

## Briefing for the Social Affairs Committee August 23th, 2013 At the Japanese Ambassador's Residence

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# Where is Senkaku Islands?



# Senkaku Islands



# Chronology : Senkaku Islands

- 1885~: The Gov. of Japan conducted surveys of the Senkaku Islands and found it as “terra nullius”
- Jan.1895:Cabinet Decision to incorporate the Senkaku Islands into Okinawa, the territory of Japan
- May.1895: Sino-Japanese War : Treaty of Shimonoseki (Incorporated Taiwan and Pescador Islands)
- 1945: End of the World War II
- Jan.1946:The administrative rights of Japan is suspended (Administration by the U.S.A over Okinawa began)
- 1951: The San Francisco Peace Treaty (Renounced Taiwan and Pescador Islands, not Senkaku)
- 1968: ECAFE conducted an academic survey and indicated the possibility of the existence of petroleum resources in the East China Sea
- 1971: China and Taiwan began their official claims about the territorial sovereignty on the Senkaku Islands
- 1971:Agreement between Japan and the U.S.A. concerning the Ryukyu Islands (Okinawa) and the Daito Islands
- 1992:Enactment of “ Law of Territorial Sea”
- 2012: Acquisition of the Senkaku Islands by the Gov. of Japan from private Japanese

# The Treaty of Peace with Japan (San Francisco Peace Treaty 1951)

- **Article 2**
- (a) Japan, recognizing the independence of Korea, renounces all right, title and claim to Korea, including the islands of Quelpart, Port Hamilton and Dagelet.
- (b) Japan renounces all right, title and claim to Formosa and the Pescadores.
- (c) Japan renounces all right, title and claim to the Kurile Islands, and to that portion of Sakhalin and the islands adjacent to it over which Japan acquired sovereignty as a consequence of the Treaty of Portsmouth of September 5, 1905.
- (d) Japan renounces all right, title and claim in connection with the League of Nations Mandate System, and accepts the action of the United Nations Security Council of April 2, 1947, extending the trusteeship system to the Pacific Islands formerly under mandate to Japan.
- (e) Japan renounces all claim to any right or title to or interest in connection with any part of the Antarctic area, whether deriving from the activities of Japanese nationals or otherwise.
- (f) Japan renounces all right, title and claim to the Spratly Islands and to the Paracel Islands.

Agreement Between the United States of America and Japan  
Concerning the Ryukyu Islands and the Daito Islands (1971)

**ARTICLE 1**

1. With respect to the Ryukyu Islands and the Daito Islands, as defined in paragraph 2 below, the United States of America relinquishes in favour of Japan all rights and interests under Article III of the Treaty of Peace with Japan signed at the City of San Francisco on September 8, 1951, effective as of the date of entry into force of this Agreements. Japan, as of such date, assumes full responsibility and authority for the exercise of all and any powers of administration, legislation and jurisdiction over the territory and inhabitants of the said islands.

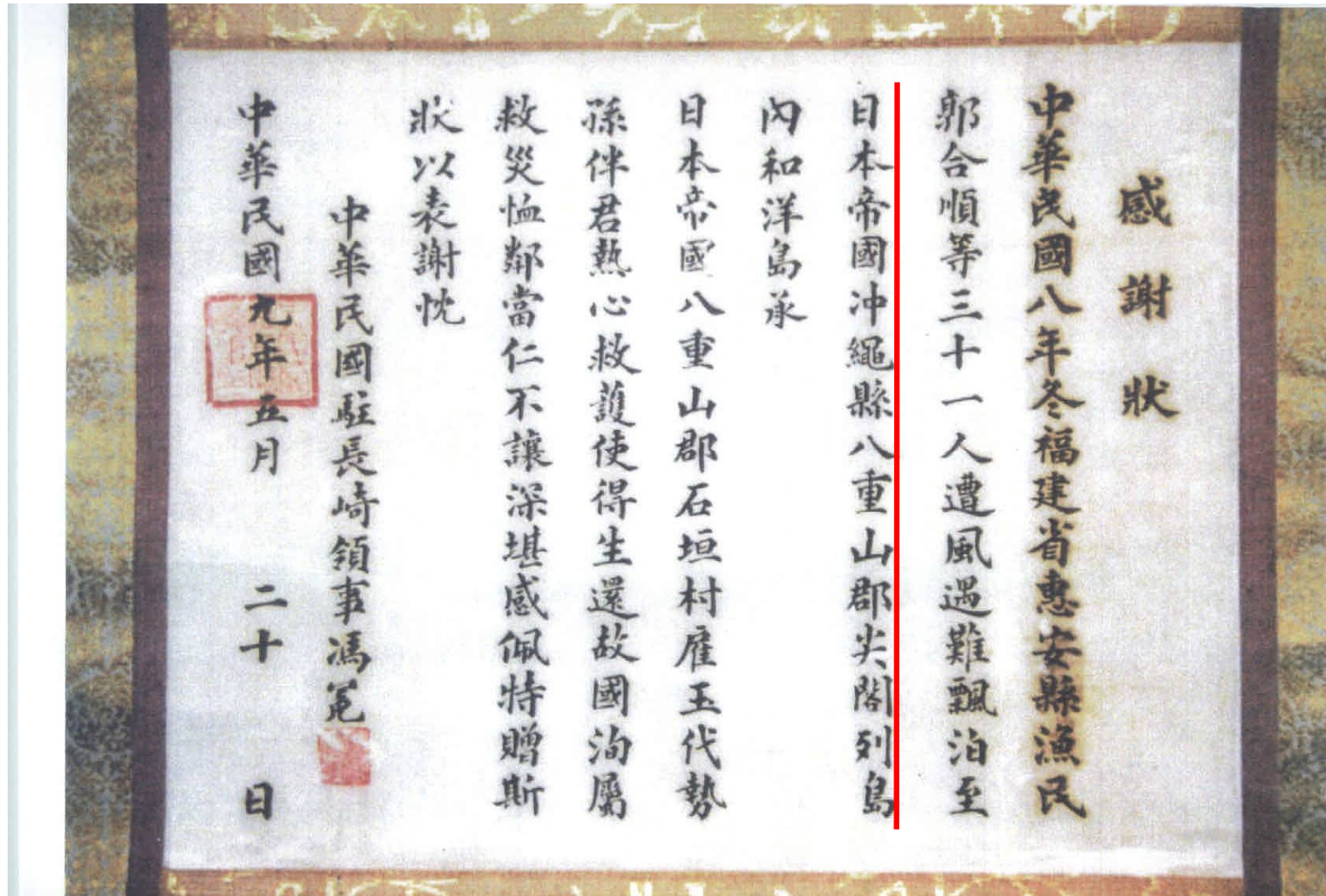
**The Treaty of Peace with Japan (San Francisco Peace Treaty 1951)**

**ARTICLE 3**

**Japan will concur in any proposal of the United States to the United Nations to place under its trusteeship system, with the United States as the sole administering authority, Nansei Shoto south of 29deg. north latitude (including the Ryukyu Islands and the Daito Islands), Nanpo Shoto south of Sofu Gan(including the Bonin Islands, Rosario Island and the Volcano Islands) and Parece Vela and Marcus Island. Pending the making of such a proposal and affirmative action thereon, the United States will have the right to exercise all and any powers of administration, legislation and jurisdiction over the territory and inhabitants of these islands, including their territorial waters.**

# Palmas Case (1928)

- Under the Palmas decision, three important rules for resolving island territorial disputes were decided:
- Firstly, title based on contiguity has no standing in international law.
- Secondly, title by discovery is only an inchoate title.
- Finally, if another sovereign begins to exercise continuous and actual sovereignty, (and the arbitrator required that the claim had to be open and public and with good title), and the discoverer does not contest this claim, the claim by the sovereign that exercises authority is greater than a title based on mere discovery.



**[Letter of appreciation from the consul of the Republic of China in Nagasaki] (provisional translation)**

In the winter of the 8th year (1919) of the Republic of China, 31 fishermen from Hui'an Country, Fujian Province were lost due to the stormy wind and were washed ashore on the Wayo Island, of **the Senkaku Islands, Yaeyama District, Okinawa Prefecture, Empire of Japan.**

Thanks to the enthusiastic rescue work by the people of Ishigaki village, Yaeyama District, Empire of Japan, they were able to safely return to their homeland. With a deep response and admiration toward the people of the village who were willing and generous in the rescue operation, I express my gratitude by this letter.

Consul of the Republic of China in Nagasaki 馮冕  
20 May, the 9th year (1920) of the Republic of China



"The Republic of China New Atlas" published in China in 1933 treats the Senkaku Islands as part of Japan



國家詳島散佈在我國台灣東北和日本九州島西南之間的海面上，包括尖閣諸島、先島諸島、大東諸島、沖繩諸島、大島諸島、土環列諸島、大隅諸島等七群島嶼，每組都有許多大小島嶼，總計共有五十個以上有名稱的島嶼和四百多個無名小島，全部陸地面積為四千六百七十五平方公里。群島中最大的島是沖繩諸島中的沖繩島（即大琉球島），面積一千二百一十一平方公里，其次是大島諸島中的奄美大島，面積七百三十平方公里。琉球群島總互連一千公里，它的內側是我國東海，外側就是太平洋公海。

美國在一九四五年六月佔領了琉球群島後，就着手在該島建築軍事基地。隨著美國在亞洲大陸上侵佔戰略計劃的破產，琉球基地的建築工程也就更趨積極起來。遠在美國發動侵略朝鮮戰爭前，美國在琉球群島的軍事工程已佔用了該群島三分之一的土地，用作建造基地的費用超過了兩億美元。其後，琉球基地的建造計劃一再擴大，而且以更大的速度進行着。一九五一年六月二十二日「美國新聞與世界報」刊載「雜誌曾透露出美國侵略者的野心：『美國在沖繩島的目標是用空軍襲擊亞洲，要使它成為太平洋的最大的基地。由沖繩島起飛，B二十九型轟炸機能達到亞洲大部分內陸地區，轟炸平壤可能包括中國全部和西伯利亞大部地區』」包括西伯利亞大鐵路。去年九月，B三十六型轟炸機則可達到更遠的距離。去年九月八日，沖繩島的美國官員竟公然宣佈：『用來將沖繩島改變成「太平洋的直布羅陀」的全部經費將將近四億八千萬美元。建築工作正在按計劃進行，防禦

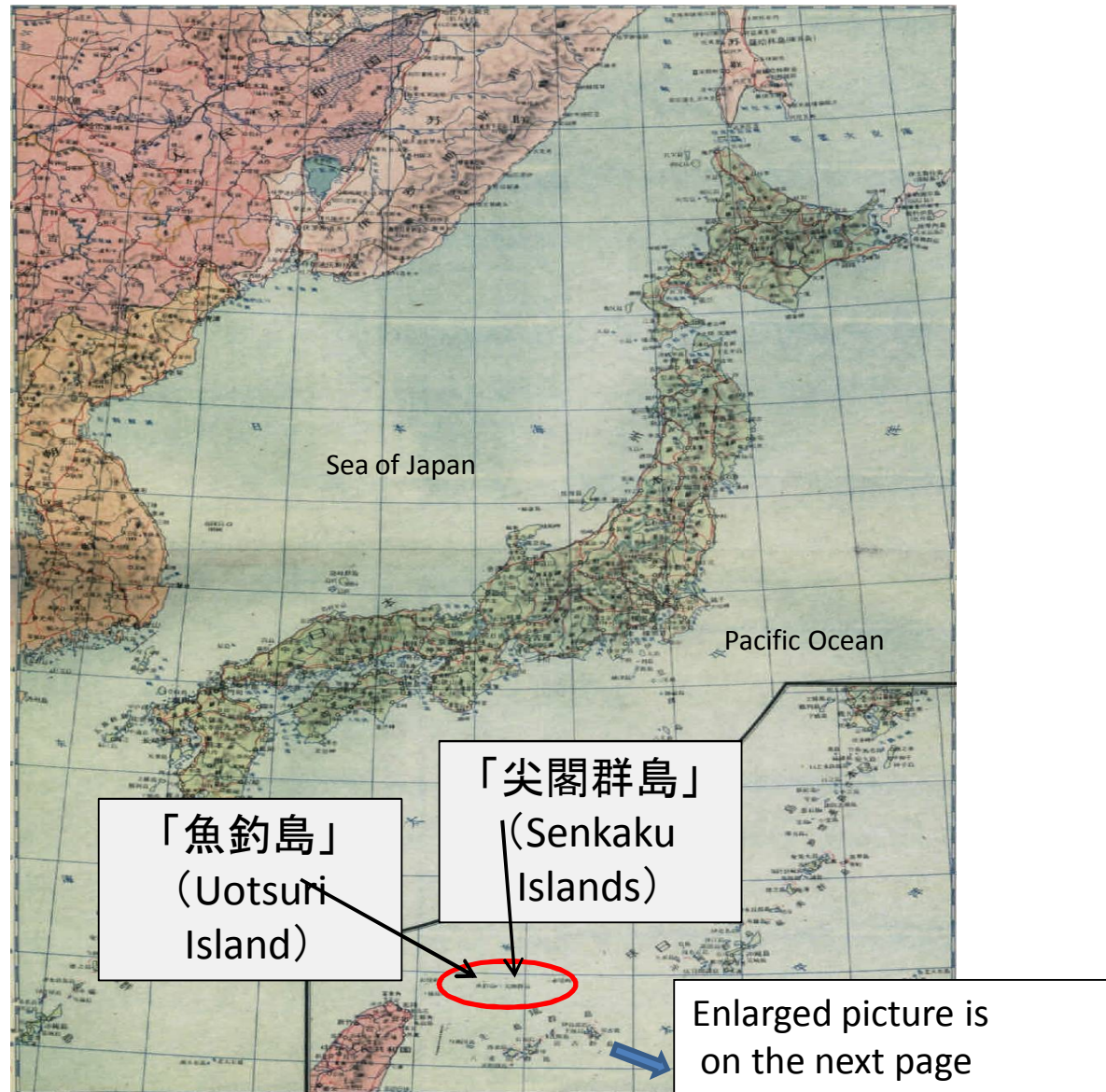
風的公路、飛機場、兵營、司令部以及其他軍事設備，將遍佈全島。另一方面，據不久前日本的報紙消息稱：美國在沖繩島那霸灣入口處的浮島神社下，已修建了具有八萬噸容量的三個地下油庫，沖繩島週圍各島都散佈着基地，共修建有二十幾個大型飛機場，並且在奄美大島、宮古島、沖之永良島等島嶼上都裝置了雷達。許多島上都建成了幾件飛機跑道用的軍用公路。而美國通訊社也曾經不止一次地承認：「美國B二十九型轟炸機，每天都從沖繩島起飛去襲擊北朝鮮」。

與建築及使用琉球軍事基地同時，美國侵略者又極陰謀又久佔琉球群島。美國佔領琉球後不久，就變賣了琉球的一切政權。去年以來，美國侵略者竟不顧「開羅宣言」、「波茨坦公告」等各項國際協議中都沒有規定託管琉球群島的決定，也不顧蘇聯政府與中華人民共和國政府的一再聲明，更不顧一百萬琉球人民的堅決反對，竟勾結日本吉田政府，擅自在其片面製訂的對日「和約」中規定：「日本對於美國向聯合國提出將北緯二十九度以南的琉球群島……置於聯合國託管制度之下，而以美國為唯一管理當局」的任何提議，皆予同意。在提出此種建議，並對此種建議採取肯定措施以前，美國將有權對此等島嶼之領土及其居民，包括其領水，行爲一切及任何行政、立法與司法權力。」美國以這樣卑鄙的手段變賣其無價霸佔琉球群島的侵略行爲，披上「合法」的外衣後，並於去年四月一日在島上建立了以比嘉秀平為首的琉球傀儡政府。

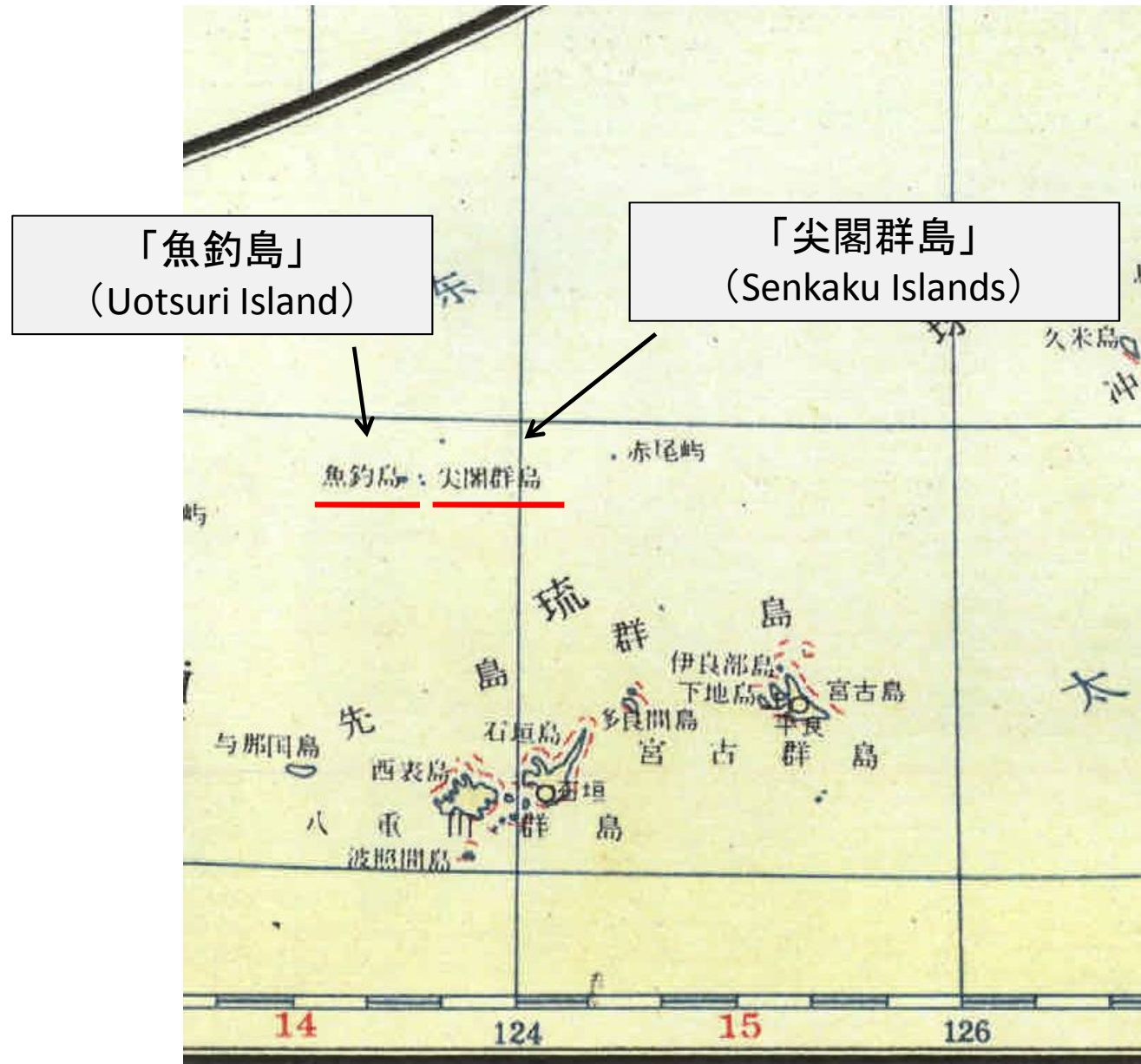
七年多以來，美國侵略者用極其野蠻橫暴的手段，

民在美國的極爲悲慘的，全賴島就有三、四塊美元。去參加建築用搶利殘酷，漁業不振，時，美軍用從一九四七居民旅行全過去充當巡流村(佈滿村的村民來就要以一個有的甚至通止，交通極權利全被美房屋的一部分。去年玩蜥蜴、蛇等工資只及美、飯館及四塊美元。『吉言女郎』婦女美事。英球舞島，死亡慘重，球人民痛楚，契球爲共

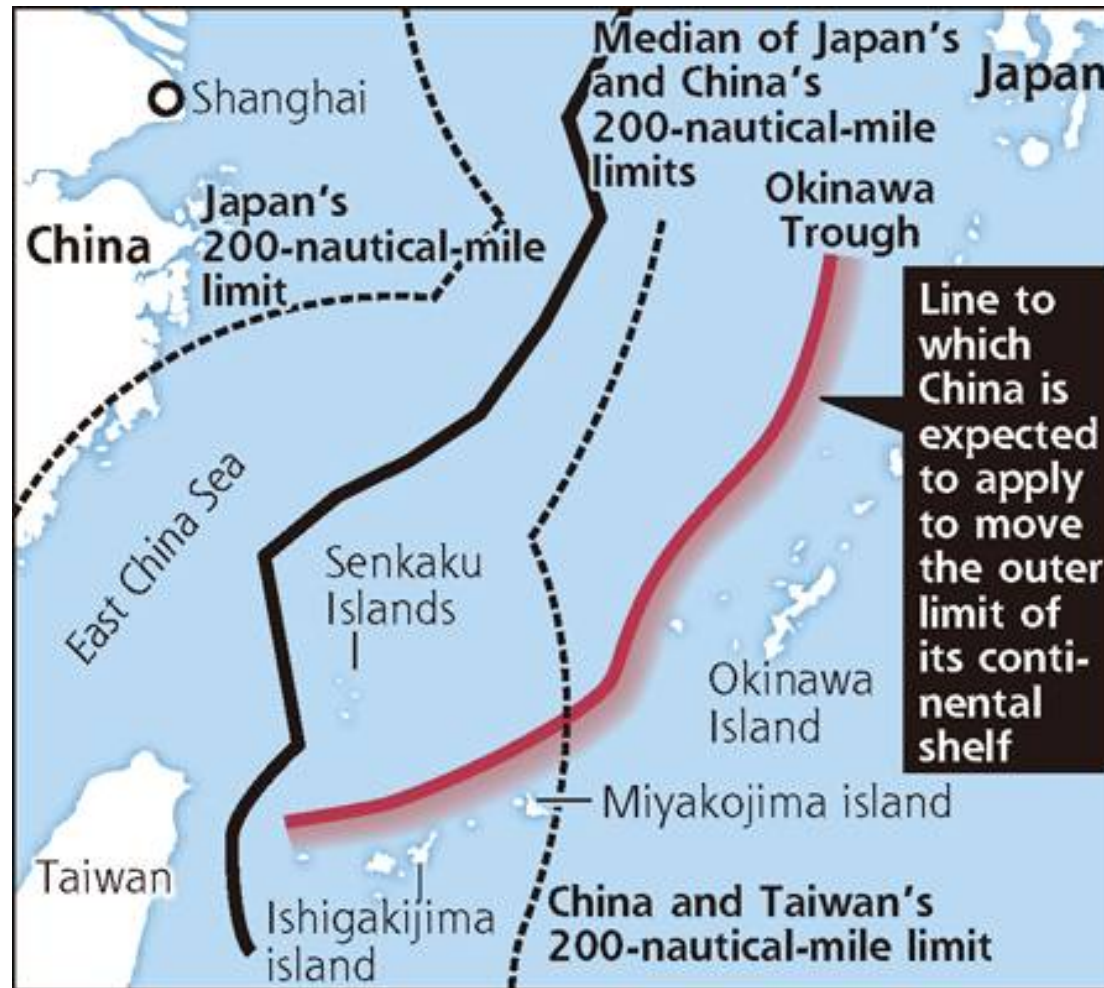
"The Ryukyu Islands lie scattered on the sea between the Northeast of Taiwan of our State (note: China; same in the following text) and the Southwest of Kyushu, Japan. **They consist of 7 groups of islands; the Senkaku Islands**, the Sakishima Islands, the Daito Islands, the Okinawa Islands, the Oshima Islands, the Tokara Islands and the Osumi Islands. Each of them consists of a lot of small and large islands and there are more than 50 islands with names and about 400 islands without names. Overall they cover 4,670 square kilometers. The largest of them is the Okinawa Island in the Okinawa Islands, which covers 1,211 square kilometers. The second largest is the Amami Oshima Island in the Oshima Islands (the Amami Islands), which covers 730 square kilometers. The Ryukyu Islands stretch over 1,000 kilometers, inside of which is our East China Sea (the East Sea in Chinese) and outside of which is the high seas of the Pacific Ocean."



"**World Atlas**" published in China in 1958 (second printing in 1960) treats the Senkaku Islands as part of Japan



## The outer limit of the continental shelf which China claims (14.December,2012)



# Straight baseline around the Senkaku Islands which China began using in September 2012



## U.S.-China summit in California (June, 2013)

According to Assistant Secretary of State for East Asian and Pacific Affairs Mr. Kurt M. Campbell,

Chinese President Xi Jinping raised some concerns against Japan and was going on about it for some length before Obama interrupted him.

“President Obama stopped (Xi) and said that ‘Japan is an ally, Japan is a friend and Japan is a democracy,  
and you need to understand that very clearly.’ ”

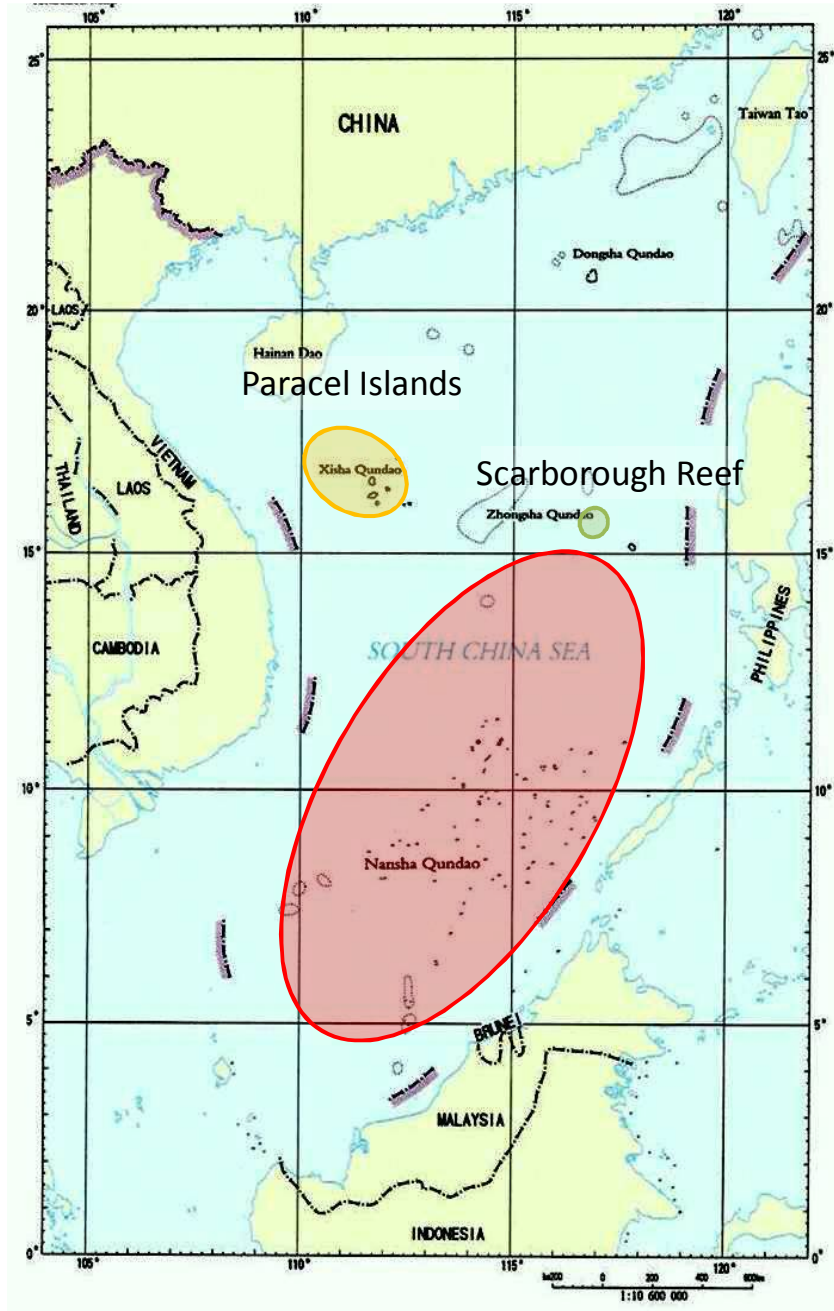
● China has become increasingly assertive, leading to escalating tensions. The “People’s Daily,” the official publication of China’s Communist Party, has now published an article raising questions about the territorial sovereignty not only of the Senkaku Islands but also the entirety of Japan’s Okinawa Prefecture. This clearly demonstrates China’s expansionist tendencies.

● Japan attaches importance to its relations with China. Since the launch of its new government, Japan has aimed to improve the situation through steady dialogue and has been issuing positive messages.

● China, at some times has communicated messages through diplomatic channels signaling hopes to improve its relations with Japan, but has shown no signs of putting an end to its attempts to change the status quo through the use of coercion and intimidation.

● Examples of this behavior include the near daily intrusions by Chinese government vessels into Japan’s territorial waters around the Senkaku Islands. Japan is bewildered by the inconsistent Chinese actions.

## Other territorial issues on South China Sea



○ 19th January, 1974 : Battle of the Paracel Islands (between Vietnam and China), as a result China got effective control over these islands.

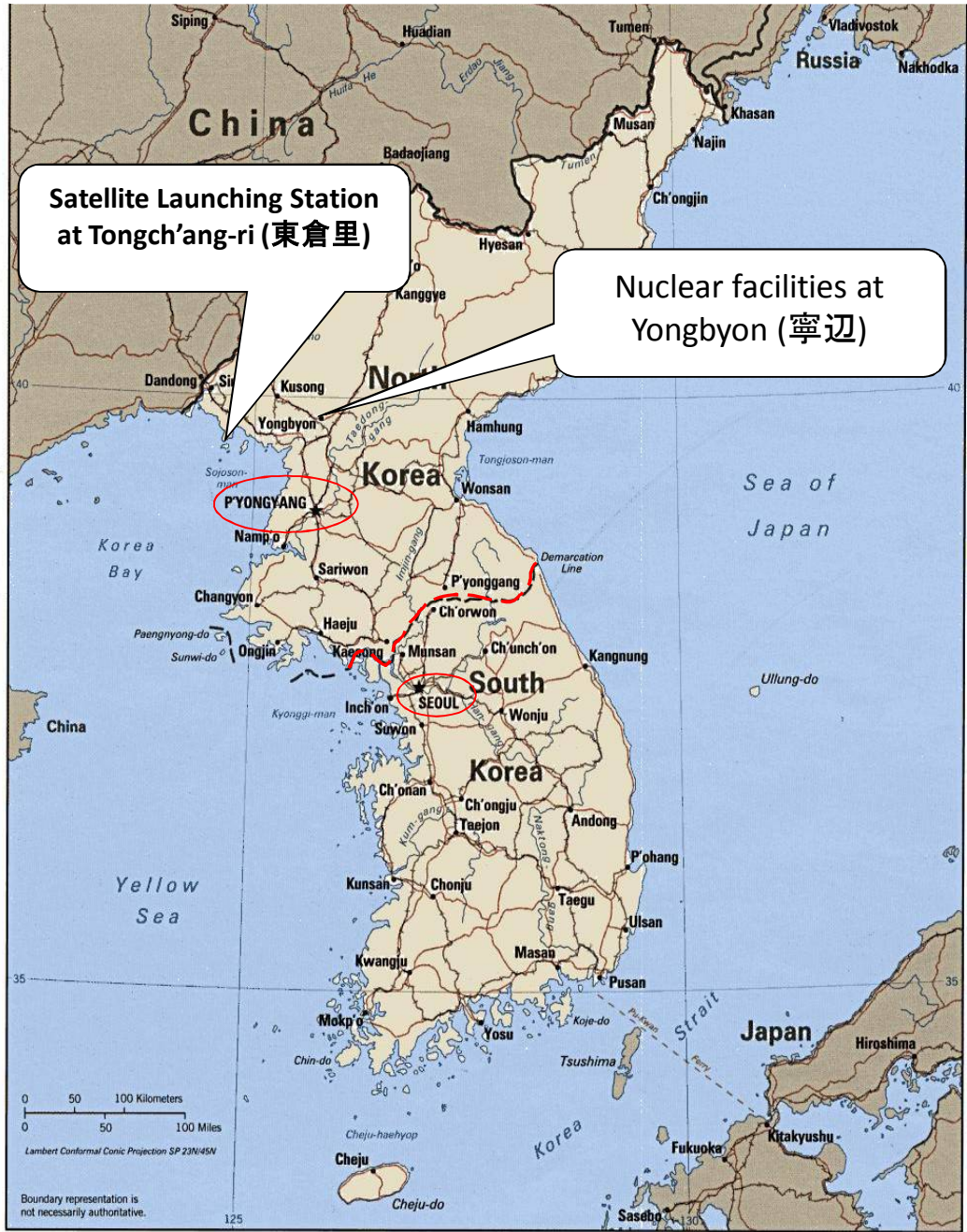
○ 14th March, 1988 : Battle of the Spratly Islands (between Vietnam and China), 2 Vietnamese battleships were hit and sunk by Chinese Navy and China got effective control over Johnson South Reef in Spratly Islands.

○ February, 1992 : China enacted “Law on the Territorial Sea and the Contiguous Zone” and stipulated Senkaku Islands, Spratly Islands and Paracel Islands as Chinese territory.

○ 1995 : China built initial structures on Mischief Reef in Spratly Islands while the Philippine Navy was not patrolling the area due to the monsoon season, and since then China has effective control over this reef.

○ 8th April, 2012 : Scarborough Reef standoff (between Philippine and China) : since then both countries have been in a tense situation over this reef.

## Nuclear and missile issues in North Korea



- 31st August, 1998 : Launch of the Missile by North Korea, which it calls a “satellite”
- 5th July, 2006 : 7 Ballistic missile Launched
- 9th October, 2006 : Nuclear test
- 5th April, 2009 : Launch of the Missile by North Korea, which it calls a “satellite”
- 25th May, 2009 : Nuclear test
- 4th July, 2009 : 7 Ballistic missile Launched
- 13th April, 2012 : Launch of Missile by North Korea, which it calls a “satellite”
- 12th December, 2012 : Launch of the Missile by North Korea, which it calls a “satellite”
- 12th February, 2013 : Nuclear test
- March 2013 : Over reaction to US-Korea joint exercise

# Economic Sanctions over North Korea

## Resolutions by U.N. Security Council

### ● Resolution 1718 (14th October, 2006)

- 1.Arms embargo (WMD and missiles) to North Korea
- 2.Trade of luxury consumer goods were banned
- 3.Calls upon member states freeze the overseas assets of organizations or persons related North Korea's weapons programs.

### ● Resolution 1874 (12th June, 2009)

Strengthened Resolution 1718 :

- 1.Extended arms embargo (includes other small arms and materials)
- 2.Calls upon member states to inspect over North Korean cargos on it's own territorial waters and the high seas.

### ● Resolution 2087 (23rd January, 2013)

### ● Resolution 2094 (7th March, 2013)

Imposes new financial sanctions and enables stronger enforcement of existing sanctions.

+

## Japan

### ● Restriction on materials

All exports to North Korea were banned (October, 2006)

All imports from North Korea were banned (June, 2009)

### ● Restriction on money

Freeze assets of extra organizations related with North Korea's weapons programs (September, 2006)

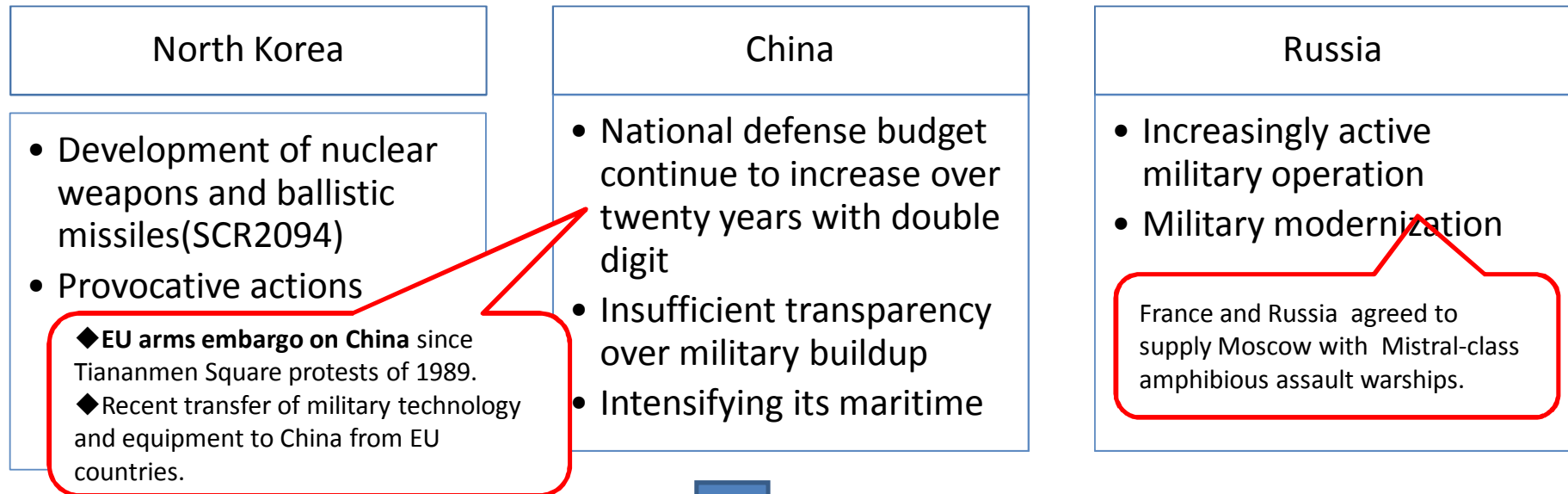
### ● Visit restriction

North Koreans were prohibited to enter Japan (October,2006)

●All North Korean ships (October,2006) and chartered planes (July,2006) were prohibited from entering into Japanese ports.

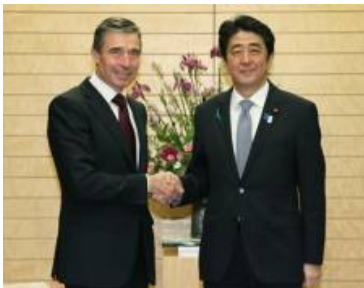
# Security Environment in the Asia-Pacific region and the Euro-Atlantic region

## Increasing Uncertainty of Security Environment in the Asia Pacific Region



**Threats and challenges for the international community in the fields of freedom and safety of navigation and energy security.**

→**The Asia-Pacific region is inseparably linked to the regional peace and stability of the Euro-Atlantic region.**



### Japan-NATO cooperation

**Joint Political Declaration** was signed by NATO Secretary General, Anders Fogh Rasmussen and Japanese Prime Minister, Shinzo Abe in April 2013.

- Japan and NATO : shared values and the common security challenges
- Further dialogue and cooperation areas; cyber-defense, maritime security (counter-piracy) , disaster relief etc.

# Japan's Actions against Piracy

## ●Deployments

- Two P-3C** maritime patrol aircrafts to the **Gulf of Aden** have completed **887** flights (occupying 60% of surveillance flights) since 2009.
- Two Maritime Self Defense Force destroyers** have escorted **2,947 ships** (12 Danish ships and 126 Danish Contract Vessels) in 454 missions since 2009.

## ●Financial Supports

- **293 million USD** for improvement of the humanitarian and security situations in Somalia since 2007.
- **14.6 million USD** to realize **Djibouti Code of Conduct**.

## Other Contribution

- In July 2013, Japan decided to extend the anti-piracy operations by the Self Defense Force for 1 year.
- Ad-hoc contribution of **US\$560,000** to the ReCAAP ISC in 2012.

Piracy Incidents off the Coast of Somalia and in the Gulf of Aden

	2009	2010	2011	2012	2013 (As of July)
Number of piracy Incidents	218	219	237	75	9
Number of vessels hijacked	47	49	28	14	2
Number of captured crews	867	1,016	470	250	N/A

# Afghanistan Assistance in Japan and Denmark

## Japan

Focus on Development

### Tokyo Conference on Afghanistan

- The conference formulated the **Tokyo Framework**.
- The international community committed to providing **16 billion USD** assistance through 2015.
- Announced to provide 3 billion USD assistance in about 5 years from 2012.
- Implemented a total of 4.187 billion USD of assistance since 2001.
- Achievement of DDR of about 60,000 ex-combatants and DIAG totaling 737 groups.

## Denmark

Focus on Improvement of Security

- Danish-led 3C Initiative to ANSF to improve the security
- Announcement of 530 million DKK (92 million USD) annual support until 2017 at the Tokyo Conference.
- Support through International Organizations (UNDP, UNHCR and UNICEF).
- 300 Danes engage in military and training activities (as of August 2013).

**Support Afghan's self-reliance and Achieve MDGs**

# **Update of “Abenomics”**

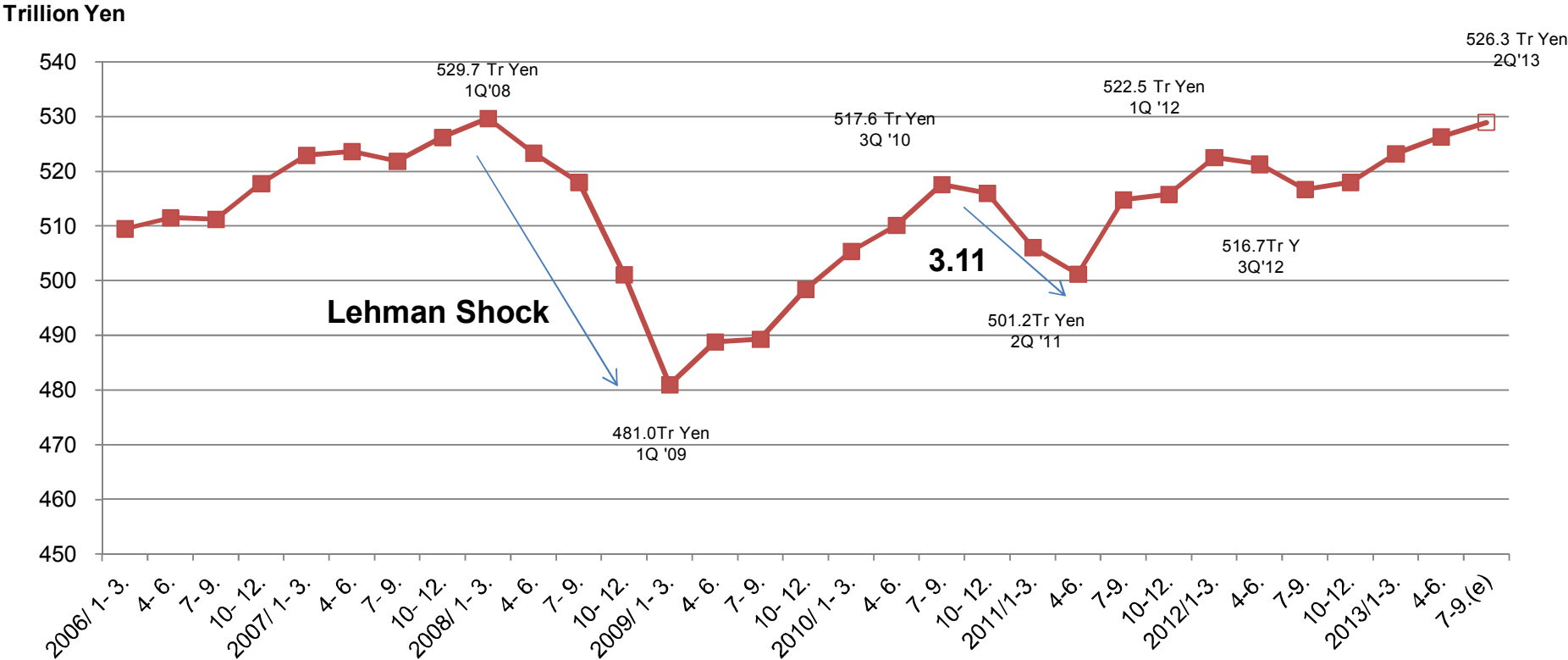
## **Overview of Japan Revitalization Strategy**

# Trend of GDP and other economic indications

	2012/4-6	2012/7-9	2012/10-12	2013/1-3	2013/4-6
Real GDP ( ) Annual Rate	▲0.2 (▲0.9)	▲0.9 (▲3.6)	+0.3 (+1.0)	+0.9 (+3.8)	<b>+0.6</b> <b>(+2.6)</b>
Private Consumption	+0.1	▲0.4	+0.5	+0.8	+0.8
Private Residential Investment	+2.1	+1.6	+3.6	+1.9	▲0.2
Private Non-Resi. Investment	▲0.3	▲3.2	▲1.4	▲0.2	▲0.1
Government Consumption	0.0	+0.4	+0.6	+0.1	+0.8
Public Investment	+5.1	+3.5	+3.0	+1.1	+1.8
Exports of Goods and Services	▲0.2	▲4.5	▲2.7	+4.0	+3.0
Import of Goods and Services	+1.3	▲0.0	▲2.0	+1.0	+1.5
Nominak GDP ( ) Annual Rate	▲0.8 (▲3.3)	▲0.9 (▲3.4)	+0.1 (+0.4)	+0.6 (+2.5)	<b>+0.7</b> <b>(+2.9)</b>
Deflators	▲0.6	0.0	▲0.1	▲0.3	+0.1

Source: Cabinet Office, Japan

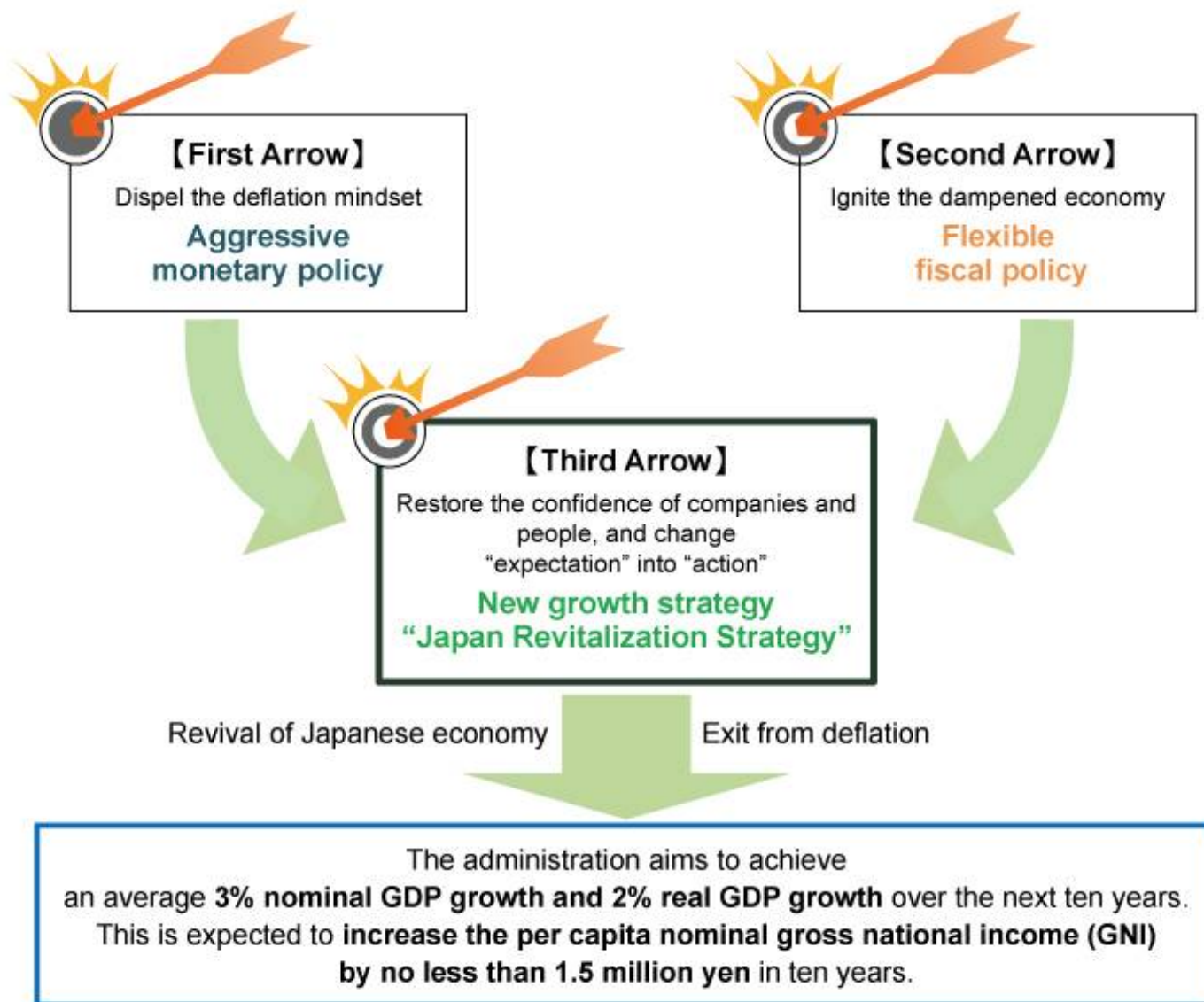
# Japan GDP Trend



Source: Cabinet Office, Japan

## Three Prongs or “Arrows”

The Abe administration will simultaneously implement the policy mix of the “three arrows” for reviving the Japanese economy:



## Three Action Plans of “Japan Revitalization Strategy”

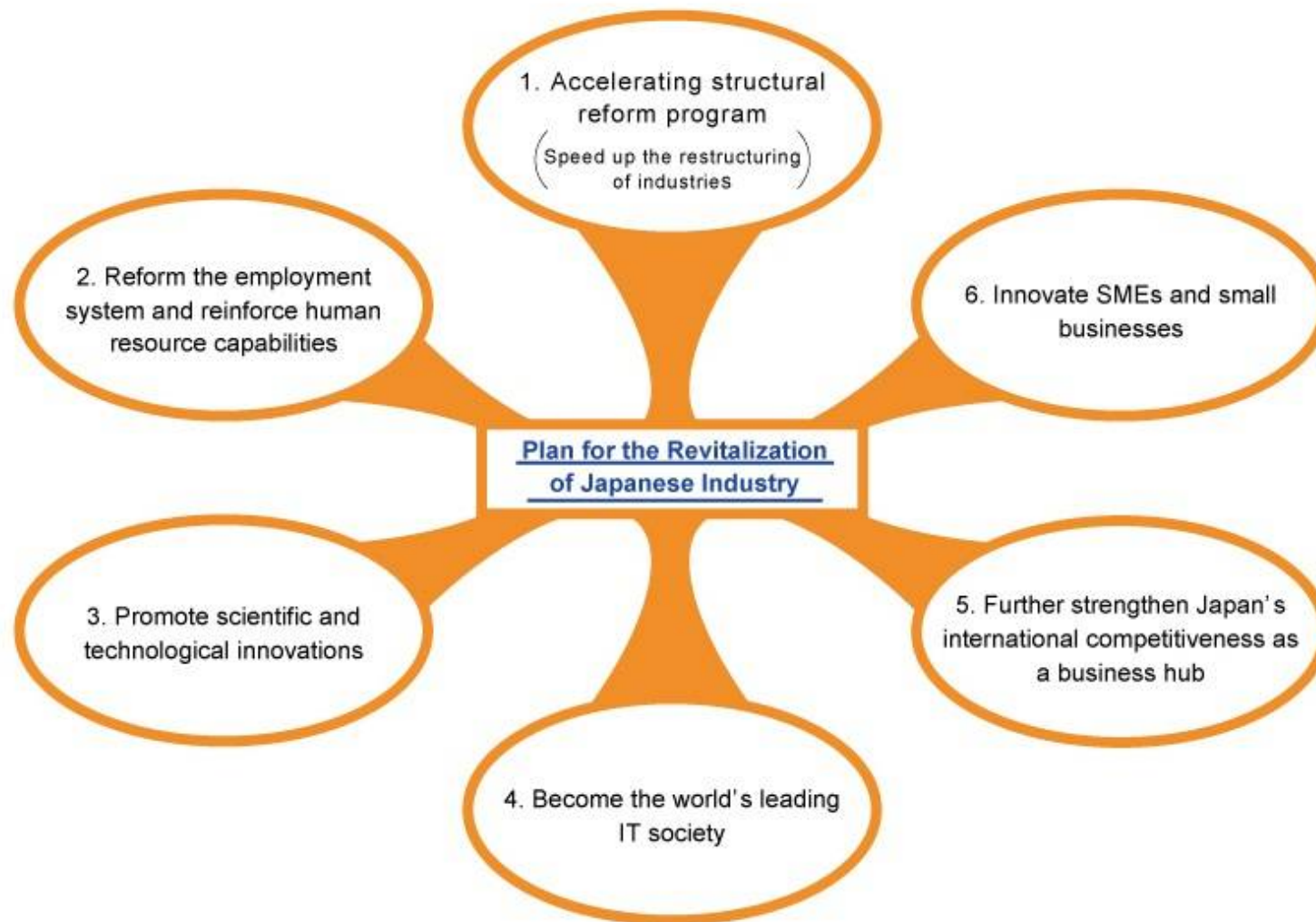
“Japan Revitalization Strategy” sets forth three action plans detailing concrete initiatives for the realization of growth:



## (1) Plan for the Revitalization of Japanese Industry

Revive a manufacturing industry that can succeed in global competition, and create high value-added service industries.

Achieve a society which facilitates company operations and leverages the full potential of individuals.



## (2) Strategic Market Creation Plan

Four themes were selected among the social challenges confronting the world and Japan, in which Japan has advantages over other countries. Japan's global markets in these fields are expected to grow, and they are expected to become strategic sectors. By becoming a world pioneer in resolving these social challenges, Japan will spur the development of new growth sectors.



### (3) Strategy of Global Outreach

- Attract global talents, goods, and funds to Japan through proactive entries into international markets by Japanese businesses and increases in FDI in Japan, and tap into global economic growth.
- Promote extensive globalization within Japan
- Advance strategic, public-private joint initiatives inside and outside Japan through the concerted efforts of the Government.



# Business Cooperation between Japan and Denmark

## Trade and Investment

### Import from Japan

**2,336 M DKK** (Y2012)

Category	Share
Machinery	19%
Manufactured goods	14%
Transport equipment	13%
Chemicals	12%
Electrical machinery	8%

Source: Trade Statistics of Japan, Statistics Denmark \*

### Export to Japan

**13,626 M DKK** (Y2012)

Category	Share
Meat	34%
Pharmaceutical	24%
Machinery	6%
Electrical machinery	5%
Dairy product	3%

### Denmark's Export of Pigmeat (Y2011)

	M DKK	Tonnes
Germany	7,198	611,580
UK	4,830	281,489
<b>Japan</b>	<b>3,636</b>	<b>135,973</b>
Poland	2,574	210,335
China	1,537	178,886

Source: Danish Agriculture & Food Council

### Danish Investment in Japan

**-121 M DKK** (Y2011)

**196 M DKK** (Y2012)

### Japanese Investment in Denmark

**69,250 M DKK** (Y2011)

**355 M DKK** (Y2012)

Source: Bank of Japan \*

Nycomed A/S – acquired by Takeda Pharmaceutical

### Danish Companies in Japan

**32** (Y2012)

### Japanese Companies in Denmark

**35** (Y2012)

Source: Toyo Keizai

### Other cooperation

Agreement on further collaboration in three target areas (life science, welfare robotic technology and green clean technology) was made between Danish PM Rasmussen and Japanese PM Hatoyama in 2009.

**Research collaboration (Life Science):** Lundbeck and Otsuka, Shionogi and 5 Danish Universities

**Field Testing (Welfare Technology):** Panasonic and Odense/Aarhus, Tmsuk and Faaborg

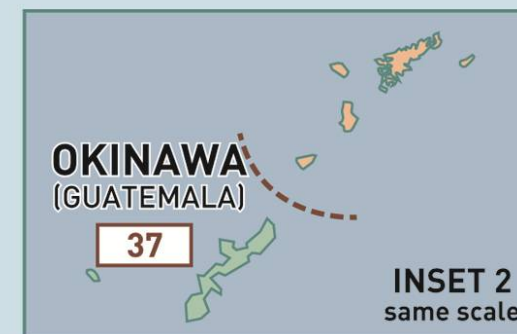
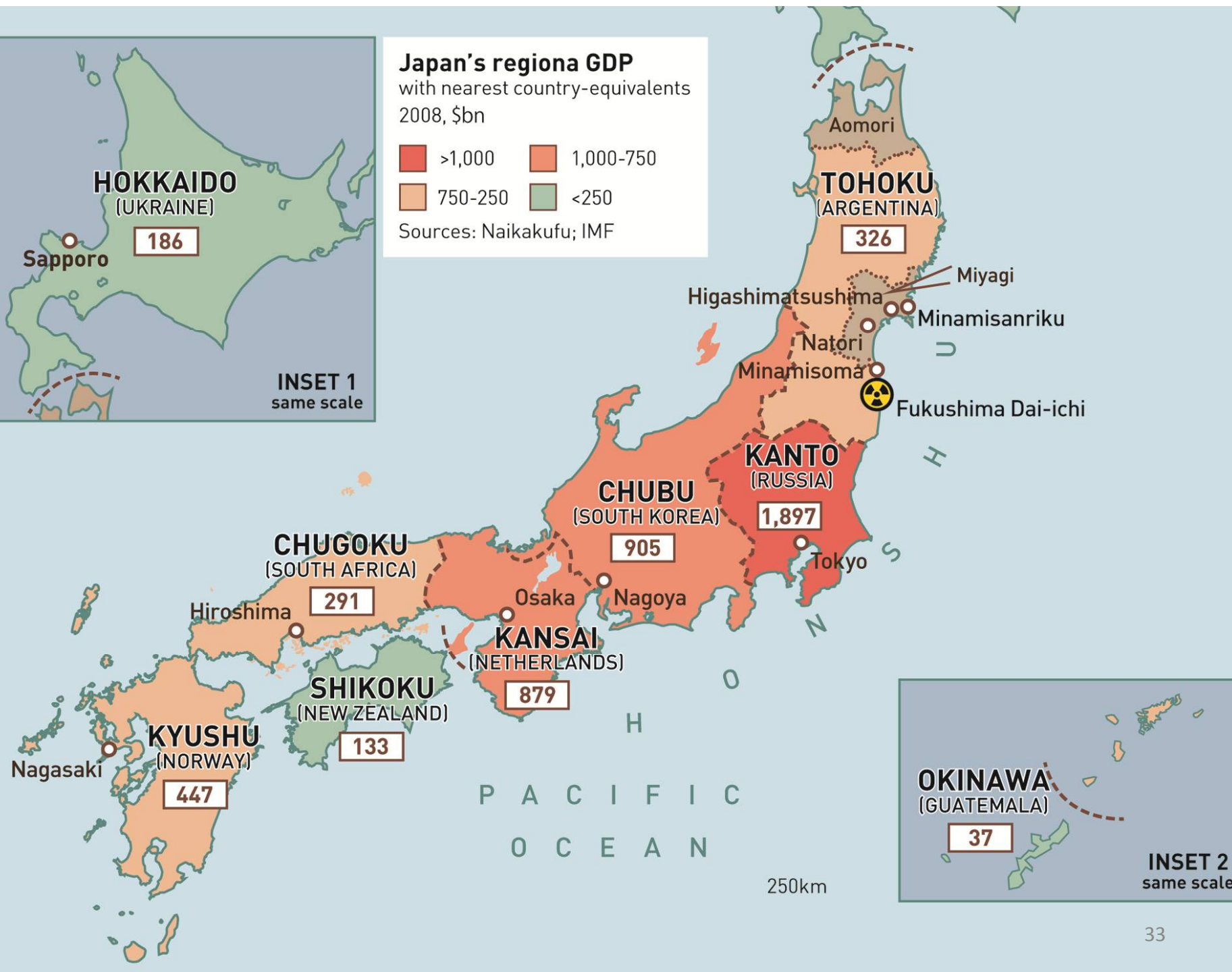
**Fact Finding Visit (Green Clean Technology):** Mr. Akaba, Vice Minister of Economy and Trade and Mr. Watanabe, Leader of Your Party visited Denmark in May 2013



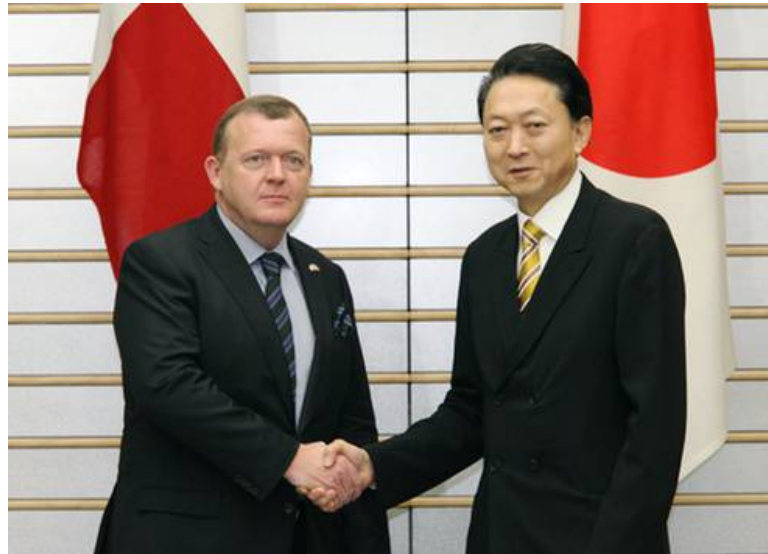
**Japan's regional GDP**  
with nearest country-equivalents  
2008, \$bn



Sources: Naikakufu; IMF



# Political / Business Collaboration



**2010**

**In March, former Prime Minister Lars Lokke Rasmussen has visited Japan and met with former Prime Minister Hatoyama to discuss deepening the bilateral relations especially in business, science and technology fields.**

**3 focus area**

- life science**
- robotic technology**
- clean green technology**

# Concrete Cooperation: Robotic Technology

**2008**

Seal shaped robot “Paro” is introduced in elderly care home in Denmark (with DTI, about 200 are sold in Denmark, 70 in the Netherlands and 50 in Germany as of October 2012)



**2010**

Panasonic signed an agreement with Odense municipality and Aarhus municipality for field test for a robotic bed especially for super hospitals

**2011**

March

Started a field test for a human shaped robot “telenoid” (2011 Svendborg (south of Odense), 2012 Aalborg)



June

Started a field test for a monitoring robot “roborier” (2011 Faaborg (south of Odense))



June

An Economic Exchange Promotion Agreement signed by Danish Embassy in Tokyo and Osaka City

# International Cooperation: Higashi-matsushima Signs Agreement with Lolland City (Denmark)

◆ **Lolland City(Denmark)** has supported Higashi-matsushima in various ways after the Earthquake and tsunami.



◆ The two municipalities have entered into a MOU to closely collaborate in terms of technology sharing and human resources development to realize both **earthquake disaster reconstruction** and the “**FutureCity**” Initiative.

※Lolland :

A town with a population of 45,000 on the Island of Lolland, located in the southern region of the Kingdom of Denmark. It is a self-sufficient town with energy supplied by wind mills, and provides its surplus energy to large cities such as Copenhagen. It is a leading environmental city and is the world's first “Hydrogen Community.”



■ Photo: Panoramic View of Higashi-matsushima



■ Photo: Signing the Agreement

Left: Stig Vestergaard, Mayor of Lolland  
Right: Hideo Abe, Mayor of Higashi-matsushima

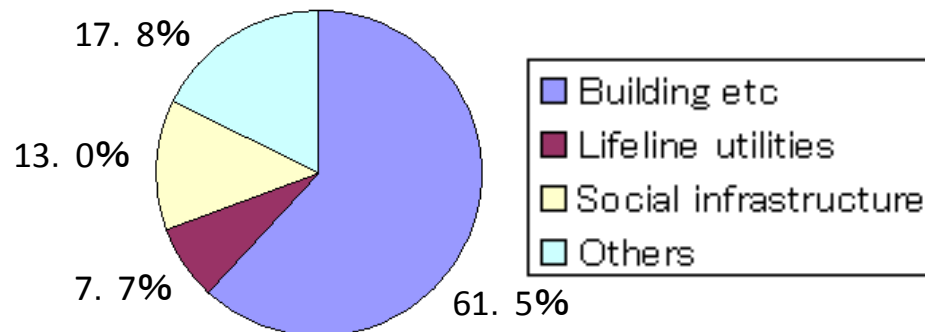
# Reconstruction from East Japan Earthquake and Tsunami

## ( I ) Damage to stocks (social capital, housing, private plants & equipment)

**16.9 trillion yen (135 billion euro)**

(about 3.5% of GDP Japan)

(about 65% of GDP Denmark)



### Reconstruction Budget:

- 152 billion euro in 10 years  
(80% of which is planned to be spent in 5 years)

### Revised Reconstruction Budget: Under New Government (Jan 27<sup>th</sup>)

- 200 billion euro in 10 years

## ( II ) Loss of power generation capacity (As of January.2013)

**2 reactors out of 50 is in operation**

= 25-30% of total electricity generation

### → Increase in import of natural gas

in 2011, it increased by about 18% (43.5 billion euro ) to about 40% of energy mix and became one of the causes for trade deficit in 2011

### → Decrease in electricity consumption

### → Promotion of renewable energy

introduction of feed-in-tariff (July, 2012)

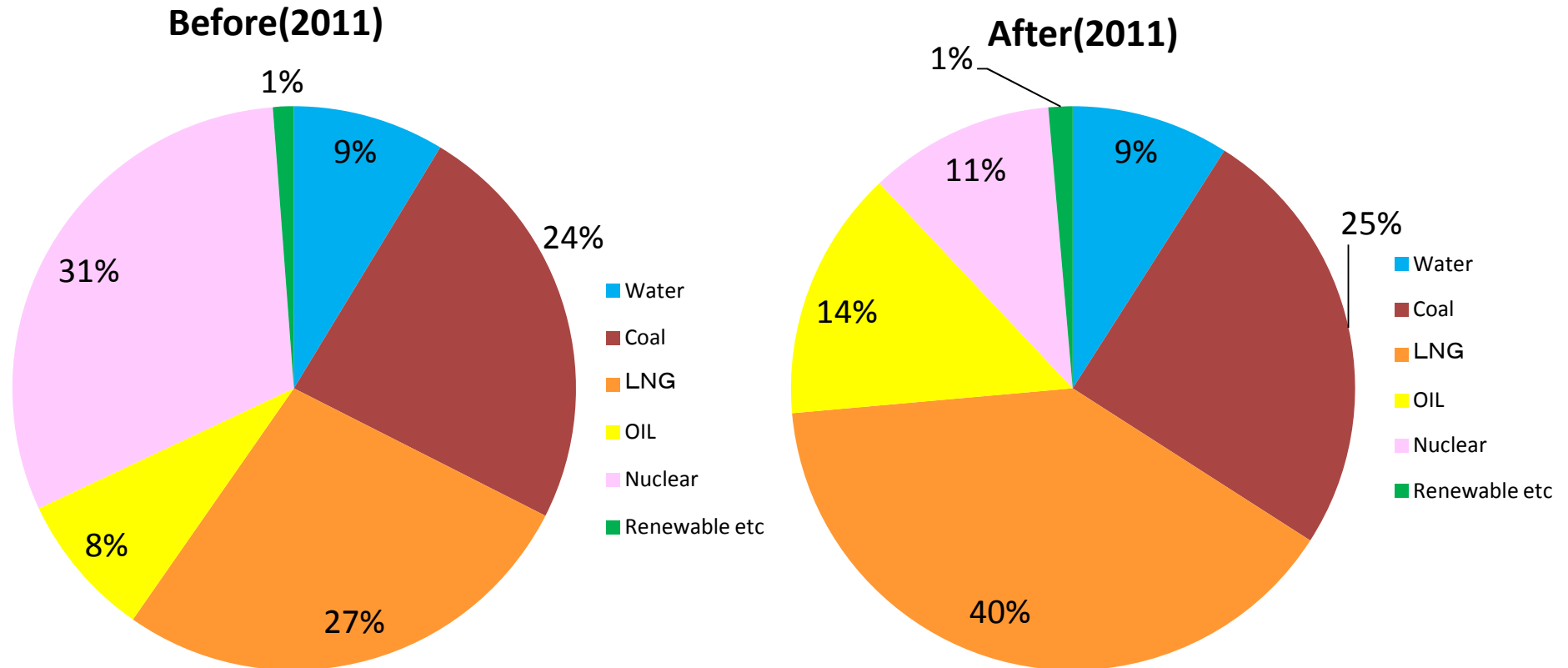
### Energy Plan (September, 2012)

- Zero Nuclear in 2030s

### Revising Energy Plan Under New Government

-More Renewables and Less Nuclear  
-but should decide when and how

# Energy mix in Japan

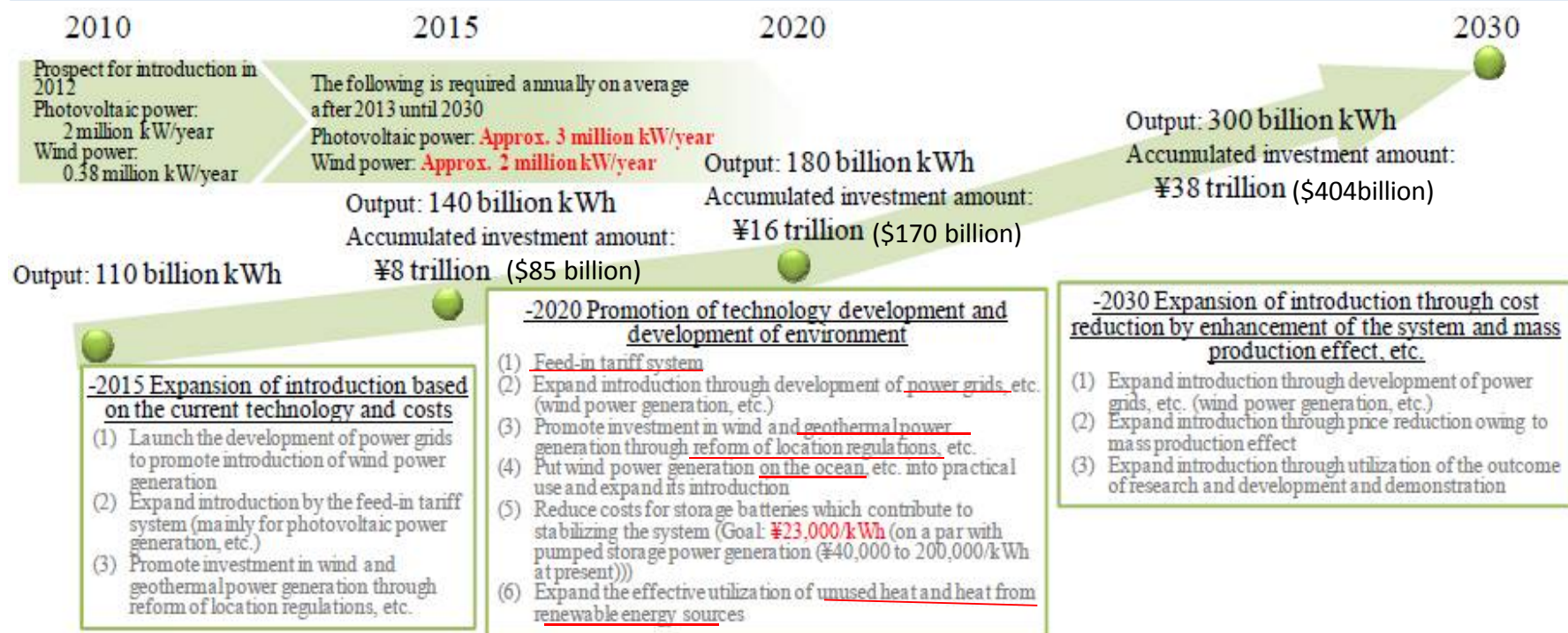


**Reference:**

Agency of Natural resources and energy of Japan,

Energy white paper 2011(<http://www.enecho.meti.go.jp/topics/hakusho/2011energyhtml/2-1-4.html>)

# Innovative Strategy for Energy and the Environment (Expansion of Renewable energy)

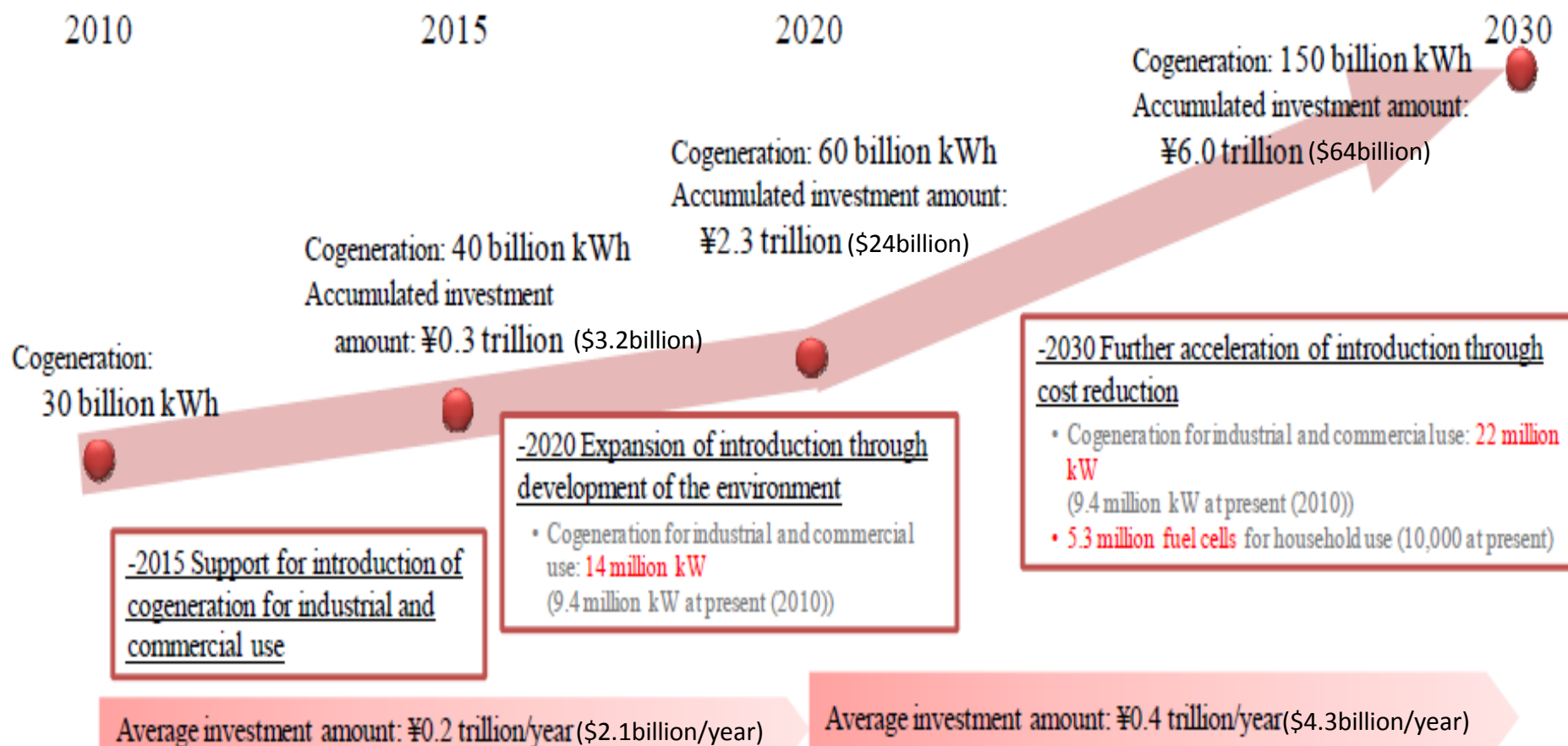


Average investment amount: ¥1.6 trillion/year (\$17 billion/year)

Average investment amount: ¥2.3 trillion/year (\$24 billion/year)

Renewable energy	2010	2015	2020	2030
Output (compared to 2010)	110 billion kWh	140 billion kWh (1.4 times)	180 billion kWh (1.7 times)	300 billion kWh (approx. 3 times)
(*Excluding water power) Output (compared to 2010)	25 billion kWh	50 billion kWh (approx. 2 times)	80 billion kWh (approx. 3 times)	190 billion kWh (approx. 8 times)

# Innovative Strategy for Energy and the Environment (Expansion of Cogeneration)



Note: The amount of investment in fuel cells for household use is recorded redundantly in energy saving and cogeneration.

# Japan's energy policy

## **1. Policy measures to promote renewable energy**

- (1) Feed-in-tariff (introduced 1 July, 2012)
- (2) Incentive measures
- (3) Deregulation (accelerating use of farmlands and national parks etc. for wind, solar and geothermal power)

## **2. Electricity system reform**

- (1) Liberalization of electricity market in 3 years (2016)
- (2) Unbundling of generators and transmission operators in 5-7 years (2018-2020)

## **3. Nuclear power (2/50)**

- (1) Review former Government's plan which will phase out nuclear power by 2030's
- (2) Reduce dependency on nuclear power
- (3) Resume operation when proven to be safe

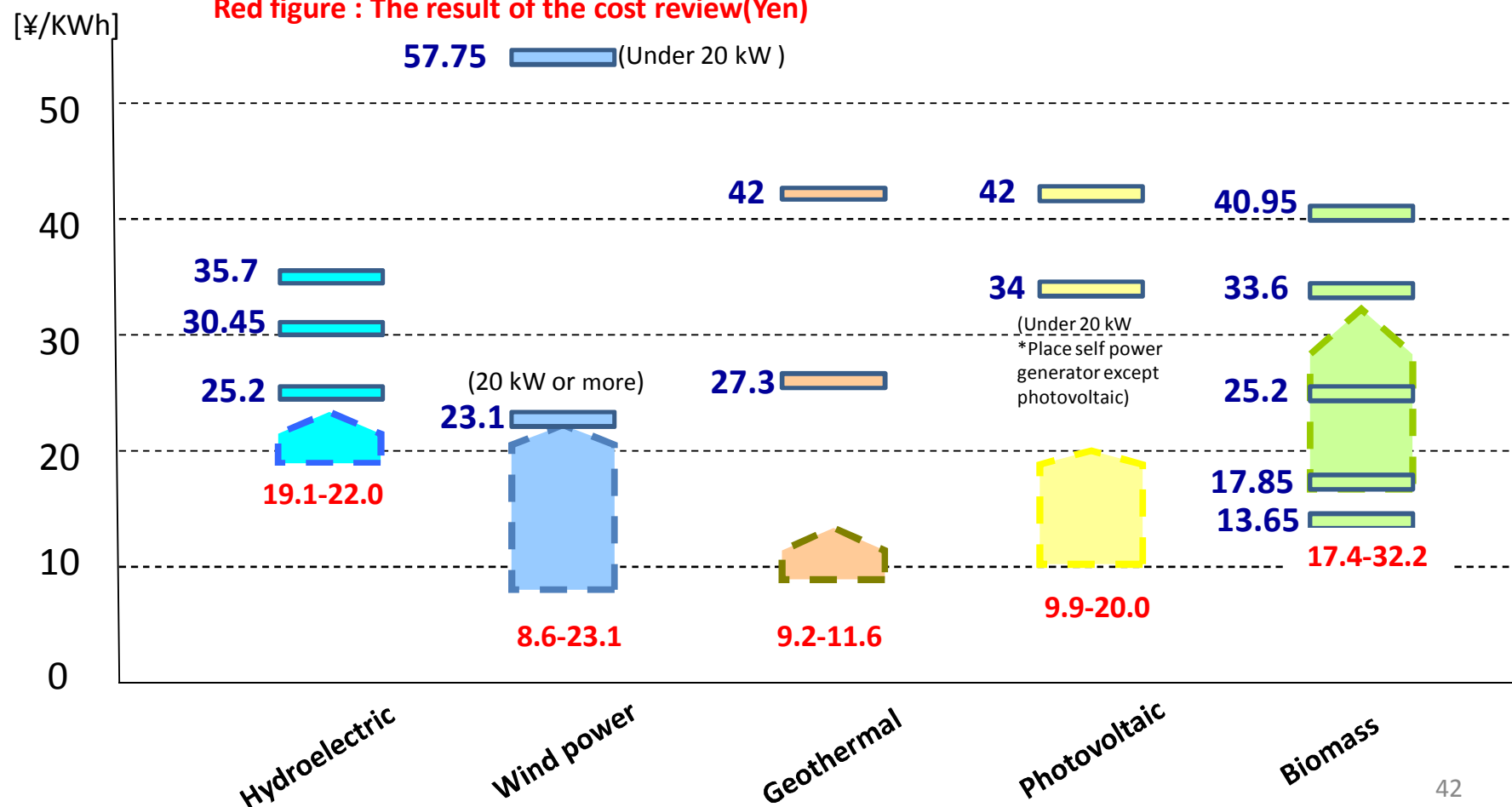
# Introduction of Feed-in Tariff

## Feed-in-Tariff

Introduced as of 1<sup>st</sup> July, 2012

Blue figure : Requested buying prices(Yen) from industries (from July, 2012 to March, 2013)

Red figure : The result of the cost review(Yen)



# Incentive measures for renewable energy

## 1. Preference Tax policy

(1) 7% of installation cost (deductible)

or

(2) Depreciation of 30% installation cost (deductible) in addition to regular tax deduction

## 2. (1) Concessional loan for about 40% of installation cost

(2) Loan guarantee by the government

## 3. 50% of cost for field survey for wind turbines/solar panels

# Theoretical Potentiality of the Renewable Energy

Source: Ministry of Environment in Japan, "Study of Potential for the Introduction of Renewable Energy (FY2010)"

[http://www.env.go.jp/earth/report/h23-03/summary\\_en.pdf](http://www.env.go.jp/earth/report/h23-03/summary_en.pdf)

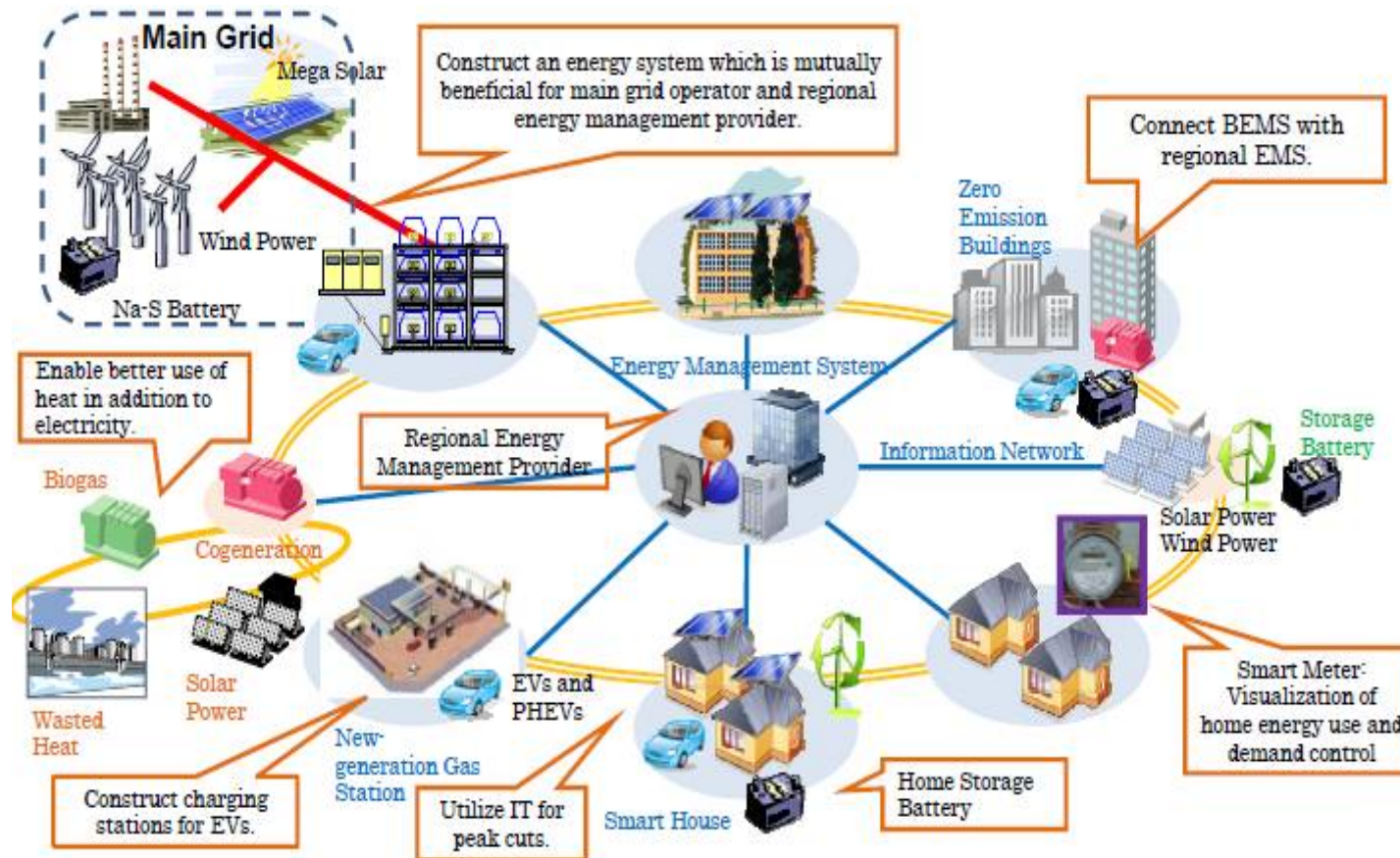
Installed Capacity (million kW)

Type of Energy		Introduction potential	Policy incentives			
			FIT	FIT + subsidy	FIT + technology innovation	FIT + technology innovation + subsidy
Photovoltaic Power (Non-Residential)		150	0	0~26	0.2~72	69~100
WindPower	Onshore	280	24~140	130~260	270	280
	Offshore	1,600	0~3	0.3~330	140	1,200
	Total	1,900	24~140	130~590	410	1,500
Small and Medium-Scale Hydropower		14	1.1~3	2.7~5.4	4.3	7.4
Geothermal Power		14	1.1~4.8	1.5~4.3	5.2	4.6 (23.5)

After the deregulation, Japan will have the potential to generate 23.47 million KW

# Future City Project

11 cities were selected as “FutureCity” which is a part of “New Growth Strategy” launched in 2010. It tackles issues regarding environment and super-aging societies by creating model cities supported by renewable energy, smart-grid, smart meter and other IT.



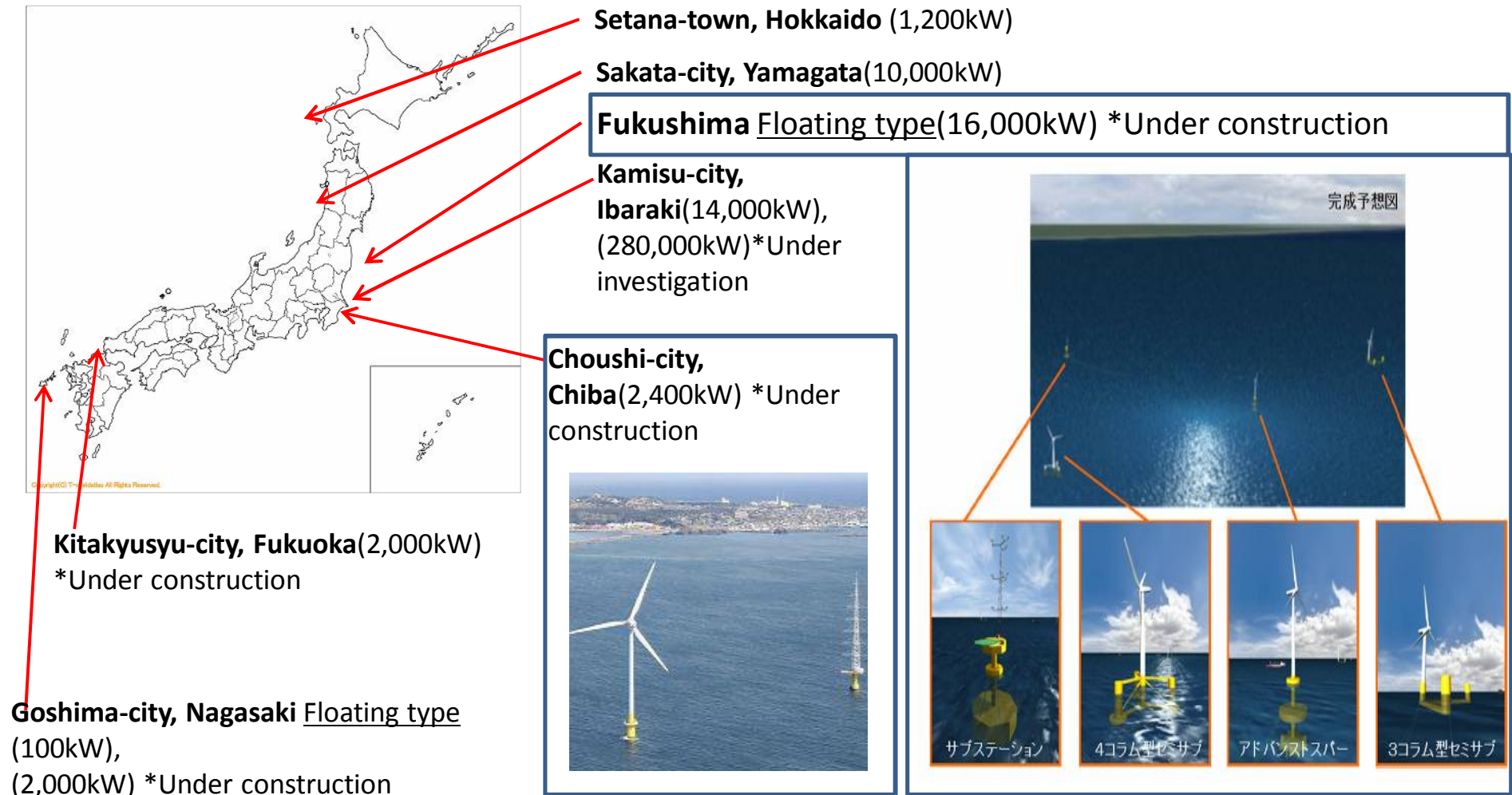
## ○6 cities from affected area

1. Ohfunato & Rikuzentakada, Iwate
2. Kamaishi, Iwate
3. Iwanuma, Miyagi
4. Higashimatsushima, Miyagi
5. Soma, Fukushima
6. Shinchi, Fukushima

## ○5 cities from non-affected area

1. Shimokawa, Hokkaido
2. Kashiwa, Chiba
3. Yokohama, Kanagawa
4. Toyama, Toyama
5. Kitakyushu, Fukuoka

# Off-shore wind power in Japan



In 2030, the capacity of off-shore wind power parks will correspond to 8 nuclear power stations