# Japan's Current Status and Challenges Towards Recovery





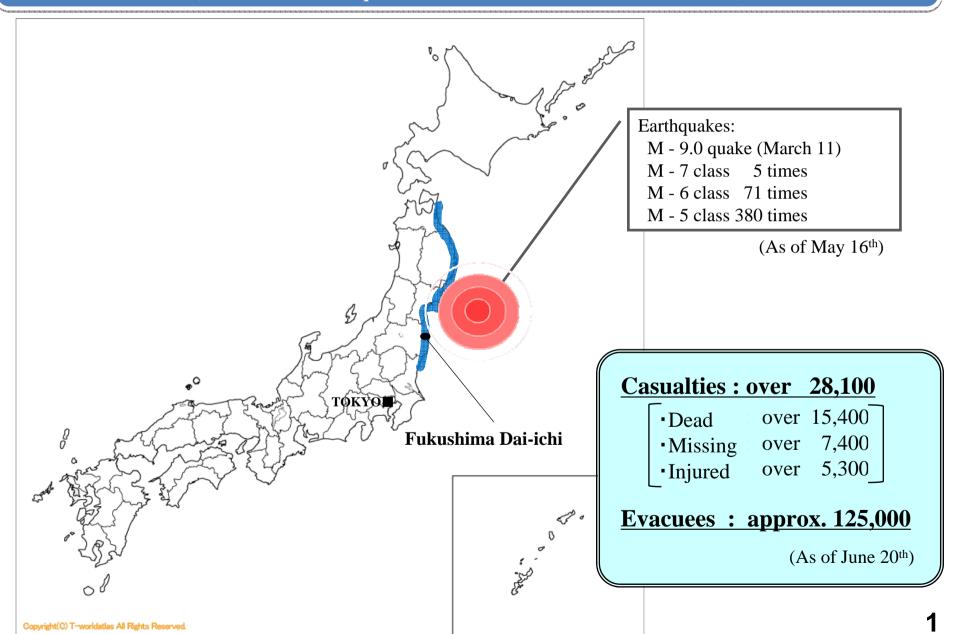


June 22, 2011

Hiroshi Inomata Consul General of Japan in San Francisco

# 1. Japan Faces an Unprecedented Challenge

(Enormous Earthquake, Tsunamis and Nuclear Accident)



# 2. Current Status of Reconstruction and Recovery

# Recovery...

#### (1) The Tohoku Expressway



March 12<sup>th</sup> March 17<sup>th</sup>.



# Challenges...

Damages to the country's safe image, and misperceptions about the radiation level

- (1) Strict inspections to international shipping and distribution
- (2) Great reduction of the number of the tourists visiting Japan
  - -- Tourists visiting from all over the world

April: 295,800 (2010; 788,212/62.5% Down)

March: 352,800 (2010; 709,684/ 50.3% Down)

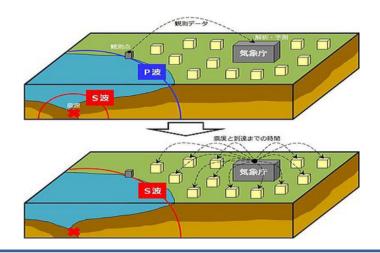
-- Tourists visiting from the US

April: 29,800 (2010; 66,900/ 55.4% Down)
March: 38,900 (2010; 67,000/ 45.6% Down)

# 3. Examples of Seismic Safety Technologies

#### (1) EEW (Earthquake Early Warning)

- ➤ Run by Japan Meteorological Agency since 2006
- ➤ Public informed through cell phone, TV, radio etc.
- ➤ Help the public act properly to save lives before main waves arrive



#### (2) Recent Evolution of Japan's Seismic Codes

➤ 1978 - Miyagi quake (7.4 Magnitude)

⇒28 Fatalities & 6,600 Failed Structures

 $\Downarrow$ 

1981 - Seismic Standards Strengthened

- ➤ 1995 Kobe quake (7.3 Magnitude)
  - ⇒6,434 Fatalities & 104,906 Failed Structures
  - ⇒But post-1981 construction performed well

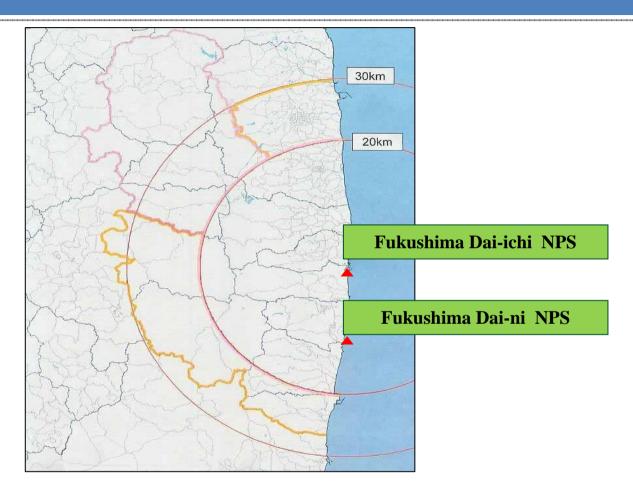
➤1995 - Government provides retrofit subsidies to bring all buildings into compliance with 1981 Seismic Standards ("1995 Act on Promotion of Seismic Retrofitting of Buildings")

#### (3) Japanese High Speed Rail System Proved its Safety in the Earthquake

- ➤ All 27 trains operating in area slowed automatically and stopped safely as designed
- ➤ Not a single train derailment
- ➤ No casualties among passengers or crew
- ➤ No critical damage to rail infrastructure
- ➤ Operations restarted only 49 days after this earthquake of unprecedented scale



# 4. Map of Areas Currently Under No-Entry/Evacuation



- 20 km radius of the plant and other designated areas
  - → no-entry zone, planned evacuation zone
- **Designated areas of 30km radius of the plant (as a general rule)** 
  - → emergency evacuation preparation area

# (Meeting the Business Challenges; Key Commercial Areas of Japan Are Safe Places to Engage Commercial Activities and Tourism)

- The recent environmental radioactivity level in Tokyo is lower than the level in New York and Hong Kong.
- Several UN agencies, including the WHO, have announced that radioactive materials have been of low concentrations and do not present health or transportation safety risks.

#### International organizations press release >

OInternational Civil Aviation Organization (April 11, 2011)

"Continuous monitoring around these airports confirms that radiation levels are well within safe limits from a health perspective."

OWorld Health Organization (April 5, 2011, FAQs)

"WHO is not advising general restrictions on travel to Japan."

#### < Environmental radioactivity levels around the world>

Hong Kong:  $0.14 \mu \text{ Sv/hour}$ 

New York:  $0.095 \mu \text{ Sv/hour}$ 

Tokyo:  $0.078 \mu \text{ Sv/hour}$ 

#### [Source]

Ministry of Education, Culture, Sports, Science and Technology (MEXT), Hong Kong Observatory, Live radioactivity monitoring online USA

Hong Kong(as of 13 April, 2011), New York (7 days average to April 13, 2011) Tokyo (as of 12 April, 2011)

#### Environmental radioactivity level in Tokyo>

OThe environmental radioactivity level in Tokyo, if the current level continues for three months, will be 168.5  $\mu$  Sv\*.

#### [Radiation in daily life]

- •An air trip between Tokyo and New York (RT): 200  $\mu$  Sv
- •A gastrointestinal X-ray examination: 600  $\,\mu$  Sv

<sup>\* 0.078</sup>  $\mu$  SV/hr (as April 12<sup>th</sup>, 2011) × 24hour × 90days=168.5  $\mu$  SV

## 5. Current Efforts to Address Nuclear Safety in Three Critical Areas

#### Water

The Japanese Government has been implementing necessary measures based on its stringent criteria for monitoring radionuclides levels in drinking water every day.

#### Food

- -Japan inspects radioactivity levels in food every day, and restricts the distribution of food that fails to meet provisional regulation values taking into consideration the spread of contamination.
- -U.S. CBP (Customs and Border Protection) and FDA (Food and Drug Administration) has increased surveillance of products

#### **Product**

- -Industrial products are manufactured in factories outside of the no-entry zone, and remain under strict quality control.
- -Manufacturing institutions and industry associations provide testing service of the radiation levels of products.

JAMA Comments on Radiation Testing Related to the Fukushima Nuclear Power Plant situation (April 18,2011)

The tests implemented by JAMA —which are conducted directly on various designated areas of the surface of vehicles — are showing results that fall within the range designated by the Nuclear Safety Commission of Japan as being unthreatening to human health, based on the daily readings performed by the Ministry of Education, Culture, Sports, Science and Technology in every prefecture since March25.



<sup>\*</sup>JAMA: Japan Automobile Manufacturers Association

# 6. Estimates of Direct Damage to Facilities and Infrastructure

\*estimated by the Cabinet Office of Japan

## 16~25 trillion Yen

(US\$195~305 billion)

(Reference) Japan's GDP: 500 trillion Yen (US\$5.9 trillion)

Adverse impact to Japanese economy is limited since the Pacific Ocean coast, which suffered the greatest damage, accounts for only 2.5% of the total Japanese economy.

# Damage for Fisheries and Agriculture

\*estimated by the Ministry of Agriculture, Forestry and Fisheries

- --1.07 trillion Yen (US\$13bn) for fisheries
- --0.76 trillion Yen (US\$9.3bn) for agriculture
- -- Damaged farming area: 23,600ha (60,000acres)

# 7. Plan for Recovery

Short-term: clearing debris, erecting temporary housing, rehabilitating industrial facilities

Mid and long-term: master planning for reconstruction efforts with an emphasis on creating new disaster-resilient communities; environmentally friendly and energy efficient facilities and housing and other steps necessary to promote the social welfare in the affected communities

Blueprint Plan for the above is being discussed within the Diet

Ongoing--"Reconstruction Planning Council" established Compiling supplementary budgets and enacting/amending relevant laws

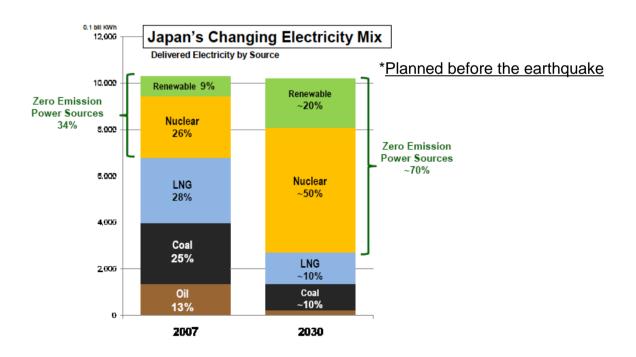
# 8. Overview of Principal Challenges

OPrimary emphasis is on reconstruction of lives and the economies in affected areas

Olnjury to Japan's "safe image"

-- Most challenging areas are exports and tourism

Olmpact on Japan's clean energy policies – particularly the ability to meet Japan's goals for renewable energy and energy conservation ORebuilding of industrial supply chains and related infrastructure



# Thank you "ARIGATO"

#### 1. U.S. and International Assistance

- Rescue teams from 28 countries and regions, and assistance offered from 150 countries around the world
- Massive support from United States: rescue team, U.S. Armed Forces, nuclear experts
  - --Operation Tomodachi: USS Ronald Reagan (aircraft carrier) and 20 naval vessels, approx. 20,000 military personnel, 160 aircraft (helicopters, etc.) aid in relief and rescue
  - --Post-disaster visit by Secretary of State Clinton: support for business and tourism

#### 2. Assistance from the State of California

- Governor Brown issues statement with condolences and directive for Cal EMA to make state resources available to Japanese government immediately after earthquake
- Assembly Speaker Pérez and colleagues hold press conference encouraging Californians to support the Japanese people
- •Relief fundraising efforts by countless communities and individuals throughout California







\*source: US Department of Defense and Japanese Ministry of Defense

\*source: MOFA

# Please come to Japan!

# The Great Hanshin-Awaji Earthquake (M6.9/January 17, 1995)

# California Legislative Delegation (March 30-April 9, 1996)

- --Participants: Senate President pro Tempore Bill Lockyer (current State Treasurer), Senator Hilda Solis (current US Secretary for Labor), Senator Cathie Wright, Assemblymember John Vasconcellos
- --Itinerary: Tokyo, Osaka, Kyoto and Kobe City, Hyogo Prefecture (hardest-hit areas)
  In Hyogo, visited Kobe Port and other stricken areas, temporary housing areas

# The Niigata Chuetsu-oki Earthquake (M6.6/July 16, 2007)

# Seismic Safety Commission Investigative Travel Team

(November 3-10, 2007)

--Participants: Secretary of State and Consumer Services Agency, Secretary Rosario Marin, Governor's Office, Alfred E. Alquist Seismic Safety Commission