

# JEO

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Red-crowned cranes in Kushiro Marsh, Hokkaido

Photography by Junichiro Noguchi, Fukushima Office for Environmental Restoration

## Message

# YOSHIO MOCHIZUKI

FROM MINISTER OF THE ENVIRONMENT  
-CUM-MINISTER OF STATE FOR THE NUCLEAR EMERGENCY PREPAREDNESS

### Reconstruction in Fukushima

“Without reconstruction in Fukushima, there is no revitalization of Japan.”

We are fully committed to radioactive decontamination, construction of interim storage facilities, disposal of radioactive waste, healthcare, and implementation of measures to ease health concerns to secure a peaceful living environment for residents of Fukushima,

We will also collaborate with relevant prefectures to address issues regarding the so-called, specific radioactive hazardous waste.

### Creation of a “sound material-cycle society” in which low carbon, resource circulation, and natural symbiosis are integrated

To revitalize Japan, the establishment of a new, “sound material-cycle society” that integrates low carbon, resource circulation, and harmony with nature by harnessing Japan’s rich natural and human resources will be indispensable.

We will audaciously promote measures against global warming including setting a post-2020 CO2 emissions reduction target, disseminating natural energy, and energy conservation. Resource circulation, biodiversity conservation, and environmental measures that take other Asian countries into consideration will also be broadly implemented.

### Nuclear regulation

As the Minister responsible for nuclear regulation, I will support independent, neutral activities of the Nuclear Regulatory Authority through securing its budget and strengthening of its structure.

### Nuclear emergency preparedness

Further, as the Minister of State for Nuclear Emergency Preparedness, I will collaborate with local public bodies to ensure our citizens’ safety and security through measures for nuclear emergency preparedness.

### “To protect people and environment”

### “To create a new society with dreams”

I am prepared to make every effort to reconstruct Fukushima, establish a sound material-cycle society, and prevent the occurrence of nuclear emergencies. Each of these tasks shares in the common mission of “protecting people and environment” and is indispensable for the creation of an inspiring new society.

**Date of Birth**  
May 2, 1947

**Member of the House of Representatives**  
(Elected 6 times)

#### Education

**1970** Graduated from Chuo University  
(Bachelor of Law)

#### Career

- 1996** Elected to the House of Representatives for the first time
- 2001** Parliamentary Vice-Minister for Foreign Affairs
- 2002** Parliamentary Vice-Minister of the Environment
- 2006** Senior Vice-Minister of Land, Infrastructure, Transport and Tourism
- 2012** General Manager of Administrative Reform Promotion Office (LDP\*)
- 2013** Chairman of the Federation of Diet Members for Port and harbor
- 2014** Minister of the Environment  
Minister of state for the Nuclear Emergency Preparedness

\*LDP : Liberal Democratic Party



## SHIGEO KITAMURA

STATE MINISTER  
OF THE ENVIRONMENT, JAPAN

**Member of the House of Representatives**  
(Elected 3 times)

#### Education

**1968** Graduated from Meiji University  
(Bachelor of Business Administration)

#### Career

- 2005** Elected to the House of Representatives for the first time
- 2012** Deputy Secretary-General of the Liberal Democratic Party  
Parliamentary Secretary of Internal Affairs and Communications/Parliamentary Secretary of Cabinet Office
- 2013** Deputy Secretary-General of the Liberal Democratic Party
- 2014** State Minister of the Environment

環境副大臣  
北村茂男

**Date of Birth**  
November 8, 1945



# Climate Change: Lima and beyond



COP19 in Warsaw, Poland (Nov.2013)

According to the Intergovernmental Panel on Climate Change (IPCC), "warming of the climate system is unequivocal." Having hosted the IPCC Plenary this March, Japan regards the findings of the IPCC's Fifth Assessment Report seriously. In recent years, the world has indeed seen frequent natural disasters due to extreme weather events. In Japan, too, we have been experiencing much localized torrential rainfall. In order to protect future generations and the environment, I would like to reemphasize the need for the whole world to put utmost effort into taking measures against climate change.

To this end, it is imperative that a new post-2020

international framework be agreed upon at COP21 in Paris next year. This year's COP20 in Lima is a crucial milestone towards next year's agreement. I am ready to contribute to the success of Lima.

Japan will continue to call for the adoption of a fair and effective framework applicable to all Parties. Moreover, it must not be forgotten that the decision taken at COP19 invites Parties to communicate their intended nationally determined contributions well in advance of COP21 and by the first quarter of 2015 if ready to do so. In light of this COP19 decision, Japan aims to submit its intended nationally determined contribution as early as possible.

In addition to formulating a new framework, it is important that each Party takes ambitious actions. Japan will continue to work towards the introduction of renewable energy to its maximum potential and the promotion of substantial energy conservation through its leading low-carbon technologies. Furthermore, Japan will contribute to global emissions reduction by promoting the diffusion of leading low-carbon technologies to developing countries through the Joint Crediting Mechanism (JCM) and other relevant measures.

As the Minister of the Environment, I will exert myself to any extent to contribute to the 2015 agreement and to promote ambitious measures against climate change.

## YASUHIRO OZATO

STATE MINISTER  
OF THE ENVIRONMENT, JAPAN

Member of the House of Representatives  
(Elected 3 times)

### Education

**1983** Graduated from Keio University (Bachelor of Law)

### Career

- 2005** Elected to the House of Representatives for the first time
- 2012** Deputy Secretary-General of the Liberal Democratic Party  
Director of Agriculture and Forestry Division (LDP)
- 2013** Parliamentary Vice-Minister of Agriculture, Forestry and Fisheries
- 2014** State Minister of the Environment  
State Minister of Cabinet Office

## MAMORU FUKUYAMA

PARLIAMENTARY VICE-MINISTER  
OF THE ENVIRONMENT, JAPAN

Member of the House of Representatives  
(Elected 1 time)

### Education

**1968** Graduated from Azabu University  
(Veterinary Medicine)

### Career

- 1987** Elected to the Member of Tokushima City Council
- 1991** Elected to the Member of Tokushima Prefectural Assembly (served for 6 terms)
- 2012** Elected to the House of Representatives for the first time
- 2013** Deputy Director, Women's Affairs Division (LDP)
- 2014** Parliamentary Vice-Minister of the Environment  
Parliamentary Vice-Minister of the Cabinet Office

## HINAKO TAKAHASHI

PARLIAMENTARY VICE-MINISTER  
OF THE ENVIRONMENT, JAPAN

Member of the House of Representatives  
(Elected 1 time)

### Education

Graduated from Nihon University (Bachelor of Art)

### Career

- 1981** Announcer, Television Iwate Corporation
- 2005** Elected to the Member of Iwate Prefectural Assembly
- 2013** Elected to the House of Representative for the first time  
Deputy Director, Women's Affairs Division (LDP)  
Deputy Director, Information Division,  
Public Relations Headquarters (LDP)
- 2014** Parliamentary Vice-Minister of the Environment

環境副大臣  
小里泰弘



Date of Birth  
September 29, 1958

環境大臣政務官  
福山守



Date of Birth  
December 19, 1952

環境大臣政務官  
高橋ひなこ



Date of Birth  
January 19, 1958



# Post-2020 International Framework for Climate Change Japan's Perspectives



June negotiation session in Bonn, Germany (Source: UNFCCC)

International negotiations under the United Nations Framework Convention on Climate Change are currently underway towards an agreement on a post-2020 framework for climate change at COP21 in 2015. Japan regards the following 3 points as critical elements of the 2015 agreement.

Firstly, the legal obligation for all Parties to submit mitigation targets (nationally determined contribution: NDC) should be an integral part of the 2015 agreement. NDCs should be submitted in a way that allows comparing, evaluating and reviewing the performance and efforts of each Party as well as evaluating aggregated contributions towards global emissions reduction.

Secondly, all Parties should be subject to a transparency mechanism including an ex-ante consultation process, whereby each Party undergoes international consultation of its intended contribution before submitting an official NDC as well as an international evaluation and review process of each Party's performance towards the achievement of its NDC.

Lastly, adaptation to the adverse effects of climate change is a global challenge and an important component of the 2015 agreement. Each Party should be encouraged to integrate adaptation into its national planning and development process under the 2015 agreement.

COP20 is a crucial milestone at which Parties need to reach a decision on elements of the 2015 agreement, information that Parties will provide when putting forward their contributions and next steps in the negotiation process towards COP21. Japan is ready to engage with other Parties in an active and constructive manner by highlighting the aforementioned points.

#### More Information:

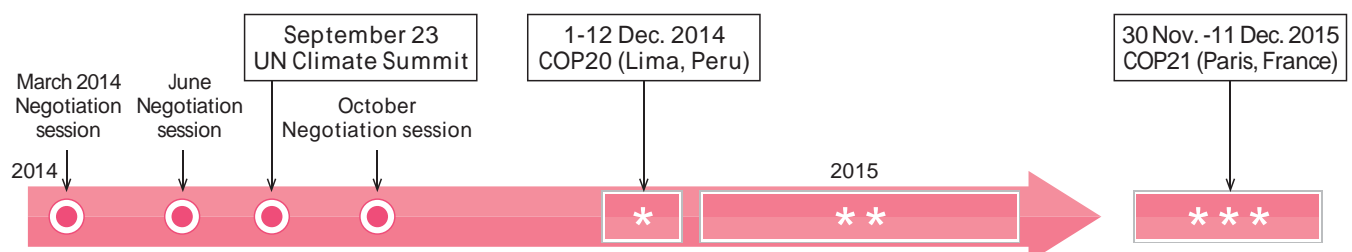
UNFCCC

<http://unfccc.int/2860.php>

Office of International Strategy on Climate Change  
Global Environment Bureau

### Schedule towards the 2015 agreement (2014-15)

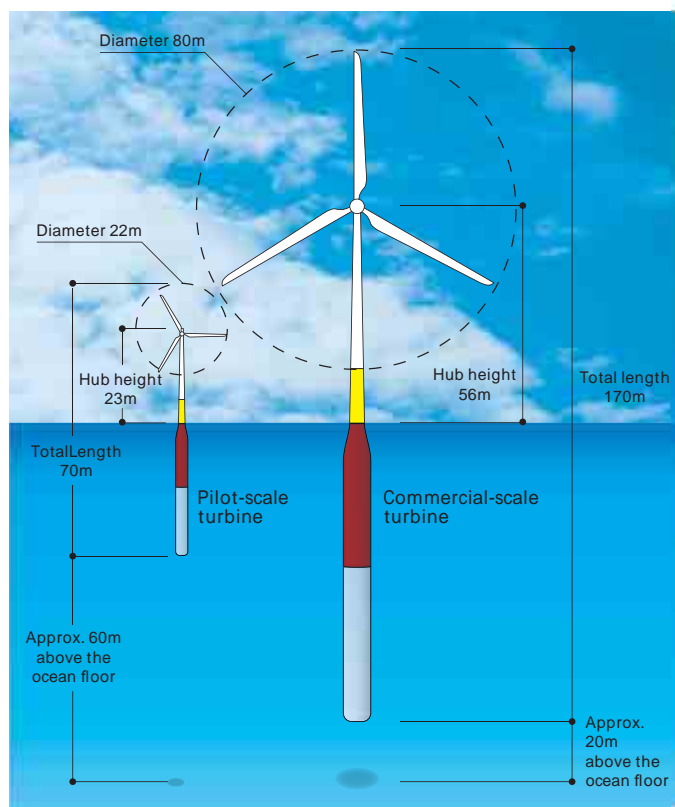
* COP20 (Lima, Peru)	Identify information that Parties will provide when putting forward contributions Elaborate elements for a draft negotiating text
** 2015	Parties communicate intended nationally determined contributions (by March 2015 for those Parties ready to do so) Make available a negotiating text (before May 2015)
*** COP21 (Paris, France)	Agreement on a Post-2020 International Framework



# Floating Offshore Wind Turbine Demonstration Project



2MW demonstration turbine floating off the coast of Kabashima in Goto City, Nagasaki



Dimensions of the demonstration turbines at the pilot and commercial scales

Japan is a marine nation with the 6th largest exclusive economic zone in the world. Among renewable energy, offshore wind power holds the greatest potential in Japan. Moreover, with higher wind speed and less power fluctuation, the ocean promises more stable and efficient power generation compared to the land. Therefore, the utilization of offshore wind power is of essential importance for Japan.

There are two types of offshore wind turbines: one, a bottom-mounted type, is fixed at the seabed at a depth of up to 50 meters. The other, a floating body type, floats on the sea much like a buoy. Not having a large area of shallow seas, Japan expects much from floating turbines that can be introduced to deep sea areas (50m or deeper).



Demonstration site

However, the floating type has only been demonstrated twice - in Norway and in Portugal - and has not yet been installed in Japan.

Therefore, the Ministry of the Environment (MOE) has implemented a demonstration project to install and operate Japan's first 2000kW floating offshore wind turbine off the coast of Goto City, Nagasaki Prefecture. In June 2012, MOE installed and began operating a 100kW demonstration turbine at the pilot scale. The first of its kind, this turbine successfully survived a direct hit of a typhoon in September 2012. In October 2013, MOE installed and began operating a 2000kW demonstration turbine at the commercial scale. Through this project, we will continue working towards the early, practical utilization of power generation. Our aim is to increase offshore wind power to more than one million kW by the year 2020.

### More Information:

**GOTO FOWT**

<http://goto-fowt.go.jp/english/home/>

### Sinpei KAWAKAMI

Environmental Specialist  
Climate Change Policy Division  
Global Environment Bureau





## Progress in the Joint Crediting Mechanism (JCM)



JCM Model Project for high efficiency chiller (ID)

Japan is actively promoting the establishment and implementation of the "Joint Crediting Mechanism (JCM)" in which Japan facilitates the diffusion of leading low carbon technologies, products, systems, services, and infrastructure as well as implementation of mitigation actions, and contributes to sustainable development of developing countries. After an appropriate evaluation of the contribution to GHGs emission reductions or removals in developing countries, Japan will use the generated JCM credits toward achieving its emissions reduction target.

Japan has signed bilateral documents for JCM with 12 countries as of August 2014: Mongolia, Bangladesh\*, Ethiopia, Kenya, Maldives, Viet Nam, Lao PDR, Indonesia, Costa Rica, Palau, Cambodia and Mexico. As consultations

with other developing countries are still underway, the number of participating countries is expected to increase.

The Ministry of the Environment (MOE) is supporting the formulation of projects through the JCM financing scheme. The scheme consists of: i) Financing Programme for the JCM Model Projects; ii) Funds for Expansion of Low-carbon Technologies; and iii) Asia Development Bank (ADB) Trust Fund. With regard to the JCM model projects, there are 15 on-going, two of which have already installed equipments with low-carbon technologies and started operating in 2014. MOE is also conducting capacity building programs for JCM rules and guidelines as well as feasibility study programs for JCM projects.

Japan will continue to recruit new partner countries and support the formulation of new projects in order to promote JCM.

\*Bilateral Offset Credit Mechanism is used as the name for this mechanism.

### More Information:

*JCM Website*

<https://www.jcm.go.jp/>

*New Mechanism Information Platfor*

<http://www.mmechanisms.org/e/index.html>

### Takaaki ITO

Deputy Director  
Office of Market Mechanisms  
Global Environment Bureau



## JCM Partner Countries (as of 2014 August)

Countries with which Japan has signed on bilateral documents to conduct JCM projects



## Coral Reef Restoration Techniques through Seedling Production

Nineteen percent of the world's coral reefs have already been degraded. Another 60% or more currently face serious threats.<sup>1</sup> Due to various disturbances such as coral bleaching and the outbreak of starfish, the degradation of many of these coral reefs has already exceeded nature's regenerative capacity. Coral reef restoration is therefore a crucial.<sup>2</sup>

The conventional technique for coral restoration, however, lacked genetic diversity. In addition, its approach of transplanting fragments of existing coral communities damaged the donor corals. We, IDEA consultants, Inc. therefore developed an alternative series of coral reef restoration techniques. Ceramic coral-settling devices (50 mm X 30 mm h) are installed on

the sea floor during spawning time, and coral larvae are settled, nursed, and then transplanted as seedlings. This series of techniques requires no special facility, and by allowing for the easy transplantation of coral, enables the production of large amounts of biologically diverse seedlings at a low cost. The Ministry of the Environment's coral reef restoration project for the Iriomote-Ishigaki National Park, Okinawa Prefecture, has confirmed the successful spawning of transplanted corals for the fifth consecutive year (see photo). We congratulate this significant achievement in coral reef restoration, and strongly hope for the contribution of our technique to coral reef restoration around the world.



Spawning of transplanted corals (Sekisei Lagoon, Okinawa)

### More Information:

IDEA Consultants, Inc.

<http://ideacon.jp/en/index.htm>

<sup>1</sup> ICRI (2013) A Continuing Call to Action.

<sup>2</sup> Rinkevich B (2005) Conservation of coral reefs through active restoration measures: Recent approaches and last decade progress, Environ. Sci. Technol., 39:4333-43452.

### Shuichi FUJIWARA

Executive Officer  
Okinawa Branch  
IDEA Consultants, Inc.(OECC Member)



## Evoking a Sense of Ownership Regarding Biodiversity

We, the Japan Civil Network for the United Nations Decade on Biodiversity, are deeply concerned about the poor recognition of biodiversity and its endangerment among Japanese people. In March 2014, we conducted the "Survey on Awareness of Biodiversity" with 30,000 respondents. While 62% responded that "risks in society will increase," only 16.2% indicated a perceived risk over biodiversity loss. While biodiversity ranked 12th of 16 perceived risk factors, issues closely related to biodi-

versity such as climate change (2nd) and radioactive contamination (5th) were perceived as high risks. These results may be due to a lack of recognition of the term, "biodiversity".

To alter this situation, we held an event to stimulate interest in the Conference of the Parties (COP12) of the Convention on Biological Diversity. We invited various people including organic farmers and crafters to exhibit booths and asked them to discuss how their work falls under an Aichi Biodiversity Target. The respective Target icon at each booth immediately boosted exhibitors' sense of ownership on the topic. As each of us depends on biodiversity, ownership of the topic is vital in conservation and sustainable biodiversity use. We will continue our effort for the successful achievement of the Aichi Biodiversity Targets.



Booths at TOWARDS COP12, Osaka

### Masako SAKATA

President  
Japan Civil Network for the United Nations  
Decade on Biodiversity





# Shiga Highland Biosphere Reserve Connects SATOYAMA Landscape

Joshin'etsu Kogen National Park



Joshin'etsu Kogen National Park is Japan's second largest national park. In 1980, the Shiga Highland area of this park became the first Biosphere Reserve (BR)<sup>1</sup> in Japan under UNESCO's Man and the Biosphere (MAB) Programme.<sup>2</sup>

The vicinity of Mt. Shiga was designated Core Area, and the surrounding area, Buffer Zone. In June 2014, the area where people engage in sustainable agriculture and livelihoods was also designated Transition Zone.

Thus, both the mountain-foot villages (i.e. Transition Area) and the forests (i.e. Buffer Zone) those villages have been using sustainably as a traditional commons are now part of the BR. We would like to take this opportunity to enhance our managerial support of Shiga Highland BR, encompassing the Core Area, a valuable local asset, as well as the Buffer and Transition Areas, a Socio-Ecological Production Satoyama landscape.



The emerald green Onuma Pond (Core Area in the BR)

## More Information:

*Joshin'etsukogen National Park*

<http://www.env.go.jp/en/nature/nps/park/parks/joshinetsu.html>

1 Biosphere Reserve (BR): Sites established by countries and recognized to promote sustainable development based on local community efforts and sound science.

2 Man and the Biosphere (MAB) Programme: A UNESCO program that proposes interdisciplinary research, demonstration and training in natural resources management.

## Akira TAKIGUCHI

Park Ranger  
Shigakogen Ranger Office  
Chubu Regional Environment Office  
(Nagano Nature Conservation Office)  
Ministry of the Environment



## Voice of MOE Family in the World

# Japan Fund for Joint Crediting Mechanism (JFJCM) in ADB

In June 2014, the Minister of the Environment and Asia Development Bank (ADB) President signed a Letter of Intent for Cooperation on Environmental Issues. Agreements under the Letter include cooperation to implement the Japan Fund for the Joint Crediting Mechanism (JFJCM). The JFJCM is a new trust fund in ADB with a grant of 1.8 billion yen from the Ministry of the Environment.

The Joint Crediting Mechanism (JCM) is a bilateral carbon market mechanism between the Japanese Government and developing countries. The JFJCM will

help finance advanced low-carbon technologies including smart grids, renewable energy, and energy efficiency measures for ADB-financed projects in countries utilizing the JCM.

In 2013, ADB approved 2.3 billion dollars for clean energy projects through various climate change-related funds and invested about another 1 billion dollars in climate change adaptation. However, as demands of the Asia-Pacific region for sustainable low-carbon infrastructure are sizable, the JFJCM will further enhance the region's capacity to meet its demands.

## More Information:

*Japan, ADB Announce Fund to Promote Low-Carbon Technologies in Asia*

<http://www.adb.org/news/japan-adb-announce-fund-promote-low-carbon-technologies-asia>



Former Minister Mr. Ishihara and President Mr. Nakao signed the Letter of Intent for Cooperation on Environmental Issues

## Ryuzo SUGIMOTO

Environment Specialist  
Environment and Safeguards Division  
Regional and Sustainable Development Department  
Asian Development Bank

