



# The 17th World Winter Cities Conference for Mayor Sapporo, Japan

## Report

Period: July 27 – July 30, 2016  
Venue: Sapporo Convention Center





## Remarks after the 17th World Winter Cities Conference for Mayors



Katsuhiro AKIMOTO  
President of the World Winter Cities  
Association for Mayors  
Mayor of Sapporo

All the meetings and events scheduled for the 17th World Winter Cities Conference for Mayors, which began on July 27 and included the Winter Cities Expo and the Winter Cities Forum held in association with the conference, have been successfully concluded.

I am glad that we have been able to have productive discussions and strengthen partnerships between member cities through a variety of events during the conference, for which mayors and other delegates from 32 cold, snowy cities in eight countries gathered in Sapporo.

When we were developing a program for the conference—hosted by Sapporo for the first time in 34 years—and organizing events related to it, our focus was to think about the fascinating elements of winter city development. Even among winter cities, city sizes and country sizes vary, and there is a diversity of histories and cultures. We regard such differences as unique characteristics. With that in mind, I believe that we could share creative city planning approaches that would result in the creation of attractive features for each city and the enhancement of the vitality of each city.

Many citizens participated in the Winter Cities Expo “2016 Winter Cities Showcase,” in which participating cities sold local specialty products and displayed a variety of exhibits, as well as in the Winter Cities Forum, for which speakers from UN agencies were invited. I hope that these events helped citizens deepen their understanding of the activities of the World Winter Cities Association for Mayors, an international network led by the city of Sapporo, and the urban development of winter cities. In my opinion, it is important for Sapporo to make continuous efforts to further develop the city into a more attractive international winter city by leveraging the knowledge and experiences obtained in the conference.

Finally, I would like to take this opportunity to express my heartfelt gratitude to all those who provided their wholehearted support for and cooperation in the preparation, organization and operation of the 17th World Winter Cities Conference for Mayors.







# The 17th World Winter Cities Conference for Mayor Report

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The background is a light blue gradient with various decorative elements. There are several white and light blue snowflakes of different sizes scattered across the top half. Interspersed with the snowflakes are white starburst or lens flare effects. Large, semi-transparent light blue circles are also visible, creating a bokeh-like effect. The overall aesthetic is clean, modern, and wintry.

The 17th World Winter Cities Conference for Mayor

# Digest

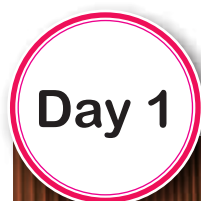


# 32 cities from Eight Countries Gathered at the WWCAM Mayors Conference, which was hosted by Sapporo for the First Time in 34 years.

The 17th World Winter Cities Conference for Mayors (WWCAM Mayors Conference), which was held at the Sapporo Convention Center from July 27 to July 29, 2016, ended with the adoption of the Sapporo Declaration. On July 30, participants of the conference enjoyed a summer day in Sapporo with an excursion around the city.

In this conference, 98 people from 32 cities in eight countries participated in discussions with a focus on urban development in winter cities. During the conference, the Winter Cities Expo, Winter Cities Forum and other relevant programs were offered to citizens to provide them with opportunities to not only learn about cities around the world and their local cultures, but also urban development in winter cities.

Below is a brief report highlighting the Mayors Conference, which was held in Sapporo for the first time in 34 years.



## Opening Ceremony and General Assembly

On the first day of the conference, an opening ceremony was held, followed by the General Assembly.



Opening remarks from Mr. Katsuhiro Akimoto, the Mayor of Sapporo



An address by Mr. Moon Soon Choi, the Mayor of Hwacheon and the Director of the World Winter Cities Association for Mayors



Mr. Esko Lotvonen, the Mayor of Rovaniemi, a candidate to be the host city of the 2020 Mayors Conference



Member cities and observer cities in a photo session





## Presentation of Case Studies by Member Cities

The afternoon session began with case studies presented by each member city, which were moderated by Professor Asami Shikida of the Japan Advanced Institute of Science and Technology. Seven cities gave case study presentations on Theme 1: Urban development utilizing winter or Theme 2: Urban development that takes advantage of special climate features outside the winter season.



Professor Asami Shikida  
(Japan Advanced Institute of  
Science and Technology)



The Mayors Conference was  
moderated by Mr. Kenji Shitomi, the  
Director General of the Mayor's Office



## Lunch & Coffee Break

A medium-sized Hall was used for lunch and coffee breaks. Each city engaged in networking over lunch and coffee.



The lunch menu included  
salad, pasta, carpaccio,  
keema curry gratin, desert  
and soup.



During the coffee  
break, participating  
cities actively  
exchanged their  
business cards with  
each other.



## Welcome Banquet hosted by the Mayor of Sapporo

Venue: Sapporo Park Hotel After the discussion on the first day of the conference, a welcome banquet hosted by the host city of the Mayors Conference was held.





## Day 2

### Presentation of Case Studies by Member Cities, Final Reports on Environmental Action Goals, Presentation by Copenhagen's Mayor of Technical and Environmental Affairs and Mayors Discussion

Continued from Day 1, seven cities presented their case studies on Theme 1: Urban development utilizing winter or Theme 3: Eco-conscious sustainable urban development in winter cities. After the presentation, each city's approaches toward environmental conservation were reported, and a lecture was given by Mr. Morten Kabell, Copenhagen's Mayor of Technical and Environmental Affairs. Subsequently, mayors took part in the Mayors' Discussion.



On the second day, many participants had time to chat with each other during breaks between sessions.



Lecture by Mr. Morten Kabell, the Mayor of Technical and Environmental Affairs, Copenhagen



## Hydrogen Fuel Cell Vehicle Test-ride Demo



Day 2 (July 28)

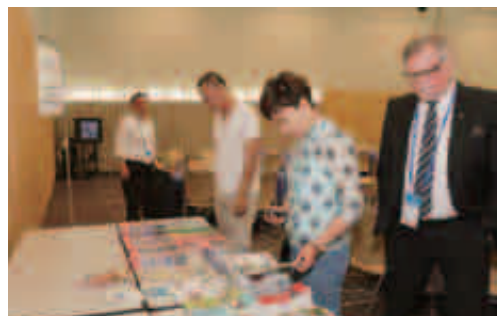
Before lunch on the second day of the conference, a demo-ride event was held for hydrogen fuel cell vehicles, a technology Japan is proud of. Many conference participants experienced the comfortable ride offered by a hydrogen fuel cell vehicle.



## Lunch & Coffee Break



Daily lunch menu during the period of conference



## Banquet hosted by the Shenyang City Government

Venue: International Convention Center PAMIR at Sapporo Prince Hotel



A banquet was hosted by the city of Shenyang, China, the host city of the next Mayors Conference. A head table was set up for delegates from each city.



## Day 3

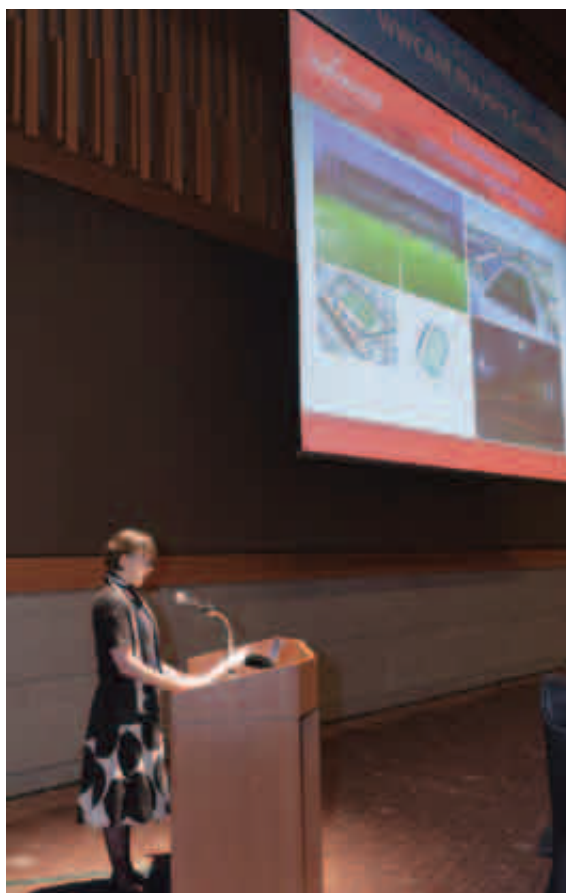
### Arctic Design Subcommittee, Report on the Ulaanbaatar Fire Fighting Technologies Project, Presentation by the Director of the United Nations Development Programme Representation Office in Tokyo, Urban Development Recommendations from Sapporo Municipal High School Students, General Meeting & Closing Ceremony and Press Conference

The third day of the conference started with a report by the Arctic Design Subcommittee, for which the city of Rovaniemi serves as the secretariat, followed by a report on the Fire Fighting Technologies Project for the City of Ulaanbaatar, a lecture by the Director of the United Nations Development Programme Representation Office in Tokyo and a city development proposal by Sapporo Kaisei High School students.

At the General Meeting, the discussions made over the three days of the conference were summarized, and the Sapporo Declaration was adopted at the closing.



After the closing ceremony, a press conference was held.



A report from the Arctic Design Subcommittee presented by Ms. Tarja Outila, City Architect of the Rovaniemi, Finland



Mr. Bayarbaatar Sandagdorj, Director of the Strategic Policy and Planning Department, Office of the Capital City Government, Ulaanbaatar, reporting on the Fire Fighting Technologies Project



As a guest speaker, Mr. Tetsuo Kondo, Director of the United Nations Development Programme Representation Office in Tokyo, gave a lecture

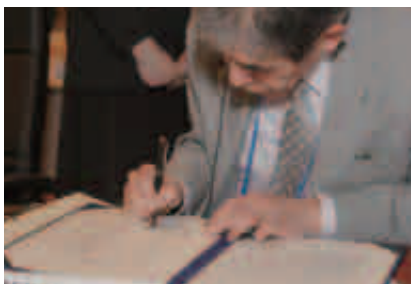


Sapporo Kaisei High School students presented a city development proposal titled "Exploring the effectiveness of theater in city development."



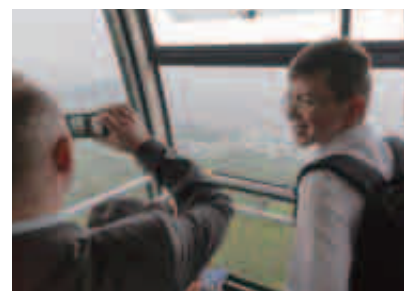
## General Meeting & Closing Ceremony

The Sapporo Declaration was adopted unanimously by the member cities that participated in the conference, and delegates from each city signed it.



## City Tour

In the afternoon, the delegates visited Mt. Moiwa, which commands a panoramic view of Sapporo.



## A banquet hosted by the President of the World Winter Cities Association for Mayors

Venue: Hoheikan (Historical Guest House) A banquet was held at the Hoheikan, one of Sapporo's historical buildings.



The Hoheikan reopened in June 2016 after renovation

Ms. Misako Konno, an actress and UNDP Goodwill Ambassador, also attended the banquet.



## Excursion

### An exploration of history, culture and food unique to Hokkaido

Participants of the conference made an excursion on July 30 and enjoyed a summer day in Sapporo. They visited the Hokkaido Museum, which introduces Hokkaido's natural history, Ainu culture and other aspects, the Historical Village of Hokkaido, where buildings from the early days of the Hokkaido development are preserved and displayed, and the Okurayama Ski Jump Stadium, which was a ski jumping venue for the Sapporo Olympics. They had mutton barbecue at Sapporo Beer Garden for dinner on the last day of their stay at Sapporo.



Once-flourishing herring fishery lodges (Historical Village of Hokkaido)



Participants enjoying mutton barbecue, a specialty food of Hokkaido, along with beer



At the top of the ski jump in the Okurayama Ski Jump Stadium



Experiencing a ski jump simulation at the Winter Sports Museum



Sapporo Beer was established as a government-run factory in the Meiji era (1876)







2016  
Winter  
Cities  
Showcase

In the 2016 Winter Cities Showcase, which was held from July 29 to July 31 at “Chi-ka-ho” Sapporo Ekimae-dori Underground Walkway at Kita 3-jo Intersection Square, 12 cities/groups from five countries put up display booths. They conveyed the attractive features of cities in cold snowy regions, like Sapporo, by displaying city PR materials and selling unique local products.

Ribbon cutting at the opening ceremony



On stage, Mongolian and Finnish folk music was performed



Products characteristic to each city displayed and sold





## Business Meeting

### Offering Opportunities for Business Exchanges

On July 28, the Business Meeting was held at the PAMIR International Convention Center in Sapporo Prince Hotel.

Nineteen companies from four cities in three countries in the environment related field, and nine companies/groups from four cities in three countries in the tourism related field participated in the Business Meeting to engage in business negotiations.





## Winter Cities Forum

### A Forum Attended by Numerous Citizens

The Winter Cities Forum was held on July 30 at Kyosai Hall.

The Fire Fighting Technologies Project for Mongolia, which was started as a result of the WWCAM Mayors Conference held in Mongolia, was introduced. Ms. Kaoru Nemoto from the United Nations Information Centre, and Ms. Misako Konno, an actress and UNDP Goodwill Ambassador, were invited to talk about the activities of the United Nations and their involvement in the UN.



Sapporo Mayor Katsuhiro Akimoto, Mr. Bayarbaatar Sandagdorj (Director of the Strategic Policy & Planning Department, Office of the Capital City Governor of Ulaanbaatar, Mongolia), Ms. Nemoto (Director of the United Nations Information Centre), and Ms. Konno, (UNDP Goodwill Ambassador) gave speeches.



Ms. Misako Konno recited a poem titled "Ai (Love)" by Shuntaro Tanikawa at the end of her speech.



Display of panels showing the activities of the WWCAM and UNHCR







# The 17th World Winter Cities Conference for Mayors: Summary

**Period:** Wednesday, July 27, 2016 – Saturday, July 30, 2016

**Venue:** Sapporo Convention Center

Hosted by Sapporo & the World Winter Cities Association for Mayors

## Theme

Main Theme: Winter City Urban Development: Uniqueness and its appeal

Sub-themes:

Theme 1: Urban Development Utilizing Winter

Theme 2: Urban Development That Takes Advantage of Special Climate Features Outside the Winter Season

Theme 3: Eco-conscious Sustainable Urban Development in Winter Cities

**Participating Cities: 98 people from 32 Cities in eight countries**

**Member Cities: 71 people from 15 cities in seven countries**

<b>Canada</b>	Edmonton
<b>China</b>	Changchun, Harbin, Jiamusi, Jixi, Qiqihar, Shenyang
<b>Finland</b>	Rovaniemi
<b>Japan</b>	Matsumoto, Sapporo
<b>Mongolia</b>	Ulaanbaatar
<b>Republic of Korea</b>	Hwacheon, Inje, Taebaek
<b>Russian Federation</b>	Novosibirsk

**Observer Cities: 27 people from 17 cities in three countries**

<b>Denmark</b>	Copenhagen
<b>Russian Federation</b>	Gubkinsky, Purovsky Area, Yamal-Nenets Autonomous District
<b>Japan</b>	Hirosaki, Kanegasaki, Fukuoka, Rumoi, Tomakomai, Bibai, Chitose, Takikawa, Eniwa, Niseko, Kutchan, Tsukigata, Shimokawa

## Conference participants

○ Member Cities

Country	City	Representative	Position
<b>Canada</b>	Edmonton	Susan HOLDSWORTH	WinterCity Coordinator
<b>China</b>	Changchun	Huili WANG	Mayor's Assistant & Vice Secretary-General
	Harbin	Yuping CUI	Vice Director of Foreign Affairs Office
	Jiamusi	Qitao ZHOU	Vice Mayor
	Jixi	Jincai YU	Executive Vice Mayor
	Qiqihar	Dehai WANG	Vice General Secretary
	Shenyang	Jinghui ZHANG	Vice Mayor
<b>Finland</b>	Rovaniemi	Esko LOTVONEN	Mayor
<b>Japan</b>	Matsumoto	Akira SUGENOYA	Mayor
	Sapporo	Katsuhiro AKIMOTO	Mayor
<b>Mongolia</b>	Ulaanbaatar	Bayarbaatar SANDAGDORJ	Director of the Strategic Policy & Planning Department, Office of the Capital City Governor
<b>Republic of Korea</b>	Hwacheon	Moon Soon CHOI	Mayor
	Inje	Soon Sun LEE	Mayor
	Taebaek	Yeon-sik KIM	Mayor
<b>Russian Federation</b>	Novosibirsk	Alexey KONDRATYEV	Deputy Mayor

## ○ Observer Cities

Country	City	Representative	Position
<b>Denmark</b>	Copenhagen	Morten KABELL	Mayor of Technical and Environmental Affairs
<b>Russian Federation</b>	Gubkinskiy	Sergei BURDYGIN	Mayor of the City of Gubkinskiy
	Purovskiy Area	Andrei NESTERUK	Mayor of Municipality of Purovskiy Area
	Yamal-Nenets Autonomous District	Sabina KAPSHANOVA	Officer of the International Collaboration Unit, Department of International and Foreign Economic Relations of Yamal-Nenets Autonomous District
<b>Japan</b>	Hirosaki	Masataka SUZUKI	Executive Director of the Department of City and Environment
	Kanegasaki	Yoshiichi TAKAHASHI	Mayor
	Fukuoka	Yoshinobu NAKAHARA	Director of the International Affairs Department
	Rumoi	Sadatoshi TAKAHASHI	Mayor
	Tomakomai	Toru KAWASHIMA	Officer, Citizen Community Action Association
	Bibai	Hiroki MURAHASHI	Director of the Industrial Promotion Division, Department of Economic Affairs
	Chitose	Kenichi ODA	Director of the Tourism and Sports Department
	Takikawa	Koukichi MAEDA	Mayor
	Eniwa	Yutaka HARADA	Mayor
	Niseko	Tomomi HAYASHI	Deputy Mayor
	Kutchan	Eiji NISHIE	Mayor
	Tsukigata	Jun MIURA	Vice-Mayor
	Shimokawa	Kazuyuki TANI	Mayor

**Banquet**

## ■ Welcome Banquet hosted by the Mayor of Sapporo

Date and time: Wednesday, July 27 from 18:30 to 20:00

Venue: The Terrace Room on the 1st floor of Sapporo Park Hotel

## ■ Dinner Banquet hosted by the City of Shenyang

Date and time: Thursday, July 28 from 19:00 to 20:30

Venue: Onuma, Shikotsu and Toya Rooms on the 3rd floor of the PAMIR International Convention Center at Sapporo Prince Hotel

## ■ Farewell Banquet hosted by the WWCAM President

Date and time: Friday, July 29 from 18:40 to 20:00

Venue: Reception Hall on the 2nd floor of the Hoheikan (Historical Guest House)

**City Tour & Excursion**

## ■ City Tour

Date and time: Friday, July 29 from 15:00 to 17:30 (Mt. Moiwa)

## ■ Excursion

Date and time: Saturday, July 30 from 9:00 to 20:00

Itinerary: Hotel → Hokkaido Museum → Historical Village of Hokkaido → Akarenga Terrace (Lunch) → Okurayama Ski Jump Stadium → Winter Sports Museum → Sapporo Beer Museum → Garden Grill at Sapporo Beer Garden → Hotel





## Relevant Events

### Winter Cities Expo, 2016 Winter Cities Showcase

Period: Friday, July 29 – Sunday, July 31

Venue: “Chi-ka-ho” Sapporo Ekimae-dori Underground Walkway at Kita 3-jo Intersection Square (West)

Event: City PR event through exhibitions and product sales

Number of exhibitors: Twelve booths by 12 cities/groups from five countries

Hosted by the Winter Cities Expo Executive Committee Secretariat & the city of Sapporo

### Winter Cities Expo Business Meeting

Date: Thursday, July 28

Venue: PAMIR International Convention Center, Sapporo Prince Hotel

Event: Business negotiations between individual companies from member cities and Hokkaido, including Sapporo  
(Environment-related field and tourism-related field)

No. of participating companies:

Nineteen companies in the environment-related field from four cities in three countries

Nine companies/groups in the tourism-related field from four cities in three countries

Hosted by the Winter Cities Expo Executive Committee Secretariat & the city of Sapporo

### Winter Cities Forum

Date and time: Saturday, July 30 from 14:00 to 16:00

Venue: Kyosai Hall

Hosted by the city of Sapporo & the World Winter Cities Association for Mayors

Supported by the United Nations Information Centre, the United Nations Development Programme (UNDP) Representation Office in Tokyo, the Japan International Cooperation Agency (JICA) & the U.N. Association of Japan, Hokkaido

Presentations:

- The World Winter Cities Association for Mayors and its Activities (Katsuhiro AKIMOTO, Mayor of Sapporo)
- Report on the Ulaanbaatar Fire Fighting Technologies Project (Bayarbaatar SANDAGDORJ, Director of the Strategy Policy & Planning Department, Office of the Capital City Governor, Ulaanbaatar)
- In Commemoration of the 60th Anniversary of Japan’s Membership to the United Nations (Kaoru NEMOTO, Director of the United Nations Information Centre)
- My Experiences as a Goodwill Ambassador (Misako KONNO, UNDP Goodwill Ambassador)

## Timetable

	Wednesday, July 27	Thursday, July 28	Friday July 29	Saturday, July 30	
9:00			9:00-9:30 Arctic Design Subcommittee	9:00-20:00 Excursion	9:00
9:15					9:15
9:30		9:30-10:15 Presentation of Case Studies by Member Cities Session 3	9:30-9:45 Report on the Ulaanbaatar Fire Fighting Technologies Project		9:30
9:45			9:45-10:00 Presentation by Mr. Kondo (UNDP Representation Office in Tokyo)		9:45
10:00	10:00-10:15 Opening Ceremony		10:00-10:20 Urban Development Recommendations (Sapporo Municipal High School students)		10:00
10:15					10:15
10:30	10:15-11:00 General Assembly	10:15-11:00 Break	10:20-11:00 Break		10:30
10:45					10:45
11:00					11:00
11:15	11:00-12:10 Presentation by the candidate Host Cities for the 19th Mayor Conference (2020)	11:00-12:00 Presentation of Case Studies by Member Cities Session 4	11:00-11:45 General Meeting Closing Ceremony		11:15
11:30					11:30
11:45			Move to the Press Conference Room		11:45
12:00	12:10-12:15 Voting for the Host city	12:05-12:30 Hydrogen Fuel Cell Vehicles Demonstration	12:00-12:45 Press Conference		12:00
12:15	12:15-12:30 Photo Session				12:15
12:30		12:30-13:30 Lunch			12:30
12:45			12:45-14:00 Lunch		12:45
13:00	12:30-14:00 Lunch				13:00
13:15					13:15
13:30		13:30-14:50 Final Reports on Environmental Action Plans	Move to the Venue of the Winter Cities Expo "2016 Winter Cities Showcase"		13:30
13:45			14:30-15:00 Participation in Ppening Ceremony and Venue Tour of Winter Cities Expo "2016 Winter Cities Showcase"		13:45
14:00	14:00-15:00 Presentation of Case Studies by Member Cities Session 1	14:50-15:20 Presentation by Mayor of Copenhagen for Environment			14:00
14:15					14:15
14:30					14:30
14:45					14:45
15:00	15:00-15:30 Break	15:20-16:00 Break			15:00
15:15					15:15
15:30	15:30-16:30 Presentation of Case Studies by Member Cities Session 2		15:00-17:30 City Tour		15:30
15:45					15:45
16:00		16:00-17:00 Mayors Discussion			16:00
16:15					16:15
16:30					16:30
16:45					16:45
17:00					17:00
17:15					17:15
17:30	Move to Hotels		Move to Hotels		17:30
17:45		Move to Hotels			17:45
18:00			Break and Move to the Hohei-kan		18:00
18:15					18:15
18:30					18:30
18:45					18:45
19:00	18:30-20:00 Welcome Banquet hosted by the Mayor of Sapporo (Sapporo Park Hotel)	19:00-20:30 Dinner Banquet hosted by the City of Shenyang (Sapporo Prince Hotel)	18:40-20:00 Dinner hosted by the WWCAM President (The Hoheikan)		19:00
19:15					19:15
19:30					19:30
19:45					19:45
20:00					20:00
20:15					20:15



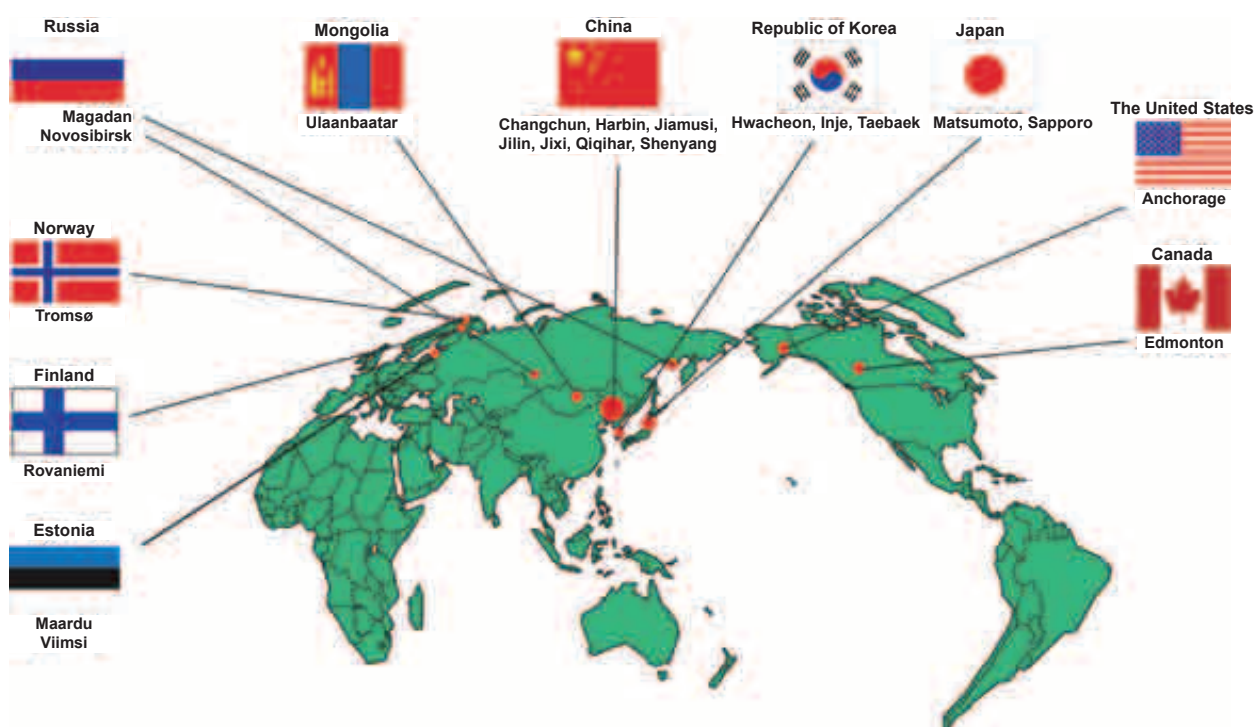
## About the World Winter Cities Association for Mayors

The World Winter Cities Association for Mayors (WWCAM) is a network that brings together winter cities of the world to meet and learn from each other about winter technologies and experiences under the slogan, “Winter is a Resource and an Asset.”

The organization began at the initiation of the city of Sapporo in 1981 as the Northern Intercity Conference, with the first conference being held the following year. In 2004, its name was changed to the World Winter Cities Association for Mayors. In its early years, discussion revolved around resolving issues to overcome the hardships of snow and cold to achieve livable winter cities. At the turn of the 21st century, however, the world shifted its attention to global environmental issues, and the environmental protection efforts of winter cities gained appeal with the international community. The 17th Mayors Conference held in Sapporo in 2016 on the theme of urban development in winter cities offered a new direction for future conferences.

Currently, 21 cities from 10 countries are WWCAM member cities. The Mayor of Sapporo has served as the President of the WWCAM since its foundation, and the WWCAM Secretariat is established in the International Relations Department of the Sapporo City Government.

### The World Winter Cities Association for Mayors Member Cities (21 cities from 10 countries)



### Member Cities

#### ■ Canada

Edmonton

#### ■ China

Changchun, Harbin, Jiamusi, Jilin, Jixi, Qiqihar, Shenyang

#### ■ Estonia

Maardu, Viimsi

#### ■ Finland

Rovaniemi

#### ■ Japan

Matsumoto, Sapporo

#### ■ Mongolia

Ulaanbaatar

#### ■ Norway

Tromsø

#### ■ Republic of Korea

Hwacheon, Inje, Taebaek

#### ■ Russia

Magadan, Novosibirsk

#### ■ The United States

Anchorage

## Conference



From left to right: The mayors/delegates of Edmonton, Changchun, Jiamusi, Jixi, Qiqihar, Shenyang, Harbin, Sapporo, Hwacheon, Inje, Rovaniemi, Matsumoto, Ulaanbaatar, Taebaek, and Novosibirsk



## Opening Ceremony

The 17th World Winter Cities Conference for Mayors was held from July 27, 2016 at Sapporo Convention Center with the participation of 32 cities, including member cities and non-member cities as observers.

### Message

Katsuhiro AKIMOTO  
Mayor of Sapporo



Good morning, everyone. On behalf of the 1.95 million residents of Sapporo, I extend a heartfelt welcome to you all.

The first World Winter Cities Conference for Mayors (Mayors Conference) was held here in Sapporo in 1982. It is a great pleasure and honor for the city to host the Mayors Conference again for the first time in 34 years.

The main theme of the 2016 Mayors Conference is, “Winter City Urban Development: Uniqueness and its Appeal.” In early conferences, the member city mayors focused on how to overcome the everyday lifestyle issues their citizens faced in winter, but their attention has recently shifted to the global environmental issues affecting winter cities. The 2016 Mayors Conference has set the theme of urban development unique to winter cities, aiming to offer a new direction for discussion based on past initiatives – a direction appropriate for the World Winter Cities Conference for Mayors, which has matured over the past 34 years. Winter cities, including the member cities, have many appealing features beyond climatic traits such as snow and coldness.

In meetings to be held during the conference, I hope to deepen discussions on how to leverage the appealing features of winter in urban development, which is a never-ending challenge facing local government officials and is also one of their missions.

I am going to conclude by hoping that this conference held in Sapporo, the birthplace of the World Winter Cities Association for Mayors, will provide winter cities with a chance to take a new step forward.

Moon Soon CHOI  
Mayor of Hwacheon

Director of World Winter City Association for Mayors



Greetings, I am Choi Moon-Soon from Hwacheon in the Republic of Korea. I would like to offer my warmest congratulations on the 17th World Winter Cities Conference for Mayors held in Sapporo, where the World Winter Cities Conference for Mayors started. I would like to express my gratitude to the mayors of the winter cities who devote themselves to city management, and Chairperson Katsuhiro Akimoto and others who have made such great efforts to prepare for the conference.

This year marks the 17th installment of the World Winter Cities Conference for Mayors. The World Winter Cities Association for Mayors has shared the experiences of the member cities and has built a network to help the cities create comfortable living environments while making the best use of their winter attractions. Since Hwacheon joined the World Winter Cities Association for Mayors in 2008, the World Winter Cities PR Hall has been operated during the Sanecheon Festival, which is held every January, in an effort to highlight the features and attractions of each member city. In 2014, the World Winter Cities Conference for Mayors was held in Hwacheon, which I believe provided Hwacheon with an opportunity to allow the mayors of other winter cities to discover the pristine nature and hospitality of Hwacheon.

Global warming and other environmental issues have become challenges that require regional and international efforts in addition to the efforts of individual cities. In my opinion, it is necessary not only for national and international organizations but also for the cities in each country to share their problems and cooperate with each other to seek common solutions to these issues. In this context, we would have to point out the great significance of the network of the World Winter Cities Association for Mayors: that is, it helps us to solve problems while understanding international and cultural differences. We have to think about the role of winter cities through exchanges during the four days of the conference. I hope that winter cities will build cooperation among themselves for urban revitalization through concrete and in-depth discussions about how the member cities, which are surrounded by similar winter environments, should develop and utilize their resources.

Please allow me to conclude my message by extending my warm welcome to the mayors of new member cities—Rovaniemi of Finland, Maardu of Estonia and Edmonton of Canada. I hope that this conference will provide winter cities with an opportunity to participate in many discussions in line with the philosophy of the WWCAM—that “Winter is a Resource and an Asset”—with the objective of helping people around the world to achieve greater happiness and a better quality of life. Thank you.

## General Assembly

### Agenda Item 1: Discussion on the Changes in Member Cities

The following changes in membership since the 2014 World Winter Cities Conference for Mayors held in Hwacheon were reported.

New membership: Rovaniemi (Finland) on October 1, 2014

Maardu (Estonia) on June 1, 2015

Edmonton (Canada) on March 1, 2016

Withdrawal: Maardu (Estonia) in March 2014

\*Maardu renewed its membership on June 1, 2015.

Yuzhno-Sakhalinsk (Russia) in April 2015

### Agenda Item 2: Election of Officials

New officials to replace the current ones were elected at this General Assembly of the World Winter City Association for Mayors.

Officials subject to election

Vice-Presidents: Harbin (Asia/Oceania Region) → Hwacheon (New)

Empty post (Europe Region) → Rovaniemi (New)

Director: Hwacheon → Shenyang (The host city/county of the next Mayors Conference)

### Agenda Item 3: Proposal for New Revitalization Project

The project as proposed by the Secretariat was approved. Sapporo will serve as the organizing city, and the project period will be three years from 2017 to 2019.

### Agenda Item 4: Settlement of Accounts and Project Report for FYs 2014 and 2015

The settlement of accounts and projects for the last two fiscal years were reported and approved.

### Agenda Item 5: Budget and Project Plan for FYs 2016 and 2017

Budget and project plans for the next two fiscal years were explained and approved.

### Agenda Item 6: Granting of Honorary Membership

The two individuals—Gab-cheol Jeong, former mayor of Hwacheon, and Fumio Ueda, former mayor of Sapporo—were granted honorary membership.

### Agenda Item 7: Host City of the 19th WWCAM Mayors Conference

The Secretariat reported that the two cities of Rovaniemi (Finland) and Hwacheon (Republic of Korea) came forward as candidate host cities for the 19th WWCAM Mayors Conference to be held in 2020.

It was decided that member cities would be asked to vote on the host city after listening to presentations made by the two candidate cities; however, Choi Moon-Soon, Mayor of Hwacheon, announced the city's intention to step out of the election and let Rovaniemi host the 19th WWCAM Mayors Conference.

Subsequently, Rovaniemi gave a presentation and then member cities voted. As a result, it was decided that Rovaniemi would be the host city for the 19th WWCAM Mayors Conference in 2020.

### ■ Presentation by Rovaniemi

The city of Rovaniemi, an Arctic design capital with a population of 61,000 people, is also home to two universities—Lapland University of Applied Science and the University of Lapland—serving as the center of education for Lapland. The city has easy access to Helsinki Airport, which is a hub airport in Finland that offers direct flights to Asia, Europe, the United States, and Canada. The city also has ample conference venues and internationally high-ranked hotels. Lapland offers very good food and has a renowned culinary culture. The reindeer is the symbol of the city and is very special to the people of Rovaniemi. Rovaniemi is also famous as the “Official Hometown of Santa Claus,” which has now become an internationally famous brand. Santa Claus’ Main Post Office in the city receives 700,000 letters each year from around the world. We are looking forward to seeing all of you at Rovaniemi.



## Presentation of Case Studies by Member Cities

Fourteen case studies were presented by thirteen member cities during a two-day presentation session from July 27 to 28 led by Asami Shikida, a professor at the Japan Advanced Institute of Science and Technology. Nine, one, and four cities, respectively, introduced their activities related to Theme 1 “Urban development utilizing winter,” Theme 2 “Urban development that takes advantage of special climate features outside the winter season,” and Theme 3 “Eco-conscious sustainable urban development in winter cities.” Sharing information among the member cities, who often share common problems and take similar measures, provided insight for their future development in a variety of ways.

### Main theme

Winter City Urban Development: Uniqueness and its Appeal

### Sub-themes

1. Urban development utilizing winter
2. Urban development that takes advantage of special climate features outside the winter season
3. Eco-conscious sustainable urban development in winter cities

### ■ Moderator profile

Asami SHIKIDA

Professor at the School of Knowledge Science, the Japan Advanced Institute of Science and Technology (Area of Knowledge Management in the School of Knowledge Science)

Visiting Professor at the United Nations University Institute of Advanced Studies  
Fields of study: Community management and eco-tourism and other strategies utilizing regional resources

Asami Shikida was born in Ishikawa Prefecture and graduated from Kochi University. After 15 years working at the Fisheries Department of the Ishikawa Prefectural Government, he took an assistant professor position at the Department of Environmental Systems Engineering of Kanazawa Institute of Technology and was appointed as a professor at the Department of Information Management of Kanazawa Institute of Technology. In April 2007, he became a professor at the Center for Advanced Tourism Studies at Hokkaido University. He has been a professor at the School of Knowledge Science, the Japan Advanced Institute of Science and Technology since January 2016, and a visiting professor at the United Nations University Institute of Advanced Studies since July 2012.



### ■ Summary of the presentations moderated by Professor Shikida

Each presentation was impressive and in line with the WWCAM’s slogan that “Winter is a Resource and an Asset.” The consequences of the measures taken by member cities were introduced to highlight successful achievements and share information. From this perspective, it can be considered that information was shared across the WWCAM network, and we could deepen our understanding of the theme of the Sapporo Mayors Conference; namely, “Winter City Urban Development: Uniqueness and its Appeal.” However, information shared among the network is merely knowledge, and stored knowledge itself does not create value. We are required to keep striving to create value by developing the WWCAM network from a knowledge creation network into a value creation network. In conclusion, I hope that all of the member cities will make further efforts and that more successful achievements will be spread through the network to create more value that can be shared with society.

## Presentation of Case Studies by Member Cities –Theme 1: Urban Development Utilizing Winter



## City of Sapporo and the Winter Olympics and Paralympics: From ‘Build’ to ‘Connect’

Katsuhiro AKIMOTO

Mayor of Sapporo

The Winter Olympic and Paralympic Games are the world’s largest event a winter city can host. Hosting such games inspires children to contribute to world peace through the promotion of winter sports, the preservation of Olympism and further cultivation of the Paralympic movement. In addition to the fundamental significance, effects in terms of urban development can also be expected from the Olympic and Paralympic Games.

In 1972, Sapporo was the first city in Asia to host the Winter Olympic Games, which resulted in the development of urban infrastructure worthy of an international city, an effort to become an environmental model city, and the construction of an underground network allowing for comfortable winter living in Sapporo. It was the 1972 Olympic Games that developed Sapporo into an international city.

## New legacy via Games that are kind to people, the planet and the future

Sapporo is preparing to bid for the 2026 Olympic and Paralympic Games, which would be the second Olympic Games and the first Paralympic Games for Sapporo as a developed city to host. For the 2026 Games, an emphasis will be placed on “Connect” by leveraging the fruits of the 1972 Olympics. “Connect” in this context refers to the connection between the past and the future that enables us to pass on winter sport environments and lifestyles that have been continuously improved since the 1972 Olympics to future generations. “Connect” also means a harmonious and unique coexistence between Sapporo and nature, urban development, the improvement of barrier-free access across the city, as well as integration of sports with culture, tourism, industry and education. Sapporo is willing to contribute to world peace by connecting to the world.

Despite Hokkaido having an aging and declining population, the city plans to promote Hokkaido’s allure internationally in order to further encourage in-bound tourism by taking advantage of the enhanced exposure during the bidding process to host the Olympic/Paralympic Games.

The basic philosophy for the 2026 Sapporo Games is a “Proposal for a sustainable and Sapporo-unique Olympic/Paralympic model” with a sub-theme of a “New legacy via Games that are kind to people, the planet and the future.” The basic philosophy is supported by three pillars. The first one is “Leverage the hosting of the Games in urban planning.” The city will be renovated to promote urban planning based on universal design to cope with a super-aging society. The second pillar is to “Establish Sapporo as a Winter Sports City.” The environment for the center of winter sports will be improved so that Sapporo will be established as a world-class winter sports city. The third pillar is to “Propose a sustainable Olympic/Paralympic model.” Facilities that can attract a large number of athletes and guests even after the Olympic/Paralympic Games and an environment to receive this increasing number of visitors will be developed while keeping costs for the Olympics/Paralympics as low as possible.

Concerning “Legacy,” we need to specify what to pass on to future generations through hosting the Olympics/Paralympics. With the goal of “Passing on a culture of joy in winter sport to the next generation,” the population of winter sport participants will be increased and the Olympic/Paralympic movement will be promoted. Aiming to develop “Sapporo as a world-class Winter Sports City,” efforts will be made to establish an environment for nurturing athletes and invite various international games and training camps to the city. To create a “Creative City Sapporo,” the Sapporo Dome area will be utilized after the Olympics as a space that symbolizes an Olympic legacy. In Sapporo, urban planning that takes advantage of the city’s unique winter city features will be continuously promoted through sports.



## ■ Comment from Professor Shikida

The city of Sapporo has various plans in place to establish a sustainable Olympic model unique to Sapporo with the goal of hosting the 2026 Olympic Games. I value the high-quality regional development and economic growth promoted by Sapporo because the city’s effort is not just a repetition of the 1972 Sapporo Olympic Games but a whole new challenge.





## Develop Winter Resources by Utilizing their Special Advantages: Turn Ice and Snow into Gold and Jade

Huili WANG

Mayor Assistant & Vice Secretary-General, Changchun

Changchun is a typical northern winter city. Recently, Changchun has set a goal to “turn snow into silver” and has developed winter resources into new industries by integrating winter sports with tourism and economic activities.

First, winter sports have been promoted. Changchun has successfully hosted the Asian Winter Games and other important sports events. The city aims to train gold-medal athletes. Since 2003, the city has held the Vasaloppet International Cross Country Skiing Festival and joined the Worldloppet Ski Federation in 2014. The city has won a reputation for being the capital of cross country skiing in China. More and more locals are beginning to enjoy skiing. The four major ski resorts (Mount Miaoxiang, Jingyuetan, Mount Lotus, and Xinli Lake) and skating rinks across the city are very popular with winter sports lovers.

Second, ice and snow tours have been transformed into branded products. Changchun has become a northern winter tourist destination. Recently, the annual number of visitors has increased by approximately 20%. Changchun has developed northeastern folk custom tours, spa tours and other tourist attractions.

Third, the winter economy and trade have been developed. During the period of the International Vasa Ski Festival this year, business and trade talks were held, in which over 2,000 people from 176 organizations participated and signed a great deal of agreements. The Winter Indoor Agriculture Expo is also very popular and attracted a record high number of 500,000 visitors this year.

### Cooperation for resource development!

Changchun promotes development with a focus on differentiation.

First, Changchun strives to make the tourism industry more attractive so that tourists will spend more time and money in the city to maximize tourism profits.

Second, Changchun aims to magnify the effects of events by developing business opportunities. The city plans to develop infrastructure and improve urban environments in order to meet the demand for future development by using the ripple effects of winter tourist destinations and the Winter Agricultural Expo. The city aims to stimulate the night-time economy by offering more night-time activities for tourists and encouraging citizens to enjoy nightlife activities in order to expand domestic demand.

Third, Changchun promotes the expansion of the inbound market and overseas expansion simultaneously by connecting the country with the world. The city’s image will be improved to promote the city to more people and increase its influence. In addition, the city aims to host numerous international conferences and trade shows by improving the services offered at hotels, restaurants and venues.

Changchun will also cooperate with winter cities in terms of resource development.

First, an emphasis is being placed on the protection of ecosystems by promoting a low-carbon economy and recycling economy and reducing the impact of urban development on the natural surroundings. The city strives for the improvement of the environment and the promotion of the sustainable use of winter resources.

Second, Changchun will develop tourism resources, advertise tourism products and promote collaboration among tourist destinations.

Snow and ice are gifts from nature. We would like to cooperate with other winter cities so that these assets can be utilized forever.



#### ■ Comment from Professor Shikida

Changchun’s active promotion efforts utilizing snow and ice seem to be perfect multi-dimensional measures. I highly rate the city’s policy of developing snow and ice into branded local products and the city into a branded destination instead of simply selling snow and ice.

## Presentation of Case Studies by Member Cities –Theme 1: Urban Development Utilizing Winter



### Urban Development Utilizing Winter

Susan HOLDSWORTH

Winter City Coordinator of Edmonton

In October 2012, Edmonton adopted a Winter City Strategy – its goal was to transform Edmonton into a great winter city. This was developed based on over 500 ideas gathered from Edmontonians, and research and leading practices from local experts and other places. All the recommendations generated were evaluated against our three principles of Authentic, Attitude-changing and Sustainable. It touches on all aspects of city building, and sees winter as an asset.

The strategy is supported by four pillars: 1) Life – making it easier to go play outside and get around; 2) Design – which is about safety/comfort and beauty/interest; 3) Economy – creating a four-seasons patio culture, supporting our winter festivals, and becoming a leader in winter business; and 4) Story – about celebrating and promoting our great northern story. Currently, 64 actions are taken based on the four pillars/areas, which are community-based and involve many partners.

Here, I would like to introduce you to five of these urban development actions. The Winter Design Guidelines has to work year-round and apply to all development in the city. One of its main focus areas is the streetscape, and the other is open spaces such as parks and squares. The goals are to improve the public realm and to embrace outdoor living.

There are five key elements in the guidelines. The first key element is to block wind, the second is to capture sunshine, the third is to think about infrastructure that can support the desired winter life, and the fourth is to use color. An injection of color on our buildings can add a lot of interest and vibrancy to our cityscape. The fifth key element is to use creative lighting. Light can play a crucial role in making a place more inviting, magical, memorable and joyful.

### Creative lighting that adds visual interest to the cityscape

The Creative Lighting Master Plan is in draft form now. The goals of creative lighting include adding visual interest to the cityscape, creating enticing gathering spaces, luring people outdoors, strengthening our sense of community, and aiding in orientation. This is an excellent initiative that brings out the unique character of Edmonton using the latest technology with the aim of establishing the culture of creative lighting.

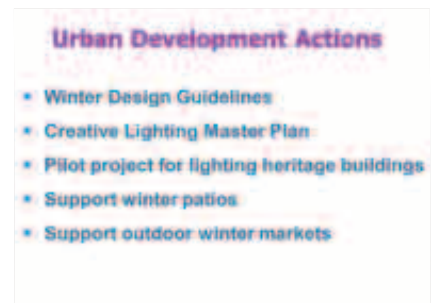
The Creative Lighting Plan has two main pillars. The first is to promote a sense of civic pride, community and unity. The second is Connectivity. In consideration of the user experience, appropriate lighting interventions are made in such a way to strengthen the connectivity between people and their community.

We are also setting up a pilot project to light heritage buildings to figure out how to run a creative lighting cost sharing program and to develop a buy-in to the benefits of creative lighting.

We also have actions related to supporting a four-seasons patio culture. We have hosted an annual Farewell to Winter Patio Party. We provide support to a number of cafes to make their patio spaces more comfortable in the winter.

We have also supported outdoor winter markets, which are an important part of vibrant winter city life.

What I have shared with you here today are a few highlights of a body of work that Edmonton has taken over four years. It has taken the leadership of our Mayor and City Councilors, as well as community leadership in all its forms. This is why Edmonton has come a long way in such a short time.



#### ■ Comment from Professor Shikida

I regard Edmonton as an attractive winter city that adopts broad and holistic approaches. The city has proposed a new concept of winter design. Edmonton is unique because it focuses not on planning or building but on designing. Other winter cities can learn a lot from this design-based approach.





## Utilize Ice-Snow Resources to Promote Urban Development

Qitao ZHOU

Vice Mayor of Jiamusi

Jiamusi is a center of politics, economy, science and technology, culture, education, healthcare, business and trade, and transportation for the east of Heilongjiang Province. The area has access to Mongolia, Russia, Japan, South Korea, North Korea, and southeastern Asian countries. Jiamusi is situated in the temperate zone with a continental monsoon climate, and has two strengths: unique ecosystems and ice-snow resources. Jiamusi is also well-known as a summer resort because of its cool temperature in summer, and the city becomes an “ice and snow kingdom” in winter.

The tourism industry has become a key to the city’s economic development. Chinese President Xi Jinping emphasized, “Green hills are mountains of gold and silver. Ice and snow is a great treasure for Heilongjiang Province.” Ice-snow resource development and utilization has been an important part of promoting economic development. Therefore, the government of Jiamusi has taken various initiatives in the field.

One of these is holding ice and snow events. In 2003, the first Three Rivers International Snow-sprinkling Festival was held, which included many different activities that reflected the snow and ice culture of Jiamusi, such as snow-sprinkling, winter swimming, fun games on ice, snow-field football, alpine skiing, and wedding ceremonies on ice. This festival has raised the image of the city as a winter paradise.

Additionally, Jiamusi set a Guinness World Record with the *Challenge Guinness, Snow-sprinkling with Ten-thousand People* activity in 2005. The tourism market targeting Russians was profoundly explored in 2006, and more than 10,000 Russian visitors came to Jiamusi during the Snow-sprinkling Festival in 2006.

Recently, ice and snow events led by the government have been held, which greatly improved the image of the city. A total of 200,000 tourists came to Jiamusi during the Snow-sprinkling Festival in 2015. As a next step, we will focus on the development of tourism resources unique to Jiamusi, including the Snow-sprinkling Festival.

### Promotion of the development of tourism products

As a measure to promote ice-snow tourism, an ice-snow tourism development plan has been worked out based on the principle of government-leading and enterprise-operating. Investment in the ice-snow tourism industry has been encouraged by attracting companies in order to expand the tourism industry.

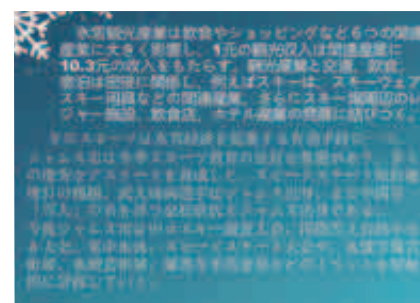
The first approach is the implementation of a tourism project by inviting ice and snow artists to the city. In 2016, a snow village project was developed, in which folk culture, ice-snow art, lifestyle experiences, and other activities were offered. The village has gained popularity among citizens and tourists.

The second approach is the construction of ice-snow recreational facilities. Infrastructure has been improved with capital investment from both the public and private sectors. The city has started the Millions of Youth on Ice project, and ice and snow playgrounds have been built in local schools, where ice-carving and snow-sculpture contests are held.

The third approach is the development of winter tourism resources, and the fourth is the development of group tours and other tourism products.

It is also important to expand the ice-snow industrial chain. One of the city’s goal is that one yuan of income from tourism will generate 10.3 yuan of income in tourism-related industries. Tourism is closely related to transportation, the food service industry, accommodation and other businesses. The city will also make an effort to develop tourism-related industries.

Developing winter sport is one way to effectively stimulate the ice-snow economy. Jiamusi will promote winter sports education and sports events such as Sino-Russian friendly skiing games, an international snow field auto rally, winter swimming, and speed-skating. At the same time, the city will actively organize ice-carving and snow-sculpture art exhibitions, ice festivals, and other events.



### Comment from Professor Shikida

Jiamusi is a city blessed with water-power, wind-power and energy. The Snow-sprinkling Festival has grown to become a major event that attracts 200,000 visitors each year. According to the presentation, the economic ripple effect of the tourism industry is ten times the investment. I have found that Jiamusi’s ice-snow policy of promoting the development of new tourism industries is very unique.

## Presentation of Case Studies by Member Cities –Theme 1: Urban Development Utilizing Winter



### Development Practices in Severe Climate Conditions

Alexey KONDRATYEV

Deputy Mayor of Novosibirsk

Novosibirsk is the third largest Russian city in terms of population. Within less than 70 years from its establishment in 1893, the city's population reached one million people. The city is listed in the Guinness World Book of Records as the world's fastest growing city. Novosibirsk has extensive road and railway networks and an airport. Thus, the city's transportation infrastructure has been fully developed.

Novosibirsk is home to Akademgorodok, an academic town that houses three research institutions: the Siberian Branch of the Russian Academy of Science, the Russian Academy of Agricultural Sciences and the Russian Academy of Medical Sciences. Scientists of the Novosibirsk Akademgorodok developed a well-known aerogel material. Aerogel is currently used at the International Space Station. This material has great potential to be applied to our everyday lives. For example, aerogel may be used to manufacture full-glass houses and thin and warm clothes to be worn in frosty weather. In 2013, the Akademgorodok established a comprehensive techno-park, where scientific findings are turned into advanced industrial technologies. Novosibirsk is home to 34 institutions of higher education, including the Novosibirsk State Technical University, which is the largest university in the city.

Novosibirsk is the acknowledged center of culture in Siberia, and the Academic Ballet and Opera Theater is the city's historic and architectural landmark. The Novosibirsk Expocenter, the largest exhibition center in Siberia, is also located in the city. Novosibirsk and Sapporo established sister city relations in 1990. The year 1996 saw the opening of the Sibir-Hokkaido Municipal Cultural Centre.

### Developing year-round facilities utilizing new materials and through technology development

Novosibirsk may be characterized by a long cold winter season and, as a result, high costs of power generation, construction and the maintenance of urban infrastructure. This is why the city strives to develop fundamentally new materials, construction, equipment and technologies. Architects in Novosibirsk attach particular importance to the efficient use of available spaces. The year-round INEY Athletic and Touristic Complex and the Vitrazh Housing Project have been designed with consideration for the severe Siberian climate. The Velo-City Cycling Park project is designed to enable users to spend time comfortably indoors, walking or cycling in any season.

Novosibirsk, as a snowy city, has a special need for "summertime recreation" even in winter. Aquaworld Water Park is a year-round water park featuring a characteristic suspended roof structure constructed with advanced technology.

The Dolphinia Oceanography and Marine Biology Center is a facility that incorporates a dolphinarium and various aquariums with over 200 saltwater and freshwater species. Dolphinia plans to open a facility to provide people with an opportunity to swim with dolphins. Special programs will be also offered at Dolphinia.

An indoor football arena that can comfortably accommodate training sessions and sporting events year-round was opened in 2011. It is a skeleton construction made of fixed-end arches designed by a local architect. This construction was technically challenging, and the trusses for the unsupported spans were designed and manufactured in Novosibirsk.

A project to develop 3,000 hectares of land that will provide year-round recreation is under consideration. In the future there are plans to expand the recreation area by introducing tours that will include visits to an indoor amusement park, children's farm, water park, planetarium, and opera and ballet theater.



#### ■ Comment from Professor Shikida

This presentation about development practices in severe climatic conditions introduced examples of infrastructure development and new indoor space creation, such as the construction of year-round indoor facilities. The construction of such facilities and other relevant activities are supported by the Techno-Park and local national universities. It appears that collaboration between industry, universities and science and a connection with science and technology will be a key subject for future development.





## Transforming Winter Resources into Wealth

Jincai YU

Executive Vice Mayor of Jixi

Nestled in the southeast of Heilongjiang Province in the People's Republic of China, Jixi is an integrated industrial city with a population of 1.81 million. Seven thousand years ago, there were people living on the bank of Lake Xingkai adjacent to Jixi, which was the birthplace of the Sushen people who are ancestors of the Manchu. Jixi is rich in mineral resources, while the environment makes Jixi an ideal place to grow green food. The city also has a developed transportation network featuring high-speed railway, railway and flight services.

Winter in Jixi lasts for almost five months. How winter resources will be scientifically utilized should become one of the important strategic choices directly related to our future. As winter is long and the temperature is low, living costs in the city are high. However, ice and snow are important tourism resources. A large number of tourists visit Jixi, showing a great deal of interest in the changing seasons.

Ice and snow contribute to the production of unique soil resources. Black soil in cold regions is rich in nutrients and has an impact on forest conservation and seafood. Ice and snow are natural refrigerators used for storing cereals, vegetables, meat, fruits and other food. Ice and snow are important as part of the ecosystem that provides a blue sky, green mountains, and clean water in winter cities.

## Development of an eco-friendly low-carbon city

From a cultural perspective, the coexistence of a variety of ethnic groups and religions has contributed to the creation of rich ethnic cultures. In order to make good use of winter resources, it is necessary to harmoniously integrate natural surroundings, such as mountains, rivers, lakes, and hot springs with cultures, history, ethnic groups, urban and rural conditions, transportation and other elements. Through this harmonious integration, it is important to establish winter industries by combining winter tourism, winter agriculture, the holiday economy, conferences, hot springs, cultures, and leisure into one industry.

As tourism promotion measures, diversified winter tourism products are created by utilizing Lake Xingkai and the Wusuli River. For example, tourism products related to rallying and skiing events have attracted many visitors, and as a result the hotel/restaurant occupancy rate has increased.

In terms of agriculture in winter, greenhouse culture is practiced during winter. Some fruit is exported to Russia.

We develop the winter festival industry and promote an increase in consumption during the Christmas, Lunar New Year, Lantern Festival and other holiday seasons. New Year's tours from Russia and China are actively promoted by highlighting the attractive features of ice and snow.

Ice and snow belong to nature and are significant resources related to the development of winter cities in the future. We have to learn how to protect and utilize ice and snow. China has a long culture of placing importance on the “union of heaven and human,” and Chinese people have long respected nature. Jixi will develop itself into an eco-friendly, low-carbon city through technological and system innovations.



### ■ Comment from Professor Shikida

The presentation by Jixi City suggested that ice and snow have not been fully utilized in many regards. The need for enhanced knowledge and technology to utilize ice and snow in the future has been shared in this conference. I believe that the positive attitude of Jixi to utilize its culture in city development will further highlight the uniqueness of the city.

## Presentation of Case Studies by Member Cities – Theme 2: Urban Development That Takes Advantage of Special Climate Features Outside the Winter Season



## An Energy-Secure, LIFE (Livable Inspiring, Feasible, and Eternal) Special County

Dae Sick IM

Director of Planning and Audit Division, Inje

The county of Inje believes that sustainable regional development and an alternative energy policy are the foundations for urban planning for the present and future generations. Inje is the second largest municipality in South Korea in terms of area and has the lowest population density in the country with a population of approximately 34,000 people. Despite the current difficult economic climate, Inje focuses on project promotion by selecting and concentrating on key projects and through the promotion of fiscal efficiency. The solution that we have come up with in order to realize a safe county, which was one of the mayor's election promises, was to build an energy-secure county.

Accordingly, the county encourages an increase in the production of renewable energy and new energy, improvement in energy efficiency, and the creation of an energy-saving culture among citizens. Aiming to satisfy Inje's energy needs with 100% renewable energy, the county has set a goal to be independent in terms of energy supply, for which the Housing Advisory Committee, experts and local government workers have come together to develop a plan with the participation of local residents. Inje was the first municipality in South Korea to declare energy independence, and has developed its own action plan. This project is led by local residents and companies and supported by the government and the assembly. Having established a governance system for energy independence, Inje continuously and systematically promotes projects.

### Becoming 100% energy-independent by 2045

First, new and renewable energy convergence was launched as a key project, and the development of photovoltaics, solar heat, wind power, and small-scale hydroelectric power has been promoted at 827 target sites since 2015. As a result, new and renewable energy facilities were completed at 342 sites last year, and more facilities are scheduled to be completed at 485 sites by October 2016. Second, regional support is being provided, which has seen solar panels installed in five public facilities and the commencement last month of the construction of a small-scale hydro power project. Third, a project to support new and renewable energy in non-public buildings and residences was started. Last year, the construction of four residences and four buildings was completed. This year, a budget of one billion won was appropriated to this project. Fourth, a power generation project is being implemented through private investment. The project is funded and constructed by Korea Hydro & Nuclear Power Co., Ltd and Hanhwa S&C, and will be operated and managed by them for 30 years after the completion of construction; after which, ownership will be transferred to Inje County. Fifth, one wind power plant and two hydropower plants directly operated by Inje County make a daily average profit of 1.5 million won and cumulatively have made 2.8 billion won so far from power sales. The profit is used to fund a project to diffuse renewable energy. Sixth, energy-saving leadership training is being provided, and with the participation of local residents, an energy-saving campaign has been developed. Seventh, projects are promoted by encouraging communication among local residents and cooperation between the public and private sectors.

Certain achievements have been obtained from these efforts. First, a foundation to promote projects has been established. Second, power generation facilities have been improved. Facilities capable of generating 25,231 MWh of electricity annually have been secured as of 2015, which has resulted in an increase in the energy independence rate by 2%, 664 toe (tons of oil equivalent) of fossil fuel annually being replaced with renewable energy, a reduction in greenhouse gases, and furthermore a reduction in electricity prices. Inje received a Presidential Citation at the 2014 New and Renewable Energy Awards. The county was also certified to participate in the Energy safe City Project, and has been selected as a convergence support municipality for two years since 2015. The county has also secured 12.5 billion won in funding.

Inje County has made the first step towards the goal set for 2045. Inje together with its citizens will make its best efforts in order to achieve 100% energy independence.



#### ■ Comment from Professor Shikida

I was very impressed by the high goal set by Inje to achieve a 100% energy self-sufficiency rate by 2045. The county's fifth approach towards the goal gave us a new perspective in realizing economically and politically sustainable new and renewable energy projects by reinvesting the profits obtained from them. Another aspect that I was impressed with was Inje's emphasis on public involvement.





## Winter Festival Development, Crisis and Further Progress

Kwun Kyou JUNG

Director of Tourism and Policy Division, Hwacheon

The Hwacheon Sacheoneo Ice Festival, one of the major festivals in South Korea, has overcome crisis and played a major role in developing the local economy. Hwacheon County, which was completely destroyed by the Korean War, has transformed into a dynamic city in the 60 years since the armistice. Of the Hwacheon County's total area of 909 km<sup>2</sup>, mountains and forests account for 86%, and lakes and rivers account for 6%. Thus, the county is a typical mountainous area with 92% of the land covered with mountains and rivers. Hwacheon is also a military zone located on the border with North Korea, where the temperature drops to as low as minus 15°C during winter, and ice (growing as thick as 30 cm) forms earlier than any other areas in South Korea. From an early age, locals start enjoying ice sledding and ice fishing through boreholes.

### Economic ripple effect of the festival grows to 99.2 billion won – 45 times that of the first year.

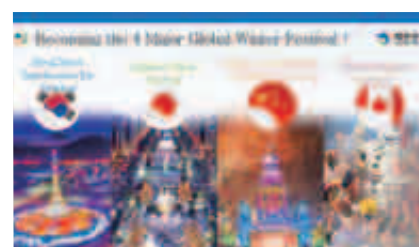
We began to plan a festival with the goal of developing the local economy through the tourism industry by taking advantage of the fun winter activities enjoyed by locals in Hwacheon County. Picturesque mountains and transparent water have long been the resources that Hwacheon is proud of. Sacheoneo (mountain trout) is a fish species that inhabits only cold and clean water, and it was considered that Sacheoneo was perfect to represent our local clean resources. This is how the Hwacheon Sacheoneo Ice Festival was born. For the festival, hands-on activities and participation programs are developed from the planning phase, and know-how has been accumulated through the systematic operation of the festival. The festival committee is made up mainly of local residents, and a close cooperative structure has been established between the military and the government. In line with the slogan, "Hearts that Never Freeze, Memories that Never Melt Away," visitors are welcomed with warm hospitality and every measure is taken to eliminate inconvenience to visitors. Approximately 220,000 people visited the first Hwacheon Sacheoneo Ice Festival held in 2003, and the festival has grown into the top winter festival in South Korea, attracting over one million people every year since 2006. Along with the development of the festival, the city economy has grown with increases in the use of restaurants and accommodation facilities and in the sales of agricultural products. The regional economic scale has also increased from 2.2 billion won in the first year of the festival to 92.2 billion won this year.

For Hwacheon Sacheoneo Ice Festival visitors, gift certificates are issued to revitalize the regional economy, as a measure to ensure that the economic ripple effect of the festival will affect the local economy. Lanterns are lit up, a heart-shaped tunnel is constructed, performances are staged on vehicle-free streets at night, and other various efforts are made for the festival. Consequently, the festival greatly contributes to an increase in income for local residents.

In 2011, the festival was canceled due to the outbreak of foot and mouth disease in South Korea. This news was spread throughout the country through social networks, and many messages of support for locals were sent from across the nation. Having overcome the crisis, the Hwacheon Sacheoneo Ice Festival held in 2012 was covered by media from more than 20 countries. This helped the festival to become one of the four major winter festivals around the world. The 2012 festival created an economic effect worth 68 billion won, which was higher than that in 2010. The festival was covered in *The Times* in 2009, was chosen as one of the seven wonders of winter by CNN in 2011, and was selected as the World Festival and Event City (with a population of less than 50,000) for 2013 by the International Festivals and Events Association (IFEA). It has become a global festival.

In 2016, the festival faced a very difficult situation due to the super El Nino phenomenon. However, we prepared for the festival with climatic changes in mind. At the same time, going forward, every program will be improved while new programs will be continuously developed. For example, a night fishing program is planned during the festival so that tourists can enjoy staying at Hwacheon for an extended period of time.

Urban development utilizing winter should be based on the efficient use of local resources. With this in mind, Hwacheon County will continuously make the best use of its attractive features as a winter city.



#### ■ Comment from Professor Shikida

In my opinion, it was very significant that Hwacheon numerically expressed the economic ripple effect of the festival as more than 70 billion won. Sacheoneo is a natural resource; whereas, the Sacheoneo Ice Festival provides services and products. The presentation by Hwacheon clarified its direction towards "service-dominant logic" by converting resources into services.

## Presentation of Case Studies by Member Cities –Theme 1: Urban Development Utilizing Winter



## How to Construct the City by Utilizing Winter Resources

Dehai WANG

Vice General Secretary of Qiqihar

The city of Qiqihar is located in the western part of Heilongjiang province, close to the Sino-Russia border in the vicinity of Nenjiang. Qiqihar has long been a transportation hub and has a long history as an industrial city, while also serving as a political and economic center. With a current population of 5.6 million, the city has promoted cultural modernization and educational, medical and commercial development in the region. Qiqihar is an iconic city that symbolizes the development of heavy industry in China. Numerous historical and cultural sites are found across the city.

Known as “Home to Cranes,” Qiqihar is also blessed with natural surroundings. The world-famous Zhalong Nature Reserve, covering an area of 210,000 square meters, is the largest reed marsh in Asia and the fourth-largest reed marsh in the world. The city has lakes, volcanoes and grassland, where ecotourism actively takes place. In 2006, a tour route that takes tourists to the black soils of Qiqihar was created. This was selected as one of the top ten tour routes in China by CCTV (China Central Television), and attracted a number of visitors.

The four seasons in Qiqihar have distinctive characteristics, with the average monthly temperature for January plummeting to 25.7°C below zero, yet that for July rising to 22.8°C. Thinking about winter often conjures up negative images. Research on how to make winter living conditions comfortable is underway, with various measures are being taken, such as protection against wind, the careful selection of colors for the streetscape, and the use of landscape lighting to make the winter city lively so that residents can feel warm. In addition, energy-saving measures are also taken, including the installation of geothermal heat pumps, technology that utilizes heat generated by sewage treatment, and wind power generation. City revitalization in a tangible manner is promoted by making use of winter resources.

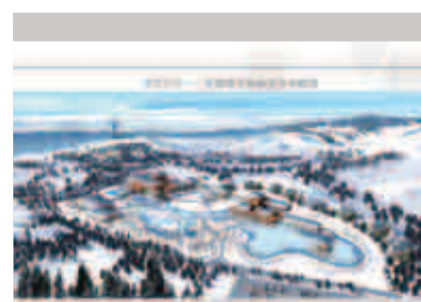
### A comprehensive mountain resort is under construction to promote sports and tourism.

Winter sports such as skating, ice hockey, skiing, and curling are being promoted. Qiqihar’s skating and ice hockey teams are very competitive, and many members have been selected to play in national teams. One large-scale facility currently under construction is an impressive project that allows visitors to enjoy skating and skiing indoors. In the vicinity of the facility, a business center and other buildings will be constructed in an effort to raise the level of business competence of the entire region. The newly built Nianzishan ski resort will be the largest ski resort in the western area of Heilongjiang province, and the ski resort is expected to be developed into a comprehensive mountain resort area.

Snow and ice-related tourism plays an important role in tourism in Qiqihar. The city has an enhanced brand as a tourist destination and is visited by 100,000 people annually. Restaurants, hotels, transportation facilities and other tourism-related facilities are currently being constructed and improved in Qiqihar. There is also an indoor ski resort in Longsha that has a water park. This facility has a completely novel design that can be used all year round.

In terms of education, winter resources are taken into some classes for primary and secondary schools. For example, students experience activities on ice every year.

With the use of snow and ice, landscape lighting is performed and snow and ice exhibitions are held in business areas and parks.



#### ■ Comment from Professor Shikida

The main topic of the presentation that Qiqihar made at the last Mayors Conference in Hwacheon was agriculture. In this conference, the topic was further developed to include infrastructure improvements required to actually implement a variety of measures. Probably, strengthening the tourism brand is a common interest shared by all cities. I think it is significant to continuously develop resources around the same goal instead of developing individual resources.





## Ounasvaara: Recreational Centre of Rovaniemi

Tuula RINTALA-GARDIN

Director of International Relations, Rovaniemi

Today, I would like to introduce Ounasvaara – a centre for recreational and sporting facilities.

The Ounasvaara Centre is located on a hill in Ounasvaara across a river from the city centre. The views of nature from Ounasvaara are beautiful and auroras can be seen from autumn to winter. For this reason, special care is needed when developing this area.

Ounasvaara is divided into seven zones. Rovaniemi locals enjoy the centre in various ways and utilize it differently in summer and in winter.

In the recreation zone, the Wellness and Sports Centre and Lapland Sports Academy have been built, and there is an arena for ice sports and a football ground in the centre. Ice hockey is the most popular sport in Finland, while the local football team finished second last season in the national league. The Wellness and Sports Centre has a bowling alley, a swimming pool area, a gym, and a children's park. In the Lapland Sports Academy, elementary, junior high and high schools are in place to enable young students to learn both academic subjects and sports. Students who have devoted themselves to sports and as a result haven't been able to focus enough on study are provided with an opportunity to gain an education at the academy. The Lapland Sports Academy also serves as an Olympic Training Centre, where national athletes receive training in different fields. The Lapland Arena is designed for ice hockey training and skating practice.

Ounasvaara has a ski centre. This is one of four national skiing centres and has been used for various kinds of events. On weekends, athletes from many different countries come to the 4.5-km skiing track to practice on fresh snow. There are six ski jumping hills, with the K90 jumping hill being the highest. For downhill skiing, 12 slopes and five lifts are available.

Ounasvaara has many kinds of tracks and trails. These tracks and trails are used for cross-country skiing in winter and trekking in summer. Half of the 100-m cross country skiing track is lit because it gets dark during winter. The ski trails are suitable for cross-country classic and skating styles and they are carefully maintained. A large area of Ounasvaara is protected. As Ounasvaara is adjacent to a river, people can swim in the river during winter.

Finland has a unique concept known as "everyman's right". People of all nationalities have the right to enjoy the Finnish countryside freely. This right comes with the responsibility to respect nature, other people and property.



### ■ Comment from Professor Shikida

Rovaniemi, where auroras are visible for more than 200 days a year, is blessed with natural surroundings and resources. I am impressed with the city's attitude to take a step further and develop new facilities and activities, using these facilities in order to enhance the city's attraction. There is also a notable local policy of guaranteeing access to nature for all.

## Presentation of Case Studies by Member Cities – Theme 3: Eco-conscious Sustainable Urban Development in Winter Cities



## Matsumoto City's Efforts to Reduce Food Loss

Akira SUGENOYA

Mayor of Matsumoto

The city of Matsumoto, home to Matsumoto Castle and other historical sites surrounded by beautiful nature, has set a goal to become a sustainable and healthy city. To this end, the city defines health as a state of physical, mental and social wellbeing and takes health promotion measures in the six areas of living, community, the environment, economy, education, and culture through cooperation with various fields.

Our various efforts to achieve the 3Rs (Reduce, Reuse, Recycle) have been made under the concept of “Mottainai” (= too good to waste). In addition to efforts to reduce food loss and provide participatory environmental education for nursery and kindergarten children, since last year we have been running the Matsumoto Kids Re-use campaign, which aims at the redistribution of unused children's goods, such as clothing and baby strollers, and awarding Eco-friendly Office certification..

As the joint statement issued at this year's G7 Environment Minister's Meeting pointed out, the reduction of food loss is the world's agenda. Matsumoto City commenced its efforts to reduce food loss in 2010, ahead of time. Our campaigns are conducted for both restaurants and homes.

### “Eat all the food on your plate: 30-10 Campaign” at restaurants and at home

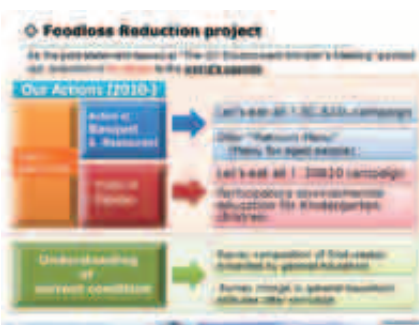
The “Eat all the food on your plate: 30-10 Campaign”, which is carried out at restaurants and other out-of-home locations, intends to encourage people to concentrate on enjoying the food on their plates without leaving their seats for the first 30 minutes of banquets, parties or other events and to encourage people to go back to their seats to once again enjoy the food and finish everything on their plates during the last 10 minutes of the event in an effort to reduce leftover food. This campaign was accordingly named the “30-10 Campaign.” We started the promotion of the campaign by making pocket tissues, paper coasters, and posters and distributing them at cooperating restaurants, hotels and various events. The 30-10 Campaign is also carried out at home. We have designated the 30th of each month as “Check your refrigerator day” to encourage people to check what they need to use from their refrigerators to avoid waste, and we promote the 10th day of each month as “Mottainai” cooking day to utilize vegetable skins and stems as much as possible in cooking. In collaboration with Matsumoto University, we have created Thanks Recipes to promote the use of all parts of vegetables in cooking and transform leftovers into new dishes.

Participatory environmental education is conducted for older pupils at 46 public nursery schools and kindergartens in Matsumoto City. City personnel use Power Point to explain what will happen to food waste and leftovers. Changes in the attitudes of children and parents were surveyed. As a result of the survey, changes in awareness and behavior were seen in approximately 60% of the children and approximately 50% of the parents.

It is a challenge to help children maintain their awareness. Accordingly, we make reusable bags from recycled PET bottles and perform picture-story shows to keep reinforcing environmental educational benefits. Last fiscal year, the amount of lunch leftovers was assessed at three model schools, and environmental education and changes in awareness were surveyed at two of these three model schools. These assessments and surveys were performed as a model project by the Ministry of the Environment. The results of the leftover amount assessments showed that the amount of leftovers decreased at Schools A and B, which conducted environmental education. In contrast, a slight increase in the amount of leftovers was seen for School C, where no environmental education was provided. The school lunch menu was the same for the three schools.

We will continuously take measures to reduce food loss both at restaurants and at home and will conduct food loss surveys.

We will also take steady steps to develop Matsumoto into a sustainable and environmentally friendly city.



### ■ Comment from Professor Shikida

The problem of food loss and leftovers is very familiar to developed countries and is a common issue shared by them. I highly value the wise decision made by Matsumoto City to address this issue as a city policy. I would like to ask for your cooperation not to leave food uneaten on your plates at the receptions of this conference to comply with the suggestion of Matsumoto.





## Strengthening the Ecological Protection of Drinking Water Sources and Promoting Sustainable Urban Development

Yuping CUI

Vice Director of Foreign Affairs Office, Harbin

Harbin, the capital of Heilongjiang province, is a big city covering an area of 53,100 square kilometers and with a population of 10.64 million people. Harbin attaches great importance to the ecological protection of drinking water sources and the sustainable urban development.

At present, the source of drinking water for Harbin city center is the Mopanshan Mountain reservoir, which has a maximum capacity of 523 million cubic meters. This is one of the largest surface water sources among the 36 drinking water sources in the province. In addition to drinking water, the reservoir is used for flood control and irrigation and has ecological functions. The reservoir's design water supply capacity is 900,000 tons per day, and approximately 830,000 tons of water is supplied daily. This water source has an upstream catchment area of 1,150 square kilometers with forestry coverage of more than 95 percent. The water source protection zone is about 750 square kilometers, which accounts for three quarters of the catchment area. There are about 15,000 people residing in the zone, engaging in agriculture and forestry.

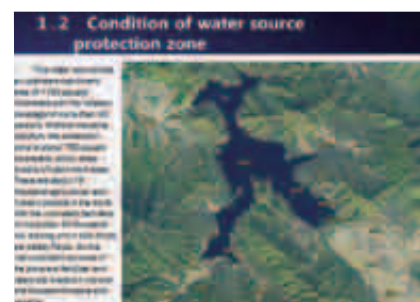
In order to protect and manage water sources, it is important to learn the characteristics of the water sources through daily management practices and to establish an appropriate management system. To this end, we set up a special office for the management of the water source environment. The major task of the office is to conserve water sources and assure safe water quality. After discussions with the Forestry Bureau of the province, Harbin signed the Contract of Compensation for Banning Tree-Felling in the Mopanshan Mountain Upstream Water Source Protection Zone in 2012. Since 2012, the Forestry Bureau has forbidden all felling activities in the catchment area. In return, 39 million RMB Yuan has been paid every year from the Harbin municipality fiscal fund to compensate for the economic loss of the Forestry Bureau. Meanwhile, efforts have been intensified on afforestation, and, as a result, the forest coverage rate and the numbers of birds and bird species has increased.

### Establishing a three-dimensional control system for water sources

The Harbin Mopanshan Mountain Reservoir Drinking Water Source Protection Regulation was officially promulgated in 2012, under which the functions and responsibilities of the relevant departments in the protected area are clearly defined. The regulations fundamentally solved the problem of the management of the protected area. The local government, the Forestry Bureau, the Reservoir Administration Division and other relevant departments signed a co-management contract to specify the water source protection area, assure safe water quality and improve the quality of management. Harbin relocated residents out of the primary conservation district to prevent human sewage from being discharged, and restored farmland to forests. These measures contributed to the restoration of the environment in the area.

The water source conservation project was regarded as part of the management of public facilities. In 2012, more projects were implemented based on the 11th Five-year Plan Project for the Songhua River Area to solve the problem of the influence of human sewage on the water source. In addition, a plan implemented by Harbin City contributed to a significant improvement in the environment of both banks of three rivers in the primary conservation district around the reservoir. The Mopanshan Mountain Water Source Environmental Protection Plan, which had been developed since the early stages of the construction of the reservoir, was formulated in 2011. The plan is currently under the process of revision and will be further improved in the future.

Future water source management will be carried out in coordination with national policy and with a focus on the improvement of the living environment of farmers and forestry workers in the protection area and the implementation of projects to restore ecosystems. Phoenix Mountain, located upstream outside the protection area, is famous for its scenery. With the aim of developing the tourism industry, pollution will be reduced while improving the life of people residing in the mountain area. Another approach is to create a perfect three-dimensional control system for the water source by which a safe, reliable, and advanced water source management system that will improve the level of management is established in the hope that the system will contribute to the sustainable development of each city.



#### ■ Comment from Professor Shikida

Water source management and integrated watershed management are important topics that advanced nations are currently addressing. In this context, I believe that system engineering is a comprehensive approach that each city should learn. I am impressed that this presentation highlighted a need for optimization. It is considered that a policy of creating new values in the protected area by utilizing tourism and recreational activities will in the end achieve sustainable regional development. We have to appreciate such steady efforts that have been made behind the scenes of tourist sites.

## Presentation of Case Studies by Member Cities – Theme 3: Eco-conscious Sustainable Urban Development in Winter Cities



## Report on Shenyang Urban Construction

Lihong JU

Director of Modern Construction Industry Office of Shenyang  
Municipal Bureau of Urban Construction

Located at a longitude of 123 degrees east and latitude of 41 degrees north, Shenyang is in the temperate zone and experiences temperatures as low as 35°C below zero. Because of these climatic conditions, we have explored how to utilize the limited construction period.

Shenyang is in the middle of development, with a focus on buildings that use energy-saving technology and renewable energy and also on a shift in the industrial structure. Modernization of the construction industry is being promoted in association with economic structural reform in an effort to improve the quality of buildings. Shenyang also encourages the development of construction-related industries within the city. Being recognized as a modern city with contemporary buildings, Shenyang became an environmental protection model city in 2011. At present, the construction industry is involved in a variety of central government policies. Prefabrication methods, modular architecture and others technologies have been introduced from Kajima Corporation, Sekisui House, Ltd., and other Japanese companies. In addition, technologies related to structures made of steel, wood and other materials have been introduced in cooperation with Canadian corporations, thereby helping to promote a variety of projects.

Government-subsidized guaranteed housing constructed with modern technologies has been so far built over a total area of 3 million square meters. In 2015, there was a new single project that launched the construction of government-subsidized housing over an area of 70,000 square meters. Combined with areas under construction, the total area of government-subsidized modernized construction reaches 10 million square meters. In 2015, government-subsidized modernized construction was launched over an area of 4 million square meters, which accounted for 20% of all the new projects. This figure is far higher than the national average of 1%. Since 2012, the modernization of the building industry has been promoted, and the construction of a third ring road is planned in addition to that of a second ring road. This approach to modernize construction will be spread throughout the city with the goal of having modernized construction account for 30% of all construction.



### Promotion of renovation into energy-saving green housing

In accordance with the modernization of construction, the modernization of related industries is also promoted. An emphasis is placed on the development of six major related industries, including construction materials, metals, electricity, and ceramics. Meanwhile, a number of human resources are being trained in cooperation with Shenyang University and Shenyang Jianzhu University.

Second, environmentally friendly buildings are promoted. Energy-saving is becoming a popular idea in Shenyang, and the construction of energy-saving buildings accounts for 65% of total construction. For energy-saving buildings, a variety of energy-saving technologies are employed, such as single-frame triple-glazed glass windows, double-glazed glass windows, and vertical wire wool. Buildings that adopt renewable energy use geothermal heat pumps, sewage source heat pumps, and solar heat. In contrast, a number of buildings are yet to adopt energy-saving measures in Shenyang. The retrofitting of existing buildings to increase energy savings makes it possible to provide home-owners with comfortable living environments.

We are required to pass on sustainable development to future generations utilizing winter resources.

#### ■ Comment from Professor Shikida

Energy saving seems to be a common challenge for each city. Shenyang's examples of taking comprehensive measures to solve this problem were very impressive.





## Eco-conscious Sustainable Urban Planning in Downtown Sapporo

Katsuhiro AKIMOTO

Mayor of Sapporo

In the late 1960s, downtown Sapporo had a serious air pollution problem caused by soot and smoke from coal combustion. In response to an announcement made in 1966 that Sapporo would host the 1972 Winter Olympic Games, a district heating system was introduced in order to solve the problem of air pollution before the Olympic Games. Coal boilers and chimneys were aggregated in one place, where advanced combustion management and smoke and soot removal were carried out. As a result, a drastic reduction in air pollutants was achieved. From this experience, the city realized that it was possible to keep a balance between city development and environmental conservation. This realization prompted the city to take action to become an environmental capital. Subsequently, the construction of district heating and cooling plants and the expansion of a heating and cooling pipe network were promoted. Currently, 100 buildings in a supply area of 128 ha are connected to the district heating and cooling system via heating and cooling pipes with a total length of 45 km.

Recently, district heating and cooling has played an important role in supporting steady city growth in harmony with the cold and snowy climate and environment by introducing low-carbon energy sources as an effort against global warming, decentralizing and diversifying energy production to improve the city's disaster-resilience, and reducing the urban heat island effect to maintain a cool climate unique to a winter city and urban environment. While promoting attractive urban planning that maintains harmony between the rich natural surroundings of a northern city and advanced urban functions, the Sapporo downtown area is urged by the city to attract people and goods and gather information both from Japan and overseas and thereby to enhance its appeal as an international city in response to changes in socioeconomic circumstances. The city aims to develop new initiatives combining urban planning that takes into consideration the appropriate time to rebuild deteriorated structures and sustainable energy policy for downtown Sapporo.

### An initiative named “SMILEs” to realize the concept of urban planning

The New Urban Plan for the Downtown Area, which was decided on May 2016, set the urban planning goals of establishing a brand for downtown Sapporo that attracts enthusiasm and investment from within Japan and overseas and establishing an attractive downtown lifestyle and workstyle. To attain these goals, Sapporo has embarked on an initiative named “SMILEs” to realize the concept of urban planning. Through this initiative, the downtown area will generate new vitality in Sapporo and will promote sustainable economic growth. The city also aims to realize the symbolic development of Sapporo into a city with world-class environmental qualities by taking advantage of its unique resources and environments.

At present, an energy policy for the downtown area to support urban planning is under consideration. By 2050, we will achieve a drastic reduction in CO<sub>2</sub> emissions in accordance with the global common goal and establish a system capable of continuously supplying heat and electricity even in times of disasters, such as major earthquakes and during extreme weather conditions, in order to maintain stable urban functions. To this end, the establishment of an energy network structure for efficient heat/electricity supply, the reconstruction of old structures into green buildings that will reduce environment burdens, and energy management for each building and for the entire area of each district will be promoted. To implement these measures, the downtown area will be divided broadly into three zones. The first of these is the “focal downtown fortification zone.” In this zone, an eco-friendly, disaster-resilient, high-level business environment will be cultivated to attract businesses and spur investment from Japan and overseas. The second zone is the “district heating network zone.” Here, district heating and cooling using a variety of energy sources will be developed to promote efficient energy use. In the third zone, the “low-carbonization zone,” progressive low-carbon initiatives for the entire area of the zone will be implemented to create a model area that symbolizes “Environmental Capital Sapporo” and aggressively promote downtown Sapporo.

Toward the goal in 2050, we will disseminate the current state and values of downtown Sapporo as a brand to the world.



#### Comment from Professor Shikida

This presentation gave details of the city's policy for downtown Sapporo. I hope that everyone here at the conference will have a chance to actually feel this remarkable energy policy promoted behind the scenes in this wonderful city during your stay. I think that the city's new initiatives to establish a brand for downtown Sapporo in line with the goals set for 2050 are a perfect topic for the presentation sub-theme, “Eco-conscious sustainable urban development in winter cities.”

# Final Reports on Environmental Action Goals

At the 16<sup>th</sup> WWCAM Mayors Conference held at Hwacheon in January 2014, member cities decided to set feasible, quantitative environmental action goals related to the two themes of “efforts to convert to renewable energy sources and reduce energy consumption” and “efforts relating to environmental preservation, such as tackling air pollution,” and to report their achievements at the 2016 Mayors Conference. Based on this decision, ten member cities – Changchun, Jiamusi, Jixi, Shenyang, Rovaniemi, Matsumoto, Sapporo, Hwacheon, Inje, and Taebaek – set action goals. Of these cities, nine cities participating in this Mayors Conference, excluding Taebaek, presented their final reports. After their presentations, cities that did not set their own action goals in 2014 also had the opportunity to introduce the efforts they are currently undertaking for environmental conservation.

## Final Report by Changchun

### Action Goals

- A 15% reduction in particulate matter (PM) 10 from 2012 levels by 2017.
- A continuous increase in the number of days per year with good air quality from year to year. A continuous decrease in the PM 2.5 index from year to year. The overall air environmental index being stabilized at Grade II.
- Development of a long-term plan for coal use. A reduction in the total coal consumption of the city from 2012 levels by 2017. A decrease in coal consumption to less than 65% of total energy consumption by 2017.
- An increase in the supply of natural gas, LPG (liquefied petroleum gas), and SNG (synthetic natural gas). An increase in the use of wind power, solar power and biomass energy as well as other forms of clean energy. Promotion of investment in the gas supply infrastructure.
- Restriction of the use of private boilers and the elimination of all the private coal boilers with the capacity of less than 10 tons per hour in the urban area by 2017.

To solve the air pollution problem, air quality has been improved by adjusting the energy structure, and reducing the numbers of small coal-fired boilers and vehicles that fail to meet the exhaust gas emission standards. Air quality was good for 237 days in 2015. The PM 10 level was 107  $\mu\text{g}/\text{m}^3$ , which was a decrease of 11  $\mu\text{g}$  from the previous year, and a decrease of 22  $\mu\text{g}$  or 17.1% from 2013. The average PM 2.5 level was 66  $\mu\text{g}/\text{m}^3$ , which was a decrease of 2  $\mu\text{g}$  from the previous year, and a decrease of 7  $\mu\text{g}$  or 9.6% from 2013. In terms of air quality, Changchun was ranked the 54th among 74 key Chinese cities and ranked second among sub-provincial cities in northern China.

Currently, efforts are being made toward air quality improvement by reducing coal use as much as possible, and by accelerating the adjustment of the energy source structure. The percentage of coal as part of total primary energy consumption has decreased from 82% to 78% to 73% over the last three years. In order to improve air pollution, Changchun has replaced, combined, controlled and managed energy and has set up a plan for energy structural adjustment. Replacement with clean energy is also being promoted by building pipelines, gas storage and CNG/LNG stations to increase the use of natural gas. The installation of a gas network that covers the entire city will be mostly completed in 2017.

In accordance with Changchun's Scheme for the Implementation of Action Plans to Reduce and Prevent Air Pollution, it was decided to eliminate coal boilers with a capacity of 10 tons or less per hour from the city. As a result, 328 and 1,205 such boilers were eliminated in 2014 and 2015, respectively. The elimination of another 1,235 such boilers is planned in 2016. The city plans to eliminate all coal boilers by the end of 2017. Changchun has announced action goals for 2017 and is confident that the city is able to achieve every single one of the goals.

## Final Report by Jiamusi

### Action Goals

- To achieve central heating installation in 73% of new buildings by the end of 2017.
- To realize a greenery coverage of 40% in the urban area by the end of 2017.

Environmental protection is a critical and never-ending challenge and a significant project. We are developing a plan focusing on development, model change and environmental protection in an integrated manner to create an energy-efficient industrial structure and reduce environmental burdens. We are also working to create a system to clarify responsibilities, use pollutant emission rights trading, strictly apply relevant laws, and facilitate public participation in environmental protection.

The Air Pollution Plan aims to reduce the PM 10 level by 5% from that in 2012 by the end of 2017. In the industrial district, the establishment of a centralized heat and steam supply system and the construction of dust removal facilities for coal-fired boilers will be promoted, and small boilers will be connected to the heat supply system in order to reduce pollution. Furthermore, public transportation facilities will be developed, greenspaces will be increased, and oily smoke from restaurants and other businesses will be treated.

The issues of environmental protection will be solved scientifically with a focus on the solution of pollution problems and the protection of water sources for drinking water to ensure a safe and reliable water supply. In priority





areas, energy adjustment and industrial restructuring will be promoted by creating a system that enables cooperation with other areas. Environmental measures for urban and rural areas will be implemented in an integrated way. Environmental pollution faced by rural areas directly affects the food of urban residents. It is necessary to take thorough measures for environmental protection and eliminate any risk of environmental pollution. Preparation for emergency events and the establishment of chemical-related companies will also be promoted in a rational way.

## Final Report by Jixi

### Action Goals

- To achieve 100% of the goals set for the protection of ecosystems.
- To achieve 100% of the water quality goals set for drinking water in the urban area.
- To improve the environmental noise level in the urban area so that it will meet the national primary environmental noise standard.
- To reduce COD (Chemical Oxygen Demand) by 750 tons, NH<sub>3</sub>-N (ammoniac nitrogen) by 60 tons, SO<sub>2</sub> (sulfur dioxide) by 1,500 tons, and NO<sub>x</sub> (nitrogen oxide) by 2,800 tons.
- To maintain the PM<sub>10</sub> level at 65  $\mu\text{g}/\text{m}^3$  or less.
- For the ambient atmospheric levels of SO<sub>2</sub>, NO<sub>x</sub>, CO and ozone, to satisfy the national standard level II or better.
- To maintain a higher quality of water within the city than that of the water that flows into the city. The quality of water on the city border should achieve 80% of Function Class III.
- To make efforts to improve the water quality of Lake Xingkai.

The city of Jixi has been striving to achieve the action goals by strengthening follow-up surveys. The city is committed to the promotion of ecosystem protection. In 2015, Jixi achieved 100% of the goals set for ecosystem protection and for the water quality of water sources for domestic water. The city's noise level satisfied the national standard, the water quality of rivers and lakes was improved, and the number of days with good or excellent air quality amounted to 326 days.

As a river pollution control measure, the Lake Xingkai Environmental Protection Plan was formulated to protect the environment for ecosystems in a systematic manner. Three warning levels were set to control water quality. For air pollution prevention, the city focuses on the promotion of the collection of dust, vehicle emissions and oil and the elimination of small coal boilers. Jixi monitored air quality for 349 days during 2015, and it was found that 175 days saw good air quality while 151 days experienced excellent air quality. Thus, the city achieved 93.4% of its air quality goal.

Jixi also works hard for pollution control in rural areas with an emphasis on the reduction of waste, the prevention of tap water contamination, and the comprehensive management of the environment in rural areas. Based on a plan for reducing overall emissions, an emission reduction project is being implemented alongside efforts to establish an eco-friendly green philosophy. We are also making efforts to reduce air and water pollutant emissions. Each county and key company set annual targets for reduced ammoniac nitrogen, sulfur oxide and nitrogen oxide emissions and has achieved these targets. These counties and companies are also strengthening their environmental management. Investment projects are evaluated and reviewed in terms of energy efficiency and they are not approved unless they meet the city's industrial policies. The capacity, responsibilities, tasks, awards, punishments and other features of each company and industry are managed and closely

monitored. The obtained data is disclosed to the public as much as possible, and illegal activities are strictly controlled.

Public relations activities will also be enhanced to attract the involvement of more citizens and increase environmental awareness among the public through the use of media such as television, newspapers, and the Internet, thereby encouraging a civil environmental protection movement and the formation of youth volunteer groups.

With a focus on the development of green activities, the city will establish eco-friendly companies, communities, schools and rural areas hoping that the environmental protection philosophy will take root with the public and people will become actively involved in green activities.

## Final Report by Shenyang

### Action Goals

- "One control": Control of general energy consumption  
The use of clean or renewable energy will be increased by 3% or more year-on-year through (1) the promotion of the use of biological power generation and heat supply systems; (2) the introduction of natural gas and the expansion of its use; (3) the promotion of the use of heat generated by sewage. The number of buses using clean energy and renewable energy will be increased, whereas the number of old buses will be decreased gradually. Shenyang is considering announcing the names of companies that discharge pollutants. The city will develop an implementation plan and ask such companies to close their business or relocate in accordance with the schedule in the implementation plan.
- "Two eliminations": Elimination of boiler heating systems and shanty towns  
By the end of 2017, the city plans to implement policies with regard to (1) the reduction of highly-polluting fuels that are burnt; (2) the removal of coal-fired boilers with a heating capacity of 20 tons/hour or less; and (3) the construction of a large-scale heat source facility and the acceleration of a combined heat and power project. Utmost efforts will be made to redevelop shanty towns in the city by 2017.
- "Four managements": Management of boilers, vehicles, dust, and the burning of straw  
It was planned in 2015 that 100 large coal-fueled boilers would be reconstructed so as to meet the emission standards. "Yellow label" vehicles (which get their name because yellow license plates are attached to vehicles that do not satisfy the national emission standards) in use will be deregistered. Dust prevention and control measures will be implemented in response to dust pollution in urban areas. The area of roads to be washed with water and the washing frequency will be increased, and greening will be promoted. An action plan for comprehensive use of straw will be created, and the straw utilization rate will be increased to 15% by 2017.

For the improvement of air quality, Shenyang promotes the Blue Sky Project and a bill for implementing anti-smog measures in Shenyang was enacted. Each department and section of the city government set responsible goals under the slogan "One control, two eliminations and four managements" to prevent and control air pollution. For the "One control" approach, a plan to completely control total energy consumption has been developed in order to strictly control projects that use coal-fueled facilities and consume large amounts of coal and to increase the energy supply capacity of natural gas, electricity and other clean energy sources. Incentives are provided when coal is replaced with gas. Electricity networks are increasingly being installed to enhance the power transmission capacity. An effort is being made to reduce the number of old vehicles and vehicles that

emit pollution by promoting the diffusion of new energy vehicles, gas-fueled vehicles and buses that use clean energy.

“Two eliminations” is an approach to eliminate small boilers and deteriorated buildings. The removal and improvement of small boilers with a capacity of 10 tons or less per hour is being carried out ahead of schedule, and coal boilers with a capacity of 10 tons or less per hour will be eliminated and replaced with electricity by the end of 2016. The removal and reconstruction of deteriorated buildings is also being carried out ahead of schedule.

“Four managements” refers to the management of boilers, vehicles, dust, and straw incineration. The modification of coal boilers is in progress. In 2016, the green area is being expanded to the area inside the Fourth Ring Road, where vehicles that emit pollution will be completely banned. The management and monitoring of oil quality has also been strengthened. With regard to dust pollution, Shenyang published dust prevention measures and strictly controls construction sites and work. Any activities that contravene environmental laws will be punished. Roads are cleaned four times a day. The city has worked out measures to encourage the management and use of straw (an agricultural by-product) as a resource in order to comprehensively manage straw.

## ■ Final Report by Rovaniemi

### Action Goals

#### ● Energy Efficiency Action Plan

The city of Rovaniemi aims at a 9% reduction in energy consumption over the period of 2008 to 2016 from the energy consumption level of 2006. The total energy-saving target is 8,479 GWh.

#### ● Napapiiri Energy and Water Ltd

The company reduces CO<sub>2</sub>, NO<sub>2</sub>, SO<sub>2</sub> and fine particles by developing and introducing new technologies and by investing in biofuels. The company recycles residues such as ash, wastewater and sludge to modify them into fertilizers, soil, and construction materials.

#### ● The city of Rovaniemi has adopted the urban zone planning-principle in land use and public transportation planning. The quality of the environment will be improved and energy consumption will be reduced.

Energy consumption has been monitored to clarify energy efficiency and survey renewable energy in an energy-saving effort. Solar heating panels installed on the roofs of swimming pools produce about 16 MW of energy. A new multifunctional central kitchen was built in 2015 and water consumption has been monitored ever since. Special attention has been paid to energy efficiency while cooking using electrical appliances and for different work processes. For cleaning, steamers and micro-fiber cloth are mainly used, thereby reducing the necessary amounts of water and detergent. In the areas of land use, traffic and construction, about 13,000 mercury-vapor lamps have been replaced with LED lamps, which resulted in an energy saving of 89w/lamp. Energy efficiency is a key-factor in land-use and traffic planning. Energy efficiency measures have been implemented in the building design and construction processes. In terms of transportation, environmentally friendly -driving has been adopted in transportation and logistics. For purchasing transportation services, the tenders that include details of energy efficiency are prioritized.

The second goal is to promote a resilient water and energy supply in severe Arctic winter conditions, which we pursue in cooperation with Arctic Circle Energy and Water

Ltd. The company is involved in the business of district heating and water/power supply. The installation of flue gas condensers has decreased nitrogen, sulfur and small particle emissions radically. SO<sub>2</sub>, NO<sub>2</sub> and particle emissions have been reduced by 84%, 49% and 50%, respectively, in the four years from 2012. Arctic Circle Energy and Water Ltd. sells 330,000 cubic meters of water every year and pumps 410,000 cubic meters of ground water annually. The company has not produced any fly ash since 2012, and the total amount of ash produced has been reduced by 37% from 2012. Since 2015, ash has been converted to a commercial by-product used for soil construction and soil dressing. The company is also involved in geodesign, and uses geopolymer technology and a participatory approach in design through technical cooperation with Oulu University and the University of Lapland.

The third goal is related to urban planning and traffic planning. The urban areas are divided into pedestrian, bicycle, public transportation and private car, and other specific zones. The construction of high-rise apartment buildings and multi-purpose buildings is scheduled in the future. New parking facilities and flexible design guidelines will be implemented in urban planning in 2017. The city designed new bus routes in 2015. Speed limits in urban areas have been assessed and new limits have been set. A bicycle and pedestrian plan has been developed, and politicians will assess these new planning principles in 2016.

## ■ Final Report by Matsumoto

### Action Goals

#### ● Initiatives with regard to energy conversion and reduction

- (1) To install a photovoltaic (PV) system to 6% of the houses in the city by the end of FY 2015.
- (2) To install a photovoltaic (PV) system to 100% of the elementary and junior high schools in the city by the end of FY 2015.
- (3) To install a photovoltaic (PV) system to five municipal public nursery schools in the city by the end of FY 2015.

#### ● Initiatives for environmental conservation with regard to air pollution and other issues

- (1) To promote the reduction of CO<sub>2</sub> emissions using city newsletters.

The city of Matsumoto has set three action goals to promote energy conversion and reduction; however, the photovoltaic (PV) system penetration rate only reached 5.51% as of the end of 2015. The reasons for being unable to achieve the target of 6% include the termination of the national government's subsidy program in FY 2013 and a drop in the Feed-in Tariff. Solar power generation accounts for 55% of the unused renewable energy available in Matsumoto. The further diffusion of PV systems is critical to combat global warming. Matsumoto is located on a major fault known as the Itoigawa-Shizuoka Tectonic Line and is prone to major earthquakes. From the perspective of disaster preparedness and response, the city will be continuously and actively involved in the promotion of measures to encourage the installation of PV systems.

There are 45 elementary and junior high schools in Matsumoto, and PV systems have been installed in all of them except for schools that are still in the process of obtaining a subsidy. The installation of PV systems is scheduled in these remaining three schools by the end of this fiscal year. As all the elementary and junior high schools are designated as evacuation centers, a plan to install batteries that can be utilized in case of disaster should be considered for a further



action.

PV systems have been installed in five municipal nursery schools in the city. The installation of PV systems in nursery schools that are designated as evacuation centers is under consideration.

Matsumoto also takes measures against air pollution for environmental conservation. In the wake of the accident at the Fukushima Daiichi Nuclear Power Plant, Matsumoto started environmental radiation measurements on March 17, 2011 for the safety and security of the citizens. Since April 2011, radiation has been measured at 11 locations across the city. At present, radiation is measured weekly at four elementary schools and five other locations and in the city and twice a week at the city hall by city workers. No abnormal radiation levels have been detected from these measurements. The level of radioactive materials in soil and groundwater is measured annually at all the 28 elementary schools in the city, and the groundwater radioactive contamination level is measured at five locations. No abnormal radiation levels have been detected from these measurements. Measurement results are provided in Matsumoto City Newsletters and through TV, newspapers and other media.

## Final Report by Sapporo

### Action Goals

- Energy-efficient lifestyle  
Implementation rate of eco-friendly activities  
The 2012 result: 61%    The 2030 target: 90%
- Application of decentralized electric power for business facilities and strengthening of the energy network in downtown area  
Amount of electric power generation by the decentralized electric power system for business facilities  
The 2012 result: 170 million kWh    The 2030 target: 430 million kWh
- Expansion and popularization of the introduction of next-generation vehicles  
Number of next-generation vehicles  
The 2012 result: 40,000 vehicles    The 2030 target: 310,000 vehicles
- Expansion and popularization of solar power generation facilities  
Amount of electric power generation by solar power generation facilities  
The 2012 result: 20 million kWh  
The 2030 target: 650 million kWh

The Sapporo Plan for the Promotion of Global Warming Countermeasures was developed in March 2015 to promote the implementation of concrete global warming countermeasures with the aim of realizing a sustainable low-carbon society. The plan set long-term and medium-term goals, which are an 80% reduction of greenhouse gases by 2050 and a 25% reduction of greenhouse gases by 2030 from the 1990 level, respectively. Sapporo has defined six visions as an ideal society that the city aspires to realize in the future. Action goals related to four of these six visions are discussed here.

With respect to the implementation rate of eco-friendly activities as covered by the first goal indicator, 61.2% of citizens implemented eco-friendly activities in 2015: they introduced renewable energy appliances at home and practiced eco-friendly activities, such as saving electricity and water, on a daily basis. In 2015, the city launched the Sapporo Smart City Project to disseminate information on how to enjoy a zero-waste, smart, energy-efficient and energy-saving lifestyle at home and work and raise awareness with the public.

In 2014, a large cogeneration unit was introduced in

the city center. The amount of electric power generation by decentralized electric power systems for business facilities (the second goal indicator) was 183 million kWh as of 2015. There are challenges to be overcome: the cost for introducing a large decentralized electric power system is very high, and only a limited number of facilities are suitable for the installation of such systems.

The third goal indicator is the number of next-generation vehicles introduced. As of 2014, 69,000 next generation vehicles including fuel-cell-powered vehicles, electric vehicles and hybrid vehicles have been introduced in Sapporo. In this fiscal year, a plan to facilitate the diffusion of next generation vehicles will be developed with the aim of promoting hydrogen fuel cell vehicles.

Finally, the fourth goal indicator is the amount of electric power generation by solar power generation facilities. As of 2015, the amount of electric power generated by solar power generation facilities installed at homes and businesses in the city was 48 million kWh thanks to a drastic increase in the number of solar power generation facilities installed at businesses.

## Final Report by Hwacheon

### Action Goals

- Promotion of a renewable energy supply project
- Promotion of a project to reduce the urban heat island effect

Since 2000, the county of Hwacheon has promoted development with a focus on tourism that takes advantage of its natural environments. A variety of urban development measures and policies have been promoted, such as eco-friendly energy programs and environment protection policies. In order to reduce energy use at public offices, Hwacheon is working to replace 20% of energy consumption with clean energy and renewable energy. At the Hwacheon County Office, a geothermal heating system is used in winter, and electricity is partially supplied by solar power. It is mandatory for new public buildings to be designed to have photovoltaic systems. A solar power project is promoted in the private sector by allowing electricity generated by solar power to be purchased by Korea Electric Power Corporation. At present, seven villages make a profit of approximately one billion won combined from such electricity sales.

The second project is to increase greenery to reduce environmental pollutants. Goatsbeard, a medicinal herb, is planted to prevent sediment from flowing into rivers. According to a study published by a research institute, goatsbeard planted on a slope reduced river pollution by 70%. In Hwacheon, goatsbeard has been planted in an area of 100,000 m<sup>2</sup>. The project has contributed to the revitalization of the regional economy by creating the jobs needed to plant and maintain goatsbeard and it is expected that processing and selling goatsbeard will prove profitable.

Hwacheon holds the Sancheoneo Ice Festival every January, which is made possible by the county's successful management of its natural surroundings. Thus, Hwacheon is developing into a global city. Environmental protection measures are closely related to the success of the Sancheoneo Ice Festival and have positive influences on regional development. Accordingly, Hwacheon emphasizes the importance of environmental management.

## ■ Final Report by Inje

### Action Goals

- Efforts for the efficient use of energy and heat
  - (1) Wind power capacity : 5,500,000 kWh
  - (2) Hydropower capacity : 2,500,000 kWh
  - (3) Installation of solar power generation systems in homes: 640 locations, 1,700 kW
- Efforts relating to environmental preservation
  - (1) Installation of sewage treatment facilities for the protection of river water quality: 3 locations
  - (2) Installation of waste incineration facilities for the protection of air pollution: 1 location (by 2017)

From the environmental protection perspective, additional sewage treatment facilities are needed to protect the water quality of rivers, and the construction of such new facilities is scheduled at three locations. With the completion of these facilities, the average sewage treatment capacity will increase from 5,800 tons/day to 7,200 tons/day. So far, 30% of the construction work has been finished and the project is scheduled to be completed in 2018. To prevent air pollution, the construction of a new waste incineration facility is planned at one location. In addition, the renovation of existing waste incineration facilities has begun, with completion scheduled for 2018. These efforts enable a reduction in the generation of offensive odors and minimize the production of wastewater and the emission of poisonous gases, leading to the prevention of environmental pollution. A strategy for utilizing waste heat generated from incineration plants in order to increase the income of local residents was developed and has been put in practice.

Solar power generation systems had been installed at 640 locations by 2013 and additional systems will be installed at 827 other locations by 2018. Thus, solar power generation systems will be installed at a total of 1,467 locations, achieving 122% of the target. The amount of wind power generation was 2.74 million kWh in 2013 and 4.12 million kWh in 2015, which is an increase of approximately 50%. We expect that the 2018 target of 5.5 million kWh is achievable.



**Moderator, Secretary General Mr. Kenji SHITOMI:** Thank you for your presentations. Please speak up if you have any questions or comments about the reports presented by the cities.

**Mr. Akira SUGENOYA (Matsumoto):** Actually, in Japan, many local residents, for example in the city of Kawasaki, have suffered from asthma and other health issues caused by pollution from businesses. I wonder if Changchun, Jiamusi or other cities are facing air pollution problems that cause respiratory diseases, asthma or other health issues for local residents. And I would like to know whether or not these governments take any measures to deal with the situation.

**Moderator, Secretary General Mr. Kenji SHITOMI:** Is there any city who would like to comment on this? It seems difficult to respond immediately. If you have applicable cases, please send the relevant information to the secretary later. We will share the information with other cities.

**Mr. Akira SUGENOYA (Matsumoto):** Thank you very much. In Japan, PM 2.5 and other air pollutants have become a major issue and we have problems such as bronchial asthma and chronic bronchitis. This is why I asked that question.

**Moderator, Secretary General Mr. Kenji SHITOMI:** Just now, presentations were given by the cities that have set action goals in advance. We would like to ask cities that have not set action goals to tell us about how they are addressing environmental conservation problems, and what results are being obtained from their efforts. The city of Edmonton from Canada, could you please share your involvement in environmental issues?

## World-leading waste management and water management systems

**Ms. Susan HOLDSWORTH (Edmonton):** Having established “The Way We Green,” an environmental strategic plan, in 2011, Edmonton is addressing environmental challenges. The city has problems in three areas. The first one is energy reduction, the second is about food and the third regards solid waste. The city has set four goals and is making coordinated efforts. We believe that the city can achieve the goals by 2040.

Edmonton’s Community Energy Transition Strategy was published in August 2015. This is a strategy for reducing greenhouse gas emissions, increasing energy efficiency in all sectors and promoting energy saving in Edmonton. The city will ensure that Edmonton’s energy delivery systems are resilient to shocks and disturbances from climate change.

As Edmonton is blessed with sunshine throughout the year, the Energy Transition Strategy places a special emphasis on the use of solar power. The city prepares environmental reports every year and provides them to citizens. In each report, programs in each category of the city’s environmental strategic plan, “The Way We Green,” are verified, and the current conditions and challenges are evaluated. The impacts of our daily activities on the environment are measured and assessed. The results are reported so that the impacts can be effectively managed. We are delighted to report that the city’s air and water are cleaner than before and the amount of waste production has decreased despite a drastic increase in population. Edmonton leads the world in waste management and water management. Looking forward, Edmonton will promote new initiatives to further reduce its ecological footprint.

**Moderator, Secretary General Mr. Kenji SHITOMI:** Thank you. Edmonton talked about the strategic environmental initiatives that the city is working on. Next is the city of Harbin. How about you?

## The nation’s experimental city in terms of comprehensive environmental measures for rural areas

**Mr. Yuping CUI (Harbin):** Harbin has not set goals for environmental conservation; however, the city takes various actions to comprehensively deal with water pollution, air pollution and rural environmental issues. The city has a large river known as the Songhua River and three tributaries, and collectively we refer to them as “three channels and one





river.” Since 2012, the city has invested 6 billion yuan for environmental conservation focusing on river bed cleaning and greenery planting. Sewage pipelines were laid over a length of 108 km to improve river water quality. This environmental measure to improve the riparian environment was recognized as a Model Project for the Human Environment of China in 2013. In addition, an anti-pollution project is being promoted for prioritized areas. More than one billion yuan was invested to implement the project at 52 prioritized areas. We have built 22 wastewater treatment plants with a total daily treatment capacity of 1,556,000 tons. Especially in the urban district, the daily wastewater treatment capacity is as high as 1.4 million tons. Currently, 90% of wastewater treatment is concentrated in the urban area. The city implements a system of environmental measures for prioritized tributaries and reports the conditions on a regular basis. Seventy-five percent of the 12 first-class tributaries satisfy water quality standards. Significant improvements have been made to major water quality indicators. With an emphasis placed on urban wastewater treatment plants and the detoxification of livestock excrement, the city achieved a 13% reduction in COD and a 16% reduction in ammonia nitrogen.

Measures for controlling air pollution, smoke in particular, are taken with cooperation from each district of the entire city in accordance with relevant domestic laws and regulations. In the northeastern area, a large amount of coal is burnt for heating during winter. Centralized boilers are heated as a heat source. Heat supply networks have been installed over 87% of the entire city area. Two thousand three hundred and sixty small coal boilers with a capacity of 10 tons or less have been modified. The city also takes measures against vehicle emissions, and natural gas fueled vehicles have been introduced to 50% or more of the local route buses. The 12th Five-Year Plan deals with industrial emissions and other issues. It is planned, for example, to introduce desulfurization equipment and denitrification equipment and to achieve a 2.8% reduction in sulfur dioxide emissions and a 4.87% reduction in nitrogen oxide emissions from the levels as of the end of the 11th Five-Year Plan.

Harbin is designated as a national experimental city for comprehensive environmental measures for rural areas, and has developed an overall plan for the protection of rural environments. The city has launched 165 rural projects to effectively deal with pollution across rural areas and in designated 37 nature reserves, which include one national-level, 11 provincial-level, 4 city-level and 20 county-level natural reserves, with a total area of approximately 560,000

ha. The total area of natural marshes with an area of 8 ha or larger amounts to 290,000 ha, and the area of natural grassland is 260,000 ha. There are approximately 50 grade I and II endangered animal species under national protection, seven grade I and II endangered plant species protection in the nature reserves.

**Moderator, Secretary General Mr. Kenji SHITOMI:** In the 2012 Mayors Conference, we discussed Ulaanbaatar, Mongolia and how increased heating demand in midwinter was one of the causes of air pollution. I would like to ask the city of Ulaanbaatar about measures currently taken by the city.

### **Installation of central heating systems in 70,000 households by 2020**

**Mr. Bayarbaatar SANDAGDORJ (Ulaanbaatar):** Air pollution has become the most significant issue in Ulaanbaatar, where 60% of the residents live in areas with no heat infrastructure. One of the short-term anti-air pollution measures that Ulaanbaatar is addressing is the policy of modifying and improving 90% of heating stoves used at homes in the district of Ger, where no heat infrastructure is provided. From a long-range perspective, the city is working on the redevelopment of the Ger district, through which every house will be connected to a central heating system. Currently, the Ger District Redevelopment Project is implemented at 24 locations. Ulaanbaatar is in the process of planning a project, aiming to construct apartment buildings where central heating systems are introduced to 70,000 households by 2020.

Smoke monitoring is conducted periodically at eight locations in the city of Ulaanbaatar to understand the present conditions. The second leading cause of air pollution is smoke emissions from vehicles. To combat this problem, the city addresses a policy of establishing bus lines to fulfill public transportation services, and securing the first lane of roads for the exclusive use of buses to reduce the use of private vehicles.

**Moderator, Secretary General Mr. Kenji SHITOMI:** The harsher the winter, the more serious the problem caused by heating becomes. I would like to ask the city of Novosibirsk in Russia how the city addresses this problem.

### **Energy-saving heating and shifting from coal to gas**

**Mr. Alexey KONDRATYEV (Novosibirsk):** Winter is

harsh in Novosibirsk, with temperatures dropping as low as minus 40 degrees Celsius. For this reason, it is a significant task for Novosibirsk to save energy and maintain a stable supply of energy. We consider that the city has to promote the minimization of energy consumption, energy-efficient heating and a shift from coal to gas as a primary energy source for heating. Novosibirsk is working on these challenges; however, we cannot show you our efforts numerically because we did not prepare for this presentation.

A specialized agency is devising a ten-year plan to tackle energy issues. Furthermore, Novosibirsk has set an environmental policy to relocate corporations and factories out of urban areas. This is expected to solve two problems. Environmental quality will be improved and the town, which was largely developed in the 1930s, 1940s and 1950s, will be redeveloped. Currently, corporations are preparing for this. In terms of residential areas, the city has developed very comfortable housing over the last ten years, contributing to the creation of attractive communities. The city has seen a greater population increase than any other city in the region. Novosibirsk is improving its living environments and other social conditions to make the city more attractive.

**Moderator, Secretary General Mr. Kenji SHITOMI:** I am sorry for having asked for your comments suddenly. Thank you for covering a wide range of topics. We are able to understand Novosibirsk's various efforts on energy issues and for environmental conservation. Is there anyone who wants to ask for more details about any of the topics presented by the cities so far?

**Mr. Soon Sun LEE (Inje):** Having listened to reports by each city, I noticed their interest in fuel. So, I would like to share some of the experiences Inje has had.

In South Korea, we used to use briquette coal at home, but it was gradually replaced with electric boilers. Now, most South Korean households use electric boilers. Inje is working further toward a future policy shift to solar panel systems and solar powered boilers. A switch from briquette-fired boilers to electric boilers helped solve the air pollution problem, but on the other hand it caused electricity bills to become a financial burden on users. The installation of a 3kW solar panel system enables electricity bills to be cut by approximately 95%. Of course, the cost of installing a 3kW solar panel system is as high as approximately 9 million South Korean won, or 900,000 Japanese yen. In South Korea, the national or local government subsidizes 70% of the solar panel installation

cost, so the money that each household invests in the solar panel installation will be recovered within approximately three years. Since the service life of solar panel systems is around 15 years, the systems will be profitable for approximately 10 years. Inje is actively promoting this policy because there is also an economic advantage for residents.

**Moderator, Secretary General Mr. Kenji SHITOMI:** In the midst of international debate over how to respond to global environmental issues, the WWCAM has been discussing these issues in the Mayors Conferences since the Changchun Mayors Conference in 2006. This is a significant challenge that all the member cities should address together as global citizens. Since the Changchun Mayors Conference, we have regarded global environmental issues as common problems that winter cities face, and our perspective on global environmental issues has been included in the declaration we resolve at the end of each Mayors Conference. We have shared our recognition, as the consensus view of the membership, of the importance of making efforts to solve global environmental issues. The presentations on environmental action goals showed us the results of various efforts made by each city under the common recognition. It seems that the cities have achieved positive outcomes.

However, it is no exaggeration to say that solving energy problems and other global environmental issues requires endless work. According to the Hwacheon Declaration that was adopted at the last Mayors Conference, "environmental issues, which are universal challenges, demand our continued efforts as we look towards the future." As we, winter cities, are sensitive to changes in the global environment and feel close to them, we will continuously put our heads together and take actions while regarding global environmental issues as our own problems.

Well, we have come to the end of the Final Reports on Environmental Action Goals. Thank you for your cooperation.





# Copenhagen's Initiatives for Environmental Energy Development

Morten KABELL

Mayor of Technical and Environmental Affairs, Copenhagen

**Mr. Morten Kabell, Mayor of Technical and Environmental Affairs in Copenhagen, Denmark, introduced some of the city's environmental and energy policies, such as the active use of wind power, biomass and other types of clean energy. Copenhagen is well-known as one of the world's leading cities in environmental energy sustainability.**



## **Sustainable initiatives feasible only in a compact city that made it possible to avoid a financial crisis.**

Being a compact city is critical for sustainable solutions. Copenhagen's population is concentrated in the urban area, which is convenient for working, shopping, going to parks and gyms, and transporting children to and from school. Such reduced transportation time is also economically efficient. For instance, Houston in Texas spends around 14% of its GDP on transportation, whereas in Copenhagen the number is 4% and in many western European countries it is 7%. City downsizing leads to a reduction of fuel consumption. In this context, the economy and sustainability is closely related.

In the late 1940s, Copenhagen promoted the Five Finger Plan, by which a rail system known as the S-train network was developed. According to the plan, investment was made over a period of 50 years. In 2002, the first metro line was built. With the development of this metro system, cheap and fast public transportation has been established.

A variety of people live in this compact city, where 20% of the residences are social housing developed to provide police officers, school teachers, nurses and other workers with easy access to work.

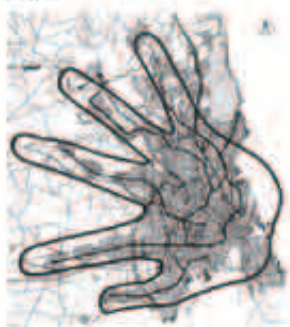
At present, district heating services in Copenhagen cover over 98% of the city's buildings, which is the world's highest coverage rate. This not only provides citizens with easy access to heating but also facilitates a shift from coal and kerosene to sustainable heating sources. Because the city is compact, a number of sustainable measures are feasible, and as a result, quality of life will be improved and financial burdens will be reduced.

Being environmentally friendly is not necessarily costly. From 1994 to 2010, economic activities in this region increased by 25%, while greenhouse gases were reduced by 40%. In 2013, the London School of Economics published a report. Among other things, the report asked a question: Is there any economic rationale for early action on climate change? In answering that question, the London School of Economics found the main reason for Copenhagen's strong economy was in fact the green transformation. Without the green transformation, the city of Copenhagen would have been hit very strongly by recession during the financial crisis.

## **50% on bikes by 2025**

Hoping to develop the city into a bike-friendly city,

FIVE FINGER PLAN



SOCIAL HOUSING IN COPENHAGEN



Copenhagen has set a target for bicycle use. Currently, 40% of citizens use bicycles to commute. Although this is the highest rate since 1989, the city aims to increase it to 50% by 2025. To this end, the city will improve the cycling infrastructure. This will not only enhance safety but also reduce travel time. In Copenhagen, bicycles are convenient for traveling from one point to another, and we can go to anywhere in the city by bicycle. Why do people often use bicycles? The answer is because bicycles are a comfortable and environmentally friendly transportation mode that requires shorter travel time without inconvenience. In addition, cycling is a good exercise to promote our health.

Spatial stress that grows with an annual population increase of 2% has caused problems in the compact city. Individuals do not have space to park their own cars. A parking space for one vehicle can accommodate eight to ten bicycles. In Copenhagen, some of the busiest streets accommodate more than 40,000 bicycle commuters every day. If that number of people used cars, they would take up much more space. Crowded environments do not make people happy. People need space to enjoy their lives. Bicycles help to create space for children to have fun and for elderly people to enjoy the shade of a tree in summer, time to meet and talk with friends over coffee or beer, and other comfortable living environments.

However, we need vehicles such as ambulances, fire engines, delivery vehicles, and cargo vehicles. These necessary vehicles can coexist with other vehicles with the use of an intelligent traffic system that helps ease traffic congestion. The city is developing, for example, a sustainable eco-driving system. Cargo vehicles and trucks can obtain information on which intersections to take using GPS. A truck that comes to a stop at every intersection and then starts will require an additional liter of diesel fuel. The provision of information for sustainable transportation is beneficial to solving economic as well as environmental issues.

### The world's first carbon-neutral city by 2025

We have to reduce a large amount of carbon emissions for compact city development. Copenhagen has a vision to become the world's first carbon-neutral city by 2025. To achieve this goal, it is necessary to maintain sustainable and cheap heating and a bicycle culture that supports comfortable transportation around the city. Copenhagen has snow but the

people of Copenhagen do not see snow as a problem. We are happy as long as snow is removed from roads and we can cycle. Bicycles are preferred over cars. We are making ongoing efforts to give citizens a very good lifestyle, and we are now working on the creation of a framework for urban development. We have learned from many cities on this matter. Such a framework has to be created by citizens. Our goal is to realize simple and organic urban living in a functional, compact city.

DEDICATED INFRASTRUCTURE WORKS



URBAN LIFE IN ANY WEATHER





## ■ Mayors Discussion

# Strategies to Create Economic Vitality in Urban Areas



Since the World Winter Cities Association for Mayors was founded as the Northern Intercity Conference of Mayors, the Mayors Discussion has been held to provide an opportunity for mayors to learn from each other by candidly exchanging opinions on common issues that challenge winter cities.

With a focus on the economic issues presented in each city's case studies, the cities introduced their problem-solving approaches and unique ideas for using local resources to create economic vitality in urban areas.

**Moderator, Mr. Katsuhiro AKIMOTO (Sapporo):** The topic for the Mayors Discussion is, "Strategies to create economic vitality in urban areas." I hope this will facilitate the exchange of candid views. Let's begin with the county of Hwacheon. Could you share your story, please?

### Development into a debt-free municipality through regional revitalization made possible by a festival New strategy to prepare for a crisis – Hwacheon

**Mr. Moon Soon CHOI (Hwacheon):** The county of Hwacheon was once a small rural village located in a mountainous area. However, it has been developed into an urban area home to the Hwacheon Sacheoneo Ice Festival, an international festival that has been attracting worldwide attention since it launched in 2003. Hwacheon has become a model for regional development through festival and PR activities. The county's strategy to produce farming incomes during winter and revitalize regional economy, in particular, has been a great success. Coupons exchangeable for local farm products are given to visitors to sacheoneo (mountain trout) experience programs at the Hwacheon Sacheoneo Ice Festival, and a local currency valid only in Hwacheon was introduced. I believe it is important to have a system to ensure that money circulates locally instead of flowing outside Hwacheon. This initiative resulted in a direct economic effect of 99.2 billion won and an induced production of 124.8 billion won in 2016.

Efforts are also being made to create a debt-free municipality. One of the reasons the county borrowed money was to improve urban infrastructure and public services.

Hwacheon had completed the repayment of a 6 billion won local government loan ahead of schedule in February 2016 and became a debt-free municipality. Hwacheon secures a large amount of funds; however, the county is always under the threat of crises, such as the impacts of global warming, heightened tension with North Korea, and a decline in consumption due to economic stagnation. Hwacheon is developing new strategies to address these crises.

The first strategy is to identify hidden attractions only known to locals. Departing from standardized tourism and consumption, we meet the demand of people who want to experience local life and cultures and enjoy interacting with local people. The second strategy is to continuously develop slow travel and long-stay tourism products in pursuit of relaxation and satisfaction. The third strategy is to secure middle-aged and older customers who are emerging as a new group of tourism consumers. South Korea has a conscription system, and 15,000 people serve in military forces in Hwacheon every year. People who spent a certain period of their youth in Hwacheon can be attracted back as tourists. We are working on the improvement of Hwacheon by creating a nostalgic atmosphere in cooperation with the military forces stationed in Hwacheon.

**Moderator, Mr. Katsuhiro AKIMOTO (Sapporo):** Next, we would like to ask the city of Changchun, which hosts the Vasaloppet International Cross Country Skiing Festival every January, to give a presentation.

## Sports-related exhibitions, summit forums and international ski competitions for urban revitalization – Changchun

**Mr. Huili WANG (Changchun):** It was decided that the 2022 Winter Olympic Games would be held in Beijing. Changchun is a city where winter sports are very popular. The city has hosted many events in the economic, trade, tourism, sports and other fields. To deepen our partnership, I hope representatives from other winter cities will visit us in Changchun to exchange ideas and promote cooperation.

In mid-December this year, the Ice and Snow Tourism Industry Expo and a summit forum are scheduled. The expo is jointly organized by the China National Tourism Administration, Jilin Province, and Changchun, and winter sports equipment, outdoor gear, and the like will be displayed there. During this period, a summit forum will be held with the participation of influential and well-known winter sports organizations, ice and snow equipment manufacturers, tourism cities, sports specialists and media representatives from around the world to deepen exchanges among different fields. I hope that residents of winter cities will come to Changchun to enjoy the city.

Another event is the Vasaloppet International Cross Country Skiing Festival, which has been held annually since 2003. The Worldloppet general meeting for 2017 will be held in Changchun. Taking this opportunity, the city will improve organizational operation, event operation and product development for the festival.

**Moderator, Mr. Katsuhiko AKIMOTO (Sapporo):** Changchun highlighted its approach to create a network by hosting a major expo and ski competitions and then develop the network into one of the pillars of urban planning. Thank you. Next, we would like to ask the city of Jixi to give a presentation.

## Creating environmentally friendly farming that produces branded farm products and fostering four major industries: the coal, graphite, green food and pharmaceutical industries – Jixi

**Mr. Jincai YU (Jixi):** Jixi is a resource-based city and a very famous tourist destination in northeast China. Known as the “capital of graphite,” Jixi is one of the top graphite production areas in Asia in terms of both quality and quantity. It has recently been announced that several large businesses, including LG Corporation from South Korea, will be investing in the graphite industry.

Recently, Jixi has been exploring new paths for transformation. In agriculture, the city is about to promote two transformation approaches. One is a move away from traditional and conventional farming to environmentally friendly farming that produces branded farm products. We aim to increase added value by actively creating green brands, attracting major companies, and producing processed products. The other approach is to expand into the livestock industry. As Jixi has suitable conditions for livestock farming, we will focus on beef and dairy cattle, pig, and poultry production.

With respect to industrial development, the city is planning to foster four major industries - the coal, graphite, green food and pharmaceutical industries. At present, 20 million tons of coal is produced annually in the city. Our goal is to build a coal chemistry industrial base in Jixi. We are also striving to process graphite into materials for heat storage, sealing, fireproofing, and other purposes. Graphite from Jixi is becoming famous internationally, attracting attention from major companies around the world.

In terms of green food, Jixi aspires to form a processed food industrial chain involving organic farming, high-quality dairy and beef products, and distinctive farm products. The final approach is to foster the bio-pharmaceutical industry. Jixi aims to create a bio-pharmaceutical manufacturing base with an emphasis on the development of herbal medicines. Furthermore, the city will make efforts to raise the level of local companies through the promotion of industrial and technological advancement and an increase in production.

In addition to branding Jixi as a tourism destination, the city will develop a base for trade goods processing by fostering trade as an important industry and by stimulating trade, especially with Russia.

**Moderator, Mr. Katsuhiko AKIMOTO (Sapporo):** That was about Jixi’s efforts to take advantage of its resources so that the city can adapt to the new age. In Japan, in contrast, each region faces a declining population and is addressing social challenges to find solutions for how to make local resources more attractive and how to effectively utilize them. We would like to hear from the city of Matsumoto.

## Promotion of the “Broad Area Tourist Route: Visit 3” project as a new tourist route in Japan developed in cooperation with Sapporo, Matsumoto and Kagoshima – Matsumoto

**Mr. Akira SUGENOYA (Matsumoto):** In Japan, where the number of people traveling within the country is decreasing due to a shrinking population associated with a declining birth rate and an aging population, attracting tourists from abroad is a major task for the tourism industry because tourism supports regional economy. The number of people who visited Japan reached 19.74 million people in 2015, and many foreign tourists began to travel to local cities around Japan instead of Tokyo and Osaka. The number of foreign tourists who stayed overnight in Matsumoto exceeded 100,000 people last year, which was a huge increase of 60% from the previous year. A further increase is expected in the future, too.

Conventionally, initiatives to attract tourists to Japan have been addressed only by individual cities or in cooperation with neighboring cities and towns. Taking advantage of the domestic flight connections that the Shinshu Matsumoto Airport offers, the city of Matsumoto embarked on the “Broad Area Tourist Route: Visit 3” project last year. This is a new inbound tourism promotion project planned to offer foreign tourists a tour route across Japan and was developed through cooperation between Sapporo, Kagoshima and Matsumoto. Matsumoto aims to develop this new Broad Area Tourist Route into a well-established route more popular than the Golden Route, which is the standard tourist route for foreign visitors to Japan that connects Tokyo, Mt. Fuji, Kyoto, and Osaka.



In March this year, the three cities of Sapporo, Kagoshima and Matsumoto worked together to invite a total of 12 people (three people each from Taiwan, Hong Kong, Thailand, and France) in charge of the development of tourism products targeting visitors to Japan. The purpose of this invitation was to provide the 12 participants with an opportunity to actually travel along the model route. They traveled by air between these cities and could experience the tourist resources and attractions of Sapporo, Kagoshima and Matsumoto. The participants showed a great deal of interest in this tour route, which was designed to allow tourists to enjoy a variety of Japan's appeals on one trip. This is made possible because Japan is a long archipelago stretching from north to south with varying climates. Promotional videos to introduce the three cities were created and were broadcast on overseas TV and posted on a video-sharing website for the purpose of publicizing the tour route. As a result, we received prompt feedback from some foreign media, indicating that we attracted a great deal of attention. A liaison conference with domestic travel agencies and airline companies will be established while further strengthening the cooperation of the three cities. In addition, effective projects that can actually attract tourists will be developed through public-private partnerships.

Comparing the tourist resources and attractions of Sapporo and Matsumoto, Sapporo features Hokkaido's magnificent nature, fresh and delicious seafood and other food, and urban shopping, whereas Matsumoto features history, tradition and culture, as represented by the 420-year-old Matsumoto Castle, which was designated as a national treasure, some of the country's best scenic spots, and Kamikochi and other mountain tourist attractions. By combining the different attractive features of each city, a high-quality tourist route ideal for foreign visitors can be created. We, local cities, should propose new travel ideas that break free from conventional travel styles, thereby enhancing the attraction of foreign tourists (whose number is expected to increase) and creating regional economic cooperation.

**Moderator, Mr. Katsuhiko AKIMOTO (Sapporo):** Local cities make ongoing efforts in cooperation with other local cities in order to align with people's values and satisfy people's needs. I assume that many cities focus on the promotion of tourism. The next presentation will be given by the county of Inje.



## With a focus on bicycle, automobile and other sports

### Promotion of the attraction of visitors by holding a Go board game festival – Inje

**Mr. Soon Sun LEE (Inje):** Inje is currently addressing regional economy vitalization through sports marketing. Inje has worked hard to develop the tourism industry for over 20 years by utilizing local tourism resources. The Surf Smelt Festival contributes to the promotion of tourism; however, it has been affected by the recent abnormal climate, causing problems to tourism businesses. Given that condition, Inje aims to promote sports, one of the city's growing businesses, in order to stably vitalize the regional economy by utilizing physical training and sports facilities and other infrastructure that have been developed to date.

An administrative department in charge of sports marketing will be established to actively promote sports-related projects and enact ordinances to support relevant organizations and systems. Inje is planning to develop systems to host large-scale festivals and support teams that visit Inje for training during the off season. By hosting a Go board game festival as a sports festival, Inje aspires to develop the city into home and shrine to Go board game.

We will also work on the promotion of cycling, car racing and other wheeled sports. In 2013, a bicycle park in which the private sector invested 160 billion won was opened. Since 2014, a festival using wheeled vehicles has been held at the bicycle park. The construction of bicycle paths will be planned. It is more important than anything to promote such projects with the participation of local residents. We will operate festivals together with local residents in cooperation with sports and other relevant organizations, thereby regional development will be promoted and our levels of hospitality will be improved.

**Moderator, Mr. Katsuhiko AKIMOTO (Sapporo):** The presentation just now was about the creation of new tourism resources to attract visitors. Next is the city of Rovaniemi.

### Sports tourism that makes a profit of 10 million euros annually and has future growth potential – Rovaniemi

**Mr. Esko LOTVONEN (Rovaniemi):** Rovaniemi, which is located within the Arctic Circle, is actively utilized as a natural laboratory for a variety of research in the field of cold region studies. For example, the only snowmobile factory in Europe is located in Rovaniemi. The factory is owned by Bombardier Recreational Products, a Canadian company that exports snowmobiles to Russia, Canada, the United States, and other countries.

There are four cold region test courses, where international automobile manufacturers and tire manufacturers perform a variety of tests. The sports facilities in Ounasvaara in the Arctic Circle are famous as a sports center. The center serves as a sports tourism destination and we are now developing additional facilities.

With easy access from Helsinki, the capital of Finland, Rovaniemi is a perfect training area for world-class athletes.

Besides being a training area, Rovaniemi hosts international championships in various sports. This trend has increased over the last ten years, and Rovaniemi has hosted some of the biggest events in Finland.

Sports tourism is a rapidly growing business in Rovaniemi, with a current annual profit of approximately 10 million euros. The city has facilities related to Santa Claus that play a central role in the tourism industry of Rovaniemi. These facilities attract approximately 500,000 tourists each year, and most of the tourists are from overseas, accounting for 60% of the total number.

In terms of economics, tourism in Rovaniemi is more profitable in winter than in summer. During the summer months, Rovaniemi is just a stopover for tourists traveling around northern Europe. The number of tourists from Asia has increased by 30% annually, and that from Russia also has been on the rise over the last few years. It is estimated that the direct income and indirect income from tourism are approximately 200 million euros and 75 million euros, respectively. A variety of business sectors benefit from tourism. More than 1,700 people are employed directly or indirectly in the tourism industry. Rovaniemi is Finland's second most visited destination by international tourists, next to Helsinki, the capital of Finland.

Tourists have a positive influence on local residents. For example, if we did not have tourism, there would be no regular flight services to and from Rovaniemi on a daily basis, and there would be fewer hiking trails, cultural services, and sports facilities. Tourism plays a significant role as the source of revenue for these services. The annual tax revenue from tourism services is as high as approximately 10 million euros, significantly contributing to the city budget. We are extremely grateful for these positive influences of tourism.

**Moderator, Mr. Katsuhiko AKIMOTO (Sapporo):** Now, we would like to hear from the city of Edmonton about its efforts to practically apply a comprehensive strategy to view winter resources positively and transform them into community-wide vitality.

### **Applying a winter lens to future investments for drastic economic growth – City of Edmonton**

**Ms. Susan HOLDSWORTH (Edmonton):** We know that quality of life is a key driver for prosperity. We view winter as an asset, and we are in the process of realizing the full economic potential that the winter offers.

Edmonton has three goals. The first is to increase the capacity and sustainability of Edmonton's winter festivals, the second to develop a four-season patio culture, and the third to become a world leader in innovative winter-related business and industry.

There are over 60 community-scale festivals and eight large festivals held in Edmonton. All the festivals have had record-breaking attendances over the last several years. All together these festivals and events have a huge impact on our local economy. We benefit from the lengthened and more vibrant tourist season, and the increased number of tourists, cultural and educational opportunities as well as a strong feeling of community pride. Local businesses benefit along with hotels and restaurants.

We have a growing four-season patio culture in Edmonton. Much like in Copenhagen, these outdoor spaces make businesses more viable, and patio spaces with colorful blankets entice more citizens. By hosting city-wide patio parties, the participating cafes, restaurants and bars are seeing an increase in their sales.



Regarding innovative winter business and industry, Edmonton is known for its cold weather construction. New technologies shave six months off the building time in many projects, saving considerable time and money. The business case for investing in winter city strategy in action within an implementation plan lies in proved economic and social outcomes for the city year round. Our culture has shifted in a short time. We are proud of how far we have come, and we are looking forward to yielding economic benefits in the future.

**Moderator, Mr. Katsuhiko AKIMOTO (Sapporo):** It was very interesting to learn about Edmonton's strategy to connect its year-round efforts to industry. Next is a presentation by the city of Shenyang.

### **Establishment of a Corporate Service Platform consisting of a federation of businesses, a service company, and a think tank – Shenyang**

**Mr. Lihong JU (Shenyang):** At present, China's economic growth is slowing down. For China, it seems to be time for a model change. Since last year, Shenyang has promoted a variety of reforms, including government structural reform. The Chinese economy used to be led by the government; however, individual companies are required to make more efforts for more effective social services.

On May 27, 2016, the Corporate Service Platform was established for the first time in northeast China with the aim of providing business intelligence services to companies. This platform consists of a federation of corporations, a service company and a think tank. It is expected that many local business leaders will get together and join the federation of corporations; namely, over 5,000 corporations from a variety of business fields, chambers of commerce, and corporation groups. I hope that partnerships will be developed between corporations through the activities of the federation. The service company is an organization created by integrating useful resources to support the platform from financing, manpower, innovation and other aspects. A wide range of services are provided to member corporations, such as the

provision of goods, technologies and consulting services, and even services related to government procurement. Finally, the think tank consists of Shenyang city's Communist Party members and persons related to the city government and the media. Its task is to contribute further development of Shenyang.

**Moderator, Mr. Katsuhiro AKIMOTO (Sapporo):** I was interested in Shenyang's initiative for industrial development. We would like to hear next from the city of Harbin, the capital of Heilongjiang province in China, about its economic development.

### **Developing a competitive industrial structure and reforming traditional industries – Harbin**

**Mr. Yuping CUI (Harbin):** China is now promoting the One Belt, One Road Initiative. Similarly, the Heilongjiang province is working on the project of the Silk Road Economic Belt. Being a key city in the country, Harbin aims to enhance its comprehensive competitiveness in the following ways.

First, special economic zones approved by the national government receive a variety of preferential treatment. Harbin is one of the special economic zones and focuses on Russia-China cooperation. Second is to establish a competitive industrial structure and simultaneously reform traditional industries to facilitate industry-wide innovation and improvement. Third is to build a dynamic, innovation-oriented urban area. Local governments also stimulate innovation, and the outcomes of scientific and technological development will be spread to the manufacturing industry. Fourth is to open Harbin up to the world in an omnidirectional fashion and establish new forms of cooperation and collaboration. For example, a railway system connecting Harbin with Hamburg, Germany through Russia has been opened and is operated once a week. Fifth is to further promote the reformation in priority areas. As mentioned in the presentation just given by the city of Shenyang, a shift in governmental functions is being accelerated. Against this background, we aim to solve a variety of difficult problems.

In Harbin, there are two big annual events. In June, the Harbin International Economic and Trade Fair is held, which attracts approximately 120,000 people each year. In January, the Harbin International Ice and Snow Sculpture Festival is held, during which domestic and international business negotiations take place.

**Moderator, Mr. Katsuhiro AKIMOTO (Sapporo):** It was fascinating to learn about Harbin's initiative to use science and technology in the advancement of industry. Novosibirsk is a large academic city and is home to Technopark. We would like to ask Novosibirsk to tell us about its efforts in this regard.

### **Establishment of Technopark and a scheme of corporate support – Novosibirsk**

**Mr. Alexey KONDRATYEV (Novosibirsk):** The Silk Road Economic Belt, which was just mentioned by Harbin in its presentation, is a significant corridor that leads to Moscow through Novosibirsk and ensures economic stability. Novosibirsk is the hub for the economic activities of a broad

region that covers Novosibirsk and its neighboring areas. In Novosibirsk, there is the Research Center, where the Siberian Division of the Russian Academy of Sciences is located. In addition to having the munition and the IT industries, which contribute to the city's stable development, and being a center for regional business and financial activities, Novosibirsk is blessed with abundant mineral resources. Thus, the city is working to develop a wide range of industry instead of depending solely on its local resources.

Corporate activities also play a significant role. There are two business incubators within the city to help entrepreneurs start up manufacturing facilities and offices. Novosibirsk is working hard to hold events to support entrepreneurs and provide them with business meetings with successful management executives from large corporations.

In terms of information support, Novosibirsk began to operate an Internet portal, "Small and Medium Corporation Activities in Novosibirsk," to disseminate information on and promote local products. The city also promotes the development of an industrial complex, an industrial cluster, and a technology park, in addition to the expansion of industrial premises, in preparation to attracting factories from the high-tech and other industries. In 2015, Novosibirsk concluded an agreement with the Siberian Division of the Russian Academy of Sciences. This agreement is to develop the organizational, economic and technological cooperation necessary for the establishment of Technopark in Novosibirsk. In addition, as the industrial area is gradually becoming overcrowded, the construction of a new industrial complex taking advantage of land unused by corporations is under consideration. In June 2016, the city embarked on a project for the development of a medical industrial complex. This is an example of an effective public-private partnership. It was decided to construct a Russia-China scientific center consisting mainly of a nuclear physics institute in Akademgorodok, an academic town in Novosibirsk. The challenges that Novosibirsk has to address now are to introduce new technologies into the local economy and facilitate the creation of partnerships in various sectors of the economy and cooperation among companies.

The policy of open administration is the foundation of the Novosibirsk city government. The city develops a variety of mechanisms and measures to support the involvement of the business community, citizens' groups and residents in the city government administration. Now, the city's attention is focused especially on tourism. We will work to create





comfortable environments for visitors to Novosibirsk, improve access to local tourist attractions, and enhance cultural and sports facilities. Being under harsh climatic conditions, Novosibirsk aims to increase the number of year-round, all-weather facilities. We will work together to promote these measures for stable urban development.

**Moderator, Mr. Katsuhiko AKIMOTO (Sapporo):** Finally, we would like ask the city of Ulaanbaatar to give a presentation.

### **An initiative for the promotion of urban tourism and MICE – Ulaanbaatar**

**Mr. Bayarbaatar SANDAGDORJ (Ulaanbaatar):** Ulaanbaatar is the capital city of Mongolia, and 90% of tourists to Mongolia visit Ulaanbaatar. However, tourists only stay in Ulaanbaatar for approximately one and a half days. Currently, the city of Ulaanbaatar is striving to promote urban tourism. Since 2013, various programs to transform Ulaanbaatar into a hospitable destination have been implemented with the goal of attracting 2 million foreign tourists annually to Ulaanbaatar by 2020.

As the tourist season is limited to the summer months in Mongolia, the city needs to attract more tourists in other seasons than summer in order to increase the total number of tourists. Accordingly, the city is making efforts to host more international events and conferences. As an example of the results of the city's efforts, the Asia-Europe Meeting (ASEM) was held in Ulaanbaatar in July this year. The city has set a goal of hosting many more large-scale international conferences like the ASEM.

**Moderator, Mr. Katsuhiko AKIMOTO (Sapporo):** We only had a limited time frame, but it was an informative experience to learn what winter cities have been doing to encourage economic development while enhancing their attractive features. Both yesterday and today, we covered topics such as urban development and environmental initiatives. The WWCAM is an international network of winter cities, and we hope that winter cities will take this opportunity to extend this network by visiting cities of interests and exchanging information.

# Arctic Design Subcommittee

Tarija OUTILA  
City Architect, Rovaniemi

The Arctic Design Subcommittee was established in February 2015. The subcommittee conducted a questionnaire survey in advance of the conference to collect examples of member cities' approaches to problem-solving through arctic design. The subcommittee secretariat Ms. Tarija Outila, a city architect from Rovaniemi, reported the results of the questionnaire survey.



The Arctic Design Subcommittee was established to solve problems and create new opportunities through design. Its approach is to define and quantify problems, plan and test solutions, and then apply them in the future. The subcommittee participant cities are Changchun, Edmonton, Harbin, Hwacheon-gun, Novosibirsk, Rovaniemi, and Sapporo. All the member cities completed the questionnaire, which solicited responses on four themes.

## Survey on four themes

### Theme I: Urban design

Changchun has invested RMB 2 billion into the construction and maintenance of the city's parks and gardens since 2014. At present, Changchun has 108 parks and gardens open to the public, and they have become popular leisure areas for citizens. The investment has helped the city improve its image.

The Victoria Park Pavilion in Edmonton serves as a space for outdoor activities and is used by community and sport groups. Edmonton's Winter Design Guidelines, which have not yet been officially approved, are applied to public facilities

such as streets, parks and other infrastructure to block wind and enliven the cityscape by using color and design.

Seondeung Street in Hwacheon-gun is illuminated with LED lights during the Hwacheon Sancheoneo Ice Festival.

Bugrinsky Bridge (in Novosibirsk) has a unique design with an arch span of 380 meters and resembles a gigantic red bow. In 2011, a kindergarten in Novosibirsk won the Best Russian Kindergarten Prize at the FIABCI Global Competition. In 2015, the Novosibirsk Astrophysical Center was recognized as the Best Implemented Construction Project for a Social Asset in Russia at the First City Planning Contest organized by the Russian Ministry of Construction. The Zarya Indoor Football Arena is Siberia's largest indoor football complex. For outdoors games in summer, the complex has five artificial-turf football pitches.

Moerenuma Park in Sapporo was designed based on the Circular Greenbelt Concept, which aims to encompass Sapporo's urban district with parks and green zones. During the winter, visitors can enjoy cross country skiing, sledding or skiing down Mt. Moere, making the park a place to take part in winter sports.

A multipurpose sports field in Rovaniemi, which is used



as an ice rink, skiing tracks and a festival venue in the winter, and a football field and festival venue in the summer, was voted the Architizer A+ Popular Choice Winner in 2016. Lappset is a corporation based in Rovaniemi. It produces playground facilities and play equipment designed with fun in mind using playful colors. The city of Rovaniemi has adopted the principle of urban zoning in local master planning. The aim is to make the city more ecological and viable for the increasing number of residents in the downtown area. A research project is also being conducted to help evaluate the planning process.

#### Theme II: Design and expertise in winter conditions

Edmonton opened a new winter recreation destination last year - the Freezeway, a 400-m skating trail nestled among trees in Victoria Park. Connected to the skating oval, the trail was illuminated by light installations designed by an artist, creating a magical atmosphere.

Hwacheon is expected to reduce air pollution and energy consumption during the winter season by using sustainable energy systems rather than fossil fuels.

Rovaniemi has employed road scanners equipped with hardware and software to obtain complete images of road infrastructure. Arctic Driving Center Ltd. provides technical assistance for local car and tire makers. The Arctic Center, as a national and international hub of information, conducts research mainly around three themes. It is a northern institute for environmental and minority laws and is also a sustainable development research group.

#### Theme III: Design in everyday life and tourism

Changchun is planning to encourage local citizens to participate in sports and exercise. Changchun hosts the Vasaloppet International Cross Country Skiing Festival. The festival is designed by the local government so that the festival will have an impact on everyday life and tourism in this winter city.

The Edmonton Ice Castle is made entirely of ice and snow. Visitors can walk through and explore the castle and its magical winter atmosphere.

In Hwacheon, a cooperative system to sell local products during the festivals was established.

In Novosibirsk, the Flamingo Sports Complex hosts various sporting events for city residents, and Warm Winter Tours are conducted.

Each year in February, Arctic Design Week is held in Rovaniemi, bringing together international design experts, Nordic designers, firms and students, as well as design enthusiasts. You can stay overnight at the Arctic Snow Hotel, which is made entirely of snow and ice.

#### Theme IV: Problems to be solved

Each city gave a few examples of their challenges and the problems that affect urban design.

Changchun's problems and challenges include a growing population, the proper treatment of waste, the smart use of energy and resources, and traffic congestion.

Edmonton's challenges are deepening the robust knowledge of what it means to design for a winter context and applying this knowledge properly. The city focuses on enhancing the vibrancy of its streets in winter.

As a measure to relieve congestion and smoothly guide visitors to the downtown area during the festival, Hwacheon proposed the creation of a heart-shaped tunnel between the festival area and the downtown area.

Sapporo has two challenges: Boosting urban appeal and vibrancy, and a need for appropriate maintenance and conservation to meet the needs of shifting demographics and age distributions.

#### The need to foster a better understanding of design

Each city was asked to give a few examples of its challenges and the problems related to design and expertise in winter conditions that restrict the design of new innovations. For Changchun, the use of snow melting agents, air pollution in winter, and the cold climate that kills most of the green plants are examples of these problems and challenges. For Edmonton, the maintenance of bicycle lanes in winter is a challenge. The city has had a few pilot projects for clearing







snow from on-road bicycle lanes. There are now more winter cyclists as a result, but there is a long way to go before winter cycling becomes mainstream. Hwacheon's solutions are to subsidize investment in solar photovoltaic systems for local residents through a project to support solar photovoltaic system installation and to create a new design for solar batteries that suits the concept of the festival without spoiling the city's scenic beauty. Sapporo must overcome the issue of high energy consumption during winter by promoting the increased use of next-generation energy systems.

The next question was about the challenges and problems that restrict the design of new innovations for everyday life and tourism in each city. Changchun hopes to attract more participants from overseas, especially from Scandinavia, to the Vasaloppet. Edmonton pointed out that aversion to risk would take longer or cost more. One of Hwacheon's problems is the high cost of wrapping design. A solution proposed by Hwacheon is an independent design competition to be held with the purpose of cutting down on wrapping design expenses. In Hwacheon, the introduction of a consumer reporting system to prevent consumer-related problems is a proposed solution to malicious wholesale dealers who distribute low-quality agricultural products. Sapporo answered

that the city would make efforts to create more comfortable environments for foreign tourists by enhancing multi-lingual services and expanding the Wi-Fi coverage area in order to attract more tourists from outside Japan during the tourism off-season from November to April.

In the next question, each city was asked to select the most prominent and least prominent of the four themes. This was a very difficult question, so I think we have to deepen our understanding of design before discussing it. First, we have to identify the challenges and problems that affect urban design in WWCAM cities. Second, we have to discuss the challenges and problems related to winter conditions that restrict the design of new innovations in WWCAM cities. I would like to point out that we have to further discuss urban design, product design and service design. We need to expand our understanding of these concepts. Now, I would like to invite your comments on these matters. Thank you.



**Moderator, Mr. Kenji SHITOMI (Director General of Mayor's Office, Sapporo):** Thank you for sharing so many concrete and interesting examples of arctic design from



member cities. I would like to invite questions now. Yes, the mayor of Rovaniemi, please go ahead.

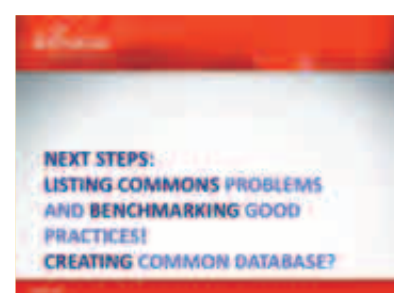
**Mr. Esko LOTVONEN (Rovaniemi):** It seems like starting this subcommittee is quite a good idea. We have common winter conditions and share various problems, so we should get together to discuss practical solutions. By listening to the opinions of other cities, we can improve urban design and also contribute to the improvement of business life and everyday life. We need to continuously discuss urban design, clarify more concepts of design and divide them into several categories. Among the many issues presented by each city, Edmonton mentioned safety issues. When designing, we have to take safety into consideration. This may be one dimension that we should further discuss.

**Moderator, Mr. Kenji SHITOMI (Director General of Mayor's Office, Sapporo):** Thank you for your thoughtful opinions about the Arctic Design Subcommittee's future discussion. The City of Edmonton, do you have any comments on safety issues?

**Ms. Susan HOLDSWORTH (Edmonton):** I find it fascinating to learn about the different approaches that all our cities take. What we focus on is quite different. Our focus is all about making outdoor public spaces more comfortable. I am very curious to learn about how you deal with microclimates and how to reduce downdrafts and prevailing winds especially when designing high-rise buildings. We have a new fascination with high-rises. We are very interested in learning more about them.

**Moderator, Mr. Kenji SHITOMI (Director General of Mayor's Office, Sapporo):** We were given suggestions about safety issues and comfort that should be taken into consideration in design. The problem of winds from high-rise buildings is difficult to discuss here because it requires expert knowledge. I would like to ask for permission from member cities to proceed with this matter with a subcommittee discussion between Rovaniemi, the secretariat of the subcommittee, and Sapporo, the secretariat of the WWCAM.

If you all agree, Rovaniemi and Sapporo will restart a discussion on this matter at a working-level talk next year. Thank you.



# Report on the Ulaanbaatar Fire Fighting Technologies Project

Bayarbaatar SANDAGDORJ

Director of the Strategy Policy & Planning Department,

Office of the Capital City Governor, Ulaanbaatar

**The city of Ulaanbaatar hosted the WWCAM Mayors Conference in 2012, which led to the start of a three-year Firefighting Technical Support Project for Ulaanbaatar provided as a JICA project by Sapporo in 2013. As an example of the effectiveness of the international network of the WWCAM, Ulaanbaatar reported on the project.**



This presentation covers three topics: a brief introduction of Ulaanbaatar, international exchanges between Ulaanbaatar and Sapporo, and the Ulaanbaatar Fire Fighting Technologies Project.

Ulaanbaatar is a winter city with a low temperature as low as minus 49 degrees Celsius; however, temperatures may reach up to 38 degrees Celsius in summer. The annual average temperature is one degree Celsius in Ulaanbaatar. Ulaanbaatar is probably the coldest capital city in the world. Ulaanbaatar is characterized by fine weather, with up to 246 sunny days a year. The annual precipitation is approximately 300 mm.

Mongolia's population and economy are concentrated in Ulaanbaatar. Mongolia's population is approximately 3 million people, of which 1.3 million people live in Ulaanbaatar, accounting for 44% of the country's population. The population has increased rapidly since the 1990s, and the current population is approximately 2.3 times that of 1995. The city's workforce accounts for 65% of the total population, and people between 0 and 14 years of age accounts for 26% of the total population. Thus, Ulaanbaatar can be regarded as a young and lively city.

As the economic and political center of Mongolia, Ulaanbaatar generates 62% of the country's GDP. Ulaanbaatar also serves as the financial capital of the country, and 80% of bank loans and savings are concentrated in Ulaanbaatar. Additionally, 95% of Mongolia's universities and colleges are located in Ulaanbaatar, which is one of the reasons for the large youth population in the city.

Ulaanbaatar can be divided into areas with developed infrastructure and areas with poor infrastructure. Infrastructure

here refers to water supply, sewage systems, and heating systems. Approximately 40% of the population lives in apartments and other types of housing with these kinds of developed infrastructure, and the remaining 60% lives without such infrastructure. In areas with developed infrastructure, each resident can use more than 150 liters of water daily, whereas in areas with poor infrastructure, each resident consumes approximately only 10 liters of water daily. In terms of the amount of waste, areas with poor infrastructure generate more waste.

Ulaanbaatar currently has sister city agreements with 13 cities and friendship city agreements with 20 cities around the world. In addition, the city has close relationships with 13 overseas cities.

With cooperation from Sapporo, the city of Ulaanbaatar has been providing training for city workers since 2014. This training is being implemented through direct exchange between the two cities, after they built a relationship through the World Winter Cities Association for Mayors. At the government level, Ulaanbaatar formulated a master plan in 2013, and requested the Japanese government, via JICA, to develop an action plan for implementing the master plan. In response to Ulaanbaatar's request for the dispatch of expert city workers from Japan, city workers from the Sapporo City Government were sent to Ulaanbaatar as consultants for the action plan.

The Japanese government has a system of grassroots technical cooperation. In Japan, municipalities, universities and NGOs utilize the system to implement human resource development and technological transfer programs at





universities. The Ulaanbaatar Fire Fighting Technologies Project was also implemented through this system over a period of three years from 2013 to 2016 with cooperation from Sapporo. Using the same system, Ulaanbaatar launched a project to improve water and sewerage systems in 2016 through a partnership between the Water and Wastewater Authority of Ulaanbaatar and the Sapporo City Waterworks Agency.

As the background to the start of the Ulaanbaatar Fire Fighting Technologies Project, three conferences were held in 2012: the WWCAM Mayors Conference in Ulaanbaatar, the International Fire Chiefs' Association of Asia General Conference in Sapporo, and the International Fire Disaster Forum of Asia in Ulaanbaatar. At these three conferences, Ulaanbaatar City Emergency Agency staff and Sapporo City Fire Bureau workers talked about problems in Mongolia and the firefighting techniques used in Sapporo, and they reached the conclusion that Sapporo could help to improve the skills of the workers of the Ulaanbaatar City Emergency Agency. They then considered an appropriate system to implement this idea and decided to employ a grassroots technical cooperation system.

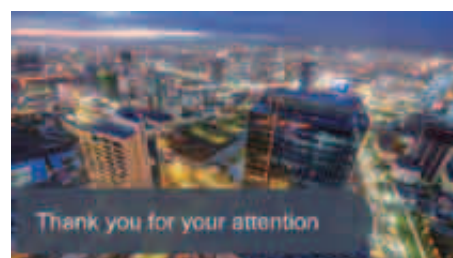
Over the last 20 years, the population of Ulaanbaatar has grown drastically. Due to rapid urbanization, the construction of high-rise buildings has increased, resulting in a rise in the number of fires. Given this, Ulaanbaatar is required to acquire the appropriate skills and techniques to cope with large-scale disasters. Firefighting equipment and fire engines that had been used in Japan were given to Mongolia through three JICA technical support programs from 2013. In addition, Sapporo had previously taken part in joint firefighting training with Mongolian emergency services and has high-rise firefighting techniques as well as cold region firefighting techniques. For these reasons, the Ulaanbaatar Fire Fighting Technologies Project was launched in 2013.

The Ulaanbaatar Fire Fighting Technologies Project has two goals. One is to have trainees acquire firefighting techniques so that they become able to properly handle firefighting equipment and fire engines, and the other is to train instructors who can teach firefighting techniques. The project was carried out for three years from August 2013 to March 2016 and was expected to achieve results in four areas. The first area is high-rise firefighting and rescue operations. The second is rescue support in case of large-scale disasters. The third is the training of educational staff. The fourth is firefighting operations in cold, snowy areas.

One of the purposes of the project is human power development. Specialists from the Sapporo City Fire Bureau

provided four training sessions to emergency agency workers in Mongolia. A total of 30 workers from the Emergency Agency in Mongolia visited Sapporo twice for practical training.

The project was successful in three aspects. First, the time required for firefighters to reach the emergency site was reduced. The introduction of equipment through JICA projects and joint projects with Sapporo helped reduce the time for firefighters to reach the emergency site by two to three minutes. You may consider that two to three minutes is a very short period of time; however, a *ger* (a tent in which Mongolian nomads live) may burn down in only four to five minutes. In this context, a reduction of two to three minutes is very significant. Second, firefighting techniques and capacity were improved. In terms of fire extinguishment, 71.3% of the fires that occurred in 2015 were brought under control within 30 minutes. Third, the current staff's capacity to train next-generation staff was improved. These three positive results were achieved through the three-year project. I hope that exchanges between Ulaanbaatar and Sapporo will continue for years to come. I would like to take this opportunity to express my gratitude to Sapporo for its support and international exchange.



# United Nations Development Programme

Tetsuo KONDO

Director

United Nations Development Programme (UNDP) Representation Office in Tokyo

As an NGO associated with the United Nations Department of Public Information and with Roaster Consultative Status to the Economic and Social Council of the United Nations, the World Winter Cities Association for Mayors is making a united effort to address sustainable development by setting action goals for environmental conservation and taking other community development initiatives. In this context, Mr. Tetsuo Kondo (Director of the United Nations Development Programme Representation Office in Tokyo), who is working on the promotion of the United Nations sustainable development goals, talked about the United Nations Development Programme.



## Adoption of sustainable development goals in the year when the United Nations marked its 70<sup>th</sup> anniversary

On behalf of the United Nations, I would like to express my respect for the efforts made by the World Winter Cities Association for Mayors. After taking up my position as Director of the UNDP Representation Office in Tokyo, I actively participated in lectures and other events in local cities around Japan. This is my second trip to Sapporo after having first visited last year. I have come to a sense that local governments have skills, manpower and many other resources that are required internationally. During this trip to Sapporo, I had a chance to visit the city of Takikawa, where I gave a lecture and observed several places. Takikawa has a long history of agricultural technical training and has accepted trainees from Africa and Asia. Its network is growing very extensively. While in Takikawa yesterday, I saw more than ten trainees from Africa along with senior government officials.

The United Nations came into being after the Second World War with one mission: the maintenance of international peace and security. Last year marked the 70<sup>th</sup> anniversary of the United Nations. On United Nations Day last year—October 24, 2015—UN Headquarters in New York and other iconic monuments, buildings and landmarks in 150 countries across the globe were lit up in blue as part of a special “Turn the World UN Blue” campaign. In Japan, the TV Tower and Clock Tower in Sapporo as well as Skytree in Tokyo, Marine Tower in Yokoyama, Nijo Castle in Kyoto and other landmarks participated in the campaign, and they were lit up in blue for peace, human rights and development.

Last year, when the UN marked its 70<sup>th</sup> anniversary, it adopted the 17 Sustainable Development Goals and 169 accompanying targets. These goals and targets are aimed to be achieved between 2016 and 2030. Sustainable Development Goals (SDGs) are new global goals, including “End poverty,” “End hunger,” “Ensure access to water and sanitation for all,” “Take urgent action to combat climate change and its impacts,” “Conserve and sustainably use the oceans, seas and marine resources,” and “Ensure access to affordable, reliable, sustainable and modern energy for all,” which require both developing and developed countries to take their own action for a better life for all as well as for world peace and stability. The adoption of the SDGs was triggered by increased natural disasters around the world due to climate change, ecosystem destruction, the threat of infectious diseases crossing borders, widening gaps between rich and poor, violent extremism rooted in poverty, international terrorism, refugees, and many other new problems we are facing. These problems are tangled up together, making it difficult to find solutions. In order to address these problems through global cooperation, the SDGs were adopted. These goals are based on an idea of “Leave no one behind.”

In a society where peace, development and human rights are lost due to war or disaster, women and children, in particular, are forced to live miserable lives. Human dignity is likely to be violated when people live in fear and poverty. The philosophy underlying the SDGs is peace as a prerequisite for sustainable development. No matter how much investment you put in to the development of resources, if a war or conflict arises, society becomes unstable and the effort you have put in to development will be undermined. It also takes time for society to recover from damage. In addition, earthquakes, typhoons and other natural disasters may also reverse development.

With the aim of achieving the SDGs, or Global Goals, we will promote human-centered development focusing on three areas: the “environments” surrounding us, the “society” we live in, and the “economy” as a base for living. It is important for us to address problems through global cooperation and achieve results that can be expressed numerically. This is because the United Nations and governments are responsible for achieving the goals. In addition, these results also closely affect local residents and local governments that provide administrative services directly connected to the living of local residents.



## Considering global issues as our own challenges

I would like to give you a brief explanation of the relationship between local governments and the development of developing countries. The United Nations Development Programme (UNDP), which I work for, is an organization founded at the UN General Meeting in 1966 to help countries develop strategies, and local governments in the developing nations find solutions to their challenges. The UNDP has offices in 129 countries and works in some 170 countries across the world. It is involved in grassroots activities, such as the improvement of educational services and the implementation of HIV measures, and is also involved in promoting sound national- and local-level governance such as the promotion of democratic governance, the support of the judicial system, and the strengthening of the skills and abilities of national and local government staff.

Before becoming Director of the UNDP Representation Office in Tokyo, I worked as UNDP Deputy Resident Representative in Kosovo, the former Yugoslavia, and UNDP Country Director in Chad, Africa. In these countries, the policy of promoting decentralization was in progress for country development, and a variety of projects were implemented to support the administration of local governments, such as the democratization of local assemblies to fully reflect the opinions of local residents, the provision of family/resident/land registration and other city services, waste treatment, the development of public transportation networks, and the maintenance of security. Local administration plays an important role in solving regional problems, which vary from region to region, as they are influenced by local industries, population size and climate conditions. South-south cooperation is the concept of mutual cooperation between developing countries, in which the development experience of developing countries is shared with other developing countries. It is expected that such cooperation between local governments will spread, for example, between Ulaanbaatar and Sapporo and between the Arctic cities.

Similar to the case of firefighting technical support introduced in an earlier presentation, the UNDP helped build international local community cooperation across Europe by implementing an organized project to seek support for the recovery of Kosovo, where many people were killed in the Kosovo Conflict in 1999. This was part of the UNDP Global ART Initiative started in 2005. The UNDP promoted international cooperation by providing the know-how of local governments overseas and dispatching local government staff as instructors. For example, in Dragash, a mountainous region in the southern part of Kosovo, the ecosystem in a national park needed to be protected while securing dairy farming and other livelihood activities of local people. Local communities in Switzerland and Finland, which have similar geographical conditions to Kosovo, shared their knowledge and technical expertise. Earlier today, another Finnish city, Rovaniemi shared its experiences in this conference. For the development of a public bus transportation network connecting Prizren and Gjakove in the southern part of Kosovo, local cities from Germany, the Netherlands and other countries shared their experiences on how to control bus operations and set up bus stops, in addition to sharing opinions from the standpoint of fair transportation and the improvement of urban functions.

Some cities in Northern Ireland, Cyprus and other countries suffered from ethnic conflicts and disputes. In 2010, the UNDP held a forum for ethnic reconciliation in Mitrovica,

a Kosovar city that suffered during the Kosovo Conflict, with cooperation from local governments around the world.



Knowledge, manpower and other resources possessed by local governments are needed across the world, and they have been exchanged, producing successful results. It is not the United Nations and governments alone but all of us on the planet that should take action to achieve the Sustainable Development Goals (SDGs). Global issues such as measures against climate change, environmental protection and peacebuilding will not be solved unless each one of us regards these problems as our own. I hope that all the mayors and other staff who have gathered at the 17<sup>th</sup> WWCAM Mayors Conference today will consider what they can do to achieve the 17 Sustainable Development Goals and will take action through daily administrative tasks and operations.

Later today, Ms. Misako Konno, a Japanese actress and UNDP Goodwill Ambassador, will attend the reception of the Sapporo Conference. Since her appointment as a Goodwill Ambassador in 1998, she has visited nine countries and regions in Africa and Asia and has reported on many UNDP activities. She will give a presentation for the Winter Cities Forum, a citizens' forum of the WWCAM, held in Sapporo Kyosai Hall at 2 p.m. tomorrow, on July 30. I hope that many people will turn up for the forum.

Goodwill Ambassador Ms. Misako Konno will visit Kenya for one week from August 3 prior to the TICAD VI, which will be held for two days on August 27 and 28 in Kenya, Africa. I will go with her. I hope that I will be able to make a presentation about the TICAD in Kenya when I visit Sapporo next time. I am honored to have been invited to the WWCAM Mayors Conference in Sapporo. Thank you.



# Urban Development Recommendations from Sapporo Municipal High School Students

## Three Strengths of Theater for City Development

Sapporo Kaisei High School was designated as a Super Global High School by the Japanese Ministry of Education, Culture, Sports, Science and Technology with the aim of fostering global leaders who can play an active role in the international community. The high school is involved in research activities from local and global viewpoints using the three approaches of snow, the environment and reading, which constitute the core of Sapporo's education. This city development proposal is a compilation of their research activities.

### Theater that connects with citizens

In this presentation, I will introduce our ideas for city development based on our three-year Super Global High School (SGH) activities.

The theme we have chosen for Sapporo city development is theater. We participated in various training courses. Among them, training sessions at Hakodate Tsutaya Book Store and Uematsu Electric Co., Ltd., as well as sessions in Niseko, Ho Chi Minh (Vietnam), and Vancouver (Canada) are the five most impressive training experiences. In each training course, we learned important concepts for city development, such as being environmentally friendly, using popular winter sports venues to take advantage of the climate, and the active involvement of individual citizens. Each training course has become an unforgettable memory. Through these experiences, we came up with an image of the ideal city that Sapporo should seek to become. That is, a "city that is loved by the world."

So, what should Sapporo do in order to become this ideal city? We have learned from many training courses that it is important for individuals to play an active role in city development. In this context, we considered that two elements would be the key concepts for Sapporo city development. One is preference: Each citizen should be involved in what they like to do. And the other is benefit: Each citizen should do something for the sake of other people. When you do something you like and you know that it benefits other people, your life becomes more meaningful, you become proud of yourself, and Sapporo will become more attractive. One thing that satisfies these two elements is theater.

Theater has three strengths. First, theater is a communicative art, and second, theater is a living art. On September 11, 2009, former Sapporo Mayor Mr. Fumio Ueda stated in his keynote speech at the Creative Cities Symposium that the role of art and culture is to allow people to share their excitement, which in turn motivates and facilitates communication. This is what theater is all about. Good theater brings the audience joy and deep emotions and creates opportunities to understand each other's differences in terms of culture, value, and religion in the globalized community. Theater is a form of communicative art between live performers and audience that employs the five senses and creativity without using a recording media. According to a survey of Canadian college students about theater, it is common for students in Canada to learn drama at school, and drama teachers are employed at some high schools. Among developed countries, it is only in Japan where national universities do not have drama departments. Self-expression and communication skills, with which many Japanese have difficulty, can be developed through drama education at school. Unlike recorded art forms such as movies and paintings that allow us to view the same performance anytime, theater is a live art that shows different performances each time. These two strengths are special features of theater.

Is it only actors that create a play? Of course not. The stage crew, playwrights, directors and many other people are involved in a play. However, it is not true that a play is created only by professionals specializing in theater. Musicians who compose music for a play, people who market the theater industry, restaurants and transportation services in the vicinity of theaters, and many other jobs and services are created with the development of the theater industry. People with a variety of talents and skills are attracted to a community where professionals in the theater industry can create plays. Thus, city development will be facilitated. And another essential player in the theater industry are citizens as the audience. Theater is an art created by citizens. This is the third strength of theater.

### Effectiveness of theater tested by two validations

Is it feasible for Sapporo to use theater in city development? I would confidently say yes. In Sapporo, theater is growing rapidly and expanding globally. There are interactions between Sapporo-based theatrical companies that also perform overseas and foreign theatrical companies that perform in Sapporo. Thus, a global communication environment has been created in Sapporo through theatrical art. The Sapporo Engeki Season, a biannual event started in 2012, has been very successful. During the event, high-quality plays are performed over a period of as long as one month in Sapporo. The event attracts attention from other regions and is visited by many inspection groups every year.

Given these conditions, we formed the hypothesis that "Theater is effective in Sapporo's city development."

To verify this hypothesis, we conducted two tests. In one test, junior high school and high school students performed a play about a local issue. From Sapporo Kaisei Secondary School, 10 volunteer students created a play around the theme of organized fraud, which has become a social problem across Japan. For the play, a professional director was invited to the school, and the play was performed in front of local elderly people.

The participating students, who had little theatrical experience, discovered the joy, difficulty and complexity of expression.

This activity was covered by the local media – the Hokkaido Shimbun Press and HTB (Hokkaido Television Broadcasting).

\*(A news video clip was played here.)

The local elderly people who actually watched the play commented: "Theater leaves a strong impression and facilitates interaction between different age groups." The play achieved a greater success than expected. This proved that theater has the ability to communicate with an audience and present problems.

As the second test, we examined the magnitude of the

effect of theater on city development using a questionnaire survey with cooperation from people involved in the operation of a citizens' theater that hosts a creative musical known as "Onkochishin Ongaku Geki" every year in Kotoni. Marking the 10th anniversary this year, over 40 people were involved in the musical. Does this approach of staging performance about local history and features of Kotoni with the involvement of local residents lead to regional revitalization?

Many respondents to the questionnaire survey, both participants and audience members, answered, "The citizens' theater provided an opportunity to reappraise our community." It appeared that the respondents were satisfied with the musical. Other opinions included, "We had a chance to interact with people of all ages." Accordingly, we can conclude that this approach greatly contributes to Kotoni's community development, because this approach provides local residents with an opportunity to do what they like and simultaneously help Kotoni.

To sum it up, theater has three strengths: it is a communicative art, a living art and an art created by citizens. Sapporo is recognized by other regions for its globalized theater industry and the theatrical event Sapporo Engeki Season. In Sapporo, many citizens live a purposeful life and are provided chances to discover the attractive features and problems of Sapporo through theater. Thus, theater is effective in city development. Furthermore, as demonstrated in the two experiments, theater helps improve our communication skills and encourages young people to get involved in and play an active role in city development. Therefore, we strongly recommend that Sapporo should use theater in its city development.

This is the end of our presentation. Thank you.



**Moderator, Mr. Katsuhiko AKIMOTO (Sapporo):** That was a presentation by students from Sapporo Kaisei High School. Thank you very much. They just recommended theater as a tool for communication and public involvement in city development and social contribution. Citizens involved in theater are provided with an opportunity to think about local issues and raise questions. They suggested that theater is effective in city development. Japanese people especially have difficulty with expressing themselves. This may be part of the background to the proposal. I think some of you may share the same problem. Do you have any questions or comments on their proposal?

**Ms. Susan HOLDSWORTH (Edmonton):** I would like to make a comment. I appreciate your presentation. I have shared quite a bit of information over the last few days including that related to Edmonton, and I believe in the power of story. Information is far more impactful if it has an emotional impact, which happens with stories and theater. That's why I appreciate the presentation. Thank you.

**Mr. Esko LOTVONEN (Rovaniemi):** This was a remarkable presentation. It is always a good thing that youngsters also participate actively in the development of our society. They have different views, priorities and ideas. Of course, drama or theater is one good method of sharing our ideas and activities with different stakeholders. Thank you for this wonderful presentation. We all should learn from these

kinds of activities for our own cities. Thank you.

**Mr. Moon Soon CHOI (Hwacheon):** I would like to ask the Mayor of Sapporo. What do you think about the presentation by the high school students in Sapporo? It is students who will play a leading role in the future. How do you feel about their opinions?

**Moderator, Mr. Katsuhiko AKIMOTO (Sapporo):** I expect a lot from them. The students explored how to communicate globally through conversations with people from many different countries. And they proposed theater as a tool for communication with citizens to address local issues. I appreciate this proposal, which has been developed based on various studies that they conducted with enthusiasm. I hope that they will continue to address local issues from their own perspective, take action, and discuss with many other people without being complacent when working on a wide range of challenges. The members of the WWCAM will certainly take this proposal to heart and use this idea in some way in their city development. Thank you very much.

# General Meeting & Closing Ceremony



Mr. Katsuhiro Akimoto, the Mayor of Sapporo, gave a summary of the three-day conference, after which the Sapporo Declaration and the 17th World Winter Cities Conference for Mayors Resolutions, which summarize the outcomes of the discussions during the conference, were adopted.

After a member of the Secretariat explained the draft of the Sapporo Declaration, Mayor Akimoto read out the draft.

## Sapporo Declaration

Possessing a thirty-four year history, the World Winter Cities Association began here in Sapporo with the Northern Intercity Conference of Mayors in 1982. Facing the many challenges presented to cities in cold and snowy regions, we members of this Association have striven to advance winter city development through the sharing of wisdom and experience among our many fellows, coming to solidify our bond.

While distinguished for the signature snow and cold associated with their namesake, winter cities additionally possess charms lesser witnessed by other regions, such as being favored by four distinct seasons and contrastively brilliant summers. Leveraging these features, it is our mission to create cities in which our citizens take joy in living.

Making full use of our World Winter Cities Association for Mayors network, we continue taking our winter city development to the next level by overcoming nationality and status to understand our cultural differences, connect and cooperate in the spirit of friendly competition.

Not limited to the resolution of issues faced narrowly within our own cities, we hereby affirm that our activities within this Association may also contribute to the resolution of environmental issues and other challenges global in nature – activities that are indispensable for shaping the future of this planet.

Moreover, it is our hope that this network of winter cities, which has built up borderless relations of trust and cooperation over the course of its more than thirty years of continued activity, may assist the resolution of multifarious international conflicts involving complex grapples of differing cultures and interests.

Given the above, we winter cities hereby declare our commitment to further deepen our allied efforts and aspire for our organization to be a leader to the world's cold and snowy cities, taking together another stride forward into the future here from the grounds of the very birthplace of the World Winter Cities Association for Mayors.

Next, the resolutions of the Mayors Conference were summarized and read out by Mayor Akimoto.

## The 17th World Winter Cities Conference for Mayors Resolutions

1. In line with the Sapporo Declaration approved at this conference, each city shall make their utmost efforts toward the following items as well as decide on realistic numeric goals, and report on these efforts at the next Mayors Conference.
  - 1) Efforts to convert to renewable energy sources and reduce energy consumption.
  - 2) Efforts relating to environmental preservation, such as tackling air pollution.
2. As a means of the new Revitalization Project approved at this Sapporo conference, we aim to increase WWCAM membership and further expand the intercity collaboration that takes place in the world's cold and snowy regions.
3. The host city of the 19th World Winter Cities Conference for Mayors in 2020 shall be the city of Rovaniemi.
4. Honorary membership shall be granted to The Honorable Gab-cheol Jeong, Former Mayor of Hwacheon, and The Honorable Fumio Ueda, Former Mayor of Sapporo, for their contributions to the growth of the WWCAM.
5. We commend the supportive efforts of the citizens of Sapporo in hosting this conference.

Having approved the draft of the Sapporo Declaration and the draft of 17th World Winter Cities Conference for Mayors Resolutions proposed by the Secretariat, each city signed the Sapporo Declaration.

All the meetings and events scheduled for the three-day WWCAM Mayors Conference were completed, and the conference was adjourned.

## ■ Comments from participating member cities

**Ms. Susan HOLDSWORTH (Edmonton):** I would like to say thank you for hosting the meeting and for everyone's generosity. It is fascinating to learn about similarities between all of our cities as well as the contrasts. I look forward to sharing more expertise and deepening discussion on the topics we discussed, particularly on winter design. Thank you very much.

**Mr. Huili WANG (Shenyang):** I learned a lot from the WWCAM Mayors Conference, even though it was held only for three days. I could listen to other cities' experiences in city management and construction. I have realized that we have many opportunities for exchange and cooperation even after the conference. I hope that the WWCAM will develop further in the future. On behalf of the participants from Changchun, I would like to thank the citizens of Sapporo as well as the conference staff for their support.

**Mr. Esko LOTVONEN (Rovaniemi):** Rovaniemi is a



new member, and it's a great pleasure to participate for the first time in this conference. We were able to create new friendships and new networks. We will develop cities and businesses globally in snowy and cold conditions. I noticed that the cold, snow and ice are attractive elements of winter cities. I am sure that we can share common activities for urban development even though we have diverse cultures and economies. It is also important to tackle global issues concerning energy consumption and to create a circular economy. I am grateful and thank you for your hospitality during these three days in Sapporo.



**Mr. Akira SUGENOYA (Matsumoto):** I would like express my sincere appreciation to the President of the WWCAM, Mr. Akimoto from Sapporo, and to all of you involved in the conference for organizing a variety of meetings and events for this conference, which ended in a great success. Thank you very much. It has been over 30 years since the foundation of the WWCAM. I admire the member cities for their contribution to the organization's significant development. I hope that the WWCAM will develop further by sharing our problems and deepening our partnerships through the conference while taking into consideration the current conditions that rapidly change with the times. Thank you.

**Mr. Bayarbaatar SANDAGDORJ (Ulaanbaatar):** I am grateful to Mayor Akimoto, the citizens of Sapporo, the secretariat, interpreters and all other people who supported the conference. Through this conference, we could re-acknowledge the common issues shared by winter cities and could learn a lot from the experiences of other cities on how to approach these problems. I would like to leverage other cities' experiences for the development of Ulaanbaatar. Thank you.

**Mr. Moon Soon CHOI (Hwacheon):** I hope that our partnership will be expanded through mutual cooperation for the happiness of not only winter city residents but of people around the world, beyond borders and above politics. I would like to say thank you to Mr. Akimoto, the Mayor of Sapporo, the conference staff and the citizens of Sapporo who worked hard for the preparation of the conference. Thank you,

**Mr. Alexey KONDRATYEV (Novosibirsk):** I was impressed that participants were very interested in various projects and exchanged experience, knowledge and other information in search of solutions to a better life in harsh climate conditions. I feel grateful to Sapporo City for its effort 34 years ago to create an opportunity for winter cities to exchange their views. I suggest we start joint projects through cooperation among businesspeople, researchers, and

government workers in winter cities in order to realize a more comfortable life. To the participants in the conference, I thank you for your hospitality. We were able to discuss concrete issues in a comfortable atmosphere. I appreciate it.

**Mr. Katsuhiko AKIMOTO (Sapporo):** Thank you again for your support for this three-day conference. Sapporo hosted the Mayors Conference for the first time in 34 years, after the city hosted the first conference. When preparing for the conference, we hoped that this conference would encourage the WWCAM to take a step further toward a new direction and development. After listening to the reviews of participants and then looking back on the three days of the conference, I am sure that we could shed new light on our discussions during the conference. We exchanged a variety of opinions and had broad discussions on promoting regional and economic revitalization and urban development using local resources including the environment. The conference's success was entirely due to cooperation from participating member cities and non-member cities, and from people involved in the operation of the conference. I appreciate all of your support.

The conference covered an idea proposed by Sapporo 34 years ago, which was to share wisdom to overcome winter challenges such as the cold and snow for a better winter life under cold snowy climate conditions. In the conference, we also shared a new idea to promote intercity cooperation from a broad perspective, such as to tackle global environmental issues.

The next conference is the 18th World Winter Cities Conference for Mayors and will be held in Shenyang, China in two years. I am glad to pass the Mayors Conference on to Shenyang, because Shenyang has long been a sister city to Sapporo and this conference was successful, with high-level discussions based on strong partnerships. Wishing winter cities further development and the 18th Shenyang Mayors Conference great success, I adjourn the 17th World Winter Cities Conference for Mayors. Thank you for your cooperation.

## Press Conference



After the Mayors Conference that took place at Sapporo Convention Center over three days, a press conference was held.

The press conference began with a speech by Mr. Katsuhiro Akimoto, the Mayor of Sapporo, who said: “When the conference was started 34 years ago in Sapporo, its theme was ‘How to overcome winter.’ However, the impression that I got from this conference was that the conference has taken a step forward with its focus on the promotion of urban development that makes the most of what winter offers.” After summarizing the three-day conference, he read out the Sapporo Declaration and the 17th World Winter Cities Conference for Mayors Resolutions, which were adopted at the closing of the conference.

Mr. Akimoto concluded his speech by saying, “I personally feel that it was very significant and stimulating to have an opportunity to exchange views and have heart-to-heart talks in a relaxed atmosphere with delegates from cities around the world that share similar climate conditions. I have learned a lot from this experience.” Finally, he mentioned the events related to the Mayors Conference that were held in different venues, such as the Business Meeting and the 2016 Winter Cities Showcase, hoping that new businesses will develop as a result of these in the future.

Rovaniemi is a new member to the World Winter Cities Association, and this was its first time to attend the Mayors Conference. Mr. Esko Lotvonen, the Mayor of Rovaniemi, remarked, “We are happy to be a member of this organization, sharing expertise and competence with other member cities.” Ms. Susan Holdsworth, Winter City Coordinator from Edmonton, expressed her opinion of the conference, saying, “It’s

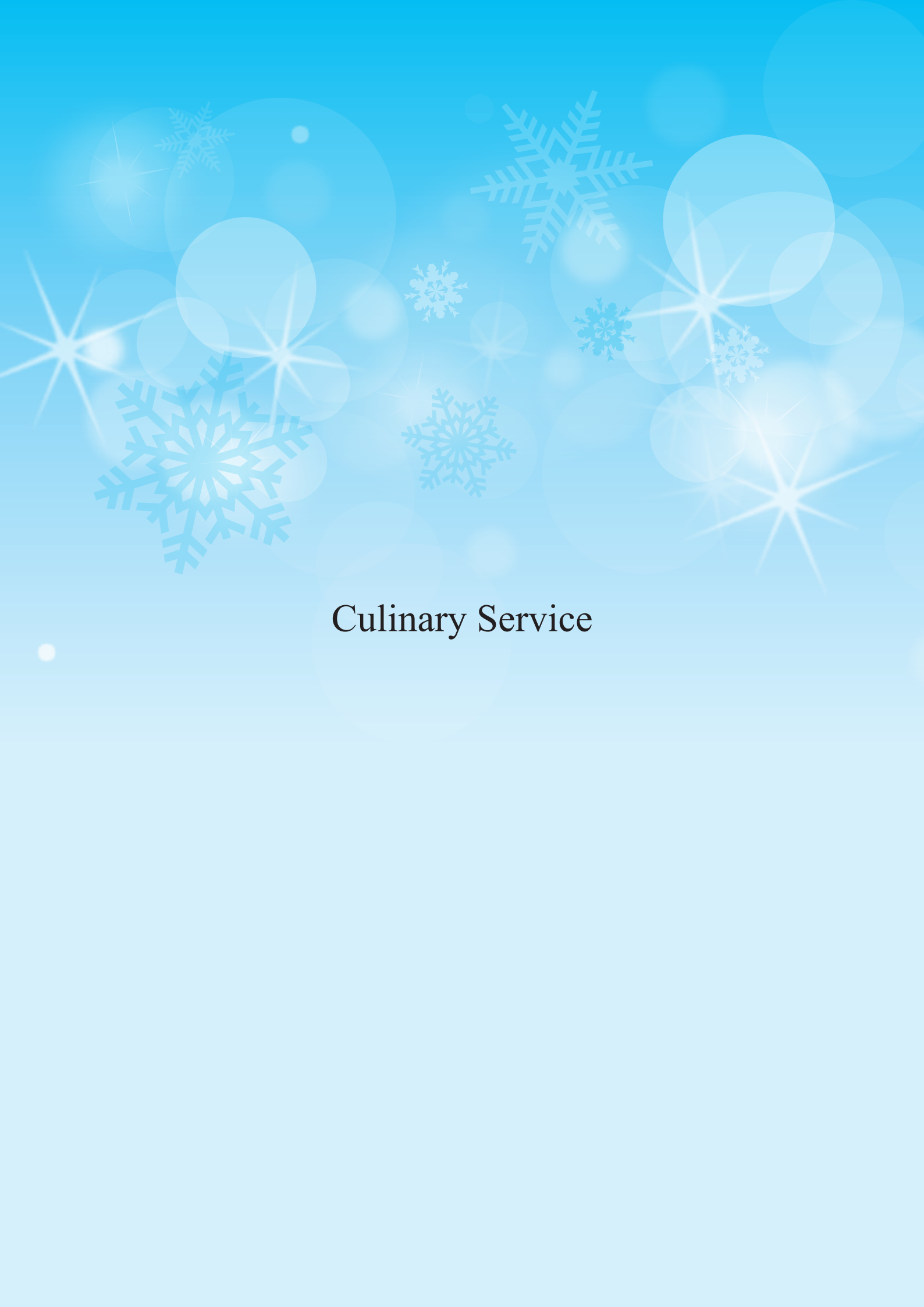
fascinating to see the similarities as well as contrasts in all the winter cities. Because I am passionate about design, the most interesting topic for me was Arctic design. Winter design has a huge impact on the livability of winter cities and on physical and mental well-being. I hope there will be more exchanges on this topic.”

In response to a question from a journalist about the Mayors Conference to be held in Rovaniemi in 2020, Mr. Lotvonen said, “Design will be a key issue for the 2020 Mayors Conference.” Mr. Akira Sugeno, the Mayor of Matsumoto, answered a question about his view on the conference: “The significance of the WWCAM is to share global issues, deepen cooperation in order to address global issues, learn from each other in order to find solutions to global issues, and accordingly contribute to world peace,” he said. In response to the following question from a journalist, “how does the WWCAM’s international network contribute to the development of friendly relationships between countries?” Mr. Moon Soon Choi, the Mayor of Hwacheon, said, “The WWCAM pursues the happiness of people around the world beyond national interests. Our focus is on residents in winter cities. When working together, it is important for us to begin with small tasks.”

### Hydrogen Fuel Cell Vehicle Test-ride Demo (Day2, July 28)

With cooperation from Sapporo Toyota Co., Ltd. and Sapporo Toyopet Co., Ltd., hydrogen fuel cell vehicles were exhibited and conference participants had a chance to test drive them. They enjoyed experiencing the quiet, comfortable ride offered by a hydrogen fuel cell vehicle.





## Culinary Service



## Culinary Service

During the conference, a lunch buffet was served in rooms designated for lunch at the Sapporo Convention Center. The rooms were also used for coffee breaks.

### ■ Coffee break

Special rooms were set aside for coffee breaks in the morning and afternoon. In addition to drinks, a variety of different sweets made by confectioners in Sapporo and Hokkaido were served every day.

Date	Wednesday, July 27	Thursday, July 28	Friday, July 29
Time	15:00 - 15:30	10:15 - 10:50 15:20 - 16:00	10:20 - 11:00
Room	Mid-sized Hall	Mid-sized Hall	Meeting Rooms 107 & 108
Sweets	Seven kinds of sweets	Morning: Six kinds of sweets Afternoon: Six kinds of sweets	Six kinds of sweets
Drinks	Water & coffee		



## ■ Lunch

A sit-down buffet style lunch featuring daily specials was served. The lunch rooms were also used as a place for information exchange. Four monitors were set up to show promotional videos provided by participant cities, and promotional leaflets provided by each city for display and distribution were set on a table.

Date	Wednesday, July 27	Thursday, July 28	Friday, July 29
Time	12:30 - 14:00	12:30 - 13:30	12:45 - 14:00
Room	Mid-sized Hall	Mid-sized Hall	Meeting Rooms 107 & 108
Fixed menu	Salads (Japanese dressing, Italian dressing, French dressing) Steamed vegetables    Vegetable soup    Fruit    Dessert    Bread    Rice		
Daily special	Cold dishes ● Ratatouille served cold ● Octopus carpaccio ● Spicy steamed chicken and pickled bamboo shoots Hot dishes ● Herb roasted chicken ● Pasta and eggplant keema curry ● Gratin ● Roast pork loin with Polynesian sauce ● Spaghetti aglio olio e peperoncino with summer vegetables	Cold dishes ● Smoked salmon with onion slices ● Escabèche ● Steamed tender chicken with citrus junos sauce Hot dishes ● Chicken ballotine ● Beef stew ● Stewed beans and tomato ● Vegetable pilaf	Cold dishes ● Vegetable sandwiches ● Caprese salad with Prosciutto ● Avocado and shrimp salad Hot dishes ● Beef and eggplant moussaka ● Sautéed salmon with soy sauce and butter ● Chicken teriyaki ● Short pasta with a variety of vegetables





# Welcome Banquet

## Welcome Banquet hosted by the Mayor of Sapporo

Date and time: Wednesday, July 27, 18:30 – 20:00

Venue: The Terrace Room on 1<sup>st</sup> Floor at Sapporo Park Hotel

After a few words from the Mayor of Sapporo, Mr. Katsuhiro Akimoto, Mr. Ichiro Onmura, Vice Speaker of the Sapporo City Assembly, offered a welcome greeting and made a toast to start the dinner party. For this stand-up buffet style dinner, Japanese cuisine including sushi, oden and other dishes using the finest ingredients from Hokkaido were prepared. Participants networked with each other while enjoying the food.

The city of Bibai, which attended the Mayors Conference as an observer, treated the participants with Natsuyuki, an unrefined *sake* stored in snow in the city.

In a live performance to entertain the participants, an ikebana artist arranged flowers in a large vase while shamisen players performed. A volunteer from the audience was invited to help add a final touch to the flower arrangement.

There was a relaxed atmosphere throughout the dinner on the first day of the conference. The dinner ended with a toast proposed by Mr. Alexey Kondratyev, Deputy Mayor of Novosibirsk.

## Menu

### Cold dishes

- ◆ Crostini
- ◆ Sashimi platter
- ◆ Marinated chum salmon with lime caviar
- ◆ Garden salad
- ◆ Soba noodles with *nameko* mushrooms and grated *daikon* radish

### Dessert of the day

- ◆ Fruit platter

### Hot dishes

- ◆ Bean quiche
- ◆ Oven-grilled dishes (soy sauce-marinated herring, *shishamo* smelt, scallop)
- ◆ Oven-grilled chum salmon in salted pie crust
- ◆ Grilled chicken and vegetables with a hint of lemon
- ◆ Pork chop with special sauce and potato
- ◆ Japanese-style pilaf of octopus and *edamame* soybeans
- ◆ Asparagus and zucchini spaghetti in tomato sauce

### Carvery

- ◆ Beef steak with Japanese-style wasabi sauce

### Japanese dishes

- ◆ Sushi: Tuna, rockfish, sweet shrimp
- ◆ Tempura: Chum salmon, scallop, hen-of-the-woods mushroom, asparagus



- ◆ Steamed dishes: Steamed egg custard hotchpotch cooked with Shiretoko chicken soup, brown rice macaroni and cheese
- ◆ Grilled dish: Grilled potato, corn and salted bonito innards in white sauce
- ◆ Boiled dish: Octopus dumplings, *daikon* radish, fish cake, potato, boiled eggs, konjac, rice cake in a pouch of fried tofu, kelp
- ◆ Vinegared dish: Vinegared crab, *wakame* seaweed and cucumber with king crab, horsehair crab and queen crab

### Drinks

Alcoholic drinks: Beer, whiskey, sake and wine  
Soft drinks: Oolong tea and water

### Entertainment

Collaborative ikebana and shamisen show  
Ikebana by Shuko Katami  
Tsugaru shamisen by Niya Sasaki and Fumihiko Sato



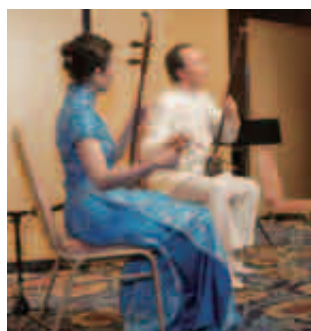
## Dinner Banquet hosted by the City of Shenyang

Date and time: Thursday, July 28; 19:00 – 20:30

Venue: Onuma, Toya and Shikotsu Rooms on the 3<sup>rd</sup> floor of the PAMIR International Convention Center (Banquet Wing of Sapporo Prince Hotel)

The dinner was hosted by the Shenyang City Government, the host city of the 18th World Winter Cities Conference for Mayor in 2018. The dinner at the main table, where delegates from each city were seated, was table served, while the dinner at round-shaped tables in the same room was a sit-down buffet style.

Pipa and erhu were played to entertain participants.



## Menus

### VIP Menu

- ◆ Pancetta and cottage cheese salad
- ◆ Chicken and lily bulb consommé
- ◆ Sea bream and salmon poêlé with vermouth sauce garnished with thyme zucchini and eggplant
- ◆ Roasted beef loin and vegetable mix and Madeira sauce
- ◆ Bread
- ◆ Chocolat mille crêpe
- ◆ Coffee

### VIP Gluten-free Menu

- ◆ Boiled pork and vegetable salad
- ◆ Chicken and vegetable soup
- ◆ Pan-fried sea bream and salmon with tomato confit
- ◆ Roast beef loin and vegetable mix with wasabi (Japanese horseradish)
- ◆ Rice
- ◆ Fruit
- ◆ Coffee

### Buffet Menu

- ◆ Carpaccio-style salmon and squid
- ◆ Salad bar (olive oil, salt, pepper, vinegar dressings) Asparagus, corn, tomato, cucumber, sliced onion, lettuce, daikon, carrot
- ◆ Escabeche of shrimps and baby scallops
- ◆ Poche of Pacific Ocean perch with short-necked clam and saffron sauce
- ◆ Kurogarei (righteye flounder) meunière with Grenoble sauce

- ◆ Sauteéd chicken and vegetable mix with Madeira sauce
- ◆ Oven-roasted spicy marinated pork
- ◆ Beef loin steak and Madeira sauce with a hint of yuzu pepper
- ◆ Bread (baguette)
- ◆ Vegetable peperoncino pasta
- ◆ Fruit
- ◆ Desserts

### Drinks

Alcoholic drinks: Beer, whiskey, sake & wine  
Soft drinks: Oolong tea & water

### Entertainment

Ensemble of pipa and erhu  
Pipa by Miyuki Okimoto  
Erhu by Huan Zhang and Akiko Zhang

## Farewell Banquet hosted by the President of the World Winter Cities Association for Mayors

Date and time: Friday, July 29 from 18:40 to 20:00

Venue: Reception Hall on the 2<sup>nd</sup> floor of the Hoheikan  
(Historical Guest House)

The dinner on the third day was held at the Hoheikan, a historical building designated as an important cultural property that just reopened last month after renovation. It was planned to have participants enjoy the Toyohira River Fireworks Display, which was scheduled on that day; however, unfortunately, the display was postponed due to rain.



### Menu

#### Cold dishes

- ◆ Bruschetta
- ◆ Seafood carpaccio
- ◆ Marinated chum salmon with a hint of sour cream
- ◆ Mixed salad
- ◆ Thick sushi roll and *inarizushi* (sushi rice wrapped in fried tofu)
- ◆ Green tea soba noodles with *nameko* mushrooms and wild greens
- ◆ Dessert of the day
- ◆ Fruit platter

#### Hot dishes

- ◆ Calzone
- ◆ Fried chicken and samosa with potato in a basket
- ◆ Rigatoni pasta and mushroom in tomato sauce
- ◆ Oven-grilled white fish topped with misonnaisse sauce
- ◆ Sesame-flavored teriyaki chicken
- ◆ Thick-cut deep-fried breaded pork cutlet with coleslaw
- ◆ Steamed vegetables with a salty dressing
- ◆ Salmon and summer vegetable pilaf

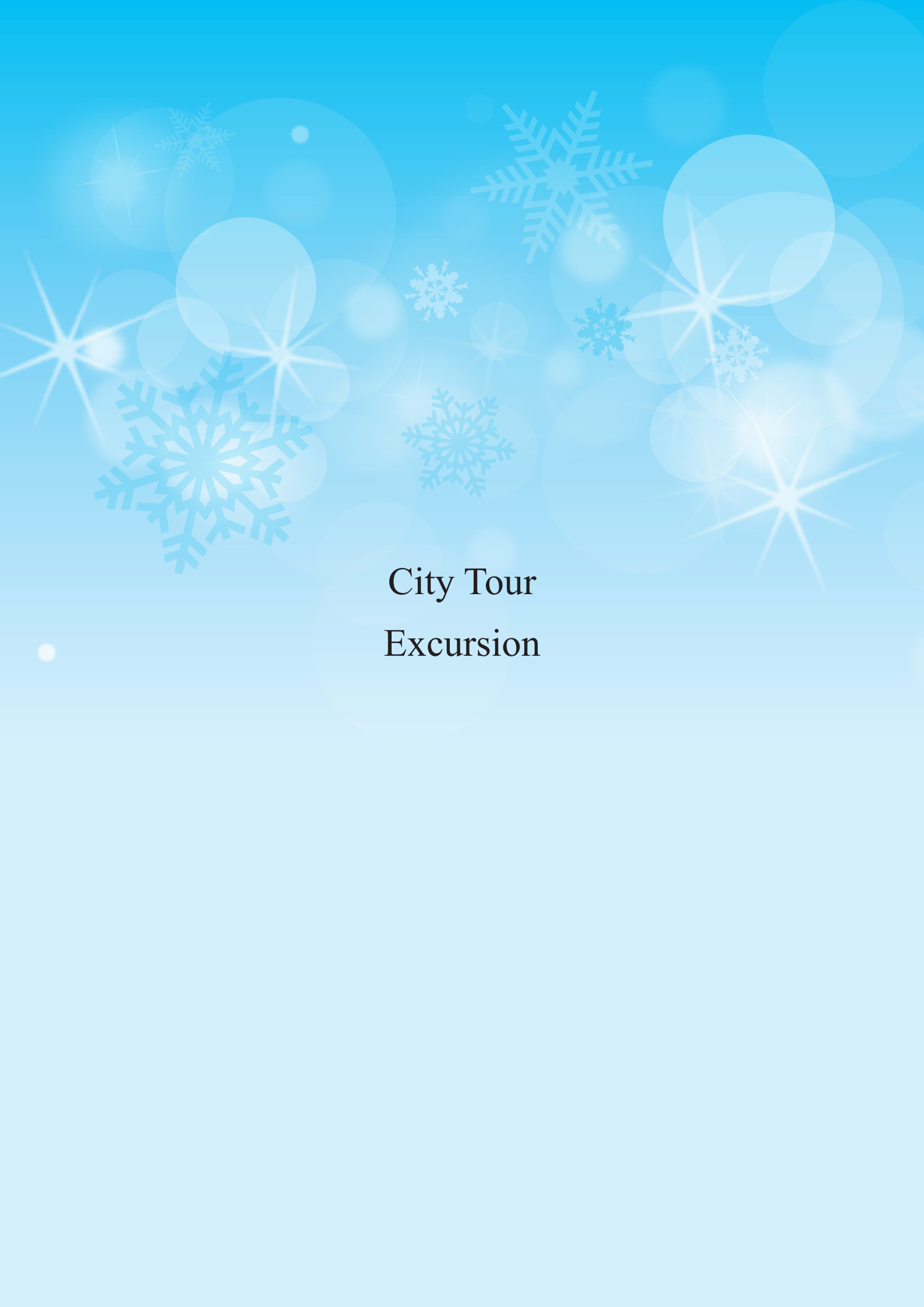
- ◆ Asparagus and potato spaghetti with a hint of chilies
- ◆ Roast beef with potato and Japanese-style wasabi sauce

#### Drinks

Alcoholic drinks: Beer, whiskey, sake & wine  
Soft drinks: Oolong tea, orange juice & water

#### Entertainment

Piano: Tomoe Iwata  
Violin: Kana Kobayashi



# City Tour Excursion



## City Tour

Date and time: Friday, July 29

14:30 – 15:00: Opening ceremony of the 2016 Winter Cities Showcase

15:00 – 17:00: City tour



The conference participants attended the opening ceremony of the 2016 Winter Cities Showcase, which was held over three days from July 29 to 31. Delegates from exhibiting cities and a representative of the expo cut the tape. After walking around the exhibition site, they toured Sapporo. The tour was intended to have participants enjoy the panoramic view

of the city from Mt. Moiwa, which was selected as one of the top three beautiful night views in Japan, and actually see the development of the city. Unfortunately, as it was raining, participants were unable to see very far; however, they enjoyed watching downtown Sapporo and other areas from Mt. Moiwa.

### Itinerary

15:00: Showcase site (Chi-ka-ho) → 15:45: Mt. Moiwa (Morisu Car to the lookout platform) → 17:00: Transfer → 17:30: Arrival at the hotel



## Excursion

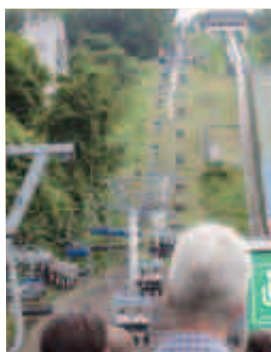
Date and time: Saturday, July 30 from 9:00 to 20:00

A one-day tour to explore the attractions and history of Sapporo and Hokkaido was planned as an excursion. Participants learned about the history of Hokkaido at the Hokkaido Museum, and subsequently visited the Historical Village of Hokkaido adjacent to the museum. They were fascinated with the exhibits there. After lunch, they went to the Okurayama Ski Jump Stadium (also known as the Okurayama Schanze) where the 1972 Winter Olympic Games were held. They rode a lift to the top of the ski jump and enjoyed a ski jumping simulation and other activities at the Winter Sports Museum.

The tour then took participants to the Sapporo Beer Museum. The excursion ended with a dinner: they had mutton barbecue, a regional specialty of Hokkaido, along with beer.

### Itinerary

9:00 Park Hotel → 9:15 Prince Hotel → 10:00 Hokkaido



Museum → 10:45 Historical Village of Hokkaido → 11:45 Transfer – Lunch at Akarenga Terrace – Transfer → 15:00 Okurayama Ski Jump Stadium (Lift ride and commemorative photo taking) / Winter Sports Museum → 16:30 Transfer → 17:15 Sapporo Beer Museum → 18:00 Garden Grill at the Sapporo Beer Garden → 19:30 Transfer → 19:45 Arrival at Park Hotel → 20:00 Arrival at Prince Hotel



### Lunch

Venue: Ristorante il Centro Hiramatsu  
(4th floor of Akarenga Terrace)

Menu: White asparagus panna cotta with seafood  
Hokkaido squid and broccoli fedelini flavored with black olives

Broiler chicken involtini in cognac sauce and salsa verdi served with seasonal vegetables

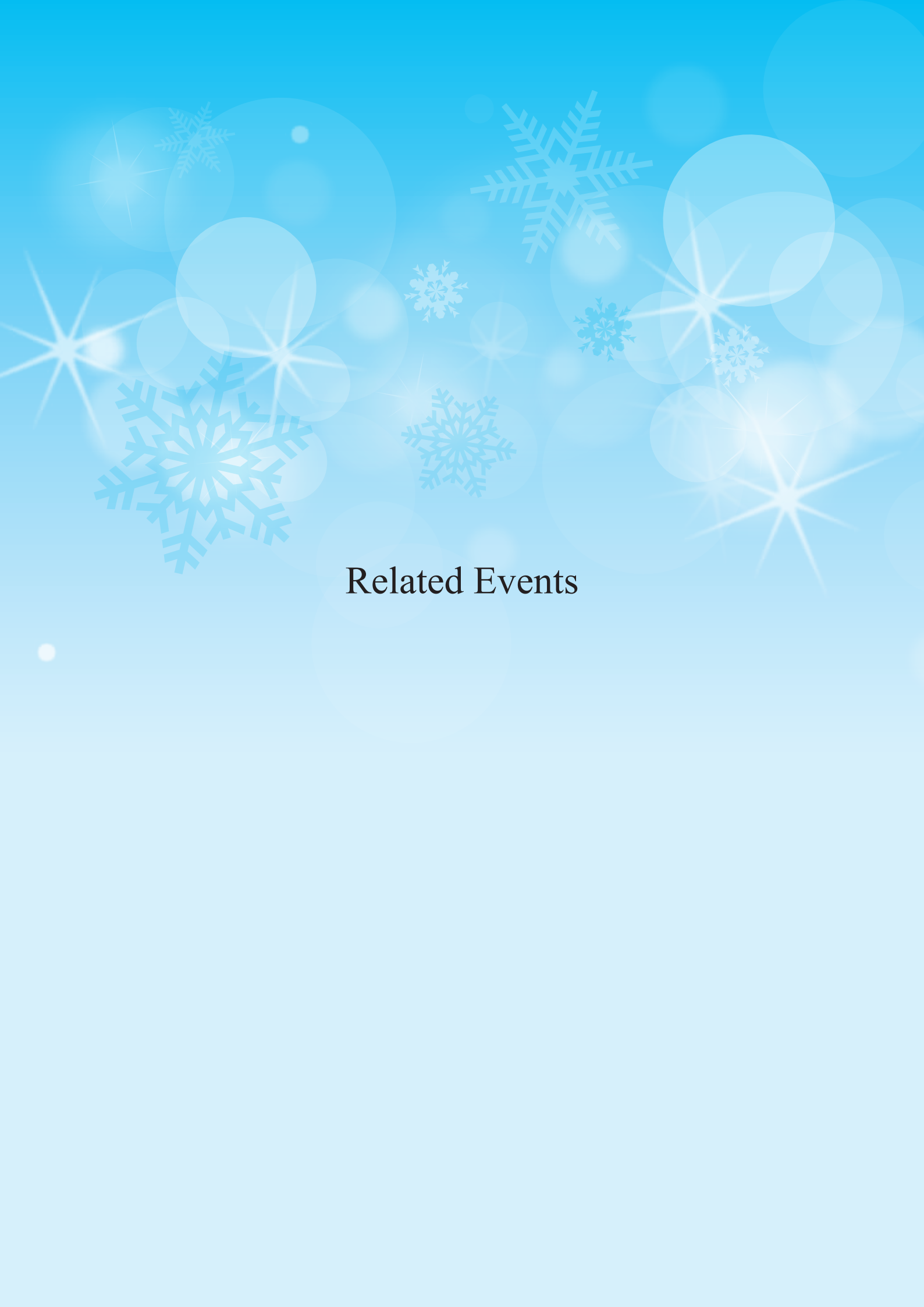
Two choices from the five kinds of dolce

Coffee and petits fours

### Dinner

Venue: Garden Grill at Sapporo Beer Garden

Menu: All-you-can-eat mutton barbecue



## Related Events

# Winter Cities Expo

## 2016 Winter Cities Showcase

Date and time : Friday, July 29 – Sunday, July 31, 2016

Friday, July 29: 14:30 - 19:00

Saturday, July 30: 11:00 - 19:00

Sunday, July 31: 11:00 - 17:00

Venue: “Chi-ka-ho” Sapporo Ekimae-dori Underground Walkway at Kita 3-jo Intersection Square (West)

Exhibitors: 12 cities/groups from five countries (12 booths)

Country	City/group	No. of booths	Exhibition content
China	Changchun	3	Information about Changchun and local craft products
	Jiamusi	1	Information about Jiamusi
	Qiqihar	-	Information about Qiqihar
	Shenyang	-	Information about Shenyang
Finland	Rovaniemi	2	Information about Rovaniemi
Mongolia	Ulaanbaatar	1	Cashmere products, sweaters, etc.
South Korea	Hwacheon	-	Information about Hwacheon
	Inje	-	Information about Inje
Japan	Matsumoto	2	Information about Matsumoto and local traditional crafts
	Eniwa	1	Regional food
	Takikawa	1	Introduction of local manufacturing businesses
	Snow and Ice Environment Project	1	Display of a snow cooler and cherry trees

As part of the Winter Cities Expo, the 2016 Winter Cities Showcase was held over three days at “Chi-ka-ho” Sapporo Ekimae-dori Underground Walkway. Exhibitors, including the cities that participated in the World Winter Cities Conference for Mayors, set up booths in the expo venue to exhibit and sell local crafts, clothing and food and introduce their attractive features to visitors by displaying panels.

After an opening speech by Sapporo Mayor Mr. Katsuhiko Akimoto, the expo began with a ribbon cutting ceremony featuring the Sapporo Mayor along with delegates from the cities of Rovaniemi, Matsumoto and Ulaanbaatar, who were the exhibitors at the expo, and Mr. Hidehiro Wakabayashi, the Chairperson of the Winter Cities Expo Executive Committee.





Special stage shows were planned during the expo. SORA (a musical ensemble) performed five times and Rauma (the musical duo of morin khuur & kantele players) performed twice.

At the closing ceremony, Ms. Sayaka Ono, a senior student at Hokusei Gakuen University, showed a video clip titled a Report on the World Winter Cities Conference for Mayors, which was recorded and edited by Ms. Ono herself. The three-day Winter Cities Expo ended with an address by Mr. Wakabayashi, the Chairperson of the Executive Committee.



# Winter Cities Expo Business Meeting

Date and time: Thursday, July 28 from 14:00 to 18:00

Venue: 3<sup>rd</sup> floor of PAMIR International Convention Center, Sapporo Prince Hotel

Participating companies:

Nineteen companies in the environment-related field from four cities in three countries

Nine companies/groups in the tourism-related field from four cities in three countries

The Winter Cities Expo Business Meeting was held at the PAMIR International Convention Center on July 28, 2016, where presentations were also given by overseas corporations and business negotiations between individual companies were conducted.

## ○Participating companies in the environment-related field

**Shenyang (five companies):** (1) Shenyang Shanglin Commercial & Trade Co., Ltd. (2) Liaoning Central Environment Protection Co., Ltd. (3) Shenyang Taiyu Environment Project Co., Ltd (4) Shenyang Bestko Environment Equipment Co., Ltd. (5) Institute of Applied Ecology, Chinese Academy of Science

**Novosibirsk (two companies):** Tran Service Co., Ltd.; Eco Police Management Company

**Sapporo (eleven companies):** Towa Construction Co.,Ltd; J&C CO. LTD.; Hokkaido Environmental Bio Sector Co., Ltd.; e.cot INC.; Waste Oil Stove Himawari Limited Liability Partnership; SETEC Co.Ltd; Hokkaido Central Pathology Laboratory; Kankyogiken Co., Ltd.; Nihon Kasetsu Co.; Hokkaido Poracon Co.,Ltd; ASAHI INOVEX CORP.

**Takikawa (one company):** Rebio Co.,Ltd

## ○Participating companies in the tourism-related field

**Harbin (one company):** Harbin Ice and Snow Festival Co., Ltd.

**Novosibirsk (one company):** Sibirski Oteli (Hotel)

**Matsumoto (one company):** Matsumoto Tourism and Convention Association

**Sapporo (six companies):** JTB Hokkaido Corp; Nippon Travel Agency Hokkaido; Kinki Nippon Tourist Hokkaido Co., Ltd.; COOP Sapporo; Growing Tourist Co., Ltd.; Sakura Tour Kikaku





# Winter Cities Forum

**Date and time** ■ Saturday, July 30, 2016 from 14:00 to 16:00

**Venue** ■ Kyosai Hall

Hosted by the City of Sapporo & the World Winter Cities Association for Mayors

Supported by the United Nations Information Centre, the United Nations Development Programme (UNDP) Representation Office in Tokyo, the Japan International Cooperation Agency (JICA) & the U.N. Association of Japan, Hokkaido

A proposal made by Sapporo in 1981 led to the formation of the World Winter Cities Association for Mayors (WWCAM), which has become an NGO associated with the United Nations. To commemorate the World Winter Cities Conference for Mayors, the major event of the WWCAM, which took place for the first time in 34 years in Sapporo, the Winter Cities Forum was held. In the forum, Mr. Katsuhiro Akimoto, the Mayor of Sapporo, outlined the WWCAM's activities. Mr. Bayarbaatar Sandagdorj, the Director of the Strategic Policy & Planning Department, Office of the Capital City Governor of Ulaanbaatar, talked about the Fire Fighting Technologies Project, which was started as a result of the WWCAM Mayors Conference as a project to support Ulaanbaatar by the city of Sapporo. This project was a good example of how the network of the WWCAM has been utilized. In addition, Ms. Kaoru Nemoto, the Director of the United Nations Information Centre, and Ms. Misako Konno, an actress and UNDP Goodwill Ambassador, introduced the activities of the United Nations along with their personal experiences of working with the UN.

Please see Page 56 of this report for a report on the Ulaanbaatar Fire Fighting Technologies Project supported by Sapporo that was presented by Mr. Bayarbaatar Sandagdorj.

## The World Winter Cities Association for Mayors and its Activities

Katsuhiro AKIMOTO Mayor of Sapporo



The World Winter Cities Association for Mayors is an international network for winter cities around the world to provide members with opportunities to meet and learn from each other about city planning. The WWCAM is involved in various activities under the slogan “Winter is a Resource and an Asset.” This organization was initiated by the city of Sapporo in 1981, when the city made a proposal to establish an international organization for winter cities and invited participation from all over the world. In response, the first Mayors Conference was held in 1982. The WWCAM is the only international conference that the city of Sapporo organizes, and since its establishment the Association has been presided over by the Mayor of Sapporo. I am the fourth president of the WWCAM.

The WWCAM defines a “winter city” as a city that engages in city planning in snowy and/or cold climate conditions; specifically, a city with an annual snow accumulation of at least 20 cm and an average temperature in

the coldest month of below 0°C. The WWCAM is a group of cities that meet at least one of these conditions.

Currently, 21 cities from 10 countries participate as the member cities of the Association. These are Edmonton from Canada, the seven cities of Changchun, Harbin, Jiamusi, Jilin, Jixi, Qiqihar and Shenyang from China, Maardu and Viimsi from Estonia, Rovaniemi from Finland, Matsumoto and Sapporo from Japan, Ulaanbaatar from Mongolia, Tromsø from Norway, Hwacheon, Inje and Taebaek from Republic of Korea, Magadan and Novosibirsk from Russia, and Anchorage from the United States.

Here, I would like to introduce you to some of these cities. Rovaniemi in Finland, famous worldwide for Santa Claus, is a small city with a population of about 60,000 people. The city features the midnight sun in summer and auroras in winter, and perfectly fits the image of a winter city.

Characterized by vast stretches of grassland and ger (Mongolian yurts), Ulaanbaatar is the capital of Mongolia, with a population of approximately 1.37 million people. The green grassland where horses run freely in summer turns into an endless snowfield in winter.

Hwacheon is a city in South Korea. Hwacheon written in Chinese characters means a gorgeous river. With a population of approximately 25,000 people located near the 38th parallel, this small city leverages its rich natural surroundings by hosting an annual winter festival featuring mountain trout. The festival is very popular and attracts more than one million visitors every year.





## Member cities' involvement in environmental issues in order to achieve their own environmental action goals

Next, let's look back on the 34-year history of the WWCAM in chronological order. The WWCAM was started 34 years ago at the initiation of the city of Sapporo, and nine cities from six countries around the world participated in the first Northern Intercity Conference of Mayors held in Sapporo in 1982.

The population of Sapporo back then was 1.43 million people. It was ten years after the 1972 Sapporo Winter Olympic Games, and the city, which currently consists of ten wards, consisted of seven wards. At that time, the Mayor of Sapporo was Mr. Takeshi Itagaki, the Subway Tozai Line between Shiroishi and Shin Sapporo Stations was opened, and Sapporo was undergoing further development.

In those days, Sapporo had many problems, and one of the major issues was dust pollution caused by studded tires. It was a difficult decision to ban studded tires when considering the safety of drivers. However, the Sapporo City Government studied the cases of European cities that had already controlled studded tires, which we just saw in the video. As a result, the city eventually banned studded tires. In terms of the promotion of winter sports, Sapporo created a new sport known as snow hockey to be played on snow fields, and it gradually became popular and played at many elementary schools across the city. Thus, the Northern Intercity Conference had achieved successful results, and there was a call among the member cities that the conference should be held regularly. In response to that request, it was decided that the conference would be organized by Sapporo and be held on a regular basis.

Next, let's move on to the history of the WWCAM Mayors Conference. The Northern Intercity Conference was renamed the World Winter Cities Association for Mayors and has since been involved in various activities, for which Sapporo has played a very significant role. There are no other cities except for the city of Sapporo that have a population approaching 2 million people and an annual snow accumulation as high as six meters. As Sapporo has promoted city planning through harmonious coexistence between urban functions and snow and other winter features in such unique conditions, the city has acquired special knowledge and techniques for planning winter events, such as the Sapporo Snow Festival and the Sapporo White Illumination, as well as for developing public facilities, such as the Sasara Tram snow cleaner, underground shopping arcades and underground walkways. It can be said that Sapporo has been able to lead winter cities around the world in a variety of fields through the activities of the WWCAM.

As shown in the example of the Ulaanbaatar Fire Fighting Technologies Project, some winter cities in the world are learning special knowledge and techniques from Sapporo through the activities of the WWCAM. (Please see Page 56 for a report on the Ulaanbaatar Firefighting Technical Support Project.)

In 2000, the WWCAM began to put more emphasis on global environmental issues in winter cities. During the 2004 conference held in Anchorage, the United States, participants witnessed firsthand a giant glacier collapsing into the sea off Anchorage due to global warming. Through this experience, member cities shared the same recognition that winter cities

should take the initiative in addressing global warming issues, as winter cities in cold, snowy regions consumed large amounts of energy during winter and could closely feel the influences of global warming. This was how the conference began to tackle global environmental issues. Each member city of the WWCAM has set its own environmental action goals in accordance with local conditions, such as a reduction in CO<sub>2</sub> emissions. The member cities set environmental action goals in the years when the biennial Mayors Conference is held, and take action to achieve these goals. They report on their results in the next conference to check how much progress they have made and to improve the effectiveness of goal-setting.

Now, I will talk about the current activities of the WWCAM, which has addressed a wide range of issues, including global environmental issues. The WWCAM decided to hold the 2016 Mayors Conference in Sapporo, the birthplace of the WWCAM, for the first time in 34 years. The discussion sessions of the conference, which started on July 27 at the Sapporo Convention Center, continued until July 29 with more than 100 participants from some 30 cities in Japan and overseas.

In order to share this experience of hosting an international conference with the citizens of Sapporo, two co-hosted events have been organized. One of these is the "Winter Cities Showcase" Winter Cities Expo. At the expo, exhibition booths have been set up by some of the participating member cities to display and sell local specialties. Public relations activities are also being conducted through stage events. This is now being held at the "Chi-ka-ho" Sapporo Ekimae-dori Underground Walkway. The other event is the Winter Cities Forum, which is you are now attending.

Having been a world-leading winter city involved in a variety of activities, the city of Sapporo is now facing drastic changes, including a shrinking population as the result of a declining birth rate. Currently, the population of Sapporo is approximately 1.95 million people, and it has been on the rise. However, this will begin to decrease. In addition, the proportion of elderly people is expected to increase year by year. It is estimated that 40% of the population will consist of the elderly by 2060. It is therefore necessary for us to take action now in order to educate younger generations, develop businesses and improve urban infrastructure that will support a better future for Sapporo.

Amid the waves of globalization, people are provided with easy access to overseas information via the Internet and other means, and more and more people travel between cities beyond borders. Due to the lowered barriers of national borders, Sapporo, as an international city, is required to develop relationships with a wide range of cities, companies and people on a global stage. This is, of course, a great opportunity for Sapporo, but it also means that Sapporo has to foster businesses, companies and manpower that can play an active role on a global stage and enhance the attractive features of the city. We seek to develop discussions on what the WWCAM can do for the world, Sapporo included, at this major turning point.

## 34 years on: a city filled with smiles

Let's look at four keywords that should be taken into consideration when talking about the activities of the WWCAM. The first is "face to face," the second is "regional

promotion,” the third is “an international network of cities,” and the fourth is the “provision of opportunities for citizens to connect with the world.”

In regard to “face to face,” the WWCAM holds the Mayors Conference biennially, in addition to working-level official meetings in years when the Mayors Conference is not held. Thus, delegates and staff from each member city get together and talk face to face. This helps them learn more about other cities and countries. In my opinion, the relationships of trust that have been built between cities in this manner, transcending differences in culture and national interest, will lead to the development of mutual understanding and cooperative relationships. Even though we have advanced communication tools such as the Internet and social networking sites, I believe that nothing is more important than face-to-face contact.

The next keyword is “regional promotion.” Each member city is able to introduce its attractive features to other cities through case study presentations during the Mayors Conferences. In addition, we, as the host city, can provide conference participants with opportunities to actually experience the attractive features of Sapporo. I hope that participants of this conference have already warmed to Sapporo and Hokkaido. The copies of a newsletter about this Mayors Conference were distributed to more than 2,300 cities and relevant parties in 52 countries around the globe to spread the attractive features of the city of Sapporo as a world-leading winter city.

The third aspect is “an international network of cities.” As I mentioned at the beginning of my speech, the WWCAM has 21 member cities from 10 countries around the world. How large do you think the Association is? Can you guess how many people live in all the member cities combined? The answer is as many as 46 million people. This is equivalent to that of around the 30th largest country in the world by population. It can be accordingly said that the size and the influence of the WWCAM, as a network and an organization, is comparable to that of a country. In addition, the WWCAM has been an NGO associated with the United Nations since 1997. The connection with such an international organization enhances the attractiveness of the WWCAM as an international network. Connecting to the WWCAM simultaneously means exchanging with multiple cities, and may result in various collaborations between cities. Thus, the advantages of the WWCAM can be multiplied. In this sense, I believe that it is very beneficial for Sapporo to participate in and organize the international network of the WWCAM amid the trend of globalization.

The last key phrase is the “provision of opportunities for citizens to connect with the world.” In addition to this Winter Cities Forum and the Winter Cities Expo, all the programs of the Mayors Conference offered at the Sapporo Convention Center have been opened to the public with the aim of providing citizens with opportunities to learn about and connect to the world through information provided by winter cities. Yesterday at the conference, students from Sapporo Kaisei High School presented their city development recommendations in front of the participants of the conference. The involvement of young people in the conference is of great significance. In this sense, we should provide citizens with more opportunities to connect to the world so that we can foster a global perspective in children in Sapporo. We aspire to build a better future for Sapporo, which is undergoing significant changes, by sharing and utilizing opportunities provided by the WWCAM in cooperation with citizens.

Let’s push the clock forward by 34 years and imagine the future of Sapporo, where the Mayors Conference started 34 years ago. At the beginning of the next year, the Sapporo Asian Winter Games will be held. Sapporo has been chosen as one of the venues for the Rugby World Cup to be held in Japan in 2019. Currently, Sapporo is preparing a bid to host the 2026 Winter Olympics and Paralympics. And, the Hokkaido Shinkansen bullet train line is scheduled to be extended to Sapporo by the end of 2030. What will the future be like for Sapporo in 2050, 34 years from now? I sincerely hope that Sapporo will be filled with smiles. Thank you.



# In Commemoration of the 60th Anniversary of Japan's Membership to the United Nations

Kaoru NEMOTO Director of the United Nations Information Centre



First of all, I would like to take this opportunity to express my appreciation to the World Winter Cities Associations for Mayors for its continued cooperation and collaboration with the United Nations in addressing various issues as an NGO associated with the United Nations Department of Public Information.

Today, my presentation is intended to help you to take up the challenges being tackled by the UN as your own issues. In September last year, Sustainable Development Goals (SDGs) to be achieved by 2030 as global action goals were adopted at the UN General Assembly. I would like to discuss how the world can be changed through the SDGs.

This year marks a major milestone for Japan as well as the United Nations, as Japan commemorates its 60th anniversary as a member of the United Nations. After Japan became independent again in 1952, it applied for membership to the United Nations. However, in those days, the world was at the height of the Cold War, and Japan's application was denied by the then Soviet Union. Against this backdrop, it took four and a half years for Japan to join the United Nations. After signing the Soviet-Japanese Joint Declaration of 1956, Japan finally became a member of the United Nations on December 18, 1956.

Japan contributes to international peace and security as a non-permanent member of the UN Security Council for this year and next, which is Japan's 11th term as a non-permanent member. No other member state has served as many terms as Japan.

I assume that everyone gets an image in their minds of the Headquarters of the United Nations Secretariat in New York when they hear the term the "United Nations." A local office of the United Nations (UN) Secretariat in Japan is the United Nations Information Centre in Tokyo, which I work for. Our task is to disseminate information on the activities of the UN Secretariat and other UN organizations in Japanese so that Japanese people can understand them, with a focus on the three pillars of the maintenance of international peace and security, the protection and promotion of human rights, and the promotion of economic and social development. Unfortunately, Japanese is not included in the six official languages of the UN. For this reason, the United Nations Information Centre in Tokyo selects topics of interest from information provided by the UN Headquarters and translates them into Japanese. There are a total of 28 UN organizations with local offices in Japan. One of the missions of the United

Nations Information Centre in Tokyo is to spread the message of "One UN" as a public relations coordinator.

The three pillars of the maintenance of international peace and security, human rights and development are inextricably linked with each other. It can be said that peace and security cannot exist without human rights or development, and vice versa. Without peace and security, no human rights can be secured and no economic and social development can be promoted.

A simple example of the activities to maintain international peace and security are the UN's peacekeeping operations (PKO). At the moment, 16 peacekeeping operations are undertaken around the world, for which approximately 120,000 uniformed and civilian personnel are working very hard. The UN's peacekeeping operation most familiar to Japanese people is that in South Sudan, to which the members of the Japanese Self Defense Force have been dispatched. South Sudan is the newest country in the world. As the country gained independence in 2011 after years of civil war, most people in South Sudan have not experienced peace. The mission of UN peacekeeping operations is to support people in South Sudan in understanding the value of peace and working towards building peace. Unfortunately, there was a major conflict in South Sudan in early July 2016, which highlights the unstable situation facing peacekeeping operations.

In South Sudan, there is a Japanese female UN worker. Her name is Hiroko Hirahara. She is greatly contributing to peacekeeping as the Head of the Field Office of the United Nations Mission in the Republic of South Sudan, located in the city of Bentiu in Northern Liech State (formerly Unity State). She leads a total of 2,000 people, including Mongolian and Ghanaian UN troops, UN Police and civilian workers. I visited South Sudan this March and talked with her in her lodge, which was made from a shipping container, about her work in unstable conditions.

## Report about South Sudan by Ms. Hiroko Hirahara (Video clip)

**Ms. Nemoto:** What is the most urgent task?

**Ms. Hirahara:** POC – Protection of civilians. There are 120,000 refugees and helping these people return to their home villages safely is the most urgent task. I think this will be smoothly carried out if the national government builds a proper system to restore the country. Things are going to be normal when peace has come. I work as a peacekeeper, and the most important mission for the UN PKO is maintaining security, peacebuilding, peace enforcement, and peacekeeping. Anyway, we will work hard to bring back security. As security is unstable in a county or region just after a conflict has ended, it is very difficult for UN organizations or NGOs to start work if they rush into such a country or region. For this reason, peacekeepers need to be dispatched first to secure a certain level of security there so that the UNDP or other organizations specializing in development can start their jobs.

In unstable conditions, security should be secured first, and



then humanitarian relief operations and development activities can be carried out. I hope that you will keep in mind that there is a Japanese woman who is devoting herself to peacekeeping.

It was an issue about human rights that made me first realize a connection between discussions at the UN and our everyday lives. I started my career as an announcer and then a reporter for TV Asahi. After studying abroad, I joined the UN. Back in 1986, when I was employed as an announcer, the only job available for a woman at commercial television stations in Japan, except for Tokyo Broadcasting System (TBS), was to be an announcer. However, in the following year, this barrier was eliminated because Japan enacted and enforced the Equal Employment Opportunity Act for Men and Women so that the county could ratify the International Convention on the Elimination of All Forms of Discrimination against Women. At that time, I realized that discussions at the UN had an impact on our lives.

I also found that the Nationality Act was revised before the ratification of the convention. Before the revision of the Nationality Act, citizenship was inherited only through fathers. But according to the current Nationality Act, citizenship is inherited through both parents. This has a significant influence on international marriage. Before the revision, a child born between a Japanese father and a non-Japanese mother inherited his or her Japanese citizenship through his or her father. In contrast, a child born between a non-Japanese father and a Japanese mother was not allowed to have Japanese citizenship. This law was extremely discriminatory and conflicted with the International Convention on the Elimination of All Forms of Discrimination against Women. This was why the Japanese government revised the Nationality Act before ratification. I learned from the Japanese government's actions for the ratification of the convention that there was a close connection between discussions at the UN and our rights.

## 17 Sustainable Development Goals (SDGs)

The Sustainable Development Goals (SDGs) will drastically change the world we live in. These 17 action goals are designed to lead the world—developed, semi-developed and developing countries—toward sustainability by 2030. The SDGs were developed after the Rio+20 conference in 2012 and through three years of international consultations that sought public opinion from several million people. The SDGs are not only for UN organizations and governments; each one of us in this room is responsible for supporting them as actors.

As the predecessor of the SDGs, the Millennium Development Declaration was adopted and the Millennium Development Goals to be achieved by 2015 were established. These goals were mainly related to the social development of developing countries, such as halving the proportion of people in poverty, halving the proportion of people suffering from hunger and achieving universal primary education. However, between the time of the Declaration and 2015 new problems became visible, including environmental issues such as climate change and global warming. Hokkaido is not supposed to have a rainy season like the rest of Japan, but in recent years Hokkaido sometimes has a weather pattern similar to the rainy reason. The amount of drift ice is also decreasing. I am sure that everyone has fully realized the influences of global warming and climate change.

With regard to the problem of the gap between rich and

poor, one in six children in Japan lives under the poverty line. Unfortunately, the gap between rich and poor keeps growing both in Japan and developing countries, even though the per-capita GNP/national income is increasing. In response to the gap between rich and poor and other problems that have recently emerged, the 17 Sustainable Development Goals were adopted.

These 17 goals can be divided into three main areas: economic growth, social inclusion based on the idea that no one will be left behind, and environmental protection.

In comparison with the MDGs, the SDGs can be characterized by universality. The MDGs targeted developing countries. On the other hand, the SDGs also tackle problems related to the gap between rich and poor, gender inequality and climate change that developed countries like us are facing. In addition, each country is required to report on its sustainable development performance.

Another feature of the SDGs is inseparability. The 17 SDGs are not independent from each other but inextricably linked. For example, girls' education is related to many other goals. When well-educated women become mothers, they will be able to feed their children nutritious food and raise healthy children. They will be economically independent, contributing to narrowing economic disparities. Girls' education will also facilitate the participation of female delegates in discussions on peace and justice and in peace talks.

The SDGs are transformative. We are entering a new era when we may be able to end poverty in all its forms everywhere, leaving no one behind. We may be about change history.

I encourage each one of you to take a close look at each of the SDGs, and consider which goals you are interested in and what actions you can take to achieve the goals you have selected. For the World Winter Cities Association for Mayors (WWCAM), I think Goal 13 "Climate Action" and Goal 11 "Sustainable Cities and Communities" may be the most appropriate. I hope you all consider what you can do for sustainable development wherever you are

Ms. Malala Yousafzai became the youngest-ever Nobel Prize laureate when she won the Nobel Peace Prize at the age of 17. She advocated for girls' education, which resulted in a death threat from the Taliban. She miraculously survived an assassination attempt, and continues to fight for what she believes in. She delivered a great speech to the UN General Assembly in September 2015, when the SDGs were adopted.

As an 18-year-old girl, Malala selected Goal 4 "Education," Goal 5 "Gender equality," and Goal 16 "Peace" as her important goals. Malala is not from a very rich or a political family. Her mother is illiterate, but her father is keenly aware of the importance of girls' education and has supported Malala's activities. Although she does not have a special background, she plays a leading role on a global scale. Everyone here has the potential to be a change maker, and actually can be a change maker just like Malala.

One of the significant challenges for the WWCAM is climate change, which corresponds to Goal 13 of the SDGs. The Paris Agreement under the United Nations Framework Convention on Climate Change was adopted at the COP21 conference last year. Unlike the Kyoto Protocol, the Paris Agreement will be entering into force with the participation of both developed and developing countries that have ratified the agreement. On April 22, 2016, the Paris Agreement Signing Ceremony was held in New York with many countries in

attendance. However, the agreement is yet to come into force because it has not received the required number of ratifications. At the G7 Ise-Shima Summit, which was held in May 2016, all the participating parties agreed to take the necessary steps to bring the Paris Agreement into force within 2016. To this end, at least 55 parties to the convention, accounting in total for at least 55% of global greenhouse gas emissions, have to ratify the agreement. Japan is urged to ratify the agreement as soon as possible.

## Each one of us is a change maker.

As I said earlier, each one of you needs to take action to achieve the SDGs. Here, I would like to give you some examples of individuals who are taking action for the SDGs.

Ms. Hiroko Ida was a weather reporter for “News Watch 9” on NHK, Japan’s national broadcasting corporation, until March 2016, and she now works as a weather reporter for TBS. When she was working as a weather reporter for NHK, she participated in a UN campaign by creating a video clip titled “Future Weather Forecast” to demonstrate what the weather will be like if we do not take any action against climate change. Ms. Ida has remained interested in issues related to climate change and global warming even after starting to work for TBS, and she features these issues in her TV programs whenever the opportunity arises. This is her way of contributing to the SDGs.

This photograph was taken by Mr. Leslie Kee, a fashion photographer who has photographed famous celebrities such as Madonna, Yoko Ono and Beyoncé. He is also an advocate for the SDGs. He took this photograph in the hope of helping to publicize the SDGs using his creative talent. The person at the center of the photograph is Ms. Yu Hayami, and next to her is Ms. Iyo Matsumoto, surrounded by people holding placards showing SDG icons. These two women are pop singers that anyone of my generation would know. The music video for Ms. Hayami’s new song was also produced by Mr. Kee, and it features placards with information about the SDGs.

High school students can also take part in UN activities to address global issues, through means such as the High School Model United Nations. The Global Classrooms International High School Model United Nations was held in May 2016 in New York, and two students from Azabu High School won the Honorable Mention Award. The 10th Japan National High School Model United Nations will be held in November 2016, bringing together students who have worked hard to prepare for discussions on the given agenda.

In Hiroshima and Nagasaki, high school students are nominated as high school peace student ambassadors and are dispatched to UN and other international disarmament

conferences to share their views on behalf of Japanese students. Ms. Kozakura, a high school student from Hiroshima said, “We want to get together to surround the government buildings involved in nuclear weapons using the networks of young people around the world.”

The best way to get involved in the issues addressed by the UN may be to become a UN worker. People who want to work for the UN are required to have three core values. The first is professionalism. Japanese people are highly valued for their ability to accomplish their jobs while judging a situation properly. The second is integrity. This concerns loyalty to organizations, and Japanese people are considered to be very loyal to the companies and organizations they work for. The last core value is diversity. I think Japanese people are good at listening to people in various circumstances, reconciling divergent views and finding common ground. In other words, Japanese people have the qualities needed by UN workers. However, the number of Japanese UN workers is quite low in comparison to Japan’s financial contribution to the UN. For this reason, the UN as well as the Japanese government is willing to offer qualified Japanese who want to work for the UN with chances to do that.

Each one of us is a change maker. UN Secretary-General Ban Ki-moon said, “There is no global solution without local action.” We cannot solve global issues if we do not take action locally. Everything starts where you stand.

Thank you for your attention.



# My Experiences as a Goodwill Ambassador

Misako KONNO

UNDP Goodwill Ambassador



My mother was born in Yoichi, Hokkaido and spent her early childhood in Hakodate. My grandmother on my mother's side was from Rikuzentakata in Iwate, but because of her husband's job, she moved to Hokkaido. Later, my grandmother lived with my family in Tokyo until she passed away when I was in the first grade of high school. I remember she often wanted to go back to Hakodate in her later years. My grandmother and my mother really loved Hakodate. The family temple of my mother's side of the family is located in Hakodate, so I have visited Hakodate and Sapporo many times since I was a small child.

One of the most memorable moments of my childhood is a family trip back to Hokkaido when I was an elementary school student. We came to Hakodate by a ferry that connected Hakodate and Aomori and then took a train on the Hakodate Main Line to Sapporo. On the train on the way to Sapporo, I played with my mother and older sister, asking each other questions about how to read Hokkaido local station names written in Chinese characters, because many of them were difficult to read. At Odori Park, I ate grilled corn. Now when I hear "Odori Park," I recall my childhood memory along with the delicious smell of grilled corn.

Speaking of Sapporo, the Sapporo Winter Olympic Games were held in 1972. I'll never forget the great achievements made by the Japanese ski-jumping team, who were known as "Hinomaru Hikotai." I remember we used to say, "Let's play Hinomaru Hikotai," and imitate the ski jumpers in the playground. And, I remember Janet Lynn, who was nicknamed the fairy on the ice skating rink. Because of the Olympics, I became aware of the existence of figure skating as a competition and was fascinated by its beauty. The high school in Tokyo that I went to had a figure skating club. I joined the club and I devoted myself to figure skating for three years in high school and in beginning of my college years. I cannot do a triple jump, but I can skate backwards and forwards. One day, if a drama about Mao Asada is going to be made, I would really like to play the role of a very strict figure skating coach (laugh).

Soon, the Olympic Games will start in Rio de Janeiro,

Brazil. I often see reports on TV about people in Rio de Janeiro suffering from the gap between rich and poor and other problems associated with the Olympic Games, which conclude that we are not supposed to be excited about the Olympic Games because local people are suffering. I agree that there is no true peace where many people live with inequality, discrimination, and anxiety.

## **The UNDP provides a wide range of support from infrastructure development to literacy education**

Today, I would like to share my experiences as a United Nations Development Programme (UNDP) Goodwill Ambassador.

I am often asked, "What is the UNDP doing? I have never heard of it." The UNDP, United Nations Development Programme, is one of the UN's many organizations, which also include UNICEF, UNESCO, and the UNHCR. Recently, the One UN approach has been promoted and UN organizations have coordinated with each other toward one goal. The UNDP focuses its activities in particular fields. Currently the UNDP operates in approximately 170 countries across the world. For example, Cambodia is a developing country located in Asia. Although Cambodia has achieved remarkable economic growth, the UNDP is providing comprehensive support to Cambodia until it can support itself as a nation without receiving help from other countries, the UN or other international organizations or NGOs. The UNDP provides a wide range of support, from the creation of an elementary school system and the provision of literacy education to women who could not otherwise receive education due to religious reasons and poverty to the development of infrastructure. On a large scale, the UNDP supports the construction of ports, roads, power plants and other infrastructure in developing countries in cooperation with the Japanese government. Meanwhile, the UNDP provides support for the diffusion and education of IT and other services. To create an independent country, the country





has to have a solid foundation. To this end, the country needs to develop legislation, an electoral system, a judicial system, and other necessary systems. The UNDP also offers support for the development of fundamental government systems.

The UNDP's operations are based on the idea that improving the abilities and expanding the capabilities of individuals in a developing country will result in the creation of a strong workforce for the country. Things that Japanese people take for granted may not be available for people in developing countries, especially in economically poor regions. For example, people in Japan can select jobs after graduating school, whereas people in developing countries, especially in economically poor regions, cannot choose what to eat every day, or even get a job. People in such difficult situations have few choices at every stage in their lives. It is the UNDP's role to provide support so that such people will be able to have more choices in their lives.

### Nine countries and regions in ten field trips

The UNDP also helps to accelerate the achievement of the Sustainable Development Goals (SDGs) by 2030 in many regions and countries. Ms. Nemoto has just explained what the SDGs are in her presentation. It is UNDP Goodwill Ambassadors who work to let people around the world know the activities of the UNDP. It has already been 18 years since my unexpected appointment as a UNDP Goodwill Ambassador in 1998. Without realizing it, I became the longest-serving UNDP Goodwill Ambassador. Other Goodwill Ambassadors include football legends and World Cup stars Zinedine Zidane, Ronaldo Luiz Nazario, Didier Drogba, and Iker Casillas. They have played in the UNDP's "Match Against Poverty" And have also invited other famous football players to join the matches. This is a charity match to eradicate poverty and has taken place 11 times to raise funds and attract attention to poverty around the world.

My work as a Goodwill Ambassador is to visit developing countries once every several years in order to actually see the places where UNDP projects are taking place, and put my experiences into my own words and share them with many other people. By the way, there is an agreement regarding the pay received by UN Goodwill Ambassadors. Each UN Goodwill Ambassador, including UNICEF Goodwill Ambassadors and UNDP Goodwill Ambassadors, is supposed to receive one dollar a year as a reward. However, this is only nominally, and I have never received it.

So far, I have paid official visits to nine countries and regions in 10 field trips. I have been to Cambodia twice, and

Palestine, Bhutan, Ghana, East Timor, Vietnam, Mongolia, Tanzania and Pakistan once. I also visited areas affected by the Great East Japan Earthquake several times. From August 2, I will visit Kenya in Africa. Located in Kenya is Lake Nakuru, which is famous as a habitat for flamingos. The lake often appears in films and is picked up in one of the songs by Masashi Sada. The number of flamingos in the lake is rapidly decreasing, probably due to climate change. I will visit Lake Nakuru, too. I hope that I will have a chance to report on my visit to Kenya.

### Primary education for all children

My first official visit as a Goodwill Ambassador was a visit to the Kingdom of Cambodia in 1999. I have been to Cambodia twice. What came strongly to mind during my first visit to Cambodia was "Seeing is believing." Seventeen years ago, when I was told that I was going to visit Cambodia, I was afraid that there may have been landmines still buried everywhere in the country. At that time, my knowledge about the problem of landmines in Cambodia was only through TV news and newspapers. It was not until I actually went to Cambodia and met and listened to many local people, including those who were injured by landmines and those who engaged in demining, that I could understand the seriousness of the problem of landmines. It was really happening on this planet.

During my second visit to Cambodia, I found that primary education for children was the most significant challenge for Cambodia. I saw the reality that many children were not able to go to even elementary school due to poverty, the lack of an elementary school near their homes, the lack of teachers, unsafe neighborhoods, having to work at home, and many other reasons. At the elementary school that I first visited, I met a female Japanese teacher, who had been in Cambodia for two years as a Japan Overseas Cooperation Volunteer for the Japan International Cooperation Agency (JICA). She was working very hard in difficult circumstances. It was a good experience for me to have an opportunity to personally meet and actually see her playing an important role in the school. At one school, there were about 130 students in the first grade but the number of students decreased to approximately 30 in the sixth grade. It was a sad reality. I met a girl in a very poor village near Angkor Wat, a magnificent World Heritage site. She was 12 years old. I asked her, "Do you go to school?" She answered, "No, I seldom go to school." Then I asked, "How come?" She answered, "Because my father and mother died, and I have to fetch water every day." It was two to three kilometers each way on foot to fetch water. She told me about

herself, “If I had money, I want to buy some stationery and a school uniform. There have been no happy days in my life. The saddest thing was when my mother died.”

I also visited a region where people lived in boats on Lake Tonlé Sap, the largest lake in Cambodia. I talked with children in the region. One child said, “My family is poor and does not have a boat to go to school.” The elementary school for children living on the lake was located on the lake. There was a 12-year-old girl who told me, “If I had money, I would buy a boat, because I want to go school every day.”

When I tell these stories to Japanese children, they listen intently and ask, “Is there anything that I can do for poor children?” I am glad that Japanese children are kind enough to care about poor children, but at the same time I want to tell Japanese children that they are very lucky to have opportunities to learn and that there are things that they should do for themselves by taking advantage of the favorable circumstances they find themselves in. I hope Japanese children will notice that.

According to Ms. Malala Yousafzai, who won the Nobel Peace Prize two years ago, “Education is peace.” I totally agree with her. As I said before, to get an education means to have more choices in your life. Even if you live in a poor neighborhood, you can carve your own path, if you can get an education. There are various ethnic groups with different histories, cultures and religions around the world. I believe that we can understand through education that it is important to create a society in which people respect each other’s differences and forgive each other. Make education the first priority. I believe that it is most important to provide at least primary education for children regardless of their economic situation and where they live.

Three years ago, the new King and Queen of the beautiful Kingdom of Bhutan visited Japan. Bhutan is the country of happiness. Bhutan values the spiritual richness of each one of its people, or in other terms, its gross national happiness. I visited Bhutan hoping to find an answer or at least a clue to the questions, “What is true happiness in one’s life?” and “What is true richness?”

Bumthang is located in the easternmost part of Bhutan. From Thimphu, the capital of Bhutan, it took ten hours by car via steep mountain roads to get to Bumthang. I talked with the governor of Bumthang over a locally brewed beer called Red Panda Beer. The governor said: “Bhutan thinks that there is no hurry to develop the country. I know that other Asian countries are making rapid economic development. But we choose not to hurry. This is because we place importance on our culture and tradition, which have been passed down from our ancestors, our natural environments blessed with forests, and the beautiful townscape of traditional Bhutanese buildings. We value these things. We do not want to modernize everything. We are satisfied with our clothing, food, education and community. We are satisfied with everything. We do not have a desire to have more than we need.” Now, in the capital city Thimphu, young people prefer a pair of jeans over traditional attire, the ban on the Internet has been lifted, and many other changes have been seen amid a wave of modernization. This is what the governor told me when I visited Bhutan ten years ago.

### **Keep doing what you can do, where you are.**

During my one-week stay in Bhutan, the words that came to

mind were “Enough is as good as a feast.” There are many Japanese people who cannot be satisfied with the abundance of materials and information they have access to. In order to live an enriched life by your own values, you should come face-to-face with yourself to find your own happiness. After visiting Bhutan, I concluded that a shortcut to an enriched life is probably to have your own happiness scale.

For my field trip to Mongolia ten years ago, I first visited Ulaanbaatar, a winter city like Sapporo. I was surprised because Ulaanbaatar was a city as large as Sapporo. I heard that air pollution was a serious problem, since the population was concentrated in Ulaanbaatar. In addition, people burned coal and especially people in poor neighborhoods burned literally anything for heat during the winter months when temperatures drastically drop. However, when we drove a little away from Ulaanbaatar, there was grassland as far as the eye could see under what Mongolians call the eternal blue sky. What I hoped strongly when I visited Mongolia was that Japanese children be provided with opportunities to interact with animals and plants in the great outdoors. In Mongolia, I saw that the One Village, One Product project was being promoted. The project was started by Oita Prefecture in Japan with the aim of promoting one special local product from each village, such as honey and carpets, and disseminating them across the nation and eventually into the world. I was glad to see the happy smiles of people who had acquired technical skills and, as a result, had their improved lives through this Japan-originated initiative.

To finish, I would like to recite a poem.

What is international cooperation? In my opinion, international cooperation is the same as getting up and offering a seat for an elderly person on a train or bus. It is to care about people close to you. In this sense, it is important for us to keep our interest alive in what we like to do, such as community activities, support for areas affected by disasters across Japan, and, of course, international cooperation. The important thing is to continue doing what we can do where we are. I am continuing the activity of reciting hoping that what I like to do can make other people happy.

This is a short poem. Please listen.

(Recitation of “Ai (Love)” a poem by Shuntaro Tanikawa)



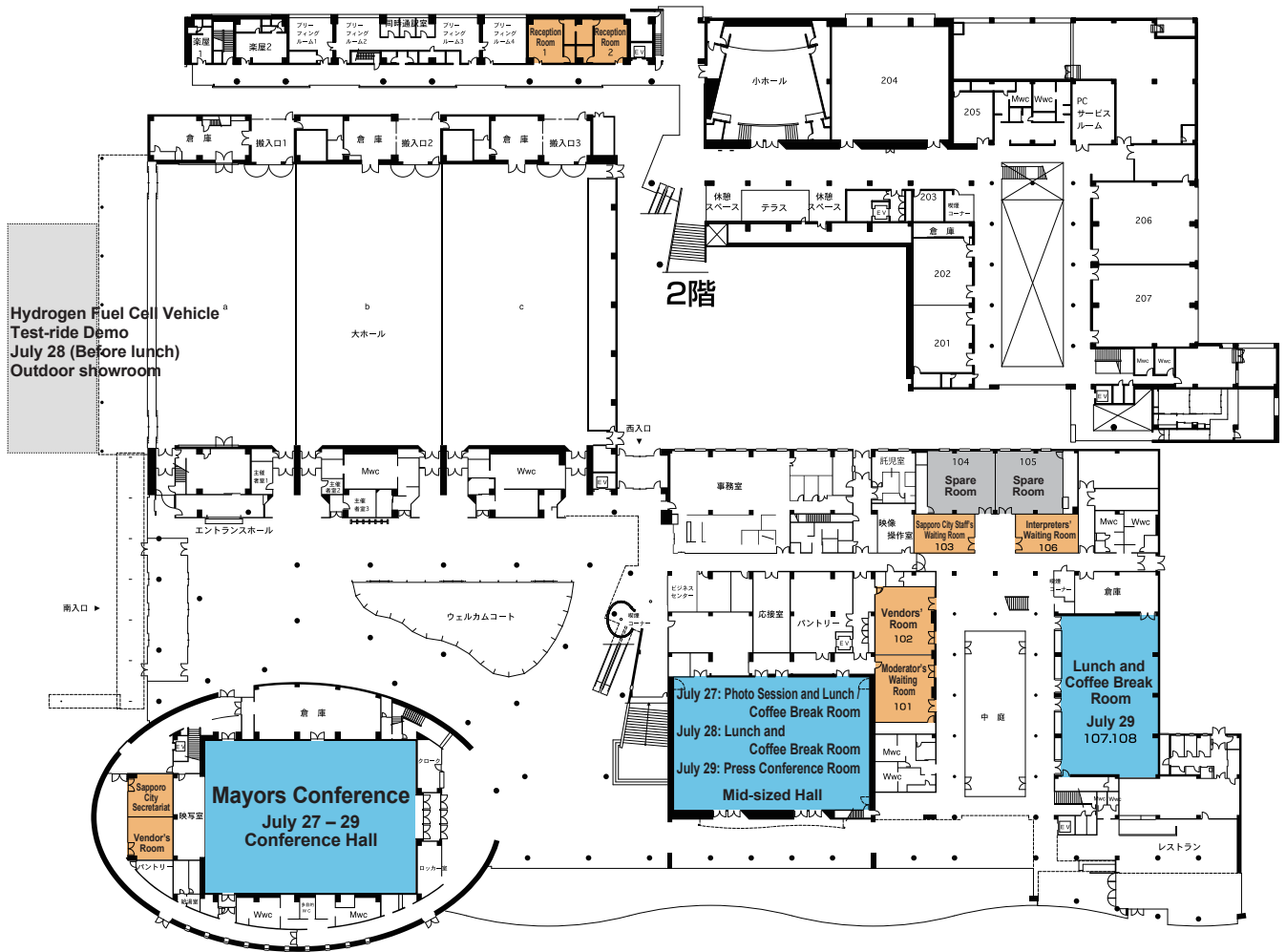




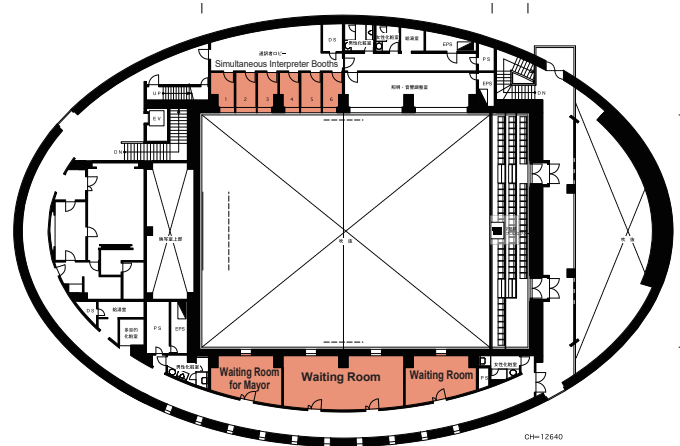
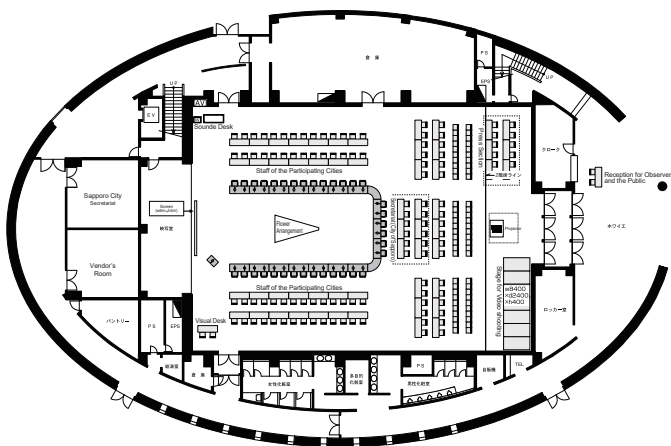


## Miscellaneous Information

## Venue map

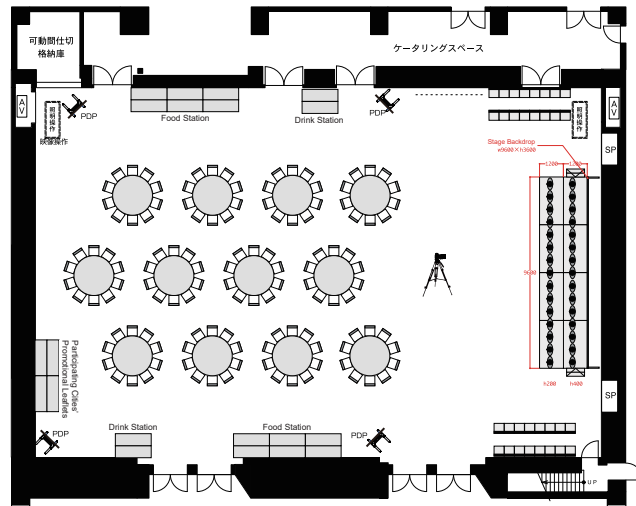


## Convention Center Floor Map

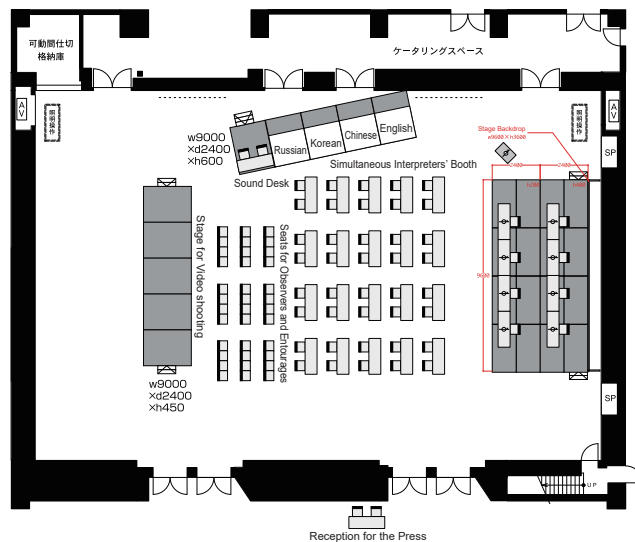


Mayors Conference Venue: 1st floor of Conference Hall

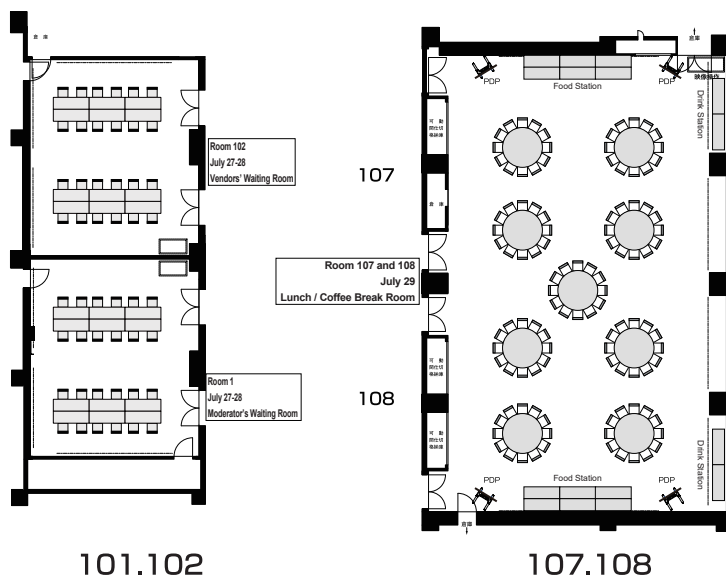
Mayors Conference Venue: 2nd floor of Conference Hall



**July 27 & 28: Lunch / Coffee Break / Photo Session Room: Mid-sized Hall**



**July 29: Press Conference Room: Mid-sized Medium Hall**





## Stage Signage/Backdrop

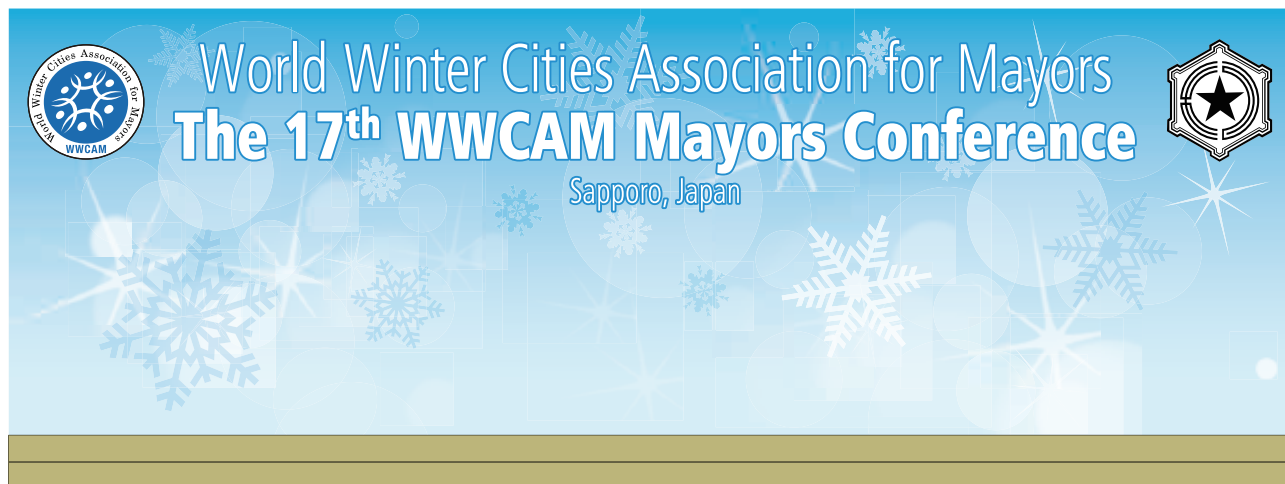
### ■ Stage Signage



Stage Signage at the Conference Hall (W.7200×H.900)

Hanging Signage at the Conference Hall

### ■ Stage Backdrop (Photo Session / Press Conference)



## Gifts and Handouts

### ■ Gift for delegates: *Nibutani-ita* wooden tray



### ■ Gift for entourages: Japanese towel and wrapping cloth



### ■ Gift for entourages: Indigo-dyed folding fan



### ■ A set of handouts



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