "essential and integral part of establishing a mindset and approach across the Olympic project that will lead to achieving a substantial legacy." Sustainability "provides a framework and way of working that will optimize

legacy opportunities."

The first officially expressed attention to the environmental issues in the Olympic Games traces back to 1994 Lillehammer Olympic Winter Games. Following Olympic Games have made efforts to mitigating negative environmental impacts and construction of environmentally friendly event facilities. Since 2010 Vancouver Winter Olympics, initial attention on environmental aspects in facility and amenity constructions has turned to expanded dimensions of sustainability including social and economic dimensions and in the same edition of Games, a full-fledged sustainability report for the Olympic Games was published for the first time. 2012 London Summer Olympics marked a visibly stronger consideration and deliberations of a more systematic and comprehensive management and application of sustainability principles to the Games. Sochi Olympic Winter Games in 2014 also duly reflected the sustainability principles in preparing and managing the Games in accordance with the above-referred international practices and expectations.

< A brief history of Olympic Games related to the Sustainable Development >

Games	Key achievements
Lillehammer Winter Olympics(1994)	The first Games that officially drew attention to environmental issues
Sydney Summer Olympics(2000)	Environmentally friendly construction of Athlete Village by introducing "Green Housing" techniques
Athens Summer Olympics(2004)	 Air pollution reduction efforts through transport infrastructure building Protection of the archeologically valuable sites
Torino Winter Olympics(2006)	· Environmental consideration through all phases of the Games
Beijing Summer Olympics(2008)	 Green City Development Plan/ Renewable energy use including wind and solar power Large scale landscaping Introduction of an independent EIA to the Games for the first time in collaboration with UNEP
Vancouver Winter Olympics(2010)	Introduction of sustainable Plan and Management system Publication of Games Sustainability Report for the first time

London Summer Olympics(2012)	 Comprehensive and systemic application of substantiality principles to all key areas through all phases of the Games preparation and management Publication of two Games Plan Reports and three Games Sustainability Reports
Sochi Winter Olympics(2014)	Introduction of locally contextualized sustainability concept in the view of development needs and characteristics of the host city

Sustainable management of Olympics has been evolving along with the advancement of the discourses and practices on the sustainable development. This trend shall continue. The world is expecting that PyeongChang 2018 opens a New Horizon for sustainable Games.

< 2012 London Summer Olympics & 2014 Sochi Winter Olympics Sustainability Framework Report >



2. Sustainability Plan for PyeongChang 2018

While pursuing a common goal of carrying out sustainable Olympic Games, each hosting cities' approaches varied in crafting concrete action plans. This is understandable considering differentiated socio-political and cultural contexts, level of developments of and specific desires and goals each hosting communities and countries aspire to achieve through the Games. Despite differences in their respective approaches, targets and distinctive features of each Games, there have been common characteristics all sustainable Olympic Games should share.

< Common Characteristics of the Sustainable Olympic Games >

Content-wise	Procedure-wise	
· Accessible and inclusive setting for all safe and secure atmosphere	· Define your vision, mission and policy	
 Minimal negative impacts on the environment 	· Define your key objectives	
· Positive benefits on the environment Responsible sourcing	Develop and implement a Sustainability Management System (i.e. ISO 20121)	
· Excellent customer experience	· Define roles and responsibilities and	
\cdot Encourages more sustainable behavior and	involve other FAs in the delivery phase	
healthy living	· Transparency and disclosure	
· Economic benefits	(i.e. GRI Guidelines)	
· Positive legacy		

Sources: 2014. IOC internal documents

Sustainability is a core principle for successful Olympic Games and virtually is in the DNA of the Olympic Games. Therefore, a holistic approach is desirable integrating strategies, action plan and operational structure of the Games under the common sustainability principles. Sustainability Plan should support and facilitate fulfilling the visions and goals of the Olympic Games the host city, the country and the Organizing Committee would like to achieve through the Games along the entire process of preparation, Games-time and decommission. Thus formulating Sustainability Plan starts with envisioning an overall goal(s) of Sustainable Olympic Games and action plans in close consultation with the IOC in lieu of broader goals for all Olympic Games and Olympism.

Then, what should be the vision and action plan for PyeongChang 2018? In order to find answers, specific contexts of the host cities and the country, the Republic of Korea, as well as shared hopes and dreams the citizens of host cities and the country are envisioning.

3. Republic of Korea: Conditions and Capacity for Sustainable Development

The Republic of Korea, the country where the host cities of PyeongChang 2018 are located, recovered from major tragic events in the 20th century, of the occupations by Japanese colonialism powers and the following civil war, the results of which,

split of the country into two, i.e. ROK and DPRK, the Korean people still suffer. Notwithstanding the country is proud to be one of the rare achievements of rapid and substantial economic prosperity as well as social, cultural and political progress despite formidable challenges and obstacles as such. Once remembered as a symbol of the sufferings the global Cold War.

Steady and substantial progress and development the Republic of Korea has yielded despite the shortage of natural resources and high population density. Recently the country has recently embraced the new paradigm of sustainable development proactively.

In particular, it is notable that in 2008 the country has envisioned low carbon green growth as a new paradigm for sustainable development. In this line, a series of robust policy and institutional efforts to ensure lasting prosperity and healthy life of the humanity through conservation of natural resources and ecosystems and sustainable development based on clean and renewable energies.

Responding to the challenge of Climate Change, the Republic of Korea introduced the GHG and Energy Target Management System in 2011, which will be switched into an Emission Trading System(ETS) in 2015. Around the same time the country hosted the Global Green Growth Institute(GGGI) in Seoul as well as the Green Climate Fund in Songdo, Incheon, the latter being expected to play an important role as so called the World Bank in green and environment areas. As a result the country is emerging as one of the leading middle power countries in global community's consolidated efforts to tackle the climate change and pursue sustainable development.

Joining OECD in 1998 and its Development Assistance Committee(DAC) in 2009, the Republic of Korea has steadily expanded its span of international development cooperation and assistance through ODA and other channels. In line with this, the country is supporting other development countries in adopting the practices of green growth and climate change response based on the country's experiences and knowhows in the framework of sustainable development.

Decades of the country's cooperation as such, the Republic of Korea has established firmly established itself as an important member of the global community working together towards the common goals of tackling the global challenges of climate change and natural resource depletions.

PyeongChang 2018 will provide a valuable opportunity to the Republic of Korea to demonstrate its capacity based on accumulated experiences and efforts to successfully manage the Games with a higher level of sustainable management of the Games.

Accumulated capacity and confidence of the Republic of Korea in pursuing sustainable development will become a foundation for hosting successful and sustainable PyeongChang 2018. POCOG aims to broaden the horizon for sustainable management of the Olympics Games.

4. PyeongChang, a City of Peace and New Hope

< Emblem of PyeongChang 2018 >



From the contemporary historical point of view, it bears a symbolic importance that the city of PyeongChang, in Gangwon province, is hosting the Games: Gangwon Province is the only province in the country whose territory has been tragically divided due to the division of the two Koreas since the Korean War in early 1950s. Since then, the province has been living with direct impacts of the division of the peninsula in terms of its physical territory and otherwise. National security issue is heavily hanging over the prospects of the province's development and prosperity where the changing political climate of the country related to its Northern counterpart structurally overcasts the people's daily lives.

PyeongChang 2018 is expected to provide a new hope for Gangwon Province, where its potential for development and prosperity has been hampered due to the external factors despite its abundance of natural resources and significant potential. PyeongChang 2018s will become a momentum for revamped vigor for development and innovation and inter-Korea stability and peace-building, I.e. key messages of the Olympism and precondition for sustainable development.

PyeongChang 2018 will provide valuable opportunities to people in the province for new vitality for economic prosperity and quality of life as well as learning opportunities as a global citizen participating in the promotion of the principles of peace and reciprocity based on the Olympism. We expect this will bring about improvement of inter-Korean relationship through revived cooperation and exchanges between the two Koreas based on friendship, generating positive impacts on overall peacebuilding efforts in inter-Korean affairs.

We believe that the above-listed unique conditions of Gangwon Province also constitute an important contribution of PyeongChang 2018 to a novel aspect for Sustainable Olympic Games. Hosting PyeongChang 2018 will offer the hosting cities and Gangwon Province precious opportunities to participate in collective efforts of the global community towards pursuing sustainable prosperity, by resetting its systems to more sustainable ones economically, socially and culturally.

Years of efforts the people in Gangwon province and hosting cities will eventually pay off through successful management of PyeongChang 2018. Host cities and its people have been working hard and continuing its consolidated efforts to realize their visions and goals of PyeongChang 2018.

5. Five Key Sustainability Principles of PyeongChang 2018

The Sustainability Vision of PyeongChang 2018 is "Creating a New Horizon for Sustainable PyeongChang Winter Olympics and Paralympics in 2018: Furthering Benefits to Human and Nature." The formulation of the vision has been based on the following:

5.1 Direction of the vision formulation: Extension of the overall vision of PyeongChang 2018

The Sustainability Vision of PyeongChang 2018 is an extension and expansion of the overall Vision of the Games, namely, "New Horizon".

To elaborate on the overall vision and strategy of PyeongChang 2018:

< Vision of PyeongChang 2018 >

The vision of PyeongChang 2018 is to create a new horizon for winter sports in Asia, an emerging stage for winter sport activities for the young generation of the Globe and to create sustainable and creative legacy in PyeongChang and the Republic of Korea.

Successful hosting of PyeongChang 2018 is a valuable outcome of the consorted efforts of the Korean people with enthusiasm for the love of winter sports. Based on

this energy and support, we will host the Games successfully in a sustainable manner.

Being the third Olympic Winter Games coming to Asia, PyeongChang 2018 aims to provide particularly the youth in the region with special experiences and confidence and to share the Olympism with the global community.

POCOG is exerting its utmost efforts in order to ensure all the participating athletes to fully realize their capacity during the Games and to bring about unique impressions and experiences to all, including athletes, spectators and all other stakeholders.

To translate the Games' Vision into concrete action plans, POCOG set up the four key objectives of the Games, I.e. Economic, Cultural, Environmental and Peaceful Olympics. The Game's vision provides important guidelines to achieve each of them.

POCOG has also established ten specific strategies to actualize the Games' vision, which are organically interlinked and mutually-supplementary for creation of synergy.

<Strategies for actualizing the Vision of PyeongChang 2018>

- 1. Secure a thorough preparation of the Games based on comprehensive risk analysis and action plans for near-perfect level of security and safety during the Games.
- 2. Athletes- and Games-oriented approach in identifying sports facilities location and management systems to provide best conditions for the participating athletes to deliver the best performances during the Games.
- 3. Inter-linkages of the transport systems among principal, artery and ring-roads as well as different modalities to minimize the transport time and enhance the accessibility to the Games facilities and to ensure the convenience in the movement within the remit of the Games' area.
- 4. Provision of sufficient level of comfortable accommodations and other facilities for enjoyable tourism and participations of the spectators and visitors.
- 5. Ensure balanced budget management for cost-efficiency through setting appropriate level of investments for maximum effects.
- 6. Deployment of top-notch marketing strategies to raise the value of the use of the Games' symbols and logos to attract sufficient sponsorship.
- 7. Development of a Korean cultural items ("Hanyru", literally meaning the "Korean wave (trends)") both local Koreans and foreigners can enjoy, and creation of lasting related legacy for enhanced synergy making by linking investment, tourism and cultural promotions efforts.
- 8. Ensure environmentally-friendly Games by fulfilling the goal of " O_2 Plus Winter Games" through environmentally-sound Games facility construction, clean and

renewable energy use as well as minimization of the wastes.

- 9. Facilitate to create an atmosphere for citizens' hospitability, openness and participation in the preparation of the Games through promoting volunteerism and genuine civic movements.
- 10. Assist to fulfil the Olympism through various peace-building activities between the two Koreas by organizing sports-exchange programs and encouraging the participations of the people in North Korea.

To actualize the Vision of PyeongChang 2018, POCOG has set up a range of sector-specific functional areas(FA) in accordance with the above-listed four key objectives and ten key strategies. Based on this, a Roadmap has been developed including concrete action plans in each of the FAs.

Each of the detailed action plans shall be implemented through a dual system of execution and oversight within according FAs. Monthly reviews shall be carried out in order to check the progress and address any occurrence of issues. Overall, systemic and multi-layered efforts will be conducted simultaneously in order to actualize the Games' Vision.

POCOG shall develop a set of measurable indexes both in progress and performance in implementing the detailed action plans. It will operate a management-monitoring-feedback mechanism for effective management of overall preparation of the Games.

Detailed action plans shall be managed based on a Master Schedule(s) which will also include identification of additional sub-plans that are identified along their implementations. Thorough and systemic development of the detailed action plans and their according implementation will provide a firm ground for effective fulfillment of the Games' Vision.

The Vision of PyeongChang 2018 shall be pursued in collaboration and partnerships amongst the central government, the National Assembly, Gangwon Provincial government, host and venue city governments, KOC and KPC and other stakeholders including local communities in accordance with agreed set of shared and differentiated roles and responsibilities.

Source: PyeongChang 2018 Games Foundation Plan(2012)

The overall Vision of PyeongChang 2018 and Strategies embed many of the key sustainability principles and objectives.

To summarize, PyeongChang 2018 shall be based on key principles of: prudent budget management balancing maximum benefits and effects with minimum costs; compact

construction of the Games facilities; comprehensive and balanced attention to the four key objectives of the Games, namely, management of culturally enriching, environmentally sound, peace-building and economically viable Games, and; development of sustainable legacy plans to rebuild Gangwon province and host and venue cities as a new hub for Winter sports by ensuring full utilization of the facilities that are being built for the Games. The Sustainability Vision of PyeongChang 2018, i.e. creating a new horizon for Sustainable PyeongChang Games, is based on these approaches and its logical extensions.

5.2 Content of the Vision: "New Horizon of the Sustainability" of PyeongChang 2018

PyeongChang 2018 aims to take a step further than those of the previous Olympic Winter Games in pursuing sustainable Olympic events management.

In particular, the Games aim to:

- Acquire certificates of the country's green building(G-SEED) and barrier-free living environment(BF) to the higher level than are legally required.
- Application of the "O₂ Plus" criteria for the overall Games management, a level higher than that of "low carbon" to an effect of creating an upgraded criterion for observing environmental sustainability in the management of the Olympic Games.
- Extending the attention and efforts to broader scope of sustainability in sport event management from environmental conservation and negative impact mitigations to other climate change-related aspects as well as social and economic dimensions.
- Application of digital ubiquity and cutting-edge ICT technology tapping on the
 country's top-notch ICT technology and infrastructure, with the world's highest
 Internet penetration levels to the management and execution of the Games for
 faster and accurate information about the Events and real time communication
 and participation by various groups of participants and stakeholders.
- The first Winter Games applying the GRI 4 for Event Organizers (EOSD), the most updated version of the Global Reporting Initiative (GRI).

Through achieving the above-listed objectives, PyeongChang 2018 will create the momentum for the following:

· Hosting the Olympic Winter Games that address climate change challenges and

are environmentally and socially responsible (thus sustainable) based on clean natural environment and rich natural resources of the hosting province and cities, through achievement of low carbon (" O_2 Plus") targets and resource circulations; conservation of biodiversity, restoration of ecosystems and reforestation, construction infrastructure for water quality improvement and clean water provisions.

- Expanding winter sport facilities and transport infrastructure in Gangwon province, whose development in these aspects are comparatively lagging & promoting vitalization of social economy in the region for invigoration of local economy, improvement of welfare of the residents and foundation building for long-term economic prosperity of the region.
- Revitalization of local community and boosting the pride of the residents as cultured citizens of the global community respecting diversity and openness.
- Fulfilling the sustainable Games through meeting the global standards in developing the Games' facilities and associated infrastructure as required, facilitating international cooperation and inter-Korean sport partnership and ensuring the compliance of participating corporate and other entities of the social corporate responsibilities (CSR).
- Enhancing the brand value of PyeongChang as a global city pursuing sustainable development and prosperity.

6. Principles for actualizing the Sustainability Vision for PyeongChang 2018

6.1 Participation and Cooperation-based Preparation of the Events

Governance for the Games management aspires to be more open, participatory through partnerships of various stakeholders on equal terms (based on networking) based on a bottom-up, decentralized decision-making approach. Since hosting the 1988 Seoul Olympic Summer Games and 2002 Korea Japan FIFA World Cup, the Republic of Korea has evolved itself towards more decentralized governance system with stronger local autonomy. Thus compared with the practices done for the previous Events, the management of PyeongChang 2018 will be more locally based in due consideration of the local needs and conditions of the host cities. In this context, POCOG's special attention lies on the question on how to effectively reflect the visions of the local residents in the hosting province and cities, as well as how to

ensure the ownership of the local community in preparation of the Games. POCOG is endeavoring to facilitate the rebirth of Gangwon Province and its people as a proud citizens and members of the global community who actively participate in and contribute to the world's sustainable development movements. For this POCOG will promote civil society building activities and awareness raising program of the global environmental challenges targeting local communities in host cities and the region.

6.2 Creation of Multi-dimensional Legacy of the Games

Olympic Legacy are multi-dimensional encompassing both tangible legacy such as built Games facilities and intangible ones such as invigorated local culture and enhanced capacity of the people who participated in the events.

Creation of Olympic Legacy are important partly due to the uniqueness of the Olympics as a global sport events of its own kind: As stated in the Olympic Charter, the Olympic Games is not only a sport event where athletes compete one another in their performances but also bears significance as a window of opportunity where all the participating parties, athletes and individuals from around the world as well as hosting country and cities and its people become aware of and elevate the universal spirits and underlying principles of the Olympism. In this context, IOC has identified culture and education as the first and second fundamental principles to the Olympic Games, and in 1996 environment as the third.

Olympic Legacy refers to lasting results and outcomes we aim to obtain through our endeavors to achieve the Fundamental Principles of the Olympism, human development and social progress. Management of Sustainable Olympic Games refers to setting up and carrying out strategies and implementation plans to create sustainable Olympic Legacy as such.

Fundamental Principles 1 & 2 of the Olympism stipulated in the Olympic Charter

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

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

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

Pierre de Frédy Baron de Coubertin (Founder of the mordern Olympic Games)

" Sport has shown its potential to be a catalyst for creating more sustainable, healthy, urdan and non-urban environments and economies.
"

Jacques Rogge(President of IOC)

" The Olympic Movement has raised the bar for future sustainable mass spectator event.
"

Achim Steiner(Executive Director of the UNEP)

7. Legacy and Olympic Games Impact of PyeongChang 2018

7.1. Balance among Environmental, Social and Economic Legacy

The concept of the Olympic Legacy have been evolved along the history of the Olympic Games towards a broader scope encompassing all the three pillars of sustainable development, namely, social, environmental and economic. Thus a balanced approach and attention amongst the three pillars is required in sustainable management of the Olympic Games, the trend of which the 2012 London Olympic Summer Games have practiced setting a new norm for the following Games.

In this context PyeongChang 2018 aims to pay a balanced attention in the overall process of preparation, operation of the Event, de-commissioning as well as creation and transfer of the Games' Legacy to all the three pillars of Sustainable Development, i.e. economic, social and environmental, transcending from one-sided focus on environmental sustainability.

< Various aspects of PyeongChang 2018' Legacy >



A various aspects of PyeongChang 2018 Legacy are interlinked to the five Sustainability Themes of PyeongChang 2018. The five Sustainability Themes will be introduced one by one in the following chapters respectively, each of which are followed by 18 Sustainability Legacy of the Games related to each of the Themes.

7.2. Olympic Games Impact

Setting the framework and strategies to create aimed lasting legacy of PyeongChang 2018 is the gist of the Sustainable Plan of PyeongChang 2018. In this regard, performance in creating legacy should be measured in concrete and objective manner through the Olympic Games Impact Study. The Olympic Games Impact Study is a set of intellectual process through which tangible and intangible impacts of the Games and their causal evolvements and changes are analysis objectively and scientifically. The study results provide a foundation for a hosting region to draft its development strategies and analyze the effects and impacts of the Games. The scope of the Olympic Games Impact Study includes all the three pillars of sustainable development, i.e. economic, socio-cultural and environmental.

< Relation of Olympic Legacy, Games Impacts and Sustainability Management Plan >



The OGI Study Framework Paper, the initial of the OGI study series issued in June 2013, divided thematic topics into three dimensions, i.e. social, environmental and economic, reflecting the three dimensions of the sustainability management of the Games. Each topic includes specific focused areas with summaries of the general conditions of the country and hosting regions(baseline studies) with implications for further studies. The overall practices as such were guided and technically supported by the IOC, the proponent of the OGI study. In particular IOC provided a set of advice on how to link the overall coordination and improvement activities for the generation of the legacy to results of the OGI studies. In general IOC's policy strongly recommends linking the OGI studies within the framework of the Sustainability Management Plan of the Games.

The OGI Study Framework Paper was produced by the Research Institute for Gangwon (RIG) with POCOG's administrative support in partnership with a group of experts and academics on related socio-cultural, economic and environmental issues. POCOG plans to develop two more(interim) study reports and KOC takes over for the final report three years after the completion of the Games.

< OGI Indexes by sector for PyeongChang 2018 >

Category	High-level Target	Specific Aims
Environment	O₂ Plus	 Building necessary systems against climate change
		· Organization of sustainable city
	Creation of social capital	· Activation of regional communities
Society & Culture		· Increased quality of living
Culture		· Mature sense of consciousness and culture
	Forming the foundation for growth in eastern and central part of the Korean Peninsula	· Confirming the basis for creative growth
Economy		· Jump start of global tourist destination
Leonomy		· Successful hosting of the Olympics

Source: First Report on Olympic Games Impact(June 2014)

8. Sustainability Themes of PyeongChang 2018

PyeongChang 2018 proposes the following five key Sustainability Themes with a thematic goal of which respectively.

① Low Carbon Green Olympic - Accomplish "O₂ Plus" effects through low-carbon operations and resource circulation.

- ② Stewardship of the Nature Ensure permanence of an ecosystem by minimizing and recovering from ecological damages.
- ③ Good Life Build foundations for lasting prosperity of local economy and improved quality of life of the people in hosting regions.
- ④ Proud people Strengthen civil society and social capital through revitalization of local communities and promotion of cultural diversity and inclusion.
- © PyeongChang Opening to the World Establishment of PyeongChang as a global city contributing to the promotion of Olympism and Winter Sports in Asia.

9. Introduction of Sustainability Report

This report, titled "Sustainability Framework Report for the 2018 PyeongChang Olympic and Paralympic Winter Games", is produced three years prior to the Games. The Report consists of a basic framework and approaches for POCOG in setting up and implementation of overall sustainability plan of the Games. Based on the framework and general approaches presented here, POCOG will produce two further reports (Sustainability Reports) and a CSR guidelines for all participating entities in preparation and operation of the Games (titled tentatively, "CSR Guidelines for PyeongChang 2018: for All Participating entities in preparation and operation of the Games") This report provides a basic foundation for concretization of more specific management plans for sustainability and detailed action plans with a set of measurable targets that to be developed in due course of time.

PyeongChang 2018 will closely examine and draw lessons and key principles for application from the past Games' sustainability management practices, including adoption of standards such as ISO 20121, Event Sustainability Management System (first applied to the 2012 London Olympic Summer Games). This Report will apply the Version 4 of the GRI(Global Reporting Initiative) to meet up with the required global standards for the sustainability reporting. In particular, GRI 4's most upgraded version for event organization, i.e. Event Organizer Sector Disclosure(EOSD), will be dully applied. In addition, G-SEED(green building certificates) and certificates from authorized organizations of the country in verification of the GHG inventory will be acquired in Games-related infrastructure building and facility constructions to ensure the sustainability targets are dully achieved. The activities and processes related to the certifications will be included in the following Sustainability Reports of the Games.

The time point for the production of this Report sets in the 2nd Phase of POCOG's Overall Operations (2013~2014). Along the evolution of the activities per the 3rd and 4th Phases in the future, organizational structure and functions (FAs) of the POCOG will be further evolved into a more extended, strengthened and sophisticated machinery. It is important to maintain the flexibility and overall adaptability of POCOG's management system to meet various upcoming challenges and issues that are to be unfolding. POCOG needs to maintain firmly the sustainability goals and principles of the Games, while ensuring adaptive translation into concrete action plans of such goals and principles, eventually bringing about the aimed legacy goals. This Report is a very first foundation for such efforts.

Following Chapters introduce the five Key Sustainability Themes of PyeongChang2018 with their respective goals, key activities as well as current conditions of the themes and future plans for implementation. The Last Chapter of this Report will present the current status of the operational and reporting mechanisms of POCOG and other Participating Parties(Stakeholders) for the preparation of PyeongChang 2018.

II. 5 Key Themes of Sustainability

- 1. Sustainability Theme 1: Low Carbon Green Olympics
- 2. Sustainability Theme 2: Stewardship of the Nature
- 3. Sustainability Theme 3: Good Life
- 4. Sustainability Theme 4: Proud People with Tradition and Culture
- 5. Globalizing PyeongChang: Opening to the World



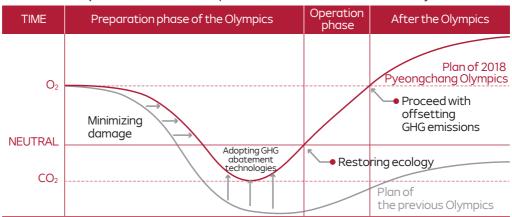
1. Sustainability Theme 1: Low Carbon Green Olympics

- ♦ Goal: To accomplish "O₂ Plus" effects through low-carbon operations and resource circulation
- ♦ Key Activities
 - Minimize greenhouse gas(GHG) emissions and utilize clean and renewable energies
 - · Develop green transport system
 - · Promote resource circulations and green procurement
 - $\cdot \ \mathsf{Promote} \ \mathsf{green} \ \mathsf{building} \ \mathsf{and} \ \mathsf{environmentally-friendly} \ \mathsf{urban} \ \mathsf{development}$

The very first Sustainability Theme for PyeongChang 2018 is ensuring Gangwon Province and host cities and regions clean and green.

Gangwon province, where PyeongChang 2018 will take place, is the richest reservoir of intact eco systems and natural resources in the Republic of Korea. To ensure the ecological integrity and abundance lasting and sustainable, it is important to refrain from human-induced pollutions as much as possible. Thus we established the goal of the first Sustainability Theme as to "Accomplish " O_2 Plus" effects through low-carbon operations and resource circulation."

PyeongChang 2018 aims to be most environmentally friendly Games in the Olympic history. To achieve this, the Games adopted proactively a new paradigm of " O_2 Plus" as a target, which refers to going beyond mere offsetting carbon emissions and achieving net minus emissions(i.e. going beyond "0"(Carbon neutrality)). This pioneering approach is expected to provide a reference point and upgrade standards for the future Olympic Games to follow in their GHG emission reduction practices.



< Concept of O2 Plus(POCOG Department of Environment and Forestry, 2014) >

To achieve this goal, the POCOG will immediately carry out reduction and offsetting programs for the GHG generated from constructions and event operations. Furthermore, a range of activities will be carried out in order to conserve and restore the eco systems so that O_2 will be generated in the region in the long term. PyeongChang 2018 will adopt a range of measures including: reduction of GHG emissions and waste generation, minimization of ecological damages from construction, utilization of clean and renewable energies and energy generation, waste recycling and systematic resource circulations to achieve net-zero land-fill waste and creation of eco-friendly urban space.

What is O₂ Plus?

 O_2 Plus is a progressive way of coping with global climate change challenges by generating additional O_2 in a long-term perspective. This goes beyond carbon offsetting and carbon neutrality. This is an enhanced approach of environmental protection, minimizing pollution, preserving and recovering ecological resources of the Nature.

1.1 Minimization of GHG emissions and Clean and Renewable Energy Use

Keeping the GHG emissions to the lowest level associated with venue construction and sporting events, a rigorous monitoring and management system of GHG is crucial. It is necessary to set up and operate with proper and consistent maintenance framework to measure and supervise GHG emissions and IT systems that technically ensure real-time monitoring. Furthermore, GHG emissions can significantly be reduced in providing required electricity and heat by deploying renewable, low-carbon and environment-friendly technologies such as wind, solar thermal and photovoltaic. POCOG plans to build wind power plants at the Games precinct in PyeongChang, Gangneung, Jeongseon and neighboring areas.

POCOG also aims to set up built environment for the Games including accommodation facilities which minimize GHG emissions and energy use through formation of Green Homes(with self-generating energy systems). These facilities will continue to be used after the completion of the Games by the local communities.

<Key Activities and Implementation Plans>

GHG inventory management system shall be designed and operated from 2015 onwards for GHG emission control.

A GHG inventory management system and operational manual was developed in August, 2014 to facilitate the effective reduction and supervision of GHG emissions management. The system can measure and monitor GHG emissions across all phases of PyeongChang 2018. A real-time measurement system will be installed and put into operation at each competition venue.

Power plants based on renewable energies shall be set up at the locations of the Games facilities, which will cover 100% of the electricity demand during the Games. Solar, photovoltaic and geothermal power generation facilities shall be installed in newly built venues and Games facilities. Currently, 145 MW out of 190 MW, the total electricity amount required for the Games operation are being generated from renewable energy sources. A plan is under formulation to secure additional 100 MW from renewable sources.

Six new wind farms(130 wind power units, 281MW of generation capacity in total) will be set up in order to tap on the abundant wind resources in PyeongChang, Jeongseon, Daegwallyeong and Odae mountain areas. They are expected to provide electricity beyond the required capacity of 190 MW for Games up to another 230 MW. This project is scheduled to be completed by 2017.

Large-scale wind farms in PyeongChang, Gangneung and Jeongseon will be built to ensure the entire power demand for PyeongChang 2018 is generated from renewable energy sources.

In PyeongChang, 1.8 billion won(KRW) will be invested to supply renewable energy sources such as photovoltaic, geothermal and solar thermal technologies to 200 households of Green Village during the period of 2014~2017.

1.2 Establishment of Green Transport Systems

For successful hosting and operation of 2018 Winter Games, a stable and convenient transportation framework is indispensable. Securing low-carbon transportation modes is an important mission for achieving the "O₂ Plus" goal.

For interconnections among different localities, linking venues and the Games support facilities, eco-friendly vehicles with cutting edge technologies will be deployed. For public transport system during the Games, fuel cell and hybrid technologies are under consideration, moving away from fossil fuel-based vehicles.

As an important means to generate a virtuous cycle for O_2 Plus effects, electric vehicles powered by renewable energies are under consideration to be placed within the overall energy cycles of the transport system. The plan is also expected to raise awareness of the public on the " O_2 Plus" vision and promotion of green vehicles.

Building eco-friendly and low carbon(and "O₂ Plus") transport system requires setting basic infrastructure for its operations. In particular, introducing electricity-based transport modes requires convenient and each-to-access recharging stations infrastructure.

During the Games, transport volume is expected to increase significantly due to movements of Games workforce, visitors and spectators adding extra burden to the already existing regular traffic volume. Controlling the traffic volume and maintain efficient and smooth flows of the movements based on newly introduced green transport modalities during this period requires not only establishing a green and smart transport infrastructure development plan and operation system, but also understanding of and participation of the citizens and the public in the scheme.

<Key Activities and Implementation Plans>

Building green and eco-friendly transport infrastructure.

Transport efficiency will be enhanced through development of high-speed railway between Wonju and Gangneung. The railway will be designed and deploy high-tech

II. 5 Key Themes of Sustainability

tunnel digging techniques in a way to reduce GHG emissions during the construction and improve accessibility to the Games venue sites. The railway is currently under construction, expecting to test-try in June 2017 and operate from December 2017.

As a measure to promote public transportation use to reduce traffic congestions and energy consumption, Low Emission Zones and IT-based green transport system will be built interconnecting locations including train stations, bus terminals and major transfer facilities. A multi-layered transport network system of public transport will ensure environmental-soundness of the transports during and after the Games.

A set of selection criteria and supply guidelines of eco-friendly vehicles has been put forward including electric and hybrid(combining electricity with gasoline or natural gas). Accordingly, zone-based operation plans will be specified concerning the development and operation of battery-charging stations and other related transport infrastructure facilities to start commercialization of eco-friendly cars gradually after 2017.

Minimizing GHG emissions through environment-friendly public transport and traffic system.

The public alternate day-driving campaign and car-pooling practices will be encouraged and area-specific green transport program will be developed to fulfil " O_2 Plus" targets. For this public green transport campaign shall be put into practice from 2016.

1.3 Facilitation of Resource Circulation and Green Procurement

In London 2012, more than 90% of construction waste was recycled to construct venues and 2 million tons of contaminated soil was purified by water so that it can be reused for the venue construction. This played an important role in establishing London 2012 as environmentally friendly Olympics, marking itself as a good practice of sustainable management of the Olympic Games.

With a reference to the case of London 2012, PyeongChang 2018 should aim to achieve an enhanced level of sustainability and environmentally friendly operation of the Games. It is unavoidable to generate waste during preparations and operations for the Games and constructions of the Games facilities and competition venues. PyeongChang 2018 aims to reduce inevitable waste generations to the lowest level possible and recycle them to fulfill its " O_2 Plus" goals. Through this, PyeongChang 2018 will be remembered as a good practice of green and clean Olympic Games and a good practice case of sustainability management of the Games, providing another

reference for the following Olympic Games afterwards.

Effective recycling, turning waste to resources and energy and green procurement to fulfil the "O₂ Plus" goal.

Waste management should be organized in a way to support the elimination of waste going to landfill ("Zero Waste") by recycling and turning waste into resource during the Games. In addition, entire life cycle of products from production, procurement, usage and discard stages will be greened. Purchasing low-carbon, eco-friendly goods and services will be another way to reduce environmental pollution and save resources to achieve the " O_2 Plus" goals.

<Key Activities and Implementation Plans>

Achieve "Zero- land fill waste" goal through systemic solid waste management, turning waste to resource and recycling.

A basic plan for no landfill waste generation ("Zero Waste" Plan) will be formulated in 2016. A separate waste collection system will be planned and implemented in 2017 covering the entire Games precinct.

According to the scheme to expand resource recovery plants, facilities for disposing food waste are being installed to produce biogas with the capacity of 80 ton/day for Gangneung and 30 tons/day for PyeongChang. After the construction of these facilities in 2014, test run will begin in 2015 with a plan to recycle 100% of food waste produced during the Games.

In addition, in order to turn food waste generated related to the 2018 PyeongChang Games to fuels for biogas generation, rather than simple landfill, PyeongChang will have a new food waste treatment facilities with capacity of 30 ton of food waste/day treatment(whose pilot operation will be launched in the course of 2015). Another food waste treatment facility to turn food waste into fertilizer will be installed in Gangneung with 80 ton/day treatment capacity, whose pilot operation is scheduled to start in 2017. In this way, the entire amount of food waste generated during the Games canl be recycled.

Practicing sustainable green management of the Games by purchasing ecofriendly green products to lower pollution and save resources.

Guidelines on the selection of green sponsors, and Green procurement guideline have been enforced put into force since November of 2011. Another plan will be put in place for continuous monitoring of green procurement activities.

II. 5 Key Themes of Sustainability

To ensure strict waste disposal and management, education programs will be organized and conducted in 2017 and 2018. The program will target waste disposal companies and volunteers of waste disposal and management and separate garbage collection practices.

1.4 Environment-friendly construction and urban space formation

Construction of venues and Games support facilities shall ensure not only beauty of exterior designs but also consider environmental impacts and sustainability in selecting building materials and designing urban space from early stage of planning and designing.

Referring to London 2012, where a dump site had reclaimed to turn it to an eco-friendly sporting complex, PyeongChang 2018 plans to convert out-of-service landfill in Gangneung into an ecological park, creating new spaces for cultural and environmental learning and experiences. This is expected to enhance the image of the Games in its endeavor for Sustainable Olympic Games.

Creation of sustainable built environment through environment-friendly and energy-saving constructions.

Overcoming a perception of the Olympic Games as one-time sport event creating environmental damages during constructions and preparation for the Games, PyeongChang 2018 will be certified for green building and energy efficiency to ensure sustainable built environment and urban spaces by designing for energy consumption minimization. Athlete Villages, media centers and other Games facilities shall be built with international green building standards. Minimization of energy consumption and GHG emissions in this way will contribute for the Games to achieve its " O_2 Plus" goal.

<Key Activities and Implementation Plans>

Achieving higher level of energy efficiency and green building standards than national requirement.

Newly constructed venues will be certified with high level national standards of green buildings. Energy efficiency certificate will be also acquired in its highest level (Grade 1) of the national standards in due course of time.

G-SEED, Korea's national certification system for green building (See the Box below) as well as a national certificate for building energy efficiency is planned to be acquired by December 2016. More specifically, it is aimed that grade 2 of G-SEED certification and grade 1 of energy-efficient building for each stadium of speed skating, figure skating, ice hockey and sliding center and G-SEED Green grade 4 for Jungbong Alpine Stadium respectively.

< G-SEED, green building certification of the Republic of Korea >

G-SEED(Green Standard for Energy and Environmental Design) is a system that offers certification to environment-friendly constructions based on the assessment of the buildings' performance in environmental pollution reduction and energy saving throughout their life cycles. Public buildings with more than $3,000\text{m}^2$ of total floor area is required to be certified G-SEED.

Olympic villages or media complex will be designed with wind ways and natural lighting. Their energy efficiency will be certified by June 2017 for Level 2 of the country's energy efficiency standards. Buildings that are to be used after the Games (legacy venues) will be certified as green buildings.

Landscaping project highlighting the ecological, natural and local characteristics of the locations is at a planning stage. Gangneung Olympic Park aims to have 60% of its space as green area. Out-of-service land fill will be converted to ecological parks for the public's ecological education, cultural and entertainment activities.

Creation of environment-friendly buildings and urban space through use of recycled construction materials and renewable energy & participation in ICLEI membership.

Newly-built venues for the Games shall be equipped with total capacity of 4,302kw from renewable energy sources including solar and geothermal. Trees cut for inevitable clearings of the sites for Games facilities shall be utilized as materials for the constructions, whose policy is stipulated in the green building and urban space formation plans. In addition, PyeongChang will carry out consistent actions of GHG emission abatement, performance reporting, monitoring and analysis by participating in the Green Climate Cities Program of the ICLEI- Local Government for Sustainability. This will enhance the image of the host city as eco-friendly city for hosting the Games.

< ICLEI Green Climate Cities (GCC) Program >

- Main body of operation: ICLEI- Local Government for Sustainability(International Council for Local Environmental Initiatives), international negotiation platform for local self-governing entities to address their environmental problems.
- Major activities: Global operation of an GHG emission reduction programs including setting GHG reduction targets for cities, monitoring their GHG emissions and sharing GHG abatement technologies and outcomes.
- Website: http://www.iclei.org/our-activities/our-agendas/low-carbon-city/gcc.
 html

'A pilot program for low-carbon and green Gangneung' that has been promoted at the national level has strategic purposes of creating green and clean environment, functioning as a test bed for advanced green technology application, verification of feasibility of domestic technologies, transformation of traffic, housing and energy systems into low-carbon ones, sustainable lifestyle promotion through voluntary activities by citizens. Specific action plans of the program will be formulated with a prospect of replicating it into broader region of PyeongChang, Gangwon Province and Korea.

PyeongChang 2018 is expected to reinvigorate the program. Gangneung will become an epicenter for green job creations and a new driver for economic growth as a hub for green industry and technology in the region. Revamping tourism industry tapping on rich eco system and natural environment for winter sport activities and eco-tourism will also contribute the revitalization of local economy.

< A pilot program for low-carbon and green Gangneung >

- · Geographical scope
 - Location: Gyeongpo, Gangneung city, Gangwon Province(Five administrative areas including Kyeongpo, Chodang and Songjeong)
 - Dimension: 18.3km²
 - Population: 13,000 people → Targeted population of 23,400 people

· Scope of a program

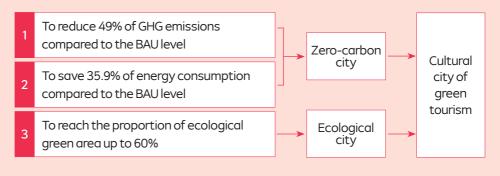
- Environmentally sound land planning, green transport, ecological conservation, circulation of water and resource, green tourism and sustainable lifestyle promotion(Six focus areas).

· Schedules

- 1st Phase(short-term up to 2012): Implementation of projects that are implementable in the current legal settings with a potential of yield higher results vis-a-vis inputs.
- **2nd Phase**(mid-term up to 2016): Implementation of projects requiring preparatory works including feasibility study and infrastructure building.
- 3rd Phase(long-term up to 2020): Implementation of projects that need a long-term plan and investment such as green technology verification and large-scale projects based on private investments.

Vision	Global city that leads green growth	
Purpose	Zero-carbon city to deal with climate change	
	Ecological city that is clean, green and comfortable	
	A sightseeing city of green culture, history and tradition	

· Purposes of the three major policies



< Legacy of Sustainability Theme 1: Low Carbon Green Olympics >

The first Sustainability Theme for PyeongChang 2018, 'Low Carbon Green Olympics' has the core vision of realizing " O_2 Plus" through low-carbon operations and resource circulations. 'Low Carbon Green Olympics' is an essential value for PyeongChang 2018 and also duly reflected in the 'Olympic Agenda 2020' which was adopted at the 127th IOC Session.

Implementing the four Key Activities discussed in this section are intended to result in the following legacy.

$\textcircled{1} \ \ \textbf{Hosting Carbon Responsible Games}$

By achieving net minus GHG emissions through complete reduction or offset, PyeongChang Games will be remembered as the most responsible sporting event for its carbon emissions in the history of Winter Olympics.

To do this, a distinctive set of strategies including specific implementation measures will be promoted with an aim of eliminating carbon emissions. During the Games, monitoring systems will measure GHG emissions which will be made publicly available and third-party validation will apply to GHG inventory and carbon-offset performance to verify the reliability of the produced data. These efforts will guarantee 'Carbon Responsible Games' which is highly credible in calculating GHG emissions, promoting and managing GHG offset and abatement actions.

② Setting supply base and infrastructure for renewable energy such as wind power Expanding renewable energy supply such as solar, thermal and photovoltaic and adding large-scale wind farms to the existing wind power capacity will contribute to strengthening a basis of supplying green and clean energy in the region. This will reduce dependency on fossil-fuels in Gangwon Province and play an important role in lowering national GHG emissions.

Large-scale wind farms based on strong potential of wind power in the five regions of Gangwon Province will provide valuable tourism asset as well as providing clean energy, a commendable case where beauty of the natural environment is combined with clean and renewable energy generation.

New venues for PyeongChang 2018 will become sustainable legacy in the future. They will be certified as green building with the highest level of energy efficiency utilizing renewable energy. Competition venues for speed skating, figure skating, ice hockey(both Ice hockey I and II stadiums) will be supplied energy from geothermal and photovoltaic power generation facilities. (Geothermal: 3,173kW, Photovoltaic: 882kW)

③ Zero-Carbon, Green Villages

Establishing green villages capable of decentralized, self-sufficient energy generation is expected to create environmentally sound and sustainable urban space. In the context of the promotion of a pilot program for low-carbon and green Gangneung by central and provincial governments, establishing zero-carbon green villages shall become a viable model for replications to other regions as a legacy of PyeongChang 2018.

Including Zero-Carbon Green Village program as part of the Gangneung Pilot Program as a tourism package will create synergy linking the ecosystems, winter sports and green village experiences.

② Building environment-friendly green transportation infrastructure Gangwon Province and host and venue regions will establish a set of infrastructure for enabling green transportation which will be environmentally sound and lowcarbon. This is expected to provide as a model case for future replications. A number of basic infrastructures are necessary for adopting environment-friendly vehicles including, for example, electricity and hydrogen charging stations for electric and fuel cell cars. PyeongChang 2018 will set an important milestone to expand essential infrastructure for an eco-friendly traffic system in the country, which will motivate and boost the growth of green car markets in Gangwon Province and beyond.



2. Sustainability Theme 2: Stewardship of the Nature

- ♦ Goal: Ensure permanence of an ecosystem by minimizing and recovering from ecological damages
- ♦ Key Activities
 - · To preserve biodiversity
 - \cdot To restore ecological environments and reforestation
 - $\cdot \ \text{To set up infrastructure for clean water supply and water quality improvement} \\$

Abundance of unspoiled natural capital of Gangwon Province should be protected and preserved as a valuable asset for future growth and prosperity.

Less affected by the trends of industrialization and urbanization of the country, Gangwon Province enjoys a better position in pursuing sustainable development as a new paradigm for prosperity and growth. Well-preserved natural environment with natural beauty of the region indicates that Gangwon Province enjoys the wealth of natural capital and tourism resources, a sound base for sustainable prosperity and source for its competitiveness in the future.

Gangwon Province, the host region of PyeongChang 2018, is categorized as vegetation preservation zone of 1st grade and 81% of which is forest area. Gangwon is considered to be the most unpolluted region in the country with three protected

wetland areas and four sight preservation areas. In this regard, proactive and effective measures should be taken place in order to address the existing concerns on possible deforestation and environmental damages in the region. Aware of this, POCOG and Gangwon Provincial Government in collaboration are making utmost efforts to minimize inevitable negative impacts on environment caused by the preparation of the Games and take proactive actions to restore and rehabilitate the eco systems, which in turn will effectively contribute to better conservation and inheritance of ecosystems and pursuance of sustainability.

Measures to offset environmental damages in the process of the Games' preparation should include, among others: Minimizing the size of land clearing for venue constructions and reforestation of the affected and neighbouring areas. Stadiums and facilities should be designed in a way to ensure the highest restoration(reforestation) potential accompanied by concrete restoration plans after the Games. In particular, damaged part of forestry as a result of constructing Jeongseon Alpine Centre at Gariwang Mountain needs integrated and systematic countermeasures and recovery programs to mitigate the environmental concerns surrounding the constructions.

Gangwon Province and PyeongChang fully recognize the importance of preserving eco-systems and a natural resource for sustainable development and prosperity. The 12th conference of the parties(COP) of the Convention of Biological Diversity(CBD), one of the three UN Conventions adopted at the "Rio Earth Summit" in 1992, was held in PyeongChang in October of 2014. The Conference adopted 'the Gangwon Declaration on Biodiversity for Sustainable Development' to contribute to preserving and enhancing biodiversity and environmental conservation. With the declaration, PyeongChang will be remembered as a city of conservation of biodiversity and environmental conservation. Now is the time for PyeongChang to demonstrate its commitment with concrete actions.

2.1 Preserving biodiversity

Biodiversity of the local species in flora and fauna in Gangwon Province will be preserved and protected through study and proliferation program of the endangered species.

Gangwon province, as a hosting region of COP 12 of the CBD, made various efforts to preserve and restore animals and plants at the risk of going extinct. Longhorned Beetles, classified as Endangered Species Categorization I, have almost gone extinct in the country and the number of Mountain Goats have also dramatically been reduced. Manchurian Trout, Categorization II Endangered Species, exists only in

few parts of the Taebak mountain range and the Demilitarized Zone(DMZ) between the territories of two Koreas. Rat Snakes are also at the risk of extinction worldwide.

Continuous efforts should be made to investigate a broader range of flora and fauna in the region that are suspected to be endangered, to set up habitats for their restoration and proliferation and steady monitoring.

<Key Activities and Implementation Plans>

Proliferation, restoration and release program shall be carried out of the endangered animals and plants in the region including Longhorned Beetle, Manchurian Trout, Mountain Goat, Rat Snake, etc.

A set of concrete actions will be initiated in collaboration of the Ministry of Environment, Gangwon Provincial Government, Wonju Regional Environment, and National Park Management Corporation to preserve biological diversity. Their activities will be continued to the year 2018.

The progress so far are as follows: proliferation and restoration projects have been implemented for the species such as Longhorned Beetle, Manchurian Trout, Mountain Goat, Rat Snake, etc. Twelve larvae of the Longhorned beetles, a specific almost extinct in Korea, were reared and put into Mongolian oak trees(September 2013). They were confirmed to be matured into adults(August 2014). Additional laboratory cages were installed in hornbeams around Sogeum River(June~August 2014) where three larvae were placed for maturization(October 2014).

Restoration activities for aquatic ecosystem are in place including, for example, releasing Manchurian Trout in the upstream of Namhan River. Release of the species(of 2,000 young fish) and subsequent monitoring have been carried out in Odae stream and the upstream of Song stream(250 adult and 100 young fish) in PyeongChang and Odae Mountain(500 fish).

Habitats for mountain goats are being restored in Odae Mountain National Park to revitalize biodiversity around Baekdudaegan Mountain Range. Two male and two female goats were released in the park in October 2014. Following monitoring and investigations confirmed that 36 mountain goats are currently living in the wild. To increase the number of rat snakes within Chiak Mountain, whose number is rapidly declining due to climate-change related environmental degradation, National Park and research the snake's habitat, more than 100 rat snakes are to be reared and arranged to be released to the wild annually in the future.

Examinations will be carried out of conditions of natural habitats of rare and endangered species. Continuous monitoring and oversights shall be accompanied of the species under release and proliferation. A continuous management plan will

be established and additional proliferation plans be conducted to ensure targeted number are maintained.

Natural habitat investigation and management will be carried out to ensure stable population size of endangered species in the region. Eco Park in DMZ will also promote biodiversity and protection of species in the area.

In consultation with Korea Forest Service, a broader zone than the damaged area as a result of constructing Olympic-related facilities will be designated as Genetic Forest Reserve to enhance the measure to protect species and conserve biodiversity.

2.2 Restoration of ecological environment and reforestation

Tackling environmental impacts through reforestation, forest restoration and minimization of environmental damage constitute core component to make PyeongChang 2018 sustainable.

Programs on restoring and preserving ecological circumstance will be put into place to guarantee the lowest level of environmental damage, restore such damage and ameliorating the living conditions of forest. The Project of construction of the Jeongseon Alpine Centre, which brought about a level of controversy, needs to be backed up with systematic and substantive countermeasures to environmental damages including a recovery plan. Damages to surrounding areas should be also tackled as much as possible related to the construction.

Effective restoration and maintenance measures need to be devised to tackle ecological vulnerability associated with the regions affected by unavoidable damages from constructing venues to extend and reinforce protective reserves in the areas with abundant natural resources whose ecological soundness has been well-conserved thus far.

<Key Activities and Implementation Plans>

Schemes of fostering alternative forestry and reforestation will help protecting and restoring ecological environment and recovering from forest damages.

For the least damage to the forest and restoration of damaged forest to its original state, research project of organizing Daegwallyeong as alternative forest zone and conserving the landscape for PyeongChang 2018 was completed in December of 2013 to build venues and natural circumstance in a sustainable and eco-friendly manner.

Planting trees around Olympic venues to improve scenery, opening up ecoexperience trail and improving ecological quality of water streams is under planning to make sure that our ecosystem remain to be rich and that local people and other participants of the Games enjoy healthy ecosystems and environments.

Minimizing pollution of natural reserves and recovering from ecological damages after the Games will be carried out through specific action plans. As for Jeongseon Alpine Stadium, a plan to preserve Gariwang Genetic Forest Reserve has been established considering the discussions with environmental organizations and experts (in May 2013). EIA consultations have also been implemented (in January 2014) with a short-term plan established to restore ecology (in August 2014). On the basis of these considerations, venue construction is now underway. It was decided that Jungbong - meaning the middle peak of Gariwang mountain - is not included for constructions after the discussion with FIS and IOC. In this way, seven areas of natural habitat are not to be affected by diverting slopes, which will lead to preservation of more than 30% of the forest that would otherwise have been damaged.

Preservation and restoration plans of Genetic Forest Reserve in Gariwang Mountain are ready with its EIA process completed and its construction approved in April 2014. Likewise rigorous EIA shall be applied in construction of other venues and Games-related facilities to minimize negative environmental impacts. Thorough monitoring prior to, during and after the construction shall be carried out and plans to ensure sustainability of ecological environment and forestry will be set up and implemented. Coverage of alternative forestation will be more than double the size of the affected natural forest areas. The plan for alternative forest and reforestation will be confirmed by April 2016 and another scheme of extending alternative ecological protection area will also be formulated to foster additional forest areas for landscape enhancements.

During the planning stage and EIA procedure, keen interests and concerns were raised from NGOs and civil society organizations concerning restoration measures. POCOG will actively reflect the results of stakeholder consultations through a series of public hearings and other programs to draw consensus among interested groups of people. Remaining controversies surrounding the Games will be resolved by making sure that EIA and restoration plans are strictly observed, information on performance and results of relevant activities are made public transparently and in a timely manner, and people's opinions shall be actively sought and consulted all through the process.

2.3 Improvement of water quality and clean water infrastructure building

Clean water sources and non-point pollutant sources will be managed through systematic water resource treatment plan and its implementation to provide clean and quality water.

The hosting regions of the 2018 Winter Games, i.e. PyeongChang, Gangneung and Jeongseon, are designated Water Protection Zones. Effective, clean and sustainable water supply and waste water disposal practice in these regions shall yield positive impacts for other regions to replicate in the future. It is also essential to make clean water available for the Games and refraining from unnecessary waste of water resources.

It is important to reuse or recycle rainwater and wastewater to create virtuous circle securing stable sources of clean water and protect its sources. To do this, it is necessary to set up a comprehensive master plan on water supply and disposal and to ensure effective and systematic implementation according to the plans.

Designing and installation of pipe culvert and disposal system should ensure drainage water is discharged only after thorough treatment. At the same time strict management should be set in place to ensure sufficient water disposal capacity to prevent sewage and waste water-related problems such as influx of waste water back into natural water streams.

<Key Activities and Implementation Plans>

Minimize waste of water resource through expansions of intake and purification plants for stable supply of clean and safe portable water as well as rainwater harvesting.

The plan to secure reservoir for drinking water with a 1.95 million ton capacity in Hoenggye-ri water basin was formulated for a clean water source and its stable and safe supply chain. Another scheme was put forward to enlarge the capacity of an existent intake and purification plant from with the capacity of 4,000 ton/day to 11,000 ton/day.

Water circulation systems will be set up including a facility for recycling rainwater discharged from venues. Other measures will also be taken to ensure no water be squandered and wasted related to the Games.

Water Treatment Plan will include installation of sewage water disposal and treatment facilities and management of non-point pollutant sources.

For the major areas of drinking water sources for Olympic facilities including Songcheon, Ponam, PyeongChang River and Odaecheon, a water management and purification scheme has been formulated. Waste water disposal infrastructure will be constructed covering each and every region around the Olympic venues. A sewerage maintenance plan will be completed by December of 2014 and pipe culvert installation by December 2016.

A plan will be established to counter non-point pollutant sources around Doam Lake basin. Several zones will be designated to filter muddy water flow from mountainous regions, which will reduce soil erosion in effect. More detailed plans will be formulated to maintain the density of suspended solids below 5mg/L.

< Legacy of Sustainability Theme 2: Stewardship of the Nature >

The second subject for PyeongChang 2018, 'Stewardship of the Nature' has a vision of promoting permanence of an ecosystem through damage minimization and restoration. In preserving biological diversity, restoring ecological environment, reforestation, improving water quality and building infrastructure for clean water supply, the following tangible and intangible legacy are intended to be materialized.

- © Restoration of biological diversity and ecological environment

 Proliferation and restoration of endangered animals and plants together with
 reforestation and forest conservation will enhance biodiversity in Gangwon
 Province and bolster the role of the province as a hosting region of COP 12 of the
 CBD. 'The Gangwon Declaration on Biodiversity for Sustainable Development'
 adopted by the Conference serves the local needs of Gangwon province as it
 includes "Forest Ecosystem Restoration Initiative" and "Peace and Biodiversity
 Dialogue", led by the Republic of Korea. Designating and extending locations within
 the DMZ as UNESCO Biosphere Reserves and Genetic Forest Reserve are examples
 of commitments to proliferating and restoring plants and animals at the risks of
 extinction.
 - Proliferation and restoration of endangered species: Proliferation, restoration and release projects for Longhorned Beetle, Manchurian Trout, Mountain Goat, Rat Snake.
 - Restoration of hydro-ecological systems though improving ecological streams in Gangneung, PyeongChang and Jeongseon.

Coverage of the alternative forest formation will be more than double the size of the damaged area resulted from the Games-related constructions. In the long run afforestation coverage will be bigger than the areas of deforestation, which will contributing for the permanence and sustainability of natural resources, advancing

the vision of "O₂ plus" of PyeongChang 2018.

- Project of forming alternative forest ("Olympic arboretum") in an area of the size of 300ha.
- Forest for better scenery formation in the stadium areas of around 500ha size.

© Building infrastructure for water resource management

Gangwon province suffers a high level of fluctuations along the year in precipitation with recurrent shortage of water supply. Revamping the water resource management in the region by installing required infrastructure will help tackling the challenges, alleviating chronic portable water shortage particularly in the areas of PyeongChang and Jeongseon, etc. In turn, this will contribute to stable supply during the 2018 Winter Games and improvement of general living standards and welfare related to water for the people in the region after the Games. In this way, PyeongChang 2018 will increase mid and long-term sustainability in water provision in regions.

Muddy water flowing from mountainous areas tend to pollute water resources. Thus management of non-point pollutant sources will help securing high-quality water resources. Furthermore, enlarging existing facilities for sewage water disposal will lead to improvement of quality and amount of clean and safe water accessible to local residents while securing sustainability of the water sources and surrounding natural environment. The improvement and enlargement of infrastructure on sewage water disposal, which will then increase the quality of water for local residents and help conserve natural environment.

- Reservoir for drinking waste: Secure a water reservoir of 1.95 million ton in total capacity(for a stable source of drinkable water).
- Newly built water intake and purification facilities or/and expansion of existing facilities (increasing total capacity from 4,000 ton/day to 11,000 tons/day).
- Expansion of sewage pipes and sewage water treatment facilities such as Gangneung and Jinbu treatment facility, among others.
- Management system of the density of suspended solid and correct non-point pollutant sources around Doam Lake basins.
- POCOG has specified an environmental management plan to open a new era of promoting sustainability, balancing sporting activities with environment care and economic prosperity. The plan consists of 26 subordinate projects which are being quarterly monitored.

Area	Unit Project		
Total	26 projects across 6 areas		
	Sustainable Downhill Venue Construction		
Preserving Biodiversity and Restoring Ecological Environment	Create alternative or landscape forest		
	Restore eco-stream and create eco-trails		
	Designate ecologically-advanced areas as alternative protected reserve		
	Promote biodiversity through proliferating and restoring endangered species		
Water Quality Improvement	Drinking water supply infrastructure development in PyeongChang		
	Water reuse system at newly constructed venues		
and Clean Water	Sewage treatment facility improvement in the Olympic precinct		
Supply	Non-point pollution source management to reduce muddy water		
Fatablish Farana	Develop Renewable energy generation complex in the Olympic precinct		
Establish Energy and Transport	Renewable energy generation facility installation at new venues		
System to	Develop green Olympic Green Village in PyeongChang		
Realize Low	GHG emission monitoring system		
Carbon and	High-speed Railway between Wonju and Gangneung		
O ₂ Plus	Promote green vehicles including E/Vs		
	Green transportation program based on public participation		
Promoting Resource	Resource recycling system in the Olympic precinct		
Recycling and Procuring Green	Waste segregation system at venues		
Products	Green product procurement and green sponsor selection		
Sustainable	Sustainable construction of venues		
Construction	Sustainable construction of Games facilities		
and urban	Develop Sports Complex by developing former landfill site		
environment	Participate in ICLEI Green Climate City program		
Strengthen	Public programs to raise environmental awareness		
Engagement and Cooperation	Establish governance system based on private-public cooperation		
Network	Strengthen international environment cooperation and exchanges		



3. Sustainability Theme 3: Good Life

- Goal: Build foundations for lasting prosperity of local economy and improved quality of life of the people in hosting regions
- ♦ Key Activities
 - · Construction of sustainable Games facilities and their efficient operations
 - Revitalization of local economy through eco-tourism based on the region's characteristics, inter-regional development cooperation and Specialized Zones
 - Pursuance of balanced regional development and betterment of living standards through development of SOCs including housing and transport

PyeongChang's successful hosting of the 2018 Winter Games was possible by virtue of unyielding support of the whole country combined with consorted efforts of people in the hosting regions, namely PyeongChang, Gangneung, Jeongseon, and more broadly Gangwon Province. Having gone through three times of bidding efforts, communities in the region and the local government had demonstrated consistent commitment based on mature citizenship of Gangwon people. This poses a great potential for the people in host regions and Gangwon province by yielding tangible and intangible legacy and benefiting from PyeongChang 2018 for the region's lasting prosperity.

In this context, this Chapter will illustrate the expected economic and social benefits that PyeongChang 2018 would bring about together with visions and strategies to achieve them.

Economic benefits of PyeongChang 2018 will be demonstrated not only in terms of macroeconomic indicators of the region but also in broader terms of impacts on human capital and social capital development.

A number of economic impact analyses of the Games have been conducted. It is estimated that the monetized economic impact of the Games would amount to 64 trillion Korean Won nationwide. In addition, there expected to be rippling effects in aspects of the country's economy.

Admittedly, there have been some criticisms and doubts on the efficacy of the economic analysis methods deployed to estimate the economic impacts of mega sports event including the Olympic Games. One should bear in mind that quantitative economic analyses always presupposes a set of underlying assumptions and scenarios projected into the uncertain future and thus always should be taken with prudence. Notwithstanding the validity of such analyses shall lie not in checking the accuracy of the prediction ex-poste but in working on to actualize such potentials through set of carefully planned and effectively implemented set of policies and measures. In particular, it is important to actively engage the population of the host communities of the Games in order to make sure the resulted economic benefits are duly directed to them as they intended. It is also wise to take note of a variety of economic impacts and positive externalities that are not easily measured and reflected in a single figure of macroeconomic indicators such as GRDP.

For one thing, we should pay attention to human development aspect of the Games. UN Human Development Index(HDI) is a good measurement as such. HDI of the UNDP is based on the basic philosophy that eventual benefits of economic development and growth shall be upon the development of the human capacity, betterment of their welfare and lasting prosperity.

Over time HDI has been evolved to reflect our improved understanding of the development impacts and related issues. Starting from due consideration of education, health and income level as its three basic components for human welfare, the Index now takes into account of gender equity, income disparity as well as environmental, economic and social vulnerability level related to climate change, political stability as well as variability of the global financial systems.

The Republic of Korea was ranked the fifteenth in terms of total HDI ratings in 2013 (according to 2013 UN Human Development Report). Compared with the

national average, however, HDI of Gangwon Province is lower in all areas of health and education and income levels. Smoking and drinking and obesity levels, which are largely associated with unhealthy lifestyles, and suicide rates are higher than the national averages. Living conditions are also recorded to be worse than the average level of the country.

A Survey result on satisfaction level of Gangwon residents about amenity facilities, quality of residential environments and local public health facilities and medical supplies indicate comparative poor performance too, marking an average rating of 2.62(Out of 1-5 range of scale with 5 being 'very satisfactory') for Gangwon Province. To specify: 3.07 for Gangneung, 2.20 for PyeongChang, 1.93 for Jeongseon. It is also notable that PyeongChang and Jeongseon suffer chronic shortage of medical equipment and facilities with no general hospital, maternity hospital or emergency medical facilities operating in the localities.

Primarily the Games' economic benefits and tangible and intangible legacy should go to the local communities and people in PyeongChang, Gangneung and Jeongseon. The benefits aimed for through the hosting the Games should be planned in line with the vision and existent plan for the regional development of the region. At the same time, benefits of the Games attributed to the host regions should also be long-lasting and sustainable.

As illustrated above, one should bear in mind the significance of Gangwon province and its unique conditions as a host region of PyeongChang 2018. Relatively slow pace of industrialization of the region partly due to the geopolitical factors should be regarded as an advantage rather than a weakness as the province's rich natural resources and well-conserved eco systems constitute abundant natural capital and tourism assets, a foundation for sustainable development, lasting prosperity and economic competitiveness.

With a view to this, POCOG and Gangwon provincial government noted the region's potential as a hub for winter sports in Asia and associated tourism. PyeongChang 2018 is expected to create a momentum for creating winter sports boom in Asia, which are currently centered in North America and Europe only. Thus since its first bidding attempts, POCOG(then the bidding committee for the PyeongChang Olympic Winter Games) had consistently envisioned developing PyeongChang as a new mecca in Asia for winter sports with combined functions of sport events, culture and tourism. To actualize this vision, infrastructure for sport facilities, accommodations and transport will be revamped and extended, which are part of the SOC of the region for lasting local economic growth and development. Benefits of the economic growth will in turn improve the conditions of the living and health of the people and communities

in the region. This constitutes the first economic legacy of the PyeongChang Games.

In order to ensure the actual benefits of the Games are directed to local people and communities, concrete strategies and plans should be set up and implemented.

It is necessary to tap into eco-tourism resources based on natural tourist attractions. For this, POCOG and Gangwon Province have made efforts to develop tourism packages through linkages and coordination amongst different tourism sites and locations with designations of specialized zones. In addition, Gangwon Province and civil society are mainly engaged in various plans and preparations such as promoting social economic activities as a set of tactics to positively affect the livelihood of local residents and induce active participation of civil society and local people.

In a nutshell, ultimate economic benefits of PyeongChang 2018 would be ensuring people of Gangwon Province and particularly the host and venue cities to lead a good life. Establishing and properly maintaining social and economic infrastructure and constructing sporting facilities during the preparatory stage of the Games correspond to creating tangible legacy for the local community with lasting value creations after the Games, contributing to improving the quality of life through betterment of living environments and job and business creations in the region.

During the preparatory stage of the Games, a daily physical exercise and elite sports program will be developed, targeting local residents in Gangwon province. After the Games, the sport facilities constructed for the Games shall be put into use for the local communities. At the same time, Gangwon Province will acquire a new engine for regional economic growth by developing tertiary industries in tourism and manufacturing related to the business related to the Games. Through this, the province's dependency could be reduced on extractive industries which is on the steady decline.

Meanwhile, strategic efforts will be made through synergy creation from stronger inter-linkage of and coordination among regions, development of specialized zones for tourism. This will ensure the people in the localities directly benefit from the investments in the development.

3.1 Sustainable construction and operation of Olympic facilities

PyeongChang 2018' legacy include the Games facilities and spaces which will be used for local people's daily physical exercises after the Games, as well as newly built or upgraded social infrastructure such as improvement of residential areas and transport systems. The local community in Gangwon Province could benefit from good quality sporting facilities with ease and convenience, leading a healthy life.

Games facilities will be designed in consideration of their sustainability, with two modes of operation demarcated: Olympic mode and Legacy mode. Energy efficiency and passive construction methods will be introduced in the designing stage of the constructions to enhance the energy saving and their conservation values. After the Games, these facilities will be open for local people and utilized to create economic profits.

Construction schemes for competition and training venues and Olympic villages will be made with due consideration of the region's long-term land use and development plans. Site selection for the development is in progress through utilizing existent facilities in privately owned lands or through the acquisition of public lands. Affected households that are to be relocated by the construction project of the Jeongseon Alpine Centre will be duly compensated and provided supports for their resettlement in accordance with "Act on Acquisition of and Compensation for Land, etc. for Public Works Projects".

<Key Activities and Implementation Plans>

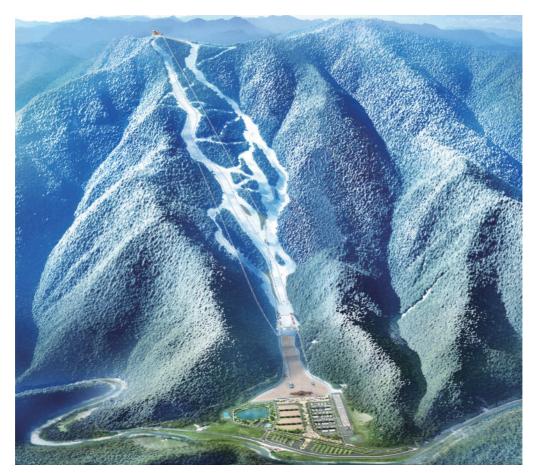
Olympic facilities are being designed and built for successful operations for the Games and creations of economic benefits in a sustainable manner after the Games.

PyeongChang 2018 hosts fifteen Olympic disciplines for which thirteen competition venues are required. Six of them are newly built and the other 7 make use of existing facilities. Once the Games are over, these structures will be utilized as multi-purpose gymnasiums, type-specific stadiums, convention center or cultural complex facility to maximize their ex-post utility as PyeongChang 2018' legacy.

POCOG and Gangwon Province set five principles for designing and constructing stadiums: 1) arenas that satisfy relevant international standards; 2) strict consideration of convenience and functionality for those who use Olympic facilities; 3) maximization of the utility of the Games facilities for regional development as the Games' legacy; 4) eco-friendly design that prioritizes environmental considerations, and; 5) energy-saving design to gain the highest effect at the lowest costs. Based on these principles, design and construction follows a strict comprehensive time

schedules for implementation in accordance with the standards of International Sports Federations(IFs) and Paralympic International Sport Federations(IPSFs) and facility standards of IOC technical manual to ensure successful Olympics with environmental-soundness and creation of maximum ex-post economic values.

Legacy plan for Games facilities are currently being planned carefully. For instance, it is under consideration that the Jeongseon Alpine Centre shall be used as a ski resort during skiing seasons and as a marketplace for local specialty or a natural farm for herbs, vegetables and flowers after the Games are over.



The Jeongseon Alpine Centre



Alpensia Sliding Centre

Alpensia Sliding Centre could be utilized as a training facility for national sports team and foreign athletes in the future. In addition, plans to develop a camp and leisure programs are under formulation targeting students linking to the Asian Youth Camp to create educational effects while maximizing the profits of the facilities.

After PyeongChang 2018, the venue for figure skating and short track speed skating are to be used a thematic entertainment center with multiple functions for sporting activity and amusement, among others, while maintaining its original functions of ice sports facility. Ice Hockey Stadium II for female ice hockey events will be located within the schoolyard of Catholic Kwandong University which will, as a trustee, operate it as university gymnasium and civil sporting facility.



The venue for figure skating and short track speed skating



Ice Hockey Stadium II

Renewable energy will be used to lower energy costs in the long run which will eventually offset the high upfront costs of investments. Electrical or mechanical devices of high efficiency and replacement stands or seats will be applied to keep the management costs of the facilities as low as possible after the Games. These measures will contribute to saving budget of local governments.

PyeongChang Olympic and Paralympic Village, Gangneung Olympic Village and Media Village will be used as private housing on sale or lease, per project owner's plan.

It is sought to return Games facilities to local community for housing improvement by selling PyeongChang Olympic and Paralympic Village and also by selling or renting Gangneung Olympic Village to locals post Games.

PyeongChang Olympic & Paralympic Village will be new apartment buildings at 720m above the sea level on the 71.490m² site. Each of the 600 units has three to four bedrooms with one or two beds in each room with extra furniture installed. Set to be completed by September 2017, the constructions will be returned to the local community, as a tangible Olympic legacy contributing to the improvement of housing conditions of residents in PyeongChang.

Gangneung Olympic Village will be built as 25-story apartment buildings with the extent of 57.014m^2 . The entire village can contain 2,300 people and will consist of 922 households with $2\sim4$ rooms in each house unit. Six building(of 624 house units) are for athletes and 3 buildings(29 house units) for the staff. Construction of the entire Village facilities shall be complete 6 months prior to the Games' opening. Once the Games are over, the Village will be used as residential apartments for the citizens. Benefiting citizens of Gangneung by providing quality residential houses shall be one of the Games' legacy.







Gangneung Olympic Village

After the Games, IBC will be utilized as a broadcasting academy, medical and educational centre for local communities as well as for renewable energy generation facilities.

MPC will be located in the existing areas of the Alpensia Convention Center and Concert Hall. With 700 m distance from IBC, MPC facilities will pursue cost efficiency by utilizing other adjacent facilities nearby. Amenities nearby MPC will provide convenience and comforts to the media community.

IBC of 46,000m² in extent is accessible within five minutes' walk from PyeongChang Media accommodation. It will be equipped properly to enable convenient and swift reporting and broadcasting activities.

Overlay compounds for a satellite farm, site management/Food and beverage/ Cleaning and waste and parking lots will occupy external area of IBC. Transport mall will be set up for media to travel between venues. IBC and MPC will have bus transport services operational, and mobility from and to competition and oncompetition venues will be ensured not only in the Mountain Cluster but also in the Coastal Cluster.

3.2 Revitalization of local economy through designation of specialized zones and developing tourism items based on local characteristics of the host regions

Host regions shall be developed for winter sports hub tapping on the tourism resources specific to the regions.

Central government and Gangwon Province aim to advertise the Province to the world by hosting PyeongChang 2018. Starting from this, the province envisions establishing the area as one of the most famous attractions for winter sports by making avail of Olympic legacy and region-specific tourism resources. Economic revitalization and development along with job creations will be pursued through making the hosting regions of the Games to be center for tourism linking sports, tourism and culture altogether.

Designation of specialized zone for PyeongChang 2018 will promote strategic investments in the host regions.

Regions for hosting the Games are designated as Specialized Zones for 20 years from 2013 to 2032. For this a long-term plan has been formulated to steadily attract required level of investments. Total volume of finance is estimated to be 3,306.3 billion won(KRW) which will mostly be invested before the opening of the Games: 3,118 billion won(KRW) is to be invested for the first phase(2013~2018) and 188.2 billion won(KRW) for the second phase(2019~2032).

During the period of organizing specialized zones (2013~2032), annual GDP increase by 523.4 billion won (KRW) and 13,220 job creations are expected.

According to the analysis of Gangwon Provincial government, setting and developing the specialized zones will create two types of economic ripple effects: 1) direct effect created during the period of zone organization as a result of the expenditure for relevant constructions for designated zones, and 2)(secondary) economic benefit yielded from tourism revenues from the operation of the Zones. The same analysis concludes that the former type of effect out of capital investment will be about 4.2 trillion won(KRW), 33.9% of which(1.4 trillion won(KRW)) belongs to Gangwon Province. This corresponds to 5.1% of the total gross regional domestic product(GRDP) of 27.3 trillion won of the province. 143 new jobs are expected to be created due to the zone designations and capital investment out of which 27.6%(39,000 jobs) will be generated within Gangwon Province. Economic effect linked to tourism after completion of the zone development is anticipated to be a GRDP increase by 347.2 billion won(KRW) and 7,586 job creations during the period after the completion of the Games in 2018 until 2032.

Tourism effect raised for Gangwon Province by designating specialized zones in the three cities or counties amounts at 347.2 billion won(KRW), i.e. 8.8% of the total Gross Regional Domestic Product(GRDP) in these cities or counties altogether (5.2 trillion won(KRW) in 2009.

In totality, 13,220 job creations and annual average of GDP increase by up to 523.4 billion won(KRW) are forecasted between 2013 and 2032 after the completion of the Zone development project. 314.5 billion won(KRW) in annual GRDP increase and 7,280 new jobs are anticipated for Gangwon Province only. (Source: A comprehensive plan of specialized zones for PyeongChang 2018, Gangwon Province, 2014)

Foster Synergy effects through inter-regional cooperation and coordination.

PyeongChang 2018 is a large-scale cultural event presenting the Korean culture which requires mobilization of the cultural capacity and technology the country has. Thus the Games will provide an opportunity to invigorate and upgrade the level of the country's cultural reservoirs including traditional arts and cuisines etc. Cultural identity of Gangwon Province and other hosting cities will be strengthened and publicized, providing resources for tourism by attracting visitors and tourists to the regions even after the Games.

Promoting regional development through the successful hosting of the Games is a shared goal of all hosting regions(PyeongChang County, Gangneung City and Jeongseon County). For creating a desired level of sustainable development and synergy, the hosting city is expected to lead in preparing the strategies to reinforce Win-Win effects through close cooperation among the hosting regions.

< Collaboration and cooperation amongst regions and local autonomous entities >

Cooperation amongst regions is to promote synergy generation in all participating regions through functional inter-linkage beyond their administrative boundaries. In order to make such synergetic benefits take place, it is desirable to 1) combine and produce limited resources, authorities and capacities for common purpose through cooperation based on interdependence among local autonomous authorities at multiple levels and, 2) create final products or shared profits from common production process based on shared goal-oriented interactions.

Cooperation and complementary inter-linkages amongst local autonomous entities prevents overlapping or double investments mitigating zero-sum competitions and create cost efficiency. The cooperation also encourages seamless and systematic support for business and development projects in the regions.

<Considerations for revitalizing local economy Economic Challenges in Gangwon Province>

- ① Aging local population
 - Since the year of 2000, the population of hosting regions has been on steady decrease. Proportion of population over the age of 65 in Gangneung (14.5%), Jeongseon (21.2%) and Pyeong Chang (22.1%) are higher than the national average (11.3%), which poses a significant challenge to the economy in the regions.
- ② Weak foundations of manufacturing industry for sustainable development

 The region has a weak base of manufacturing industry. Main industry is about service area most of which small-scale food production businesses. This poses a significant challenge as sustainable industrial bases are in dearth.
- ③ Decline of mining industries

Southern parts of Gangwon Province such as Jeongseon is subject to the program to regenerate abandoned mine areas. The region is in the process of transforming the economy depending on highly polluting and ecologically harmful fossil fuel-based extractive industries to green economy based on clean and renewable energy. Thus creating new types of industry replacing the old ones is a must.

<Key Activities and Implementation Plans>

- 1) Pursuance of local development plans based on the local characteristics and conditions of Gangwon province and host regions
 - "Outdoor recreation activities will be promoted utilizing Olympic facilities. Major tourism districts will be organized providing a range of ecological experiences, sports, recreations."

For actualizing the vision for a regional development plan of Gangwon Province, to become a "world-class hub for amenity industry ensuring life and health services", support programs and specialized zone plans are being developed as described below. Covering more than 80 topics including environmental conservation, cleanness, comfort ability, amenity industry is defined as 'comprehensive comfort needed for human lives generally'. Amenity industry of Gangwon Province is part of the region's creative industry with a goal of improving the quality of human existence, life, health and safety.

 Specialized complex for 'PyeongChang Health Olympics': A specialized zone with a combination of experience, exercise, lodging and entertainment will be set up based on the Olympic complex where bio and sport industries will be located and supported for boosting outdoor recreation activities.





- Daegwallyeong holiday resort adaptive to the ecosystem: Organizing outdoor recreation spaces based on the region's geological characteristics of high lands in Specialized Zone for Health Olympic Complex.
- Daegwallyeong Tourism and Hospitality Village: Organizing a central place for mid and long-term stay and medical tourism center including a wide range of thematic lodging facilities.
- PyeongChang Olympic & Paralympic Village: To be sold in lots to local residents.
- Yongpyong Resort: Establishing global resort complex that leads holiday and leisure practice as an important base for PyeongChang mountain cluster.
- PyeongChang is a central area for national development plan on renewable energy where a project to develop a cluster of wind power plants is under

progress as well as another project to industrialize facilities. PyeongChang is now operating an empirical research complex and Daegwallyeong renewable energy exhibit.

- The Institute of High-level Science and Technology at the College of Agriculture and Life Science, Seoul National University ("Green Bio Campus" in Pyeong Chang) is located in an area of 2.8 million m² for research and education activities. The institute will facilitate an industry-university-institute collaboration and function as a driver for local development
- Wonju Medical Techno-Valley Foundation and KIST (Korea Institute of Science and Technology) will collaborate with the Institute of High-level Science and Technology to interconnect scientific, medical, clean and bio technologies to formulate a biotechnology cluster which connects sporting and leisure businesses throughout Baekdudaegan Mountain Range and PyeongChang.
- Comprehensive specialized zones in Gangneung Cultural Olympics: Organizing a central low-carbon district for green tourism through regenerating four-season centers for leisure sports, generating the Games' Olympic legacy on the basis of eco-friendly marine culture and resources. Investment in advanced manufacturing and/or research sectors of ICT and electronics, medicine, precision optical equipment(such as watches etc.) will boost creating new opportunities of employment and growth in Gangwon Province.
 - Tourism and Hospitality Village at Gyeongpo district: Establishing coastal hospitality and lodging facilities providing traditional and marine culture experiences.
 - Green Tourism Experience Complex: A complex of exhibition centers related to environmental issues and green tourism and shopping areas etc.
 - Specialized Zone for Experiencing Ecological Systems in Jeongseon:
 Arrangement of multifarious spaces such as ecological complex provide green tourist.
 - Olympic Ecological Park: Organizing an Olympic park celebrating the Olympic legacy and utilize natural forest resources for tourism purpose.
 - Camping Site on Gariwang mountain: Camping venues for families in natural forestry, providing forestry-based therapy.
 - Gangneung is planning to develop an industrial belt of oceanic bio industries in coastal regions of Gangneung. It promotes combination of existent industries with new ones using marine resources in the East Sea, such as medical tourism etc.

- A number of research institutes and manufacturing corporations in medicine and life science are located in Gangneung where regional subsidiaries of Science Industry Foundation and KIST are located. It is important to raise competitiveness of Gangneung in the area of manufacturing advanced bio equipment.
- Specialized area in Bongpyeong for leisure, culture and creativity: Winter leisure sports, spaces for entertainment, culture and arts with tour guiding services.
 - Hyoseok Culture & Art Village: Creative cultural village with themes about buckwheat as local special product and modern literature of Lee Hyoseok, a renowned novelist.
 - Comprehensive Olympic Tourism Center: Offering information on tourism and sporting events of the Games based on an IT-based information management system. The center is located at the entry point to the Olympic stadiums.
 - Pheonix Park: A futuristic mountain resort for luxurious lodging and hospitality to lead the culture of creative recreation. An Olympic legacy.
- Specialized zone in Geumjin Spa Area: A base for four-season hospitality service based on spas and oceanic resources, providing business opportunities to create added value of tourism and relevant industries by capitalizing on local convenient facilities.
- Competitiveness of tourism-related services will be enhanced by building a
 foundation for tourism industry in the regions of abandoned mines during
 PyeongChang 2018. Eleven projects are in pipeline, as listed below, which are led by
 an integrated promotion entity covering four cities and counties for the purpose of
 income increase and job creations in the regions.
 - Generation of ecological and industrial legacy: A business model was
 formulated based on the image of unpolluted Gangwon province with
 cultural heritages. Through this, old and out-of-service mine areas are being
 rejuvenated as a new tourist attraction based on clean and renewable energies
 and environmentally friendly development practices.
 - Infrastructure for anti-aging and therapeutic tourism: Medical tourism are taking roots in Gangwon Province as an emerging hub in the country and the Northeast Asian region.
 - Arirang Railroad Travel Service: Jeongseon Rail Bike Services make avail of old railways and has become popular amongst Korean visitors. Similar service providers are entering to the market, raising booms in the industry with new

investments and strengthened marketing.

- Developing personalized experience tour evoking emotions: Going beyond simple landscape sightseeing, "try-sumers" demand of more personal and total tourism experiences. Accordingly innovative items are under development to meet the needs.
- Festivals and other events: Festivals integrating four cities and counties in old mine areas are expected to generate synergy in tourism campaign, attracting tourists. Collaborative efforts shall also ease the budget and human resource constraints of each entity.
- Development of E-contents: Contents using interactive art creations, 3D or 4D experience facility on the theme of mining culture and the region's history will be introduced for educational and tourism purposes, highlighting regional characteristics about mining culture.
- Making cultural contents based on the local traditions and history: Developing
 cultural contents of Jeongseon Arirang, a traditional work of performance art
 in the region, combining traditional and modern aesthetics to appeal to the
 world. Digital technology will be deployed. Integrating the product into the
 Games' opening ceremony and other events is under consideration.
- Building traditional museums with a new concept: Museums and folk village development presenting major folk religions of Korea along with natural and traditional heritage in Taebaek region by building museums and folk villages.
- Project to revamp Museum Villages: Youngwol County as a village of museum
 has continuously been engaged in museum business and has now a plan for
 expansion from the existing 24 museums to 30 museums. Youngwol is shaping
 and operating a new type of program linking museums providing related
 tourism packages.
- Installing symbolic structures and art works: Building up landmark facilities for adopting new image overcoming the stereotypical image of the mining area, reflecting historical aspects of highlands in Southern Gangwon Province and a progressive vision of the future.
- Launching an integrated tourism support center for mining regions: By making comprehensive tourism information available to offer information for visitors to help plan their travel and by setting up a guidance center for integrated service on public relations and marketing, new jobs will be created and education and training programs will be provided in the mining regions. To do

that, relevant activities are being continuously planed and promoted.

- East Coast Free Economic Zone: This is a Free Economic Zone with a purpose of developing the east coast area of Gangwon Province as an economic center in the East Sea rim by establishing an international city with a business complex for global tourism, leisure, logistics and green materials industry.
 - With SOCs such as rails and roads, which will be installed for PyeongChang 2018, as well as existing ports in the coastal regions of Gangwon Province, Donghae Port is expected to become a new base for international logistics and tourism particularly for Russia, China and Japan. The port has existing capacity of dealing with 38.5 million ton/year. About 1.5 trillion Won(KRW) will be invested for introducing new infrastructure in the port, including multi-purpose docks. They will activate various sea routes for trade and logistics.
 - Okgye Port, located adjacent to Okgye Industrial Conplex I & II, will be utilized exclusively for Okgye advance materials convergence industry district.
 - A number of natural resources will used such as dolomite, lithium, silica and other rare-earth elements which are abundant in Gangwon including Hongcheon and Yangyang.

2) Accentuating local characteristics in hospitality and catering businesses of international standards

- "Securing competitiveness through developing special tourism packages in observance of strict quality standard based on a long-term master plan."
- Accommodation facilities will be prepared based on the region's tourism resources in the specialized zones for the 2018 Winter Games. A long-term master plan has been developed to foster thematic lodging business reflecting local characteristics through marketing and quality management. In this way differentiated charms and attractiveness will be created by different facilities providing unique experiences for visitors to remember and revisit later on. Various tourist attractions on eating and entertainment activities will be available to create added value to the lodging facilities as competitive tourist spots.
 - Cave hotels: Creating hotel facilities by transforming cave and old mines located at mountainous area. Exotic exterior and interior designs will add value while providing learning opportunities for the visitors about the mining industries and history of the localities.
 - Sea hotels: Retired ships will be recycled and remodeled to on-board hotels at

beautiful seashore in East Sea in Korea saving building costs and resources.

- Globalization of Korean cuisine: Branding and commercialization strategies of the Korean traditional cuisine will be set up. Database formation on local delicacies and standardization of the food industry in the host regions will be will be carried out to boost culinary tourism market. A variety of marketing and communication channels will be deployed in order to provide multi-faceted information on the country's rich and diverse culinary traditions to make it global brand items.
 - Diversification of culinary tourism contents: Ideation for local food tourism will be carried out to satisfy appetite of consumers by providing unique and enriched experiences surrounding the act of food appreciation through providing background information of the food items with its origin and history.
 - "Taste of Harmony" Project: A marketing project of the Korean foods related to tourism. "Taste of Harmony" will be implemented in a number of ways, from celebrity marketing of the Korean actors and actresses well-known to the public(as "Hanryu" (meaning "Korean wave or trends") stars)
 - 'Surasang Road' Korean cuisine tourism: "Surasang" refers to traditional culinary traditions for the royal families in the past. Carefully selected foods representing each of hosting cities will be served combined with tourismbased culinary experiences. Package items including specific tourism sites and related local foods will be developed.





POCOG developed "CSR Guidelines for PyeongChang 2018 for All Participating entities in preparation and operation of the Events" covering the POCOG's and other participating entities' overall operations of procuring, purchasing, making provisions and hosting PyeongChang 2018 to ensure its sustainable and socially responsible management. This guideline conforms to an international standard of GRI G4 Event Organizers(EODS). POCOG's selection of catering and accommodation facilities will be also based on the Guidelines.

3) Building linkages between tourist circulation roads and expedition routes

"Generating synergy from connecting sightseeing courses and mapping out and commercializing new tour routes."

A number of tourist attractions will be selected in the host and venue cities or counties and 'Three Roads' Tracking Courses will open for visitors and local communities. These courses will consider new routes that have not been identified before accompanied by a transportation scheme to guarantee high accessibility through connecting travel spots, facilities and Specialized Zones to one another.

- 1st Road Daegwallyeong Sky Route: Trekking course will be installed for tourists to enjoy natural beauty of vast grassy plains and appreciate ecology at the ranches in Daegwallyeong and the mountains.
- 2nd Road Chiljokryeong Byeolgok Route in Dong river: Dong river across the regions of PyeongChang, Jeongseon and Youngwol provides landscape of both the river and surrounding mountains.
- 3rd Road Baekbokryeong karst route: Baekbokryeong, National Monument No. 440, is one of the rare karst areas in the country well-preserved and least affected by human activities.

4) Setting up an advanced tourism information and guidance system

- "A tourism information and guidance system will be established providing most updated information available to tourist virtually anytime and anywhere."
- Installation of "Rest Information": In and around major places such as bus terminal, Olympic plaza, train stations and sports stadiums, etc., kiosks will be installed with benches and free Wi-Fi to offer sightseeing information to guide tourists. Mini garden with plants on the top of the structures will create aesthetic effects.
- Ubiquitous QR City: The QR code system will be available to offer tourist information in several major languages beside English throughout travel routes including individual tourist destinations, resorts and stadiums to restaurants, stations for public transportation and other convenient facilities.

5) Branding and marketing of the host cities

"Host city and Gangwon province shall be remembered by the world through PyeongChang 2018. International standing of the region will be strengthened along the preparation, operation of the Events and afterwards."

Three-step strategies are to be taken to raise international status of Gangwon

Province and hosting city before and after the Games.

- 1st Step: Fulfilling "Strategies to secure opportunity for raising popularity of cities in Gangwon Province".
- o 2nd Step: Consolidation of "International position of the hosting city".
- 3rd Step: Operating "A sustenance and management system for sustainable city brands".

6) Promotion of Social economy through active participation of social economic entities in the preparation of the Games

"Gangwon Province announced PyeongChang 2018 as "Olympics of Social Economy." The Games will be prepared for promotion of the local economy in collaboration with various players of local economy in the region."

Gangwon Province announced PyeongChang 2018 as 「Olympic of Social Economy」. Social economy in the region will play an important role in generating actual income and jobs for the local population. In this framework, Gangwon Province will procure some items for the Games from local cooperative associations (including agricultural product, tissue papers, beverage and chartered bus, etc.) aiming to creation of 1 trillion won(KRW) of social economy prior to the Games' opening in 2018. A Private-public Committee for Social Economy Legacy Creation will be created to promote linkage of social economy to the preparation of the Games. The committee will also plan to extend follow-up management activities after the Games and marketing and administration activities of the Olympic legacy.

Gangwon Province is currently promoting new legislation of 「Regulations on expansion of broadening participation in 2018 Winter Games and social economies」 and introduction of a policy to prioritize and target a certain portion of procurement from local social enterprises as suppliers for the Games. These measures will increase the opportunities of locally based social enterprises' participation such as supplying agricultural products for the Games, and open up employment opportunities.

< What is social economy? >

Social economy in an economic perspective stressing direct production and selling of goods and services, with high level of autonomy as well as authority of participation and withdrawal of producers/sellers. As member of the system, producers/sellers could make substantial influence on the collective financial decisions. Minimum wage is guaranteed for all producers/sellers like industrial wage workers. From sociological perspective, it can be defined as an economy created by leadership of citizens and operated by democratic decision making of participants(OECD, 1999). Social economy has the following features:

- ① Primary purpose is to provide services to society members rather than pursuit of profit
- 2 Autonomic operation differentiated from public programs
- 3 Democratic decision making and governance
- 4 Labor is the priority to capital and profit allocation

3.3 Improvement of living environment through balanced regional development and expansion of SOCs such as road, housing and transportation system

Social infrastructure including public health and transit facilities constitutes the basis of economic growth.

Gangwon Province has relatively low level of income generation and economic activities (According to the census on household finance and welfare for 2014, the province was the second to the bottom in 2013 in average income level amongst 16 regions nationwide, amounting to 40.7 million won(KRW). The province also suffer poor health conditions (regional health rating of Gangwon Province is the lowest in the country with 49.2 points while national average is 62 points, with Ulsan metropolitan city being the highest rating of 77.6). The underlying reasons include geographical and other conditions of the province with weak social and economic infrastructure. Housing quality of local residents in Gangwon Province is also assessed to be worse than other regions. In this context PyeongChang 2018 is expected to make a solid foundation for economic development of local society and improve the level of residential quality by revamping infrastructure associated with the Games.

<Key Activities and Implementation Plans>

- Widening railroads around the hosting regions and introduction of highspeed rails
 - "Laying high-speed rail is expected to lower the cost of logistics and increase accessibility with reduced travel time."

Construction of high speed rails from Wonju through PyeongChang to Gangneung facilitates smooth and time-saving transportation and save the cost of logistical distribution. This in turn will boost the economy of Gangwon Province. With the investment of 3 trillion and 896.2 billion won(KRW), construction is in place to connect the regions and metropolitan cities for PyeongChang 2018, scheduled to be completed by 2017. Double-track railroads that stretch out 120.7 km in total ensures the maximum speed of 250 km/h and connect Manjong, Hoengseong, Dunnae, PyeongChang, Jinbu and Gangneung Stations as part of Wonju-Gangneung line with 6 stations in between. Five stations across PyeongChang-Daegwallyeong line started started their construction as a phase I and the work for West Wonju~PyeongChang line along with city lines within Gangneung City followed as phase II, due to the geographical complications of the areas.





Setting up KTX lines from Incheon international Airport and Seoul to PyeongChang starting its operations in 2017 will contribute to cost reductions in domestic and international logistics and facilitate the inflow of domestic and overseas buyers and visitors.

Direct train route is going to open between the Incheon airport to PyeongChang and Gangneung by connecting Wonju-Gangneung line to the existing line between Incheon International Airport, Yongsan, Cheongryangri and Wonju. the rapid transit rail system is forecasted to lower the travel time from 4 hours to approximately 30 minutes for Wonju-Gangneung route, and from 6 hours 24 minutes to about 1 hour for Seoul-Gangneung one. It will take about 90 minutes from the Incheon airport to PyeongChang non-stop. Wonju-Gangneung line is planned to complete construction and start commercial operations in June of 2017 after 6 months of a test-run. Travel time and distance between the Incheon airport and Cheongryangri is described in the following table.

Departure	Destination	Distance	Travel Time(Approx.)
Incheon	Jinbu Station	237.0km	90min
international airport	Gangneung Station	278.0km	110min
Cheongryangri station	Jinbu Station	166.2km	50min
	Gangneung Station	207.2km	70min

2) Streamlining and coordinating an existing road network and newly installed highway

"Yeongdong Expressway-2 will be established to increase accessibility and reduce logistical cost."

Accessibility of cars will be upgraded by extending roads around Olympic venues, constructing Gwangju-Wonju Yeongdong Expressway 2 and installing PyeongChang Olympic Interchange(Extension of an existent IC) to support the hosting of PyeongChang 2018.

Opening a new highway results in connecting Incheon bridge(Completed in 2009), Anyang-Seongnam Expressway(Completed in 2013), Seongnam-Janghowon national road(Completed in 2011) and Yeongdong Expressway(Wonju-Gangneung). While it takes 2 hours and 20 minutes from Seoul to Gangneung currently, it will be reduced to a bit more than 1 hour. 2 hours 50 minutes will be taken for Incheon-Gangneung route with the least distance of 252 km. These constructions will embody the East-West network of express ways.

According to the analysis of Ministry of Land, Infrastructure and Transport, travel from Hanam junction in Jungbu Expressway to Wonju will save 15km of distance (101km—86km) and 23 minutes of time(77min.—54min.) which will save logistical costs by 180 billion won(KRW) annually. In addition to activating regional interchange among metropolitan areas and the district of Yeongdong, streamlining road systems will greatly relieve heavy traffic loads during weekends and straight holidays.

Gangwon Provincial Government is also planning roadway projects including the project of major maintenance for a PyeongChang-Jinbu route in National Road No.59 to be completed in 2011 and a renewal project for the section of linear defects along National Road No. 42(PyeongChang-Jeongseon). In 2012, another maintenance work was initiated for the 17 km route from Makdong, PyeongChang to Jeongseon·Najeon in National Road No.59. Project for the Dunnae-Jangpyeong-Ganpyeong part of National Road No.6 has started in May 2014 section by section.

3) Promotion of recreational sports for Gangwon people through provision of sport infrastructure

"Accessibility of people in Gangwon Province will be improved to sporting facilities through promoting healthy life styles and sporting activities."

Establishing healthy life styles and providing correct health-related knowledge to Gangwon people is as important as building health and medical facilities. Notably Gangwon Province and Gangneung city has higher level of incidence of high blood pressure than national average, whereas proportion of exercising population is assessed to be noticeably low compared to the corresponding national level.

To address this, it is desirable to implement programs for the people in the province and the hosting regions to correct unhealthy life styles and habits while promoting practicing physical exercises as part of the Games' programs. Unique health condition of the province, as illustrated above, should be taken into account in designing public health improvement programs. Gangwon Provincial Government and other related entities will provide financial and other supports.

As illustrated above, Specialized complex for 'PyeongChang Health Olympics will be established for better access to sport and daily exercise facilities to the communities in the host regions in addition to awareness raising campaigns and education programs for healthy lifestyle and physical exercises. In this way we expect that overall health conditions of Gangwon people and their quality of life will be improved.

4) Providing advanced medical services and facilities based on local conditions and characteristics

"Center for severe injuries and emergency system will be set up for sports and safety accidents for the Games. The facilities will remain for the local use after the Games."

A center for severe injuries will open at Wonju Severance Hospital equipped with required facility, equipment and working force specialized in external injury treatments in emergency, hemorrhages and/or multiple fracture related to accidents during the period of the Games.

Considering the geographical conditions of Gangwon Province, the likelihoods of incidence of severe injuries is high as a result of accidents concerning mineral mines, land mines, mountaineering and a traffic condition of winding roads. Thus the center will be highly useful for the local residents too after the Games.

A helicopter transportation system is going to be established considering golden

time for effective medical treatment(1 hour for severe injuries from traffic accident, 3 hours for patients with a stroke) during the period of the Games. After the Games, more helicopters will be introduced to raise the accessibility to medical facilities to be ready for accidents of the local residents associated with mineral mines or land mine areas and also ready for traffic congestions in tourism-intensive periods This will particularly be useful for the area of mountainous regions in Gangwon Province where quality of emergent medical service is currently insufficient.

< Legacy of Sustainability Theme 3: Good Life >

The third subject of sustainability for PyeongChang 2018, 'Good Life' is based on the vision of "Forming the foundation for long-term economic prosperity, refined welfare of residents and invigoration of local economy by hosting and operating sustainable PyeongChang 2018". By conducting three key activities including 1) sustainable construction and efficient operation of Olympic facilities, 2) stimulating local economy by designing environmental-friendly tourism packages based on regional characteristics through designation of specialized zones and strengthened cooperation between regions and 3) improvement of living conditions and realizing balanced development among regions by expanding social infrastructure such as transportation, public health, etc., the Game is expected to create the following tangible and intangible sustainable legacy:

7 Facilities linked to the Games and Events

Facilities that are built for the Games including venues, Olympic villages and media complex will maintain as legacy to local community after the Games, contributing to sustainable development of local economy.

- Jungbong Alpine Centre: Ski resort(for normal seasons) and marketplace for local specialty, natural farm for herbs, vegetables and flower(for non-seasons)
- Alpensia Sliding Centre: Training facility for national sports team and foreign athletes
- Figure Skating and Short Track Venue: The matic entertainment center
- · Ice Hockey Centre II: University gymnasium and civil sporting facility
- PyeongChang Olympic/Paralympic Village: Apartment(to be sold to local residents for housing)
- · Gangneung Olympic Village: Utilization as apartment buildings for residents

Social Social

Building and enlarging social infrastructure which is currently insufficient in Gangwon Province will significantly contribute to the development of local

economy and amelioration of living conditions.

- · High-speed rail system between Wonju-PyeongChang-Gangneung
- · KTX route between Incheon-Seoul-PyeongChang
- · Yeongdong Expressway II
- · Advanced medical service and facilities
- Upgrading service quality of hospitality industry

Improved quality of restaurants and resorts after the Games will be tangible legacy of the Games serving as a driving force to forge the hosting region as winter sport hub in East Asia.

- · Lodging facilities based on the local tourism resources of specialized zone of the Games
 - Cave Hotel
 - Sea hotel on board
- · Global branding and promotion of traditional culinary tourism
 - Project "Taste of Harmony"
 - 'Surasang Road' for Korean cuisine tourism



4. Sustainability Theme 4: Proud People with Tradition and Culture

- ♦ Goal: Strengthen civil society and social capital through revitalization of local communities and promotion cultural diversity and inclusion
- ♦ Key Activities
 - Globalization of Gangwon province and local communities based on their traditions and local cultures
 - Preparation and participation of the Games based on social diversity and inclusion
 - Building a platform for innovative social participation and communication of the public and various stakeholders

PyeongChang 2018 will become a stepping stone for the manifestation of universal values of multiplicity, acceptability and Olympism based on culture and identity of Gangwon Province and PyeongChang.

POCOG regards a formation of social capital and mature civil society as an important legacy of the 2018 Winter Games. Mature civil society accepts characteristics of modern society such as multiplicity of culture and identities as well as accepting minority groups as fully entitled member of a society on equal terms while each

member cherishing their tradition, history and cultural roots. Mature civil society also means an open society to the global community based on strong social capital in their locality.

To accomplish this vision and purpose, POCOG, along with the hosting cities and counties, other pubic organizations and local communities aim to globalize native culture of the regions by developing cultural infrastructure and implementing cultural programs under the common theme of 'Cultural Olympics'. The programs in the host regions will inspire attention and interests of the world towards PyeongChang 2018. The ICT technologies with social media and SNS shall be fully utilized to publicize the cultural programs and activities around the time of the Games. Dynamic two-way communication will speed up people's online participation in the Games.

Economic, cultural and social benefit will be directed to the residents of Gangwon Province and the hosting regions.

Culture is one of the basic principles of 'Olympism' as specified in Olympic Charter. Likewise 'Cultural Olympics' is one of the core subjects POCOG promised to pursue for accomplishing the vision of PyeongChang 2018. Social and cultural benefits directed to local community and people are valuable legacy that should not be overlooked among all the tangible and intangible legacy the Games aim to generate.

Today cultural exchanges across cultures and territories are occurring on real-time basis with the wide-spread Internet connection. However, traditions and cultural features of the host regions are relatively unknown to the world. Cultural heritages in Gangwon province are strong today. For example, the Province has Gangneung Dano Festival and Jeongseon Arirang which were recognized as intangible cultural heritages by UNESCO in 2005 and 2010 respectively.

Korea had long been a racially homogeneous country for thousands of years. As such it forms a society of cultural and historical homogeneity. It was as late as the outset of the 20th century when the country virtually opened itself to the international community beyond its immediate territorial neighbors. Since then a wave of rapid globalization hit the Korean society which has gradually become increasingly diverse and multi-cultural. The trends of increasing diversification and multiplicities of the cultural and demographical compositions are also reflected in host regions: Accordingly, cultural and traditional identity of regions of the past need to reflect and integrate the emerging cultural and societal trends for more inclusion and harmonization.

4.1 Globalization: globalization of the culture based on a deep sense of tradition and cultural heritages

Cultural programs of the Olympics can function as an important chance to present uniqueness of local identity of the hosting cities to the world increasingly effective expressions of a regional and national identity through the Games is becoming an important goal for host cities. In this context, globalization strategies for the host cities should be firmly based on its authenticity, cultural identity and originality. Thus making PyeongChang and the host regions a global city should tap on its current efforts to sustain and preserve the regional and cultural heritages of Gangwon Province such as Jeongseon Arirang, Gangneung Dano Festival, etc. At the same time host region's cultural contents should be actively created and disseminated globally to draw inspirations while making the host regions proud and culturally strong Cultural globalization should be accompanied by mature citizenship, sense of community and deep awareness of the region's culture and history in the host regions.

This Chapter presents a number of approaches to achieve this in conjunction with POCOG's goal of creating cultural legacy of PyeongChang 2018. These approaches include: developing cultural contents based on cultural resources of a region, setting up management and operation system of the Games' cultural infrastructure as well as a governance mechanisms to utilize cultural heritages of the Games. A viable management and monitoring plan need to be set up to systematically reflect the cultural identity and authenticity of the region in the formulation of the cultural programs for PyeongChang 2018.

To position Gangwon a truly global destination through the 2018 PyeongChang Games, an effective branding based on its strong local characteristics and identity, effective use of the brand, including lasting publicizing and implementation requires long-term strategies with a big picture.

<Globalization of cultural legacy of the hosting city>

Public relation activities at global level about UNESCO Heritage.

In December of 2012, "Arirang", the most representative folk song of Korea was registered on the World Heritage List. One of the most famous festivals linked to Arirang is Jeongseon Arirang Festival, which has continued to this day since its history started in 1976. Jeongseon Festival is held early October every year, an important cultural event that recognizes traditional culture of a region as valuable and revitalizing it enthusiastically. In this regard, Jeongseon County is pushing forward worldwide marketing activities based on the strategies of making Jeongseon Arirang as a heritage of a global cultural importance.

Gangneung Dano Festival, which is Important Intangible Cultural Asset No. 13, has also been designated as a UNESCO Intangible Cultural Heritage in November of 2014. The festival is meaningful in that it is the only activity that represents and maintains the originality of "Dano", one of 4 major national holidays of the country. Since the executive committee of Dano festival began its activities in 1970s, the festival has contributed to boosting regional economy, strengthening historical and cultural identity of local people and creating social capital. Recently, the festival is becoming the event that represents the Korean traditional culture as part of Korean tradition and culture experience programs of for foreigners.

<Key Activities and Implementation Plans>

1) Cultural Programs for PyeongChang 2018

"A variety of programs and implementation systems will take concrete shape as part of cultural Olympics, one of the four key themes of PyeongChang 2018."

Cultural programs of the 2018 Winter Games are under formulation including the Games' opening and closing ceremonies, protocol events for the Olympic Games, Olympic torch relay, medal ceremonies, etc., an official cultural program with a wide range of genres and other cultural programs at regional and metropolitan level including the hosting city among others.

The Korean Ministry of Culture, Sports and Tourism initiated a research project to draw out a basic plan to realize cultural Olympics. The study project in July of 2014 and the outcomes of research will be published in February of 2015. Based on the outcomes, cultural programs will fully put in place from May of 2015. On May 16th of 2015¹⁾, a cultural ceremony to celebrate G-1000 days for the opening of PyeongChang 2018 aims to raise its profile by carrying out a seasonal event which represents key landmark events prior to the Games and to offer the opportunity of participating in the cultural Olympics through sporting and cultural performance.

Here is an overview of the celebration:

- The ceremony will focus on the programs initiated by POCOG in line with the overall concept of Cultural Olympic of PyeongChang 2018 and represent the story of accomplishing the vision of PyeongChang 2018, 'New Horizons'.
- Main event of G-1000 celebration will take place in Seoul to attract national-wide attention while regional events will take place in the venue cities and Gangwon Province together with POCOG to generate synergy effects around the region.

¹⁾ G-1000 Celebration event is scheduled to take place during 16th-17th of May, 2016.

o In the future, further events will be promoted in other places in Gangwon Province and PyeongChang County.

Cultural programs to celebrate G-500, G-365, G-100 days for the Games will also be specified in due course of time.

In addition to the roles of the Ministry of Culture, Sports and Tourism, roles and functions are assigned among the hosting cities, Gangwon Province, POCOG and other associated ministries and agencies of the central governments, as summarized as follows:

- Central government with relevant ministries (including Ministry of Culture, Sports and Tourism, etc.): Support for practicing seamless cultural events in major cities in Korea, identification and dissemination of cultural activities and contents throughout the country, active promotion and information disseminations of cultural events in cooperation with organizations of art and culture around the country.
- POCOG: Seasonal promotion activities and ceremonial events including Olympic torch relay, welcome events for athletes, Live site broadcasting and opening and closing ceremonies will be carried out along with regular cultural promotions within the Olympic Plaza.
- Gangwon Province and the hosting cities and counties: Creation and promotion of the regional contents of local culture.

The Korean Culture and Information Service(KOCIS) set up a 6-year plan(2012~2017) with a theme of Winter Olympics and Winter sports in consultation with POCOG. For the same period, Gangwon Province holds Daegwallyeong international music festivals to promote traditional music in Korea and various cultural events including PyeongChang Winter Fantasia as an upgraded form of Daegwallyeong Snow Festival.

2) Cultural movements of the people in Gangwon Province

- "People in Gangwon Province and the hosting regions are primarily the ones who will enjoy various cultural events related to PyeongChang 2018."
- According to the OGI Study Report(2014), level of cultural and recreational
 activities and entertainments in Gangwon province is found to be comparatively
 lower and there is a necessity to improve the level of its social capital. Social
 capital refers to an intangible asset that enables organized and efficient

function of numerous entities and resources for the purpose of creating common benefit by an individual, a group of people or regional society. Examples of social capital includes respect, reciprocity, mutuality, conduct code, common sense of belongings, a formal and informal network of society and an efficient channel of information. In this regard, POCOG should work together with Gangwon Province and the local society organizations in the host regions based on mutual respect, collaboration and cooperation so that the regions could systematically and efficiently achieve shared goals of PyeongChang 2018. Shared and consolidated works and experiences of hosting the Games is expected to bring about, among others, consolidated foundation of cultural infrastructure, reinforcement of cultural production capacity, increased level of cultural entertainment, formation of open networks, strengthened civil participation, cultivation of regional experts, citizens' various learning programs and activities, strengthened social awareness as well as life style changes.

"Cultural Citizenship Campaign" was introduced in February 2012, by Gangwon Cultural Citizenship Campaign Association, whose purpose is to achieve mature civic sense of the people in the province and to inspire their pride and self-respect as the main agent for the success of PyeongChang 2018. Led by volunteerism of citizens in the region, the Campaign will continue until the year of 2018. The program of the Campaign has three key areas including citizenship and civic sense, reception of guests and integration of the people in the region.

The Campaign's activities have already started. From April to September of 2014, a project of identifying core policies for Cultural Citizenship Campaign was conducted, In May 2014 a ceremony was held to launch a local college students' Supporters Program with full operations afterwards. Youth Supporter Program has about 500 members 21 colleague clubs from 8 universities in Gangwon Province. In addition, "2014 Core Leadership Academy for the Next Generation" is being operated to cultivate specialists of hosting and managing international sports events including future Olympic Games.

<Structural framework for proceeding with the cultural movement of the residents of Gangwon Province>



Lions, Bareuge, Saemaeul, JC, Rotary, etc.

Besides, a variety of cultural events will take place to stimulate cultural activities within the hosting regions.

<Cultural events in the Hosting Regions>

① Great Mountains Music Festivals and Schools





- ② Cultural programs of Gangwon Provincial Government

 Cultural programs to strengthen the unity of Gangwon people: Several events and festivals will be organized to boost the commitment for the successful
 - PyeongChang Games especially after the Olympic flag is handed over.
 - · 6 July 2012: Concert to celebrate the first anniversary of the successful Bid
 - · 26 February 2014: Province-wide ceremony for flag handover
 - 11 April 2014: Ceremony of raising the Paralympic flag to mark G-1400 days
- ③ Cultural programs by districts of Gangwon Province
 - 30 August 2014: Concert featuring K-pop music wishing for successful PyeongChang 2018 and Chuncheon World Leisure Sports Festival
 - 9 December 2014: Hosting academic programs in PyeongChang on successful

hosting of PyeongChang 2018

- 26-28 February 2014: A tour event in cities and counties associated with the Olympic flag to raise awareness and promote the 2018PyeongChang Games
- 29 August 2014: Open broadcast by MBC., the country's private broadcasting company. of the PyeongChang's to pledge for successful hosting the 2018 Winter Games

4.2 Preparing the Games with inclusion: through participation of min ority groups in respect of social diversity

PyeongChang 2018 will embrace the value of inclusion and social diversity, welcoming and encouraging active participation of various minority groups including: the elderly, the impaired, women and ethnic minorities, social minorities including immigrant workers, non-Korean spouses and those who resettled in the country fleeing from North Korea ("Saeteomin", literally meaning "new settlers").

Population of Gangwon is 1.5 million as of 2014, which occupies 3 percent of the country's total population. With relatively low level of urbanization with decreasing density of population the province recently witnessed the rate of decrease is slowing down as populations in major regions including Chuncheon and Wonju, etc. are increasing and as people are flowing from metropolitan areas. However, a trend of aging population also continues in Gangwon Province as in the other parts of the country. Youth population under the age of 40 is also decreasing in the province.

Although Korean society has almost always been racially homogeneous, it is becoming increasingly multicultural as the number of migrant workers from abroad and international marriages is increasing significantly. The visibility of the non-Korean population is more prominent in rural areas. Number of non-ethnic Korean population residing in the country is increasing not only in metropolitan areas, but also in agricultural regions such as Gangwon Province, which speeds up the process of diversification of the society's cultures in both urban and rural areas. (Findings from the OGI Study Report(2014))

Harmonious co-existence of numerous groups with different backgrounds and characteristics is indispensable condition for happiness, stability and prosperity for all. PyeongChang 2018 welcomes and promotes active participations of various minority groups including: the elderly, the impaired, women and ethnic minorities, social minorities including immigrant workers, non-Korean spouses and new settlers

from North Korea in preparation of the Games as well as enjoying the Games' events. For this, POCOG is preparing for setting a policy to encourage participation of non-Korean spouses and other groups, including associated organizations, universities and civil groups with foreign language fluency and international experiences that are based in the host regions in translation and interpretation services for the Games.

Accessibility will be increased for diversity and inclusion.

A core notion for reflecting diversity and inclusion in actual policies and implementation program to encourage the participations of the above-listed groups is 'Accessibility.' While primarily referring to the physical ability to have an access to facilities, the notion also has a broader coverage as stipulated in the GRI 4 Event Organizer Sector Disclosure as below:

- The regulations for major stakeholder groups including minority populations will clearly be stated to consider them in the whole process of preparing, hosting and managing the 2018 Winter Games and relevant matters afterwards. Policies to include and consider these people will actively be substantiated, practiced, monitored and reported.
- Physical accessibility should be considered to the highest level in the design and disposition of various Olympic facilities.
- Practical and effective education should be implemented for all staff and voluntary workers with regard to disability and accessibility.
- Reporting systems will be set up and applies to communicating effects and impacts of implementing policies and plans related to accessibility.

According to the findings of the OGI Study Report(2014) Gangwon Province has lower level of social participation of minority groups compared with the national average. Thus, more active promotions to create more inclusive social atmosphere is desirable. Notwithstanding the same study shows one thing noteworthy: relatively high level of mature and positive social consciousness for the impaired by Gangwon people. This may be attributed to Gangwon province's efforts to make it as the 'Best place for the impaired'.

The Games will set groundwork for the impaired's sports activities and raise public awareness for the promotion of the equality of the impaired and improved treatments.

The impaired's sports activism is relatively weak in Korea. Particularly in winter sports as indicated by relatively low number of medal winnings of the country in the Winter Paralympics compared with that in the Summer ones. Social standing of the impaired is relatively weak while a level of social discriminations still persists. A gap in economic standing and income levels between the impaired and others is another vindication. Interestingly, while the portion of the impaired population who reported to do regular physical exercises is rising, the actual number of those who do not or are not willing to do any exercises also increased.

Making active efforts to improve the welfare of the impaired and other minority groups and to correct the society's bias against them for equitable and fair treatment of all constitute an essential element of hosting the Games successfully. According to a report on the results of 2012 London Olympics published by British Paralympic Association, the interest for Paralympics was originally about one eighth of that for the Olympics but it soared to one fourth by the margin of increase of more than 100% with the successful London Paralympic Games.

<Key Activities and Implementation Plans>

1) Programs for people with disabilities

"The 2018 Paralympic Games will promote sport activities of, raise awareness for and facilitate capacity building of the impaired."





Under the motto of "Same Worker, Two Games", each staff of POCOG is responsible for preparing both Games of Olympics and Paralympics. The first-phase of the organization of POCOG was formed to accomplish the mission to minimize the conversion between Olympics and Paralympics and maximize the integration of relevant organization. Particularly, Korean Paralympic Committee(KPC) staff with the past experience of participating in and administering Paralympics were assigned in the Paralympics division of POCOG to organize an internal working process to consult and cooperate with other FAs.

POCOG and Gangwon Province intend to fulfill most of the pledges they have made

in the bidding by successfully hosting the Paralympics/ PyeongChang's vision of becoming a hub for the winter sports in Asia is for all, with or without disabilities. Additionally, in our efforts to enable the best conditions of the compact venue master plan, all participant athletes will be able to enjoy and exert their full capacity of performances during the Games, including members of Paralympic Family.

"PyeongChang 2018 provides a momentum for the country to kick-start the provision of sport facilities for people with disabilities."

Unfortunately, there is a dearth of sport facilities designed for the impaired in the country. PyeongChang 2018 is introducing virtually for the first time proper facilities that meet the requirements of International Paralympic Committee(IPC) with high level of accessibility. For this POCOG is working in cooperation with IPC conforming to the guideline on accessibility of IPC. Currently, POCOG is promoting the preparation of its own version of such guidelines applicable to PyeongChang 2018. When hosting the Games, POCOG will observe the following requirements.

- The distance between bus stops and entrances of a venue will not be more than 100m.
- All the ramps in the venues will be less than 1/18.
- For all routes in the venues for snow sports, artificial pedestrian road of special material will be installed not to hinder wheelchair movements.
- \circ $\,$ Sufficient number of portable toilets is to be installed with heating functions.
- Especially, the idea of SMART Environment will apply to the facilities of the 2018 Paralympic Games to access necessary information real-time through wirewireless terminal equipment.

Amenities for the impaired

"Infrastructure and amenity facilities will fully be prepared around venues for the convenience of the impaired including restaurants, roads, traffic systems and accommodations."

Complete barrier-free construction will be guaranteed for core accommodation facilities around Olympic-related facilities. Disposition of those structures will cautiously be decided to ensure fast movements between venues. Olympic Villages, Media Center and Family Hotel for the 2018 Paralympic Games will have the highest level of accessibility.

PyeongChang Olympic Village, which is located at the center of Paralympic venues, will have 340 units of rooms(out of total 1,020 units) accessible by wheelchairs. In addition, 25% of the rooms at Paralympic Family Hotel and 10% of the rooms at Media

Center can afford complete access for wheelchairs.

2 Smart environment for Paralympics to remove other barriers

"ICT technologies will facilitate ease the inconvenience due to audio-visual disability and limited accessibility."

In connection with the cutting-edge ICT technologies, a wide range of amenities will be available offering enjoyable and comfortable environments to participating members of Paralympic and their families. Participants will be provided with real-time information about venue, Olympic Village, traffic and other necessary subjects in a range of forms including videos, multilingual texts and voices to overcome the barriers linked to time, languages and other types of barriers.

As part of an effort to upgrade accessibility, 4 venues for ice sports are to be built in Gangneung are at a design phase and have obtained a preliminary approval under 'the Institution of Certifying Barrier-free Living Environments'. Accordingly, accessibility is regarded to be high and continual monitoring activity will be done to see whether there occur positive ripple effects to regional community.

③ Wheelchair-accessible transport systems

"Barrier-free transportation system will be established."

Eco-friendly and low-floor bus will be operated during the Games for the passengers in wheelchair. To do that, a guideline to select eco-friendly sponsors are in place and maximum use of these buses will be promoted in consultation with the sponsors. All the vehicles will adopt advanced systems to minimize physical, visual and acoustic barriers. All venues and accommodations are to be fully equipped with necessary installations for the people with visual and hearing impairments. Bus terminals and train stations will also be newly constructed or remodeled for the same purpose. Additionally, audio and braille services for the visually handicapped will be available at traffic information facilities. When moving between Paralympic Villages and other stadiums, low-floor city buses and shuttle buses will be available to remove inconvenience as much as possible associated with moving on a wheelchair.

"PyeongChang and Gangneung will provide barrier-free environment."

Five-Year National Comprehensive Plan on the Promotion of Convenience and a program for design certification have been put in place since 2012, which will transform PyeongChang and Gangneung into complete barrier-free locations where the impaired can freely move around. Convenient facilities in the entire city will be modified in a way to highlight the interconnection between convenience improvement of an individual facility and the whole city. Advanced IT system for information and guidance will create an environment where travel becomes much

more convenient for both domestic and international visitors.

4 Raise social awareness of disability

" A comprehensive program to raise awareness of and provide education on disability."





Article 3 of the Act on Welfare of Persons with Disabilities of Korea stipulates legal right of the impaired to participate in social activities on equal terms. First(2000~2004) and Second(2005~2009) Five-Year National Comprehensive Plan on the Promotion of Convenience largely amended policies to promote convenience of the impaired and public awareness raising. The third version of the policy had been in force until recently(2010~2014).

POCOG and KPC plan to run an awareness raising program about the disability as part of the Actualising the Dream Project(ADP)(Refer to detailed explanation in the box below).

"Special education program will be provided to raise awareness of the disability issues."

Awareness raising program for the impaired will consist of regular(targeting host communities in the region) and special programs(targeting safety guards for the Games) will be carried out systematically and efficiently. The former is aimed at regional community and staff while the latter is for safety guards.

A separate special program will be developed with a focus on drawing interest and engagement of the mass media and organize information about sporting activities for the impaired. It will also encourage voluntary participation of ordinary citizens, employees of public transportation industry, staff of restaurants and lodging facilities of the host regions. Impressive and insightful episodes and stories about sporting activities of the impaired will be complied and shared with the media to raise interest of the public about Paralympic Games. Such task will facilitate meaningful communication about the stories of the impaired.

Contents of education include various topics related to ensure a better living environment for the impaired and harmonious way of living together with them, including: types and characteristics of the disability, understanding of the facilities, equipment and instruments for the impaired and measures of addressing conflicts

and facilitating communications. Expert-level education and training programs will be customized to the needs of different types of the participants and workforce for PyeongChang 2018. For the program, the impaired themselves will contribute as lecturers. In this way, people with disability will not only be a subject for further understanding of the public but they themselves will become an active agent for the Games.

POCOG's education programs will include on-site experiences to maximize the effectiveness of education. Noticeable education effect can be achieved by participating in a camp program for young students, familiarization tour(Famtour) as part of Actualising the Dream Project(ADP) or taking part in international competition as an athlete, operation staff or voluntary worker. Additionally, the Games' staff will take part in an IPC excellence program. Accordingly, they have a role of observer in 2014 Sochi and 2016 Rio Paralympics and participate in 8 times of workshops, debriefing and simulation activities to build capacity for the operation of PyeongChang 2018.

< Actualising the Dream Project(ADP) >





 \lceil Actualising the Dream Project(ADP) \rfloor is a very special project' of PyeongChang 2018 which PyeongChang consistently suggested from the initial bidding stage. It is the most distinctive feature that differentiates PyeongChang 2018 from other Paralympics in the past.

- Period: 2014 ~ 2018(5 Years)
- · Total budget: 17.5 million USD
- · Main contents:
 - Reinforcing winter sports of Winter Paralympics.
 (Youth camp, workshops, etc. for the continents of Asia, Africa and South America where winter sporting activities are not active.)
 - Boosting the recognition and participation of the media and general public. (Awareness programs about the impaired, etc.)
 - Enhancing capacity for hosting PyeongChang Paralympics successfully.
 (Workshop for job training involving about 1,500 staffs and technicians, international contest under the approval of IPC or IPSF.)

2) Programs for the youth

"Special programs will be operated for young people as agents of winter sports of the next generation."

In developing PyeongChang into an East Asian hub for winter sports, the youth will have a major leading role. For this reason, POCOG intends to focus on the education of Winter Olympics and sports targeting the youth.

POCOG consulted with Gangwon Office of Education about operating an educational program about PyeongChang 2018 and winter sports for elementary and middle school students. POCOG is now offering learning programs including education contents as part of school curriculum. Some schools are actually using them for physical education. Such activity poses opportunities for students to become spectator, athletes or other participants in PyeongChang 2018. POCOG has consistently offered relevant educational contents since 2013. Initial pilot programs started in Gangwon Province and regular program is planned to be applied to other schools nationwide.

From 2012 to 2017, each semester will have 20 hours of new regular curriculums related to these subjects for the students of elementary, middle and high schools. "Dream Program" has been put in place since 2004 for international students to experience culture of winter sports. This is a flagship program of PyeongChang 2018 for the youth as a sustainable legacy of the Games.

Youth Camp and Para Youth Camp will be operated for about 200 young people from around the world, which offers chances to participate in PyeongChang 2018 and winter sport activities for those from the countries where winter sports are virtually non-existent in line with achieving Millennium Development Goals(MDG). Preparation of the venue for experiencing Winter Olympics and Korean culture will raise the interest and participation of young people around the globe in winter sports, which will contribute to creating further interests and enthusiasm for PyeongChang 2018.

3) Support and facilitation of participation of the socially disadvantaged and minority groups

POCOG operates the expert committee for voluntary service from the end of 2014 till the opening of the Games. Under the committee, an external group of about 20,000 voluntary workers will be gathered initially. Second and third recruitment campaigns are to be carried out later. POCOG is formulating policies and strategies to ensure a multiple strata of the society to take part in the preparation and hosting of PyeongChang 2018.





- Policies and implementation plans for more participations and recruitments of the minority groups: In mobilization process of voluntary workers or other types of workforce, it is encouraged to hire the impaired, adolescent, new settlers from North Korea("Saeteomin"), women and non-ethnic Koreans.
- Voluntary interpreters' system for tourism(Office of Culture, Sports and Tourism in Gangwon Province): Plans to hire foreign spouses and other non-ethnic Koreans who are bi- or multi-lingual.
- o In case of Paralympics, people with disabilities will be given priority in employment.
- Provision of awareness programs on human right, prohibition of discriminations, fair and just treatment of the impaired to the Games' staff and associates.
- POCOG conforms to the mandatory quota system in hiring the impaired for domestic public agencies, as the domestic law in Korea requires.

4.3 Creating innovative platforms for public consultation, communication and participation

Ensuring genuine participation and cooperation by all segments of the eco-city and stakeholder is a core principle for sustainable management of PyeongChang 2018.

As indicated in the Introduction chapter, governance for sustainable development requires transformation from top-down and centrally controlled measures to bottom-up, networked and decentralized approaches, where a wide range of entities coexist and cooperate for a shared goal(s) based on voluntary cooperation and mutual trust. Thus, voluntary participation and communication of these entities are a core to achieving sustainable principle.

As for the issue of Jeongseon Alpine Centre to be established at Gariwang Mountain, Group for the Promotion of Revitalizing Biodiversity in Jungbong was formed in May 2014. The Group is actively engaging a range of public officials, experts and environmentalists, etc. to deal with the issue and verify the eligibility of the

restoration plan and its implementation. Implementing agency, relevant companies and institutions are also member of the Group together with environmental advocacy groups and resident representatives of the host communities. Diverse opinions of these stakeholders will be collected and reflected in constructing an eco-friendly venue, guaranteeing eligibility of a plan for environmental impact assessment (EIA), checking whether agreed contents during EIA process are actually implemented, supporting verification of additional measures to reduce environmental impacts and verification of investigation results about legacy environmental impact assessments.

Public-private governance partnership for environment, society and sustainable hosting of the Games.

For successful, an eco-friendly and sustainable Olympics in 2018, private-public governance will be in force to expand programs through interconnecting local societies and organizations, elevating the understanding of sustainable development and carry out campaign activities.

For successful Olympics, participation and cooperation of various stakeholders are indispensable. Therefore, partnership between public sector(international organizations, government, regional authorities and public agencies) and civil society will be strengthened in order to carry out coordinated strategies and achieve environmental goals. To do this, government, academia and environmentalists will jointly form an expert committee on the environment. In addition, Green Management Association will be put in place to prepare an environmental monitoring system engaging both public and private sectors.

Sustainability Vision and the five key Sustainability Themes of PyeongChang 2018 will be made public to the international community through various cooperation and environmental exchange activities. By reinforcing the global trend of sustainable management of the Olympic Games and ensuring the environmental soundness of the Games, PyeongChang 2018 aims to be remembered as a good practice and successful model.

World-class ICT infrastructure will broaden the room for communication and consultations with the public.

The Republic of Korea is proud of the world's best quality and scale of ICT infrastructure and communication technologies. Mobile communication services of 2G/3G/3.5G technologies have been widely used and commercialized throughout the country with 4G technologies entering into the market since 2013. Such

infrastructure and related skills along with ubiquitous and advanced IT technologies will be fully applied to the operation of PyeongChang 2018.

ICT technique such as the Internet will be used to create a cyber space to facilitate communication and a sense of global community where information about PyeongChang 2018 will swiftly be available to all connected. High degree of convenience will be guaranteed in offering the services of digital media through webbased(PC and tablet PC) and mobile(smart phone) instruments. This will also have positive impacts in building an image of the hosting city as smart and ICT-savvy.

<Key Activities and Implementation Plans>

1) Environmental Olympics Program led by civic volunteerisms

Carbon offset and " O_2 Plus" programs targeting the participating athletes and visitors and GreenStart program for general public will be operated from 2015 onwards. During the opening and operation of the Games in 2018, citizen-led green transport program(including car sharing campaigns) will be implemented.

Creation of Committees of private environmental experts and Association for green management of PyeongChang 2018

In July of 2012, an environmental committee that consists of NGO leaders, public servants, local residents and environmental experts was set up and has been active in operation thereafter. In addition, a Green Management Association was formulated in 2014 including Bokwang Pheonix Park and other business leaders and individuals, and will expand the participation of the companies of the hosting regions in environmental management.

3) Cooperation with international organizations including UN

An MOU with UNEP will be signed for devising joint programs on environmental promotions such as Initiative for Environmental Action Movement. Further collaborations will be sought after with other international organizations and institutions.

4) Revamping public participation and communication through implementing Smart Olympics of the Games.

POCOG and relevant stakeholders jointly designed a communication program for 7 years (2012~2018) which will be promoted by phase. This program will help people to share a vision of Pyeong Chang Olympics and promulgate values of Olympic activities.

National Information Society Agency is specifying an idea of Smart Olympics and it focuses on information-oriented sporting activities in partnership with Gangwon Province. It will promote the strategies for enhancing digital contents and capacity of the hosting city related to the preparation and operating the Events including following actions.

- Existing mobile services based on 2G, 3G, 3.5G, 4G will be enhanced by 5G technology by 2018
- Operation of a website(www.PyeongChang2018.com)
- Organizing web-based initiatives through social media(such as Facebook, Twitter, Flicker, and YouTube)
- Development and utilization of an smart-phone application to make information about lodging, sporting events and tourism available
- o Forging a cooperative relationship with IOC in the area of digital media

<Legacy of Sustainability Theme 4: Proud People with Tradition and Culture>

The fourth Sustainability Theme for PyeongChang 2018, 'Proud People with Tradition and Culture', has a vision of "revitalizing local community, forging mature civil society of culture based on diversity, inclusion and formation of social capital". Three key activities for achieving the vision includes 1) Olympism and globalization that reflects traditions and culture in Gangwon Province, 2) preparation and participation based on acceptance for social diversity and minority groups, 3) stimulation of public participation and communication to enable innovative and sustainable Olympics. In the process of conduction the above-listed activities, tangible and intangible legacy stated below will be created.

© Consolidation of social capital in the hosting regions including Gangwon Province

Successful preparation and implementation of the 2018 Winter Games will do pride to the host community. A reinvigorated sense of belonging and ownership for the Games as well as cultural identity can activate cultural movement, which will create a clear vision for the globalized and advanced future of Gangwon Province and the hosting cities and counties. To actually materialize such vision, it is necessary to consolidate the voluntary participation and cooperation of civil society.

- Development and operation of programs for an environmental Olympics with voluntary participation of civilians.
- Stimulation of cultural movement of Gangwon people along with a program of promoting a Youth Supporters Program targeting university students in the host

regions.

- Educational programs to enhance social awareness on diversity and inclusion and encourage public participation.
 - (e.g. 2014 Core Leadership Academy For The Next Generation)
- Encouragement of life-long study and trainings of human resource in the host regions.
- (1) Bolstering the brand value of the host regions, formation of cultural capital, globalization of the culture of the host regions.
 - Development of cultural contents tapping on local cultural resources.
 (e.g. Daegwallyeong international music festival and other cultural programs of Gangwon Provincial Office)
 - · Setting up a framework of promoting cultural Olympics.
 - Preparation of the system to manage and operate infrastructure of cultural Olympics.
 - · Governance framework that utilizes cultural heritage of Olympics.
 - Promotion of branding the image of the city based on identity and regional features of Gangwon Province and PyeongChang.
 - A mid- and long-term scheme of branding activities for marketing, boosting and utilizing a value of devised brands.
- © Formation of the basis for barrier-free city by building infrastructure including barrier-free(BF) traffic and transport systems, sport facilities and amenities.
 - · Construction of the first-ever venue that satisfies the IPC criteria.
 - Formation of amenities for the impaired at The PyeongChang Olympic Village and other major structures related to the Games.
 - · Organization of the wheelchair-integrated traffic and transport systems.
 - Continuation of the BF design certification program initiated in 2012 in Gangneung and PyeongChang.
 - Implementation of the country's <National 5-year Scheme for Better Convenience.
- ® Forging a mature civil society where people have good understanding of and capability for sustainable development.
 - Participation in a variety of activities in preparing and hosting the Games will raise public awareness on the importance of sustainable development and public participation. Numerous activities led by the public will formulate the basis and capability for active involvement in sustainable development.

- · Developing and expanding a program for linking regional societies.
- · Devising a private-public framework of governance.
- Deploying cutting-edge ICT technologies including ubiquitous systems to enhance communication and networking of participants of the Games.
- Formation and operation of a negotiation body for green management and council of private-public environmental experts.
- Wurturing democratic citizenship welcoming social and cultural diversity.
 Socially disadvantaged and minority groups will be encouraged to take part in governance of the local community based on the principle of diversity and inclusion.
 Such movement will nurture modern, cooperative and globalized democratic citizenship in the host regions.
 - · Actualising the Dream(ADP) Project.
 - · Public awareness raising program about impairments in cooperation with IPC.
 - Differentiated programs customized to regional community, POCOG staff and other participants on the issue of the impaired and disabilities.
 - · Operation of special educational programs for different target groups.
 - Set up a policy encouraging minority groups' participation within an external expert committee for voluntary work of the Games.
 - Implementation of education and training programs on human rights antidiscrimination and considerations for the impaired related to preparation and operation of the Games.



5. Globalizing PyeongChang: Opening to the World

- ♦ Goal: Establishment of PyeongChang as a global city contributing to the promotion of Olympism and Winter Sports in Asia
- ♦ Key Activities
 - \cdot To create a hub for winter sports by building up world-class infrastructure and facilities
 - To increase sport-related international cooperation and exchange programs between the North and South Korea
 - · To ensure highest level of safety and security
 - \cdot To promote Corporate Social Responsibility(CSR) of the key participants of the Games

PyeongChang 2018 will be a starting point of making Global Gangwon/ PyeongChang as a hub for winter sports in Asia. Through this brand value of the host regions and cities will be strengthened while the traditional culture of the country as well as Gangwon's message for peace will be widely known to the world, closing the distance between PyeongChang and the world.

Korea had experiences of hosting a number of international sporting events such as 1988 Seoul Olympics, 2002 FIFA World Cup and 2014 Incheon Asian Games among others. PyeongChang, the host city of 2018 Winter Games, also had an experience of hosting Winter Asian Games in 1999. Based on these experiences, know-hows and capacities for implementing global events and complying with international principles and standards have been accumulated over time.

Global standards and principles will apply to the entire process before, during and after PyeongChang 2018, which will continue to maintain the required quality of service, safety, security, accommodation and fairness based on the Olympism. Participating companies and institutions will be ready to ensure international level of CSR performances in all accounts throughout the Games.

Accordingly, Gangwon Province and the hosting region will have infrastructure and capacity of an advanced and globalized city which satisfies international standards in facilities and services. Thus, the Games are an important milestone for achieving Global PyeongChang.

PyeongChang Games are promoting 'Olympic Games for peace' from an initial phase of hosting the Games. It is the opportunity to make a divided country of South and North Korea to cooperate during the Olympics, which can function as a measure of promoting world peace and show the country's progressive will to form a genuine North-South sport-community in the Korean Peninsula.

5.1 Creating a winter sports hub in East Asia by constructing world-class infrastructure and facilities

International mega sport events such as Olympics offer a valuable opportunity to stimulate some of domestic industries and their services to a level that conforms to international standards. PyeongChang 2018 will be a starting point to build a capacity of making the hosting region to be a global city and the best hub for winter sports in East Asia.

Sufficient number of foreign language experts will be trained and placed during the Games for the convenience of foreign staff, athletes and visitors. Olympic venues and Villages will comply with International standards in their constructions while related regulations will be strengthened and the brand of the host regions safeguarded. As for transport, accreditation, security and immigration, commonly accepted international standards and principles will apply to while encouraging refinement of the related institutions and improving quality and hygiene of accommodations, food, beverage and medical instrument.

POCOG and other relevant public agencies will work together to satisfy domestic and international visitors to PyeongChang 2018. Consolidated efforts shall be made in hiring, educating and fostering experts and volunteers in the host region for each of relevant areas of the Games. Linkages between FAs within POCOG under the same goals of sustainable management of the Games (as a cross-cutting issue) will also be strengthened to continuously manage and maintain the quality of relevant services. These activities will inspire the pride of the whole country including Gangwon Province and the hosting region and improve the standing of the country on the international stage.

5.2 Improving Inter-Korean relationship through sport partnerships

Collaboration of international sports circles, including IOC, International Sports Federations (IFS), National Olympics Committees, other public agencies, organizations and international media, is essential for the successful hosting of PyeongChang 2018. For this reason, on-going effort is put into cultivating organic international relations of cooperation by supporting foreign figures that visit POCOG and actively engaging in international events and meetings.

Successful formation of international cooperation and networks itself can be one of the accomplishments of PyeongChang 2018. Such network and knowhow of hosting the Games will be intangible asset for Gangwon Province and Korea as an Olympic legacy.

International relations & Protocol refer to a series of activities which offer services for Paralympics and Olympics Family and activities about collaboration with international organizations such as IOC and IPC. The Protocol has a role of spreading the Olympic Movement around the world. Therefore, it is a major component of hosting successful Olympics to offer protocol services in accordance of the IOC and IPC guidelines. In this regard, a solid mutual cooperation with IOC and IPC and, efficient and systematic services available during the period of the Games will be crucial to ensure the Games success.

Meanwhile, building a stable relationship based on mutual trust and co-benefits between North and South Korea is one of the important ways to contribute to world peace. Particularly, PyeongChang 2018 has a strong will to have a role in improving inter-Korean relationship on the Korean peninsula. POCOG and the hosting regions hope that the Games will be a cornerstone for the promising future of the peninsula and deliver a message of peace from South Korea to North Korea. This, in turn, is expected to relieve the strained relationship between the two sides and therefore promote world peace and co-prosperity.

<Key Activities and Implementation Plans>

1) Participation in international events

As of October 2014, POCOG has a record of participating in the following major international events.

O Year of 2012

Name of event	Time	Place	Participants
Innsbruck Youth Olympic Games + Debriefing meeting	19~26 January	Innsbruck, Austria Lausanne, Switzerland	President, Secretary General and other 6 staff
General Assembly of PASO	5~10 March	Mexico City, Mexico	President, Secretary General and other 3 staff
General Assembly of the Association of National Olympic Committees	13~16 April	Moscow, Russia	President, Secretary General and other 5 staff
IHT Global Sports Summit	24~28 April	Istanbul, Turkey	President and 3 staff
IOC Sport and Environment Commission	6~10 May	Lausanne, Switzerland	Secretary General and another staff
IOC Executive Board (Sport Accord 2012)	22~26 May	Quebec, Canada	President, Secretary General and other 7 staff
2012 London Summer Olympics (IOC General Assembly)	24~29 July	London, the UK	President, Secretary General, other 9 staff and 50 observers
2012 London Summer Olympics	4~7 September	London, the UK	Secretary General, another staff and 30 observers
General Assembly of the International Ice Hockey Federation	24~27 September	Tokyo, Japan	Secretary General and 2 staff
Debriefing of 2012 London Summer Olympics	16~28 November	Rio De Janeiro, Brazil	Secretary General and 13 staff

O Year of 2013

Name of event	Time	Place	Participants
Sochi Paralympics CdM Seminar	20~25 March	Sochi, Russia	Secretary General and one staff
Match-Fixing and Betting Seminar	12~14 May	Lausanne, Switzerland	Secretary General and one staff

Executive Board of International Olympic Truce Foundation (SportAccord 2013)	28 May~ 7 June	Saint Petersburg, Russia / Sochi, Russia /New York, the US	President and 5 staff
IOC General Assembly	2~14 September	Buenos Aires, Argentina	President, Secretary General, other 9 staff
IOC Sport and Environment Commission	31 October ~ 1 November	Sochi, Russia	Secretary General and another staff
General Assembly of European Paralympic Committee	21~23 November	Rome, Italy	Secretary General and two staff
IPC General Assembly	22~27 November	Athens, Greece	President and 7 staff

O Year of 2014

Name of event	Time	Place	Participants
2014 Sochi Olympics	1~25 February	Sochi, Russia	President, Secretary General, other 10 staff and 150 observers
2014 Sochi Paralympics	3~18 March	Sochi, Russia	President, Secretary General, other 8 observers
2014 Nanjing Youth Olympic Games	16~17 August	Nanjing, China	President, Vice President and other 6 staff
2014 Incheon Asian Games	18~22 September, 3~4 October	Incheon, Korea	President, Vice President and others
Reporting of IPC Executive Board	2~9 October	Berlin, Germany	President and 4 staff
Reporting of IOC Executive Board	4~8 December	Monaco	President and 4 staff

POCOG and Gangwon Province will take further steps to diversify events for the POCOG's and related agencies' participation, to deepen and broaden the level of participation and to encourage non-Korean figures' visits to and support for the Games.

2) Inter-Korean sport-related and cultural exchange programs and activities

Efforts of the two Koreas towards the shared goal of peace-building and unification

should be made gradually but continuously based on long-term visions and mutual understanding. As the political situation in North Korea and other circumstances of the Korean Peninsula are assessed to be changing variable, PyeongChang 2018 could play a role in creating a window of opportunities to build a common ground between the two countries through the exchanges of cultural and sports events and activities based on common cultural and historical and racial origins of the two Koreas for nurturing a culture of co-existence and shared prosperity.

In this context POCOG and the hosting regions intend to utilize the Games as an opportunity to foster a North-South sport and culture partnership as part of peace-building efforts on the Korean Peninsula.

- It is under consideration that the President of the Republic of Korea(South Korea) suggesting to North Korea(DPRK) strengthening inter-Korean exchange programs and conducting a joint-program for ecological conservation during the 70th anniversary of the country's independence.
- Inviting North Korean youth and athletes to the "Dream Program", "Youth Camp" and other youth-related activities for PyeongChang 2018, with gradual collaboration between two Koreas for inter-Korea sports and culture partnership building.

<Dream Program>





- Purpose: Offering cultural experiences of winter sports for young people from underdeveloped countries or tropical regions without ice and snow.
- Significance: As a program promised to IOC and promoted from bidding stage for Winter Olympics in 2004, it will contribute to 'world peace' and 'expansion of the basis for winter sports' and contribute to peace of the humankind.
- No. of people for Invitation: Invitation of about 150 young people including the impaired from 30~40 countries annually(since 2004).
- Main programs: Training of winter sports for the Olympics(snowboard, Alpine ski, short track speed skating and figure skating), recreation, experiences of Korean culture, tour of Olympic facilities and winter festival sites.
- Output: Among the participants in Dream Program, 46 athletes from 19 countries

improved their performance when they participated as a member of its national team in Winter Olympics, Winter Youth Olympics and other international competitions.

5.3 Maintaining highest level of safety and security

Security and safety are indispensable for successfully hosting PyeongChang 2018. Understanding this, POCOG and Gangwon Province are preparing to take all required measures including thorough planning, and verifying safety and security guarantee system as well as preparing for emergencies.

From sustainability point of view, ensuring security and safety is not all about merely putting a lot of resources.

Systems need to be smart: Equipment and IT systems of highest quality along with new operation techniques will apply to implement a scientific, synthetic and efficient scheme for ensuring safety and security.

On the basis of international safety criteria and best practices, proper establishment of comprehensive phase-based schemes of the hosting city will mobilize citizens, media, spectators and athletes. It will secure material safety for guarding the facilities related directly and indirectly to the Olympics such as competition venues, Olympic Village, traffic and infrastructure: Creation of another Olympic legacy by hosting safe and thorough Olympics.

<Key Activities and Implementation Plans>

1) Specification of a nation-wide operation system under the leadership of the government for the safety of the 2018 Winter Games

Korean government will devise a full set of safety measures for hosting peaceful and highly safe events of the Games. From the year of 2018, Security Measures and Anti-terrorism Committee(which is to be led by the head of National Intelligence Service, whose composition including the ministers from the related government departments and offices) will be established and operated in accordance with the Special Act on Support for the 2018 PyeongChang Olympic and Paralympic Winter Games to guarantee public order and safety and forestall any terror activities during PyeongChang 2018.

2) Enhancement of a compliance and implementation system for international anti-doping regulations

Doping refers to the use of illegal substances and prohibited actions(e.g. blood transfusion) to enhance the physical performances in sports events and competitions along with avoidance of doping test and illegal replacement of blood samples. Every year, the World Anti-Doping Agency(WADA) publishes an updated version of standards concerning doping test, laboratory, and cases of exemption for therapeutic purpose. According to the WADA's standards, POCOG is preparing a series of plans to strictly comply and promote anti-doping regulations. Additional staff for managing anti-doping will be hired and educated and a transportation system of clinical material will firmly be established.

3) Forging an effective management system for emergencies and disasters

"Medical services and a contingency/disaster management plan and systems will be set to be available for event sites including stadiums."

POCOG will adopt a system that is capable of effective emergency and disaster management as a safety measure for the areas of security and access control of Olympic facilities, maintenance of order, accreditation and guide for Olympic participants. Security measures such as Crime Prevention through Environmental Design(CPTED) will be utilized from a design stage of the Olympic venue and facility constructions in consideration of opinions from independent experts. Headquarters on antiterrorist and safety countermeasures will be formed and operated since January 2016 and POCOG will take full charge of thorough safety activities by sector including antiterrorist, security, transport and fire services. Periodical safety checks will apply to the facilities that are directly and indirectly related to the Games such as venues, Villages, lodgings and media center, etc. The utmost level of safety will be guaranteed according to an international safety standards though, for example, installing scientific surveillance equipment. Education for on-site security staff from private contractors and other members of relevant institutions will be provided on the subjects of anti-terrorism safety and security.

5.4 Compliance the CSR requirements of participating entities

Globally, the importance of social responsibility is increasingly being emphasized and a wide range of social players including major companies operate responsibly for the sustainable development of their society and environment. In line with this trend and growing social needs, POCOG has published a guideline for major entities of the Olympics to fulfill their social responsibility to hosting the Games in a sustainable manner, titled "CSR Guidelines for PyeongChang 2018: For All Participating Entities in

Opreparation and operation of the Events".

All the participating institutions will sign the Charter of Ethics for Sustainable Management of PyeongChang 2018 and comply with CSR guidelines for sustainable management of PyeongChang 2018.

Guidelines for public procurement in a number of regions around the world such as the European Union, United Kingdom and US legislate and institutionalize social responsibility regarding the areas of environment, human rights and labor. The government of the Republic of Korea is also in the process of legally institutionalizing the responsibilities concerning social responsibility and public procurement. In case of Seoul metropolitan governments and some local governments, they are in the final process of adopting an index system to assess the degree of social responsibility performance of corporations. In a variety of international events including the Olympics and World Cup, there is a serious ongoing discussion about the social responsibilities and procurement that promote sustainability.

Following such movement, POCOG has set up "CSR Guidelines for PyeongChang 2018: For All Participating Entities in preparation and operation of the Events" as a general operational manual for corporate participants to consider social impacts such as environmental and social impacts, human rights, employment, labor conditions, social integrations, etc. During the whole process of preparing for and operating PyeongChang 2018, participating entities will have to comply with domestic and international regulations, international criteria and ethics and fulfill social responsibility strictly. These entities include the government entities of the hosting region and their people, volunteers, private sector entities as a supplier and contractor for procurement among others. All the members of participating entities will sign POCOG Games' Business Covenant for Socially Responsible Performance and Integrity Pact

<Key Activities and Implementation Plans>

Setting up a Charter of Ethnics for the Sustainable Management of PyeongChang 2018

POCOG, venue city authorities and volunteers will observe basic rules and ethics and fulfill social responsibility during the process of Games preparation, for which POCOG developed the Charter of Ethics for Sustainable Management of PyeongChang 2018. The Charter shall be signed by all above-listed parties to pledge their commitment to and accountability of socially responsible performances in accordance with the Guidelines.

2) Introduction of CSR Guidelines for the sustainable operation of PyeongChang 2018

"CSR Guidelines for PyeongChang 2018: For All Participating Entities in preparation and operation of the Games" include the visions, subjects, core principles and specific items for compliance in the overall scheme of the Games sustainability management. The Guidelines stipulate the observance of major international standards and criteria including the UN Global Compact's ten principles, Universal Declaration of Human Rights(UDHR), International Labor Convention(ILC), United Nations Convention on the Rights of the Child(UNCRC), Convention on the Elimination of All Forms of Discrimination against Women(CEDAW), among others. In addition, it also considers domestic and internationally accepted regulations and standards about society and environment.

CSR performance indexes will be developed against the Guidelines in order to assess the compliance of participating entities in the Games in terms of social responsibility fulfillment. The Guidelines will be distributed to the entities and companies well in advance to their actual performances.

< Legacy of Sustainability Theme 5: Globalizing PyeongChang: Opening to the World >

The fifth subject of sustainability for PyeongChang 2018, "Globalizing PyeongChang: Opening to the World", envisions Gangwon province and host region becoming a global brand remembered by the world as advanced cities meeting global standards, contributing to creating and broadening the values of Olympism and promoting winter sports in Asia. Key activities include building Games' infrastructure meeting global standards, strengthening inter-Korea sports and culture partnership for peace-building on the Korean peninsula, guaranteeing highest level of security and safety of the Games and ensuring observance of social responsibilities by the Games' participants. Carrying out the activities listed above shall bring out following tangible and intangible legacy:

- © Accumulated know-how and capacity of the host region and other participants of forging and operating the network and cooperative relations with international communities related to the Olympics and Paralympics.
 - · Cultivating foreign language skills.
 - · Enhancing policies and regulations for brand protection.
 - Construction of Olympic facilities such as sporting venues and athlete villages in accordance to international standards.
 - · Upgrading transportation, immigration, registration and security systems in

accordance with global standards.

- Expansion of accommodations and medical facilities and increased level of their quality and hygiene particularly in the host regions.
- · Ceremony services according to the guideline of IOC and IPC.
- © Capacity building for conformation to an international standard about safety and security. Securing world-class anti-doping experts and developing antidoping management systems including strengthened transportation system of clinical materials in accordance with the WADA standards.
 - Application of BYOB(Build Your Own Blocks) principle for security and access control of Olympic facilities, maintenance of order, registration and guide for Olympic participants.
 - Construction of the venue by utilizing Crime Prevention Through Environmental Design(CPTED) companies.
 - Increased and enhanced on-site education and training programs about safety, security and anti-terrorism for staff of private contractors and other participating or associated organizations and entities.
- (7) Improving inter-Korean Sports and Culture partnership for peace-building in the Korean Peninsula and Asian region.
 - Encouragement of the North-Korean participation in Dream Program and Youth Camp.
 - Develop a peace building program on the Korean Peninsula particularly for the border areas around the Military Demarcation Line in Gangwon Province.
- Expansion of the basis for socially responsible management of the Games.
 Through capacity building and education programs as well as formulation of the Guidelines ensure the awareness and compliance of the social responsibility standards that are required by all participating entities of the Games. Companies and entities assessed to be a good CSR performer shall be rewarded through being awarded as "Best Practice" for promotion and publications of the case, while substandard or failed performances shall be sanctioned. This will provide learning opportunities for many a company and other entities on compliance of the CSR.

The ultimate legacy of PyeongChang 2018 is to fulfill the Combination of the 18 abovementioned Legacy Items in this Report, shall surmount to the achievement of the Games' overall vision of "New Horizion", transforming PyeongChang and Gangwon province into a truly global winter sports hub while contributing to the humanity's efforts towards sustainable development. This will be an ultimate legacy of PyeongChang 2018.

III. Sustainability Management System & Reporting

- Key principles for formulating Sustainability Management Plan for PyeongChang 2018
- 2. The Organizations



In the Introduction Chapter we have seen that associating the Olympic Games with the concept of sustainability was relatively recent in the long history of the Olympic Games. It is even more recent that introduction of sustainability management system in the overall process of preparation, operation and decommissioning of the Games. Publication of sustainability report of the Olympic Games was initiated in 2010 Vancouver Olympic Winter Games for the first time. Since then, 2012 London Summer Olympics and 2014 Sochi Winter Olympics followed the practice virtually establishing it as a norm to develop and report a sustainability management system for the Olympic Games.

Responding to this, PyeongChang 2018 has closely examined the practices of the past Olympic Games in their formation and implementation of the Sustainability Management System, drawing relevance to and assessing their respective feasibility of and applicability to the PyeongChang Games. Key principles of the ISO 20121 will be drawn for adapted application to the PyeongChang Games. Through this, PyeongChang 2018 will set up a viable and effective sustainability management system of its own responding to specific needs and expectations of the country, Gangwon province, hosting and venue cities based on realistic assessments of their capacities and resources available.

This Framework Report is produced three years prior to the opening of the Games. As such, only the initial generalization of the Sustainability Management System could be drawn with its overall structure, key principles for sketching out implementation plans. More concretely, phased action plans shall follow based on the framework presented here.

1. Key principles for formulating Sustainability Management Plan for PyeongChang 2018

Key principles in formulating the PyeongChang Games' sustainability management plan are summarized as follows:

- ① Application to entire states of management of the Games
 From preparation, operation and de-commissioning of the Games, the entire process is covered under the sustainability management plan.
- ② POCOG-wide operation as a cross-cutting issue.

 While the focal point for the sustainability management of PyeongChang 2018 is sitting on the Planning Department(Sustainability team) within the POCOG, the implementation of the sustainability management plan shall be carried out by all relevant FAs of the POCOG in a holistically but functionally-differentiated manner.
- ③ Phased, incremental evolution and sophistication of the system.

 The Management System's structure will be incrementally developed and sophisticated in accordance with the POCOG's phased evolution framework and linking the system to the POCOG's Games Foundation Plan(GFP).
- ④ Flexible adaptation and learning organization principle.
 Firmly based on the key principles of sustainability management of the Games and basic implementation framework, the system shall also be flexible and open enough to adapt itself into evolving situations and rising needs. For this, POCOG should maintain the culture of a learning organization.

<Lessons from 2012 London Summer Olympic Games in terms of Sustainability Management>

- · Importance of a clear vision of the Games' legacy.
- Importance of observing sustainability principles which are unwavering by political climate changes.
- · Organization and partnership firmly based on clear mutual trust.
- Commitment and participation of key stakeholders.
- Maintenance of flexibility in consideration of potential changes and adjustments of the plan.

- · Creation of sustainability momentum after the Games.
- · Understanding of the sub-national level entities as partners.

Source: Post-Games Evaluation(Meta-Evaluation of the Impacts and Legacy of London 2012 Olympic Games and Paralympic Games

2. The Organizations

PyeongChang's three time bidding for the Olympic Winter Games was supported by the national government, with special supporting committee composed by different ministers, chaired by the Prime Minister. Having been selected as the host city for the 2018 Games, central and local hosting governments launched POCOG on 11 October 2011, inheriting all the legal authorities and responsibilities from the Bidding Committee under the promulgation of "Special Act on Support for the 2018 PyeongChang Olympic and Paralympic Winter Games_J. Game Support Committee and Game Support Working Level Committee were set up, constituting governance structure at the central government level. Likewise support and implementation mechanisms were established in Gangwon province and host and venue cities.

Games Planning Department of POCOG set sustainability as a core principle cross-cutting across various areas of management functions and activities of POCOG. Planning Department will play coordination roles amongst various collaboration works of POCOG's FAs and external participants to create a new horizon for sustainability in managing PyeongChang 2018.

With three years passage since its establishment, POCOG has entered the Phase II ("Foundation setting") of its organization plan which is composed of four different stages altogether. As of 2014, POCOG focused its efforts on establishing overall sustainability framework of the Games. Currently POCOG is in the process of developing environmental performance indicators and monitoring frameworks.

2. The Organizations

<Organizational chart of POCOG> (as of July 2015) President & CEO Situation Room Chief of Staff Auditor Chief Spokesperson Financial **Games Planning** Legal Officer and • Paralympic Games Integration Administration, Director Planning & Coordination & Planning Department of Secretary Security • Games Coordination Department Bureau General Secretary • General Affairs Department Deputy President General General Affairs • HR Development Department Office & Workforce • People Management Department Bureau Volunteer Department Finance • Finance Department Coordinatior Office Bureau • Logistics and Procurement Department Culture & Cultural Department Ceremonies Ceremonies Department Bureau • PR Department PR Bureau Design Department • International Relations Department Public • Protocol Department IR Bureau Relations Accreditation Department • Venue Operations & Planning Department • Coastal Venue Operations Department Venue Games • Mountain Venue Operations Department Operations Bureau Operations • Games Operations Department • Test Events Department Sport Services Department Sport Department Sports • SPP Department Bureau NOC/NPC Services Department Medical Service Department Licensing Department Sponsorship Department Marketing Bureau Partner Service Department Ticketing Department Media • Broadcast Services Department Broadcast & Operations Communications • Press Operations Department Bureau Venue & Facilities Planning Department Venue Venue Development Department Venue & and Infrastructure Overlay Department Bureau Infrastructure Energy Department Environment & Forest Department Accommodation Department Accommodation Olympic and Paralympic Village Bureau Department Media Village Department Transport & Planning Department Transport & Traffic Bureau Transport Operation Department • Traffic Department ICT Planning Department Information Technology Department Technology Telecommunications Technology Bureau Department Results Technology Department Venue Technology Department

The illustration above presents the current structure of POCOG(as of July 2015).

Since January 2013, POCOG has established 2 units in charge of environment and sustainability (i.e. Sustainability unit under Planning Department and Environment department under Venues Bureau.) Due to the initial emphasis on environmental dimension of sustainability from the bidding stages, Environment and Forest Department is separately in charge of environmental aspects of sustainability. Later on Sustainability team has been formulated under Games Planning Department as a coordinating unit of overall implementation structure and themes regarding sustainability management in a broader sense.

Ideally, the current dualistic structure of a separate environmental management on one hand(by the Sustainability and Environment Unit under Environment and Forestry Department) and broader sustainability management on the other(by the Sustainability unit under Planning Department) needs to be overcome considering holistic approach of sustainable development and interconnect natures of the three pillars economic, social and environmental.

Major sustainability-related tasks of some of the key POCOG units are illustrated as below(as of December 2014)

< Key Tasks related to sustainability management by POCOG Units >

Units & Department	Tasks related to sustainability management
Games Planning Dept.	Operation of educating the adolescent
	· Operation of winter camps for young people in Gangwon Province
	· Operation of Para Youth Camp
	 A pilot program to grow the experts on record and management in local universities
Paralympic Games Integration Dept.	Constitution of a manual on POCOG accessibility
	· Operation of Paralympic Day
	· Operation of Excellence Program
General Affairs Dept.	 Compliance of a mandatory employment promotion for female, the disability, etc.
	Prioritized recruitment of local residents
Financial and External Relations Dept.	· To secure a budget for the Paralympics

To employ social minorities as voluntary workers
· To hire the voluntary workers from local communities with priority
Preference on environment-friendly resources for procurement
Prioritized use of products available in relevant institutions to reduce carbon emissions.
Prioritized purchase of disability-related products
Non-corruption pledges for purchasing and procurement
· Measures of using a regional human resource as safety personnel
· Participation of the disability with priority in monitoring copyrights
· To host cultural events at the hosting city
To hold cultural events that promote social diversity and accepts minorities with magnanimity
· Seasonal events in association with regional festivals
· Globalization of cultural heritage of the hosting city
Torch relay with the participation of social minorities
Operation of torch relay events which reflects regional features
Operation of Live sites by making use of partners
Production of braille-based marketing materials for the people with visual impairment
Expansion of the participation in regional society for Engagement Working Group
Establishment of homepage for improving accessibility for the impaired
Development of smart-phone applications and guidance for the Olympics considering accessibility
Development of ticket systems associated with regional tourism packages
Systems of issuing tickets in consideration of the accessibility for the impaired
· As a partnership project, selection of a sponsor for the projects for
social minorities, regional communities and eco-friendliness
Identifying partnership projects that consider social minorities, local community and occupantions.
local community and eco-friendliness • Expansion of separate collection of food waste
Extension of braille blocks within the Olympic venues

Sports Dept.	 Utilization of regional medical staffs who have necessary certificates Utilization of skilled professionals from medical and nursing departments of local universities
Venues and Facility Planning Dept.	 Monitoring of composing a complex of renewable power plants Organization of Best-of-Korea associated with regional festivals and culture
Venue Development Dept.	Installation of barrier-free overlay facilities Monitoring of restoring Jeongseon Alpine stadiums
Environment and Forestry Dept.	 Establishment of the inventory of GHG emissions associated with the Olympics Operation of a consultation body for green management To proceed with the movement for civilians to their own plant trees to celebrate the Olympics Operation of the consultative meeting to deal with practical matters in restoring ecologies in Jungbong
Accommodation Dept.	 Participation of local corporations which offer accommodation services(e.g. laundry) Construction of Olympic Villages and Media Center in consideration of accessibility
Transport Dept.	 Adoption of eco-friendly vehicles Introduction of low-floor buses for the handicapped Guidance of traffic by using regional organizations Extension of parking areas for the impaired

2.1 Strategic goals for Sustainability Management of PyeongChang 2018

In order for viable planning for the Games' sustainable management and effective implementation, strategic goals have been set up as follows:

- Integrate the Games' sustainability vision and internalize sustainability values into the overall decision making, operational mechanism and programs of POCOG.
- Set up inter-linkages, consolidation and coordination mechanisms for crosscutting issues involving multiple units.(e.g. marketing, logistics and transport)
- Develop methods and approaches for strategic monitoring reporting of the implementation of the sustainability plan .

Broadening a horizon for sustainability of the Games requires an extensive strategic partnership building with a range of key stakeholders. For this systemic and strategic planning encompassing the overall process from planning, event operation and decommissioning is desirable based on: 1) stakeholder analysis whose results to be used for communication, networking and education programs and; 2) Enhancement of the key stakeholder's awareness of the sustainability vision and values of PyeongChang 2018.

Strategic and holistic management system building including effective implementation, monitoring and evaluation mechanisms would be established only with POCOG's strong and steady commitments and endeavors, based on which, strong bond and partnerships with other stakeholders could be formed based on mutual trusts for cooperation. In addition, POCOG should design a set of sustainability performance and progress indicators and continuous improvements over time. Currently POCOG is drafting action plans accordingly.

2.2 Collaboration with Key Stakeholders

Key stakeholders of PyeongChang 2018 are listed as follows, whose full support and collaboration is essential for successful sustainability management of the Games.

< Key stakeholders of PyeongChang 2018 >

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Groups of Stakeholders	Organizations and Institutions	
IOC/IPC, NOCs/NPCs	· IOC, IPC, NOCs, NPCs	
National Assembly and Governments (Central/Regional)	 National Assembly Korea Forest Service, Korea Meteorological Administration, Ministry of Culture, Sports and Tourism, Ministry of Environment, Wonju Regional Environmental Office, Ministry of Land, Infrastructure and Transport, Ministry of Knowledge Economy, etc. 	
	 Gangwon Province, PyeongChang Country, Gangneung City, Jeongseon County 	
Institutions related to the Olympic facilities	PyeongChang Olympic VillagePheonix ParkYongpyeong Resort	
Spectators	 Regional spectators International spectators 	
Local communities of the hosting regions	Residents and groups of people in the hosting regions	
Sponsor/Partner	TOP Sponsor/local sponsor Business partners	

NGOs	· Local environmental organizations
UNEP/ISO	· International environmental organizations

 ${\hbox{\it Collaboration with respective stakeholder groups will be carried out as follows:} \\$

< Key areas for collaboration with key stakeholders of the Games >

Stakeholders	Description about cooperation and supplied services
IOC/IPC	To offer information about sustainability and environment of the Olympics to be hosted
	To report to OGI and share the information about sustainability and environment
NOCs/NPCs	 Offering information and consulting preparation status about the Olympics.
	Integrated supervision of OGI copyrights and publication of final reports
Government (Central/Local)	Development and distribution of guidelines and programs for hosting the environment-friendly Olympics
	Supporting the implementation of an EIA and the operation and construction of stadiums.
	Establishment and implementation of designing a special project on the environment
	Operation of programs for a better understanding of the environment
	 Operation of programs to create legacy and prepare a plan for businesses in the Olympic venues
Partner,	· Development and execution of programs for eco-friendly venues
organizations and sponsors related to Olympic	Support for and operation of a consultation penal for green and low- carbon management
	To operate a program for eco-friendly products such as ESCM, Green purchase, etc.
facilities	Support for relevant areas of sustainability
Communities and NGOs of the hosting city	Provision of sustainable development strategies and involvement in environmental monitoring activities
	Operation of and participation in programs for raising awareness about the environment
Spectators	To offer information about environment and sustainability
Spectators (General public)	Chances to take part in a program for environmental improvement and knowledge enhancement

UNEP/ISO	To prepare the reports about investigating, monitoring and assessing environment
	 Certification about sustainable management(e.g. ISO 26000), Member country for UNCG

Source: PyeongChang Games Foundation Plan(GFP)

2.3 Sustainability Management Systems of the Games

Units in charge of sustainability management of the Games within POCOG shall ensure effective support and participation of the government and hosting communities as well as general public, build effective partnership with a various key stakeholders, both domestic and international to contribute to environmentally responsible and sustainable management of PyeongChang 2018.

Promises related to sustainable management of the Games PyeongChang made during the bid shall be duly fulfilled through the sustainability management plan, whose systematic functional divisions of roles across different FAs and units of POCOG will be effectively coordinated.

< Evolution of the organizational structure of units in charge of environmental and sustainability management of PyeongChang 2018 >

Time point	Progress
January 2012	 Composition of the unit for environmental sustainability Designation of a leader for the environmental sustainability unit Employment of staffs for the environmental sustainability unit
	 Operation of a governance framework for sustainable development Formation of a committee for environmental consultation to build eco- friendly venues(initiated by Gangwon Province)
February 2012 ~	 Formation of a consultation penal for preserving and restoring environmental areas related to Alpine venues(initiated by Korea Forest Service)
July 2012	 Establishment of a committee for environment and sustainability and opening of its first meeting(initiated by Gangwon Province)
	 Participation of the central government, POCOG, NGO, corporations, public agencies and academic sector.
June 2012 ~ May 2013	 Operation and management of environment-friendly Winter Olympics Setting a target of environmental management and pushing forward the publication of environmental guideline.
July 2013	Organization of a sustainable task force within Games Planning and Management Department

August 2014 ~ Novemver 2014

• To come up with a plan of sustainable management and work out a framework report for sustainable management.

2.4 Reporting and Documentation

1) Principles and criteria for sustainability reporting

Reporting system and guidelines for sustainability management of the Olympic Games have been recently developed: In December 2012 GRI, a most widely used guideline for corporate sustainability reporting worldwide, has issued a reporting guidelines customized for Event Organizers which the 2012 London Olympics have adopted for the first time for its sustainability reporting practice. London adopted the original GRI version for Event Organizers, i.e. GRI G3.1. EOSS(Event Organizers Sector Supplement).

POCOG has also decided to take into account the standard global practices of sustainability through certification by global standards in order to demonstrate the efficacy of its sustainability management plan for PyeongChang 2018, POCOG's commitments and to comply with the principle of transparency in information disclosure.

In this regard PyeongChang 2018 aims to move one step further ahead in sustainability reporting, by applying GRI G4 EOSD(Event Organisers Sector Disclosure), the most upgraded version of GRI standards for event organizers.

<Overviews of the key principles and guidelines in sustainability reporting>

GRI G4 Event Organisers Sector Disclosure (EOSD)

GRI is one of the most widely used forms of certifications for a sustainable report.

- GRI G4 EOSD is a revised and updated form of the recent version GRI4 which offers a set of standards for a sustainability report. The revision is to include standards to be satisfied for the entire process of preparing, hosting and carrying out mega-scale events including global sporting activities.
- It functions as a framework to prepare a sustainable management system of PyeongChang 2018 and publish relevant reports.

10 principles of UN Global Compact

- A performance report to announce the compliance of the 10 principles and describe the result of relevant activities.
- The effect of verification through publicizing sustainable outcomes of participating organizations. (Domestic awards for UNGC grand prize and best practices)
- · For each and all items of 10 principles:
 - To declare support for the principles.
 - To describe the activities of observing the principles.
 - To set a target, represent performance indexes and measure an outcome.

2) Knowledge transfer, data management and documentation

The Olympic Games provides a valuable momentum for a host community to transform its very identity, operational practices in managing affairs as the host community tend to go through a set of unique experiences along its preparation and management of the Games. Lasting legacy are offered to host cities and local communities and memorable experiences for the athletes and other participants of the Games. Thus storing and managing the knowledge related to hosting and managing the Games are highly important. On account of this, IOC has been operating OGKM, Olympic Games Knowledge Management.

Organizing Committees of each Olympic Games at the country level are also obliged to carry out a series of tasks to contribute to the OGKM in accordance with the letter of agreements with the IOC including commissioning of the evaluation meeting of the Events; recording and preservation of the documents; transfer of acquired knowledge to IOC/IPC; monitoring and recording of the legacy generation; publications of official reports and; documentary film makings etc.

In this context POCOG has set up Knowledge Management Unit within its structure and currently doing a ground work such as capacity building for IKM initial briefings and efficient knowledge management system building among others.

In addition, as part of the overall Games management and Legacy plan, documentation plans shall be established to keep records of all POCOG's and other key stakeholders' activities related to the Games, covering post Games periods after the decommissioning. Orderly, efficient and reliable of task fulfillments including policy and management decision-making process, documentation supports, provision of task continuity in time of eruptions of disasters and emergencies, fulfillment of legal and regulatory requirements, support of organizational activities and evidence-based risk management as well as litigations and legal protections, and formation of collective memory related to the Games are some of the expected impacts of effective knowledge management practices. Through systematic information flows and management, POCOG will constantly evolve itself adaptive to the changing knowledge and information positioning itself as a learning organization.

POCOG's documentation not only supports policy formation, management decision or recordings of the organization's key activities but also upholds the Committee's accountability and transparency of the official acts of management of the Games in entirety and transfer the accumulated knowledge to the next generations as Olympic legacy.

<Key activities and implementation plans>

The year 2012 was the initial phase for setting the institutional foundation for documentations and the following year witnessed a steady internal infrastructure building for systematic recording and documentation practices. In October 2013, during the 2nd transition(organizational reform) period, POCOG set up a library for documentation storage and consolidated the functions into one Knowledge Management Team under Games Planning Department for efficient operation. In addition, Record retention and disposal authority has been formulated in accordance of IOC's TM, which provides a single consolidated system for recordings and documentation.

3) Collaboration with the IOC

Since 2012, POCOG has conducted a number of consultation meetings and workshops with the IOC formally and informally in formulation of sustainability framework and implementing measures. The consultations and communication with the IOC will continue until the end of the Games, which will ensure the quality performance and POCOG's international standard applications in the sustainability management of PyeongChang 2018.