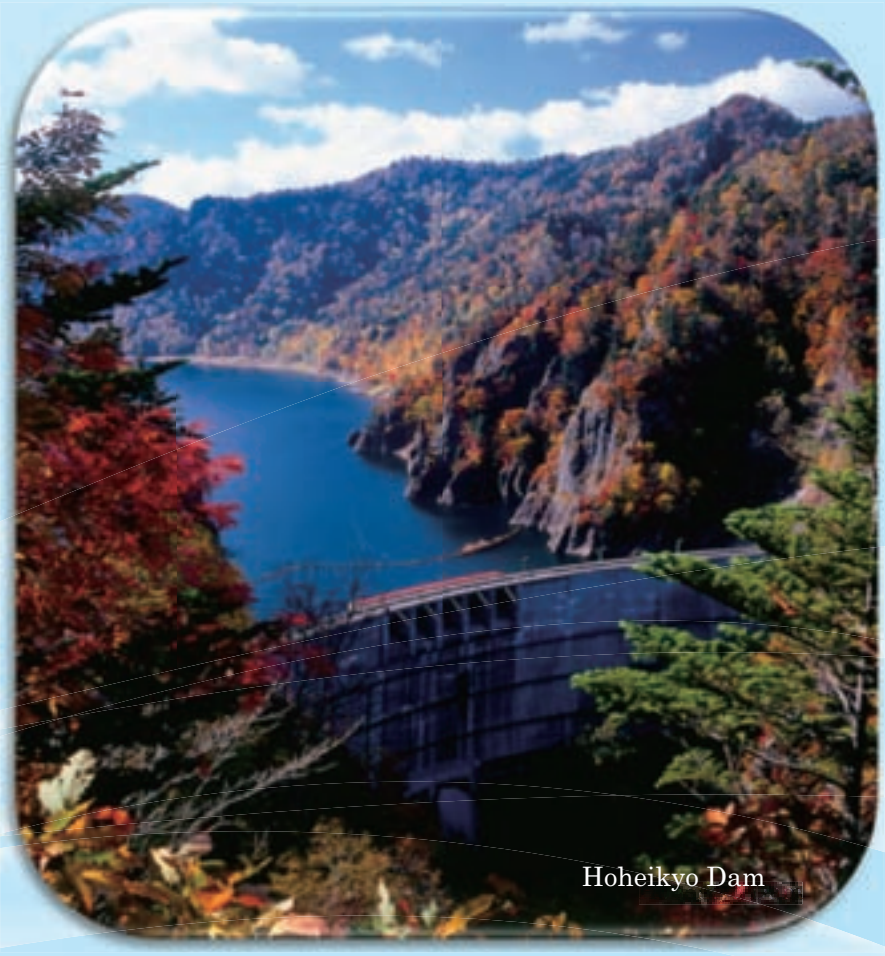
4th Asia-Pacific Group Symposium
9th East Asian Area Dam Conference

2016 Sapporo

September, 25th to 30th

FINAL BULLETIN



Hoheikyo Dam

JCOLD

Japan Commission on Large Dams

ORGANIZING COMMITTEE

Asia-Pacific Group (APG) & East Asian Area Dam Conference (EADC)

APG & EADC

APG (Asia-Pacific Group) Symposium has been held three times during the Congress and Annual Meeting of ICOLD. On the other hand, EADC (East Asian Area Dam Conference) is held every two years in China, Japan and Korea in turns since the first conference had been held in Xian, China, in 2004. The Conference has promoted exchange of information about dam engineering and its development through symposium and technical tours. Furthermore, the EADC entered the third round when the 7th Conference was held in Zhengzhou, China, in 2011. This time we will hold the APG Symposium and the EADC at the same time. We hope that not only the EADC members but also the Asia-Pacific Group and the other ICOLD members will participate in the 4th APG Symposium & the 9th EADC to be held in Sapporo, Hokkaido, in 2016.

APG Member Countries

1. Australia
2. China
3. India
4. Indonesia
5. Iran
6. Iraq
7. Japan
8. Korea
9. Lebanon
10. Malaysia
11. Nepal
12. New Zealand
13. Pakistan
14. Philippines
15. Sri Lanka
16. Thailand
17. Vietnam
18. Myanmar

EADC Member Countries

1. China
2. Korea
3. Japan

Organizing Committee

Chairman	Noriaki HASHIMOTO
Secretary	Norihisa MATSUMOTO
Member	Joji YANAGAWA
	Junya TAKIMOTO
	Tatsuo HAMAGUCHI
	Akira KOGANEZAWA
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	Toru HINO
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Japan Commission on Large Dams

President	Noriaki HASHIMOTO
Vice-President	Joji YANAGAWA
	Naori FUKUDA
Managing Director	Norihisa MATSUMOTO
Executive Director	Junya TAKIMOTO
Secretary General	Akira KOGANEZAWA

INVITATION FROM THE CHAIRMAN OF ORGANIZING COMMITTEE AND PRESIDENT OF JCOLD

To APG and EADC Members:

JCOLD is truly honored to host the 4th Asia-Pacific Group (APG) Symposium and 9th East Asian Area Dam Conference (EADC) in Sapporo, Japan from September 26 to 30, 2016.

The world is now facing regionally variable shortages of energy and food caused by population growth and challenges to the sustainable management of water resources including frequent abnormal floods and droughts, which may be thought to be the results of the impact of climate change. To deal with these problems, various regions are striving to tackle a variety of technical issues such as constructing new dams, improving the functions of existing dams, and appropriately managing reservoirs.

The EADC has conducted technical exchanges concerning dams in the three countries of China, Korea and Japan, which share a common culture and monsoon climate, and will now simultaneously hold the APG symposium and EADC. This will give the many ICOLD members from West Asia to Oceania the opportunity to exchange information, and I am confident that it will provide the setting for an unprecedented landmark exchange of views.

The overall challenge taken up at the symposium will be “Innovative Technologies for Dams and Reservoirs toward the Future Generations” and consisted by three themes which have been set are: (1) Innovative Technologies of Dams, (2) Extending Service Life of Dams, and (3) Dam Safety and Risk Management.

September is a pleasant season in Sapporo. I am looking forward to many of you taking part in the APG Symposium and EADC.

Noriaki HASHIMOTO

President, Japan Commission on Large Dams

MESSAGE FROM THE CHAIRMAN OF THE APG

On behalf of the Asia and Australasia Zone of ICOLD, I would like to extend my deepest gratitude for being given the opportunity to co-host the 4th Asia-Pacific Group (APG) symposium which is the follow up of the 3rd Symposium held on June 26, 2007 in St. Petersburg, Russia together with the 9th East Asian Area Dam conference with the theme of "Innovative Technologies for Dams and Reservoirs Toward the Future Generation."

Thanks to the great effort by 3 NCs (KNCOLD, CHINCOLD and JCOLD), the EADC (East-Asian Area Dam Conference), established in 2007, has expanded its membership to include more Asia-pacific Group members, as well as ICOLD members, to its Symposium. This decision, made on October 21, 2014 at the 8th EADC among 3 NCs, will be very helpful for coping with the many challenges that we encounter in Asia-Pacific Region.

Also considering the need to activate APG activity, established in 2002, the constitution was amended in a timely manner for the purpose of strengthening its role at the Bali APG Board Meeting held on June 3, 2014. As one of our quick action responses that followed the decision made at the APG Board meeting in Stavanger, Norway on June 13, 2015, it was suggested and approved that a joint symposium be held together with the 4th Asia-Pacific Group (APG) symposium and 9th East Asian Area Dam conference which is to be held in Sapporo, Japan from September 26 to 30, 2016.

The main purpose of the symposium is to foster and strengthen neighboring friendship between Asia-Pacific countries since the region has a significant number of dams, almost half of dams in the world. In the years to come, many more dams will have to be built to meet the many challenges that lie ahead.

Along with your participation, it would be greatly appreciated if you could please submit any papers and or topics that you think would be relevant to improving the discussions at symposium.

I would like to express my sincere thanks to the organizing committee of JCOLD for the significant effort they have made and wish to see you soon in the very beautiful city of Sapporo, Japan.

With warm regards,

Kyung-taek YUM

Chairman of Asia Pacific Group and Vice President of ICOLD

CONTENTS

WELCOME TO JAPAN

Japan is situated in northeastern Asia and is an archipelago of about 6,800 islands. The four largest islands are Honshu, Hokkaido, Kyushu and Shikoku, together accounting for 97% of Japan's land area. The north to south distance of Japan is approx. 2,000 km and the total land mass is approx. 378,000 km^2.
It experiences four distinct seasons. Since 70% of the islands are mountainous, Japanese people live and carry out their major and economic activities on the remaining 30% of the land. Japan's topographical features include coastlines with varied scenery, towering mountains, which are very often volcanic and twisted valleys that invite visitors into the mysterious world of nature.
Japan has a long history of absorbing advanced cultures from the Asian Continent from ancient times through the Middle Ages.

Matsumoto Castle

Mt. Fuji from Hakone Lake Ashinoko

In June 2012, the 80th ICOLD Annual Meeting and the 24th Congress was held in Kyoto where remain many temples, shrines and other historic buildings in Kyoto that were built during long period.

Akashi Ohashi Bribe

Kaminari Mon Asakusa Sensoji Temple
"townphoto.net"

Later it began to assimilate elements of Western civilization from the latter half of the19th century.
By selectively assimilating these many cultural influences, the country has successfully added rich new dimensions and depth to its indigenous culture.

A World Heritage Site Tomioka Silk Mill

This marvelous harmony between the refinement of "Oriental" things and concepts blended with the leading-edge technology and the often ultramodern urban lifestyle you find in Japan today is truly proof of a long history.
With its long history, traditional culture and beautiful nature, Japan has nineteen locations registered as World Heritage Sites. These consist of fifteen Cultural Heritage Sites and four Natural Heritage Sites.

World Heritage Sites : Mt. Fuji

World Heritage Sites : Shiretoko

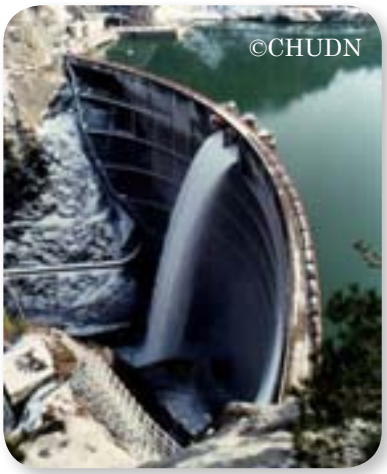
WELCOME TO JAPAN

Hokkaido Shinkansen (Bullet train)
"Hayabusa"

TOKYO SKYTREE® Height=634 m
The tallest free-standing broadcasting tower in the world

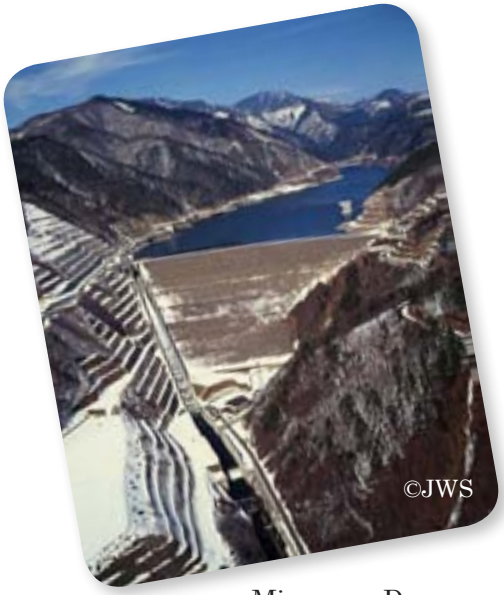
Kurobe Dam

Nukui Dam



Takane Daiichi Dam

Urayama Dam



Misogawa Dam

WELCOME TO SAPPORO

There are various theories on the origin of the word “Sapporo.”
The leading theory is that it derives from the Ainu (indigenous people of Japan) words “Sap (Dry) -Poro (Wide),” but another theory is that it derives from “Sari (Wetland) -Poro (Wide) -Pe (River)” which describes the downstream basin of the Toyohira River.
Until the end of the Edo Period (1603–1868), Sapporo was a trading post with the Ainu.

In 1869, it was renamed Hokkaido and the Hokkaido Development Commission was sent and established tis head office in Sapporo. The Hokkaido Development Commission organized Sapporo into a planned city modeled after Kyoto. Thus, Sapporo becomes known for its functional grid of streets and avenues.
After the railroads were built, the beer, flour milling and paper making industries began to flourish and Sapporo became the political and economic center of Hokkaido. In 1970, the population surpassed 1 million. In 1972, Sapporo was described as Japan’s northernmost city designated by government ordinance, and hosted the Sapporo Olympic Winter Games.

Distant View of Sapporo City

Okurayama Ski Jump Stadium

The large Sapporo City clock tower

Hokkaido Government Office

WELCOME TO SAPPORO

Odori Park

Kyogoku Pumped Storage Power Station Upper Reservoir
(Lockfill Dam with Asphalt Facing)

Mt. Yotei

Okurayama Summer Sky Jump Stadium

Maruyama Park

Maruyama Zoo

APG & EADC Sapporo Program

			Symposium & Meeting		Technical Tour		
Date	25 Sept. (Sun.)	26 Sept. (Mon.)	27 Sept. (Tue.)	28 Sept. (Wed.)	29 Sept. (Thur.)	30 Sept. (Fri.)	1 Oct. (Sat.)
AM			Symposium Opening Ceremony Symposium Session	Symposium Session	1st Day	2nd Day	Tour end after breakfast
PM	Registration Beginning	City Tour (With Dinner)	Symposium Session	Symposium Session APG Roundtable Meeting Symposium Closing Ceremony			
	Registration ← →						
Social Program			Welcome Reception			Farewell Dinner	

Theme:

Innovative Technologies for Dams and Reservoirs Toward the Future Generations

The Symposium will be held on 27 to 28 September at the Royton Sapporo Hotel. The APG Symposium and EADC Organizing Committee invites professionals, managers and decision makers from the international dam community to participate in an international symposium organized as part of the 4th APG and the 9th EADC from 26 to 30 September, 2016.

The topics in the international symposium are listed as follows.

(1) Innovative Technologies of Dams
(2) Extending Service Life of Dams
(3) Dam Safety and Risk Management
(4) Climate change and Dam strategies

The Symposium will be organized so as to give as much time to speakers for discussions. To stimulate discussion on the oral presentations, experts will be asked to present the latest developments in their field of expertise and to give their views on the key issues raised.
Papers will be presented orally by authors or postered in the lobby adjacent to the meeting room.
The official language will be English only.
The participants are required to register to the 4th APG and the 9th EADC.
For more information, you can visit our website:

http://jcold.or.jp/e/apg-eadc/

VENUE AND ROOM ALLOCATION

The Royton Sapporo Hotel, venue of the 4th APG & 9th EADC, is fully equipped with large and small convention halls on Floors 2, 3, and 20.
Royton Hall on Floor 3 is one of the largest venues in Sapporo. With 1,607 m^2 of space and an 8 meters ceiling, the hall is suitable for exhibitions and other large-scale conventions, as well as modern visual presentations using two 200-inch projector screens.

The Royton Sapporo: a venue for

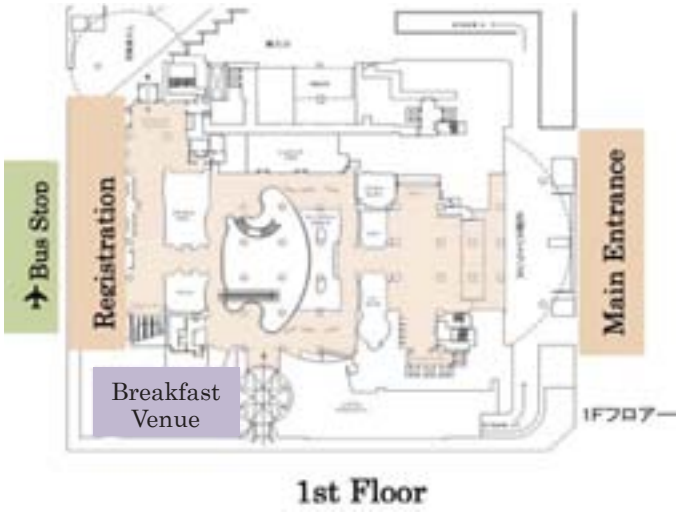
Registration during, 25 to 28 September
International Symposium, 27 to 28 September
APG Conference, 28 September
Welcome Reception, 27 September
Farewell Banquet, 30 September

Over View of the Royton Sapporo Hotel

Royton Hall : Receptions

Empress Hall : Sessions

Main Venue of the Royton Sapporo 3rd Foor



Registration desk & Breakfast Venue
of the Royton Sapporo 1st Floor

TOURISM

TECHNICAL TOUR

We will prepare a two-day technical tour which will visit the Apporo Dam (Trapezoidal CSG Dam), the Yubari-Shuparo Dam (Gravity Dam), the Kyogoku Pumped Storage Power Station. We will also arrange city tour.

➢Day 1

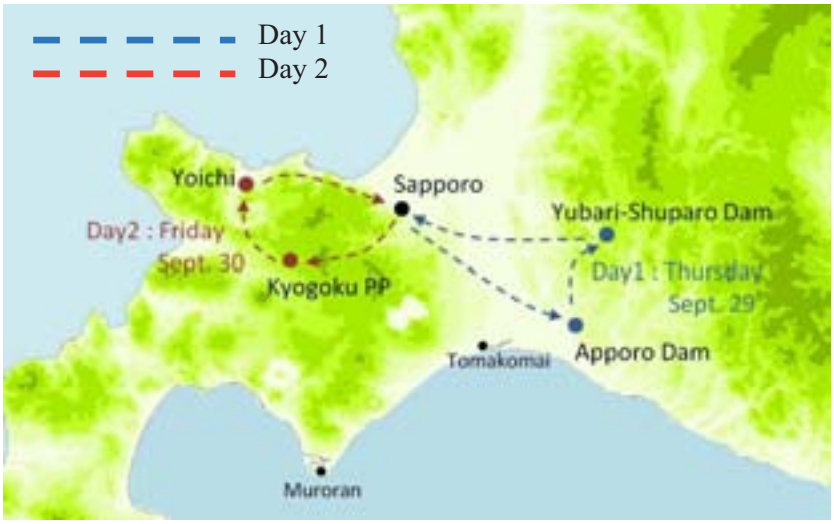
2 Dams

The Yubari-shuparo Dam,
The Apporo Dam

➢Day 2

Pumped Storage
Power Station

The Kyogoku Power Station
(Upper reservoir &
Kyogoku Dam)
～ Nikka Yoichi Factory



Day 1 (Sept. 29) Apporo Dam and Yubari-shuparo Dam

6:30 – 8:00	Breakfast at hotel restaurant
8:00	Departure from Royton Sapporo Hotel
10:00 – 10:45	Briefing about the Apporo Dam at Atsuma Town General Welfare Center
11:15 – 12:15	Visit the Apporo Dam
13:30 – 15:00	Lunch at Hotel Mount Racey Briefing about the Yubari-Shuparo Dam
15:30 – 16:15	Visit the Yubari-shuparo Dam
18:30	Arrival at Royton Sapporo Hotel

● Apporo Dam

- Multipurpose
- Under Construction

Type of Dam	Trapezoidal CSG
Height of Dam	47. 2 m
Dam volume	480×10^3 m^3
Crest length	516.0 m
Gross storage capacity	47.4×10^6 m^3

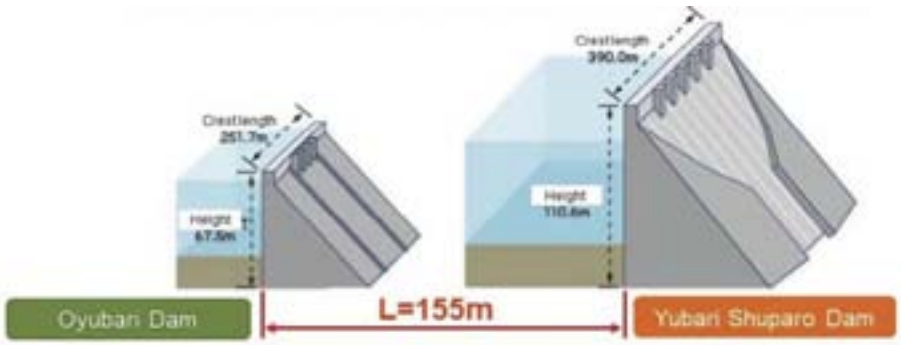
—Trapezoidal CSG dam.

In addition to flood control and maintenance of normal water flow, its main purpose is water irrigation and the supply of city water. The slope of the upstream to downstream is 1:0.8, and it is built in a trapezoidal shape.

● Yubari-shuparo Dam

—Concrete gravity type dam.

Through reservoir redevelopment project, a dam 43.1 meters high was built in the direct lower stream of the existing dam with the aim of increasing reservoir capacity.



	Oyubari Dam	Yubari-Shuparo Dam
Type of Dam	Concrete gravity	Concrete gravity
Height of Dam	67.5 m	110.6 m
Dam volume	200,000 m^3	940,000 m^3
Crest length	251.7 m	390.0 m
Gross storage capacity	87.2 $\times 10^6$ m^3	427.0 $\times 10^6$ m^3

Day 2 (Sept. 30)

8:00	Departure from Royton Sapporo Hotel
10:00 – 10:30	Briefing about The Kyogoku Pumped Storage Power Station at the Kyogoku Town Community Center
11:30 – 11:50	Visit the Upper Reservoir
12:20 – 12:40	Visit the Kyogoku Dam
12:55 – 13:40	Lunch at Kyogoku Town Community Center
14:40 – 15:40	Visit the Nikka Whisky Yoichi Distillery
17:40	Arrival at Royton Sapporo Hotel
19:00 – 21:00	Farewell Dinner at Royton Sapporo Hotel

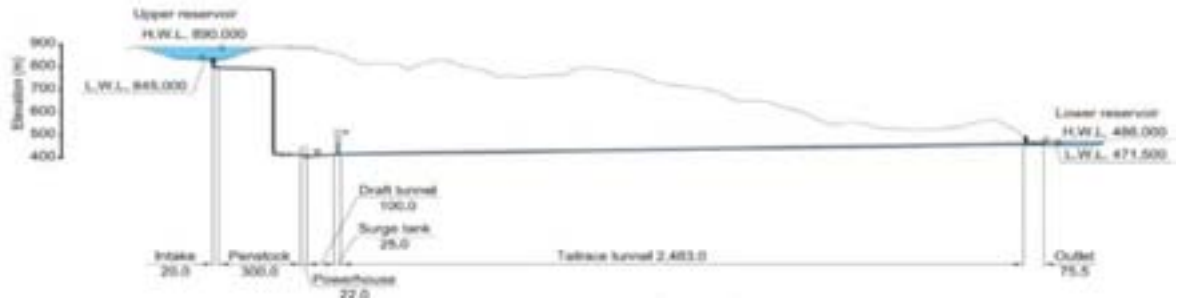
● The Kyogoku Pumped Storage Power Station

Hokkaido Electric Power Co., Inc. (HEPCO), aiming to ensure a stable supply of power based on long-term planning while paying attention to global and regional environments, has been diversifying the sources of electric power for a well-balanced supply of energy by developing thermal and hydroelectric power as well as nuclear power. The Kyogoku Project was planned to take charge of peak demand of electricity in the daytime, and to store energy through pumping in the nighttime.

Panoramic View of the Kyogoku Pumped Storage P/S

	Upper Reservoir	Kyogoku Dam
Type of Dam	Rockfill dam with asphalt facing	Rockfill dam with central clay core
Height of Dam	22.6 m	54.0 m
Dam volume	$1{,}539 \times 10^3$ m^3	$1{,}318 \times 10^3$ m^3
Crest length	1,140.9 m	332.5 m
Gross storage capacity	$4{,}400 \times 10^3$ m^3	$5{,}546 \times 10^3$ m^3
Max. output capacity	600MW (200MW per unit for 3 units)	
Max. utilization flow	190.5 m^3/sec	
Effective head	369 m	

Profile of water way (Unit : m)



Upper Reservoir

Kyogoku dam

● Nikka Whisky Yoichi Distillery

Pot Still

Nikka Whisky Yoichi Distillery

In 1918, Masataka Taketsuru, known as the “father of Japanese whisky,” traveled alone to Scotland, where he learned the secrets of whisky making. Upon his return, he began looking for the ideal location to make whisky in Japan, convinced that whisky was best produced in a northern climate. He eventually built his distillery in Yoichi in 1934.

Even today, the Yoichi Distillery makes whisky with the traditional “direct coal-fired distillation” process, placing the highest priority on quality. Its whisky is recognized as being of “the highest quality in the world.” In fact, in 2002, the Yoichi Distillery had the distinction of being the first distillery outside the United Kingdom to be recognized by the Scotch Malt Whisky Society (SMWS), the world’s largest organization of whisky lovers.

The distillery has facilities for tasting and shopping. It also offers a tour of the historical buildings and distillery on its vast grounds that is popular even among those who do not drink whisky. These features make it one of Hokkaido’s most popular tourist attractions.

HALF DAY CITY TOUR

Afternoon tour for Monday, September 26, (dinner included)

14:00	Departure from Royton Sapporo Hotel
14:20 – 16:20	Visit Okurayama Jump Stadium
16:20 – 16:50	Former Hokkaido Government Office, Odori Park, Sapporo Clock Tower (viewing from bus)
16:50 – 18:00	Visit Sapporo Beer Museum
18:00 – 20:00	Dinner at Sapporo Beer Garden
20:25	Arrival at Royton Sapporo Hotel

• Okurayama Ski Jump Stadium

The stadium was the venue for the ski jumping competition of the 1972 Winter Olympics held in Sapporo. Today it features modern facilities that permit summer and night jumping as well as traditional jumping and is the stage for many international events.

• Former Hokkaido Government Office

Affectionately known as “Akarenga” (red bricks), the former Hokkaido Government Office was built in 1888 in the American Neo-Baroque style. It was placed on the list of National Important Cultural Properties in 1969.

HALF DAY CITY TOUR

● Odori Park

Odori Park is situated in central Sapporo.
It stretches for 1.5 kilometers from Odori-nishi 1-chome to Odori-nishi 12-chome and covers some 7.8 hectares. It is classified as a park for special use.

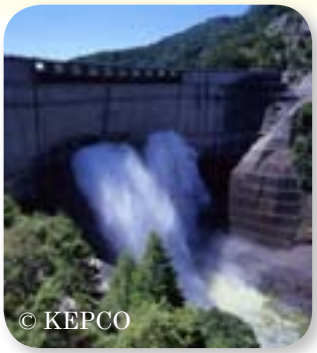
● Sapporo Clock Tower

Formal name: Drill hall of the former Sapporo Agricultural College which is predecessor of today's the Hokkaido University, Sapporo Agricultural College was established in 1876 to train people to lead Hokkaido's development. Its drill hall (clock tower) was built in 1878 based on a proposal by Dr. William S. Clark. It served as the college's central hall for military training by students, enrollment and graduation ceremonies, and other activities.

● Sapporo Beer Museum

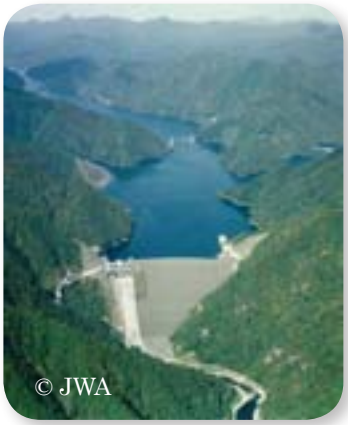
The Sapporo Beer Museum is Japan's only museum dedicated to beer. It has been designated a "Hokkaido Heritage" site.
The red-brick museum was originally built as a sugar factory in 1890. It later served as a factory for barley cleaning for some 60 years.

TYPICAL DAMS IN JAPAN



Kurobe Dam

The geographical features of Japan are quite distinct, especially when compared with those of continental countries.
Collision of four tectonic plates brought about the narrow archipelago of Japan, its high orogenic and volcanic activities, complicated geological structure, and frequent occurrence of large-scale earthquakes.
The existence of backbone mountain ranges formed many small river basins. Plentiful precipitation brought by the Asian Monsoon is also a characteristic feature of the country, which fosters rich forest zones with clear streams on mountain sides.
Two thirds of the national land of Japan is covered by green forests. The precipitation causes floods and transports the river sediments to the downstream area repeatedly. Alluvial plains spread along the downstream parts of rivers. These plains are now the major areas of social and economic activities of Japan.
Paddy cultivation was a key industry for more than ten centuries until the achievement of industrialization of Japan. Natural condition in Japan suits paddy cultivation and contributes to high productivity. Paddy industry has contributed to innovations in water management and flood disaster mitigation.



Tokuyama Dam

The water management including construction and management of irrigation ponds is an important part of the social frame work in Japan.
There are more than 3,000 large dams with different types of dam in Japan. Approximately 60% of the dams are concrete gravity dams.
Importance of the effective use of the existing dams has been increased. Major tasks include redevelopment and prolonging the operation life of the dams.
In addition, measures to adapt to climate change accompanying the global warming are emerging as world-scale challenges.
The role of dam reservoirs in mitigating the fluctuation of the hydrological cycle will be of greater importance, in the face of more frequent floods and droughts.


Sasanagare Dam

Miyagase Dam

A new type of dam, CSG

The trapezoidal CSG dam is a new type of dam which differs from the conventional concrete gravity dams and embankment dams, and its dam body is trapezoidal in shape and made of cemented sand and gravel (CSG).
Because integration of the CSG dam body with the bedrock is not necessary to withstand overturning and sliding, it is possible to relax the conditions for the foundation bedrock.
Also the raw material of CSG is rock-like raw material such as material excavated to form the foundation, riverbed sand and gravel, terrace sediments, and weathered rocks, all of which can be obtained relatively easily.

Kin Dam

Tobetsu Dam

The trapezoidal CSG dam is able to: (1) Control the stress generated within the dam body even in the event of a large earthquake; (2) Control stress fluctuations within the dam body even if loading conditions change; (3) Enhance safety against sliding or overturning.
Furthermore, CSG Construction Method is able to: (1) Reduce environmental burden and cost by effectively utilizing materials that can be easily obtained near the construction sites; (2) Reduce construction costs by omitting an aggregate facility and simplifying construction facilities; (3) Achieve rapid execution works by using general-purpose machines.

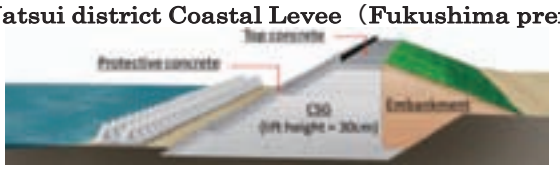
Apporo Dam CSG Placement

Sanru Dam CSG Placement

Application of CSG Construction Method

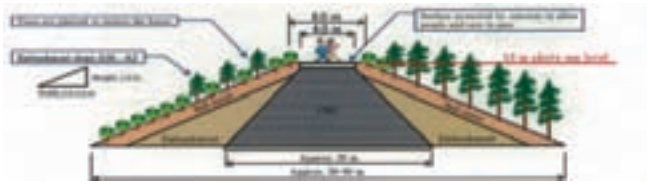
Need to construct more sturdy coastal levee

Natsui district Coastal Levee（Fukushima pref.）



■ Specifications
Height :T.P. 7.2m
Length :920m
Volume :60,000m³(including CSG 40,000m³)

Hamamatsu-shi Coastal Levee（Shizuoka pref.）



■ Specifications
Height :T.P. 13.0m
Length :175,000m
Volume :2,0000,000m³

Coastal Levee of Hamamatsu & Natsui district using CSG Method

Coastal Levee of Natsui district (Fukushima Pref.) using CSG Method

Coastal Levee of Hamamatsu district (Shizuoka Pref.) using CSG Method

GENERAL

Location

The 4th Asia-Pacific Group (APG) Symposium and 9th East Asian Dam Conference (EADC) in Sapporo will be held at Royton Sapporo Hotel.
Royton Sapporo Hotel is located in the central part of Sapporo city, and it takes 10 minutes from Sapporo Japan Railways Station by subway and 75minutes from New Chitose Airport by limousine bus.

Climate and clothing

Climate

Japan has a temperate northern hemisphere climate and weather patterns are regular year to year. Sapporo celebrates the changing of the seasons through festivals and events, and its exciting and varied seasonal cuisine.
Sapporo is characterized by four distinct seasons, including a cool summer and cold, snowy winter.
In September, temperatures drop with each rainfall and the precipitation increases as autumn deepens. The leaves begin to change color in October and the temperature sometimes approaches 0 degrees. The first snowfall usually occurs in late October.

Climate of Sapporo

	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ANN.
Mean maximum temperature °C (°F)	−0.8	−0.2	3.5	11.1	17.3	21.2	24.7	26.3	22.4	16.2	8.5	1.9	12.7
	-30.6	-31.6	-38.3	-52	-63.1	-70.2	-76.5	-79.3	-72.3	-61.2	-47.3	-35.4	-54.9
Mean minimum temperature °C (°F)	−8.4	−8.3	−4.4	1.4	6.4	11.1	15.7	17.3	12.2	5.7	0.2	−5.2	3.6
	-16.9	-17.1	-24.1	-34.5	-43.5	-52	-60.3	-63.1	-54	-42.3	-32.4	-22.6	-38.5
Rain fall mm (inch)	98.6	76.4	53.9	47.4	50.2	41.4	72.2	111.6	122.7	105	107	99.1	985.4
	-3.882	-3.008	-2.122	-1.866	-1.976	-1.63	-2.843	-4.394	-4.831	-4.134	-4.213	-3.902	-38.8

Clothing

The evenings can be cool and appropriate warm clothing should be worn.

Immigration and visa

It is recommended that you check with your local Japanese embassy for correct and up to date entry requirements to Japan. All non-Japanese passport holders are required to give finger prints (electronically recorded) and be photographed at passport control.
The Ministry of Foreign Affairs of Japan advises on its website a list of countries that do not require a visa to enter the country.

http://www.mofa.go.jp/j_info/visit/visa/index.html

Currency and foreign exchange

The Japanese currency is called the yen. Cash is the most widely accepted method of payment. Major credit cards are widely accepted, except in some small sole traders. Debit cards are almost unknown and should not be relied upon as a payment option. Traveler's checks are only accepted for exchange in banks and post offices, and, in general, cannot be used to purchase goods and services. Foreign exchange can be performed in banks (look for signs in English), larger post offices and Royton Sapporo Hotel.

Emergencies

In the unlikely event of an emergency while you are in Sapporo it is good to know the systems in place to support you. Your first source of information and advice should be your hotel or the Secretariat of Organizing Committee for the 4th Asia-Pacific Group Symposium and 9th East Asian Dam Conference.

Personal safety & security

Japan is noted as relatively safe country. Generally speaking, tourists can peacefully take a walk by themselves at any time of the day or night as they choose. It should be reiterated here however that you are always recommended to take the proper precautions you would normally practice when in an unfamiliar place.
It is recommended that visitors carry insurance against any possible injury.

Telephones & mobile phones

The Japanese mobile phones protocol is different from that in other parts of the world and it is difficult to give useful information here. The best advice is check with your provider before you depart.

Electricity

Mains electricity is supplied at 100 volts AC at the frequency of 50 Hertz in Sapporo. Most portable computers and cameras are internationally compatible but you are advised to check your equipment before departure.
Mains sockets require a Type A plug and you are advised to obtain an adaptor before departure if needed.
Type A plugs have two flat blades and are used in the US and Canada too.

Transportation

New Chitose Airport

New Chitose Airport is situated 45 km from the center of Sapporo city. It is easily accessible by road and railway.

Train

From New Chitose Airport to Sapporo Station, it takes approximately 40 minutes by JR Airport Express train and the rates are 1,070 yen.

Limousine Bus

From New Chitose Airport to Sapporo Station, it takes approximately 80 minutes by limousine bus, and the rates are 1,030 yen.

Public Transit

The bright, spotless and comfortable city subway system offers convention delegates an efficient, relaxing and reasonable means to travel around Sapporo. Hotels, conference facilities and sightseeing spots are located along the subway lines.
In addition, the extensive bus network makes it easy to go around the city.

Arrangements for Transportation

From New Chitose Airport to Royton Sapporo Hotel

- Airport buses and rapid trains connect New Chitose Airport with Sapporo station, where participants can take a taxi or the subway onward to Royton Sapporo Hotel.
- JCOLD will meet the participants at the international arrival lobby (1F) from 25 to 27 September, 2016.

For more information you can visit our website :

http://jcold.or.jp/e/apg-eadc/

Return to New Chitose Airport

- JCOLD will provide limousine bus ticket from Royton Sapporo Hotels to New Chitose Airport on 1 October.

For more detail information you can find in the pocket program which you will get at the registration desk of the 4th Asia-Pacific Group Symposium and 9th East Asian Dam Conference in Sapporo.

Accommodation

We prepared the Royton Sapporo Hotel to the venue and accommodation for the 4th Asia-Pacific Group Symposium and 9th East Asian Dam Conference in Sapporo. (Except for the Japanese participants.)

Royton Sapporo Hotel

Hotel Entrance

Guest Room

REGISTRATION AND METHOD OF PAYMENT

1. Registration

Please register in the Online Registration System.
If you have difficulties to register by online, please fill out the form and send by e-mail or Fax.

www.jcold.or.jp/e/apg-eadc.org

Participants should keep a copy of the registration form or a print of the online registration as well.
All payments shall be made in Japanese Yen (JPY) by bank transfer.
After having received the registration form, Organizing Committee of APG & EADC 2016 Sapporo will send to each participant an invoice of confirming all reservations requested by the participant.

2. Methods of payment

Registration will be only made on receipt of full payment. Please pay to the following bank account.

Japan Commission on Large Dams
Mizuho Bank, Ltd. Toranomon branch (Swift code: MHCBJPJT)
1-2-3 Toranomon, Minato-ku, Tokyo 105-0001 Japan
(Account number: 1803970)

3. Delayed payment/Reminder

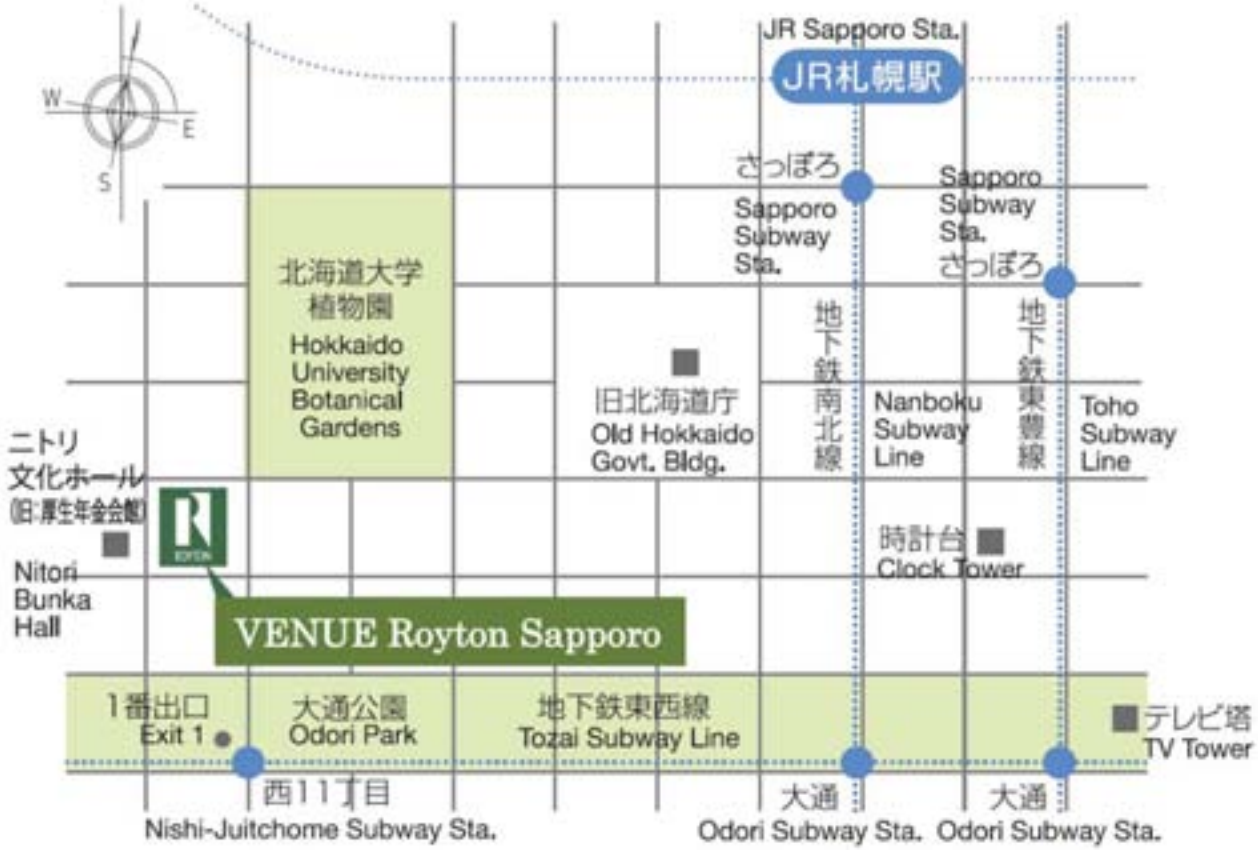
In case of delayed payment, a reminder will be sent to the participant 21 days after the invoice has been issued. If no payment is effected within the following 14 days, then the registration is considered as invalid and your registration is deleted. In this case, please register online again.

4. Cancellation policy of registration fee

(1) Full amount of registration fee after deduction of 8,000 JPY management costs will be given if notice of cancellation is received by Organizing Committee APG & EADC 2016 Sapporo prior to 1 July 2016.(JST*)
(2) 50 percent of the registration fee will be given if notice of cancellation is received by Organizing Committee APG & EADC 2016 Sapporo prior to 1 September 2016.(JST*)
(3) No refund will be given if notice of cancellation is received by Organizing Committee APG & EADC 2016 Sapporo on/or after 1 September 2016. (JST*)

JST* Japan Standard Time

SAPPORO STREET MAP & SUBWAY ROUTE MAP



ORGANIZATION AND PROMOTION

JAPAN COMMISSION ON LARGE DAMS

Address：Ningyo-cho Sun City Bldg., 1-2-7, Nihonbashi-Ningyo-cho,
Chuo-ku, Tokyo 103-0013 Japan

Tel：+81-3-5614-0968 Fax：+81-3-5614-0969

E-Mail：secretariat@jcold.or.jp URL：http://www.jcold.or.jp

Organizing Committee, APG & EADC2016 Sapporo

Address：Ningyo-cho Sun City Bldg. 2F., 1-2-7, Nihonbashi-Ningyo-cho,
Chuo-ku, Tokyo 103-0013 Japan

Tel：+81-3-5614-0968 Fax：+81-3-5614-0969

E-Mail：secretariat@jcold.or.jp URL：http://jcold.or.jp/e/apg-eadc/