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G7 Environment Ministers' Meeting to be Held in Toyama, an Eco-City Japan Boasts to the World

I. Features of Toyama, the Host City of the G7 Environment Ministers' Meeting 2016

1. Abundant with natural blessings from the sea and the mountains

Toyama Prefecture features a remarkably dynamic landscape. Over just 40 to 50 kilometers, the Toyama Plain connects the 3,000 meter-high peaks of beautiful Tateyama Mountain Range to the 1,000-meter-deep Toyama Bay. The elevation difference is some 4,000 meters. Clean and good-quality water from snow and rain on the Tateyama Mountain Range supplies a wealth of nutrients to Toyama Bay. Thus, Toyama enjoys not only diversified blessings from the soil but fresh and delicious blessings from the sea.

Toyama City, the capital of Toyama Prefecture, has a population of approximately 420,000 in an area of about 1,200 square kilometers. The productive agricultural land on the plains has seen prosperity as



A Light Rail Transit (LRT) introduced to create compact city (in front of Toyama International Conference Center)



the key traffic point for the region since the end of the seventh century.

2. Toyama, a cutting edge prefecture on environmental and energy issues

The Toyama Prefectural Government has been tackling environmental conservation with full support from its citizens with an aim to lead the circum-Japan Sea area as a forerunner prefecture on environmental and energy issues. Its diversified activities include: 1) introduction of renewable energy such as small scale hydropower that takes advantage of Toyama's local characteristics; 2) eliminating the distribution of free plastic shopping bags at stores prefecture-wide; 3) woodland cultivation and regeneration through the Toyama-specific tax to help conserve woodlands; and 4) bus emissions control in the Tateyama alpine area. Moreover, Toyama Prefectural Government has been promoting international environmental cooperation by establishing Regional Coordinating Unit Toyama Office of the Northwest Pacific Action Plan (NOWPAP) for the United Nations Environment Programme (UNEP) in 2004, and hosting the Tripartite Environment Ministers Meeting among China, Japan and Korea in 2007.

The Toyama City Government has also been actively engaged in various environmental initiatives. For more than 10 years, it has been addressing itself to realizing a Compact City for sustainable society, facing a declining population and a super-aging society that is common to local cities of developed countries. The city was recognized in the 2012 OECD report on "Compact City Policies" as one of the five cities of the world with advanced approaches. The United Nations Climate Summit 2014 merited Toyama City as an energy efficiency accelerator under city-led initiatives. In the same year, the Rockefeller Foundation admitted Toyama City to the 100 Resilient Cities Network as Japan's sole representative city.

The Ministry of the Environment, Japan believes that Toyama City, the capital city of Toyama Prefecture, was selected as the host city of the G7 Environment Ministers' Meeting 2016 thanks to its aforementioned track records with regard to diversified environmental issues.

II. Ready for the G7 Environment Ministers' Meeting 2016

1. Determination to lead the world in environmental dimension

At the meeting in Toyama, world advanced city of Environment, during May 15-16, the G7 environment ministers discuss global issues and making public their political will to lead the world in environmental issues.



Toyama Bay sushi (blessings from Toyama Bay)

2. Excursions

We plan to invite our guests to excursions to observe co-existence with nature and efforts to overcome flood damages, to relish various historic and cultural legacies, and to review our predecessors' efforts to prevent environmental damages to nature and human health. At reception parties, the guests will be served with Toyama's delicious food, fresh from the sea and mountains, to their hearts' content.

MORE Information

G7 Toyama Environment Ministers' Meeting http://www.env.go.jp/earth/g7toyama_emm/english/

The Secretariat for the G7 Environment Ministers' Meeting 2016, International Strategy Division, Global Environment Bureau, Ministry of the Environment

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Listed in alphabetical order by last name



Participants of 1st APAP Workshop on collaborative management of protected areas

Asia has been known for its rich and beautiful nature, which serves as a home to globally important biodiversity hotspots as well. The region's natural resources, however, have been under significant pressures from rapid population growth and accelerating economic development. In response, Protected Areas (PAs) have played an increasingly important role in conserving biodiversity and providing ecological services that underpinned the development.

Asia Protected Areas Partnership (APAP) was established last year to facilitate collaboration across the region towards improved PAs management in accordance with Sendai Charter, the agreement of the first Asia Parks Congress (APC).

During 16-20 November 2015, first APAP workshop was hosted by the Ministry of the Environment, Japan in Ishigaki-city, Japan. The workshop highlighted collaborative



Participants experiencing eco-program of coral plantation

management, an approach to involve stakeholders in PAs management. Participants, from all of eight APAP member countries, have shared their experiences on the ground and discussed to identify the keys to the success, while learning from the collaboration schemes to protect coral reefs in Ishigaki as well.

The chair of the event emphasized the uniqueness of APAP workshop; "It is not ad hoc gathering but a part of learning process that was preceded by and followed by further learning of their home PAs." At the closing session, deep appreciation for the host and expectations for another learning event were expressed by participants.

About APAP

Asia Protected Areas Partnership (APAP) was launched in 2014, in response to the call made at the first Asia Parks Congress (APC) in Sendai. APAP serves as an informal platform for policy makers, park managers and academics to facilitate best practices and innovative solutions to the challenges facing the region's protected areas.

MORE Information

Asia Protected Areas Partnership http://www.asiaprotectedareaspartnership.org/

Akiko NISHIMAE

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Current Topics

Impacts of Climate Change: **Our Adaptation Plan and the Future Building a Society Resilient to Climate Change**

Japan's cabinet approved a decision on the "National Adaptation Plan" in November 2015.

Climate Change Impact Assessment

The Central Environment Council assessed impacts of climate change in Japan, and formulated a Climate Change Impact Assessment Report in March 2015. The areas of high significance and high urgency, the Council pointed out, encompassed broad fields.

National Adaptation Plan

The "National Plan for Adaptation to the Impacts of Climate Change (National Adaptation Plan, or NAP)" has been established based on the March 2015 Climate Change Impact Assessment Report. The NAP, while considering a long-term perspective to the end of the 21st century, covers approximately the next 10 years.

The following five basic strategies were set to minimize or avoid damage from the impacts of climate change, and create a secure, safe, and sustainable society that can quickly recover from those impacts.

- 1. Mainstreaming adaptation into government policy
- 2. Enhancement of scientific findings
- 3. Promotion of understanding and cooperation through sharing and providing information on climate-related risks
- 4. Promotion of adaptation in region
- 5. Promotion of international cooperation and contribution

To enforce these basic strategies, the Government will effectively promote sectoral measures and basic, international measures in collaboration with related government ministries.

Aid to Developing Countries

Based on the NAP, the Ministry of the Environment of Japan (MOE) provides a wide range of support to other

Japan's National Plan for Adaptation to the Impacts of Climate Change

(Basic concept (Part 1)) Vision of society

To build a secure, safe and sustainable society that is able to minimizing and avoiding damage due to climate change impacts, and to be resilient against damage **Basic strategy**

- Data Strategy
 Mainstreaming adaptation into government policy
 Enhancement of scientific findings
 Promotion of understanding and cooperation through sharing and providing information about climate-related risks
- Promotion of adaptation in region
 Promotion of international cooperation and contribution

(Sectoral measures (Part 2))

Overview results of climate change impact assessment, and then present basic adaptation measures in seven sectors

- $\langle Basic measures and international measures (Part 3)
 angle$
- Observation and monitoring, research and studies
- Sharing and providing information related to climate risk
 Promotion of adaptation in region
- International measures

countries, especially developing countries. This includes bilateral cooperation on climate change impact assessment and adaptation planning, and personnel training through international networks such as the Asia Pacific Adaptation Network (APAN).

The MOE disseminates the adaptation plan in Japan and abroad, and promotes implementation of the NAP in collaboration with related governmental ministries.

MORE Information

Submission by Japan to the UN Framework Convention on Climate Change Communication on Japan's undertakings in adaptation http://unfccc.int/files/adaptation/application/pdf/submission_on_japan_ undertakings_in_adaptation.pdf

Shintaro FUJII

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A temperature change projection example for 2100 (Left figure: Low emission scenario (RCP2.6), Right figure: High emission scenario (RCP8.6)) Source: University of Tokyo, the National Institute for Environmental Studies, Japan Agency for Marine-Earth Science and Technology (JAMSTEC), Ministry of Education, Culture, Sports, Science and Technology (MEXT)

Current Topics

Progress of Decontamination Efforts in and outside Fukushima Prefecture

Five years have passed since the accident at TEPCO's Fukushima Daiichi Nuclear Power Station. Following the Act on Special Measures concerning the Handling of Radioactive Pollution pertaining to the accident, the Ministry of the Environment of Japan (MOE) has been advancing the decontamination and contaminant disposal process outside the station.

The MOE has been directly implementing decontamination over the 11 municipalities designated as the Special Decontamination Area in Fukushima Prefecture (the area within a 20 km radius from the Plant, and the area estimated with annual cumulative radiation exposure dose of 20 mSv or higher for one year after the accident). Evacuation order was issued for the areas. Decontamination has been completed according to the plan over six municipalities entirely, and the residential sections of one municipality. The remaining work is scheduled to be completed by March 2017. After the decontamination, re-establishing social infrastructure, and consultation with the residents, the evacuation order has been lifted in three municipalities since April 2014. The municipality-led decontamination is also progressing in the Intensive Contamination Survey Area (94 municipalities inside and outside Fukushima Prefecture). As Fukushima Prefecture in particular is seeing a massive amount of soil removed in the process, MOE has also made efforts to establish an Interim Storage Facility that will enable centralized management. MOE is also conducting research and development of technologies of soil volume reduction and recycling.

With the effects from the progressing decontamination work and physical attenuation of radioactive material, the air dose rates have been steadily decreasing in and around



Rice harvesting in decontaminated paddy fields (Namie-machi, Fukushima Prefecture)

Fukushima (see diagram below). Decontamination has been contributing to the steady progress of reconstruction of the affected areas. For example, even in the evacuation zone, rice cultivation has been gradually restarted following the decontamination of paddies, and the safety of the products has been confirmed by the inspections on all bags of rice.

We want to take this opportunity to extend our appreciation for all the support and advice provided from overseas since 2011. We hope you visit Fukushima to see the recovery efforts and achievements.

MORE Information

Off-site Decontamination Measures http://josen.env.go.jp/en/

International Cooperation Office for Decontamination of Radioactive Materials

Environment Management Bureau

Decrease in the Air Dose Rates at and around Fukushima

The air dose rates have been decreasing by decontamination work and radioactive decay.



Note: Made by MOE based on the NRA's "monitoring information of environmental radioactivity level" (http://radioactivity.nsr.go.jp/en/index.html)

Relay Column

Net Zero Energy Buildings Help Realize a Low-Carbon Society

Daikin Industries, Ltd. has established the Technology and Innovation Center (TIC) in Osaka, Japan. With operations starting on November 25, 2015, the new facility will function as the core base for technology development of the globally expanding Daikin Group. We are building the world's No. 1 technology in core technologies that include inverters, heat pumps, and fluorochemicals through the collaborative creation of innovation inside and outside the company and will also leverage new and advanced technologies to expand business with differentiated products and create new value and business opportunities.

TIC is a building that combines Daikin's advanced low-carbon technologies to achieve zero energy buildings (ZEB). With the completion of TIC, Daikin will aim for 85% reduction in energy consumption by air-conditioning and ventilation and 100% energy savings including energy creation in the future



Technology and Innovation Center in Settsu city, Osaka

by updating facilities as a solution model for development and verification of each new energy technology. Specifically, TIC will introduce energy-saving technologies such as; a) Individual control of temperature and humidity by multi-split air conditioners, b) Peak shift by thermal storage and heating by using renewable energy (e.g., geothermal or solar power heat pumps), c) Optimum setting of the overall system by Building and Energy Management System and d) Solar panels with tracking mounts to improve power generation efficiency.

Daikin promotes further technology developments in TIC and pursues a low-carbon society in the world.



Efforts to Prevent Our Extinction with "Fossil-fuel" Dinosaur

With a goal to attain a fundamental solution to various current environmental and social problems that Japan is related to, Friends of the Earth Japan is involved in activities to correct our social system through studies and proposals to influence the government, corporations, and residents.

While the areas of our interest encompass broad fields: countermeasures for climate change and global warming, deforestation/forest degradation, environmental impacts from large-scale development projects, our critical approach with a perspective as citizens and bottom-up remains the same. We listen to the voices of the people who are directly affected by issues to identify the root cause of the problem. We then make



Fossil-fuel dinosaur appears at the Sumida River Terrace: "Do you want to go extinct together?"

proposals to solve or alleviate the problem, and organize protests if necessary.

Since 2011, we have been working to minimize the radioactivity damage caused by the nuclear accident, through lobbying and negotiation with the government. This is all done to produce appropriate response to the voices from the people we serve. Prior to the United Nations Framework Convention on Climate Change held at the end of 2015 (COP21), we took action to widely inform the seriousness of this issue on climate-change/global-warming, which had failed previously to attract much interest from society.

For us, humankind, not to go extinct with the dinosaur of "fossil-fuel" energy source, but to build and maintain a sustainable environment and society in which we can live peacefully on earth indefinitely, we will continue our endeavor.



National Parks of Japan

A Pond in Towada-Hachimantai National Park



A tranquil pond reflects trees under the warm sunshine. You can hear birds singing in their paradise along the pond edge.

The pond in Towada-Hachimantai National Park is located in the Tsuta region of Aomori Prefecture, the northernmost of Honshu Island. The region

has long been well known for hot-spring cure at Tsuta Hot Spa deeply loved by many visitors including famous literary figures. Around a total of seven placid ponds, you can enjoy seasonal changes including fresh green in early summer and colored leaves in fall.

In February this year, Towada-Hachimantai celebrated the 80th anniversary of its designation as one of the nation's national parks. In addition to the Tsuta region, the national park preserves natural beauty from time immemorial at Towada Lake with its high transparency, the Oirase Mountain Stream shielded with deep green of trees, the Hakkoda Mountain Range with its expansiveness, etc.

From Tokyo, it takes about three hours by train and then about an hour by car. By air, it takes a bit over an hour plus a car-ride of about an hour. Come and relish indigenous charms of nature, hot



Mirror-like surface of a placid pond in Tsuta

spas and history that are so unique to Towada-Hachimantai National Park.

MORE Information

Towada-Hachimantai National Park http://www.env.go.jp/en/nature/nps/park/parks/towada.html

Shinnosuke TABATA

Park Ranger





Voice of MOE Family in the World

Motorbikes in Hanoi

Hanoi is full of energy. Its symbol and lifeblood are the enormous number of motorbikes. They appear inexhaustibly from everywhere, thread ways between cars and fill all spaces of the streets. They carry people as well as every possible commodity which is several times bigger than a rider's body. A motorbike is



the very thing which forms lives in this city.

The population of Vietnam is 93.4 million and registered number of motorbikes is 43 million. Both numbers are increasing. In recent years, together with increasing number of cars, streets are always congested and the air pollution is getting worse. Because of that, most riders are wearing a mask to cover their nose and mouth.

Now the first lines of metro are under construction and they are expected to improve many problems including environmental issues. Solutions of environmental problems sometimes require people to change their lifestyle. That is why it is not easy. Will people really leave motorbikes and take the metro instead? I look forward to seeing the transformation of this attractive city.

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