

# Melting down climate change policy and politics in Japan

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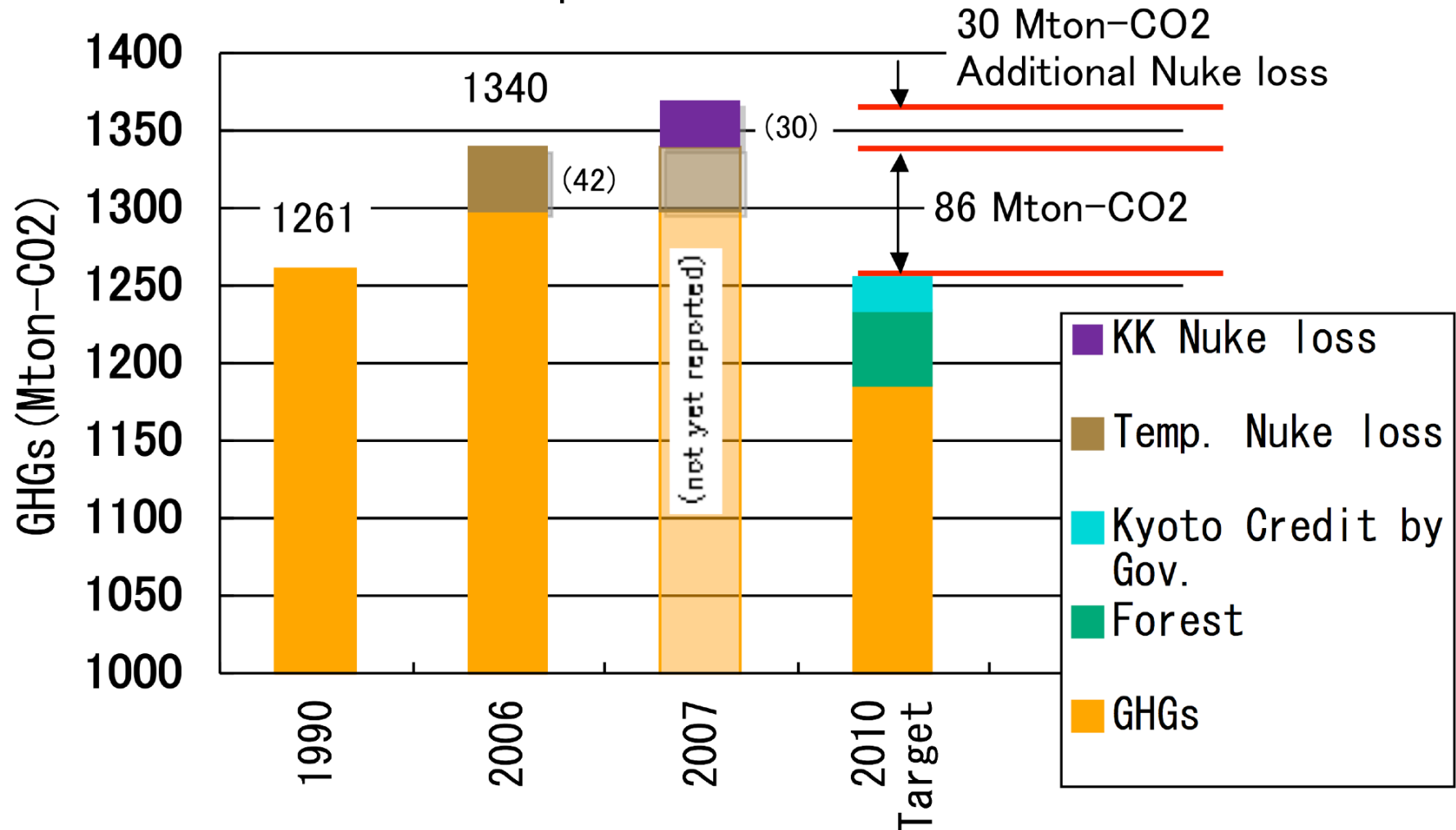
## Overview of “melting down climate change policy” in Japan

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- GHGs +6.2 % (CO2 +11.3%) in 2006 should be reduced to - 0.6%
  - 1.6% by Gov’s Kyoto credit and 3.8% by forest absorption
- “Governmental Climate Change Strategy”, amended April 2008, aims to achieve by 2010, but not likely because of unchangeable energy policy
- Divided political power in the climate change policy arena
- Divided and chaotic climate policy debate

# Climate change policy failure due to energy policy “unchanged”

“Japan Climate Change Strategy 2008” aims further reduction of 86 Mton GHGs from 2006 level, besides additional CO2 from accidental stop of Kashiwazaki-kariwa nuclear power station

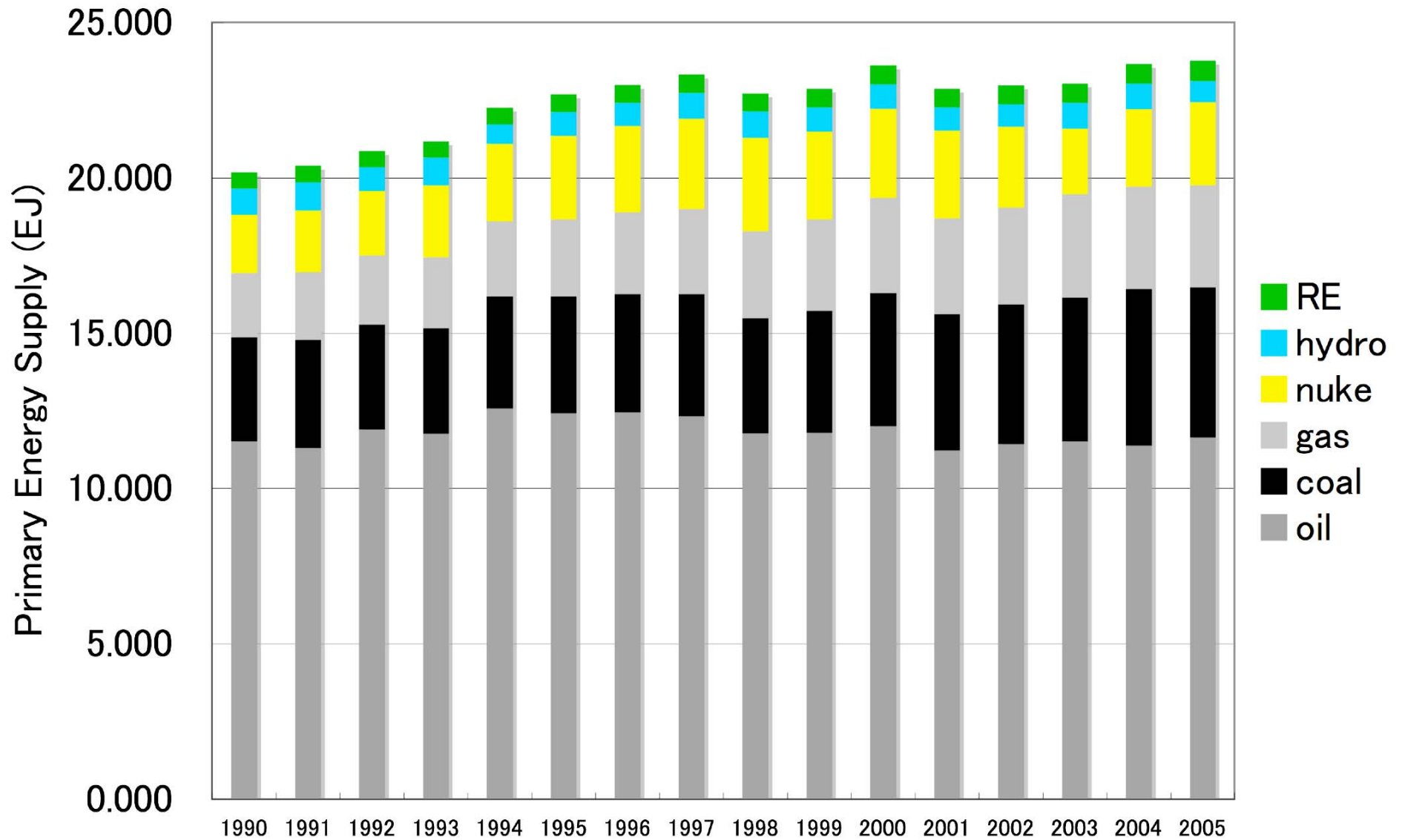


## Overview of “melting down climate change policy” in Japan

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- “Governmental Climate Change Strategy”, amended April 2008, aims to achieve by 2010, but not likely because of unchangeable energy policy;
  - more weigh on energy supply security, with coal power expansion plan,
  - nuclear power is too much centralized politically, without reality
  - RES is too much marginalized politically
- Divided political power in the climate change policy arena
- Divided and chaotic climate policy debate

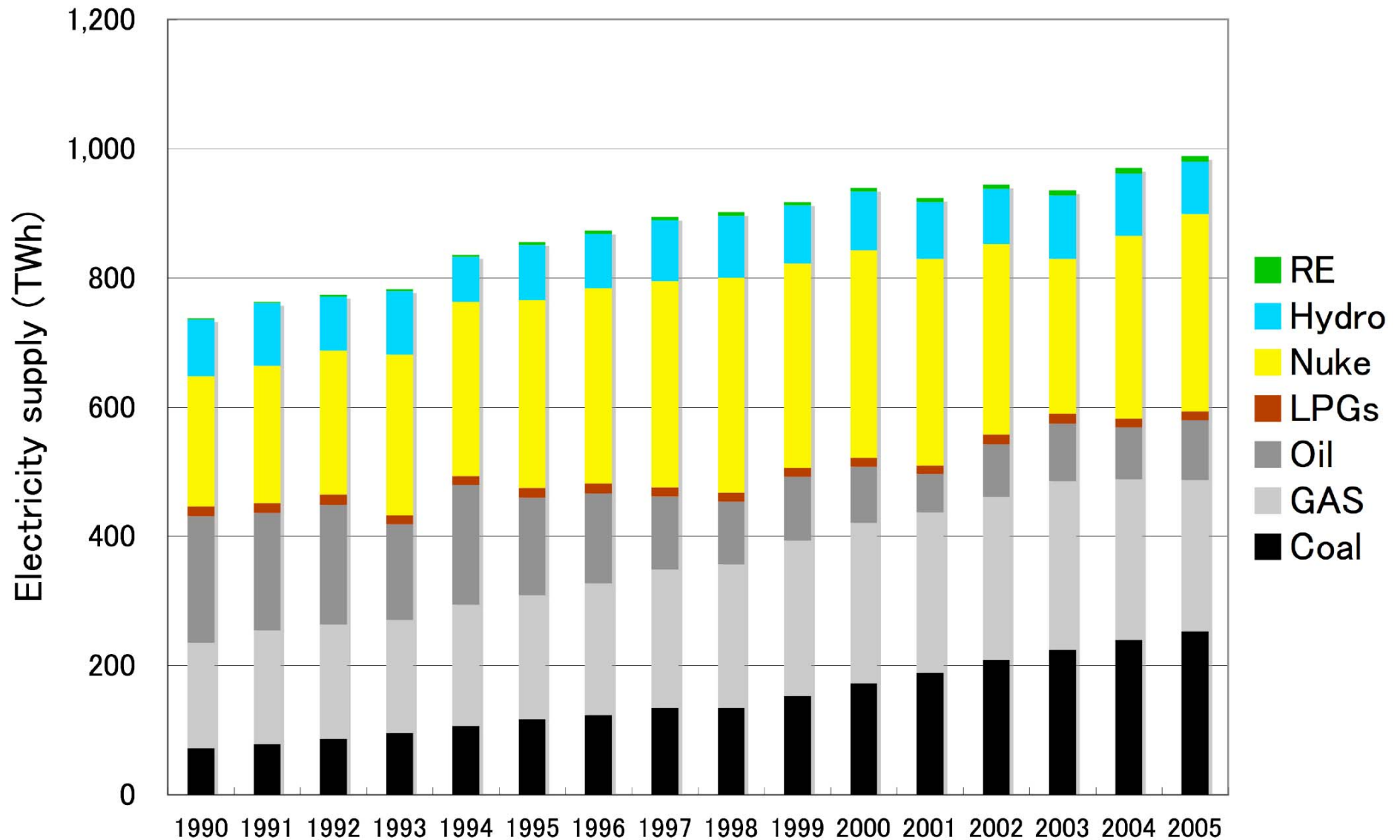
# Primary Energy Supply in Japan



Source : METI Energy White Paper 2008

# “Lock in structure” of electricity supply in Japan

Steady growth of coal, gas and nuke

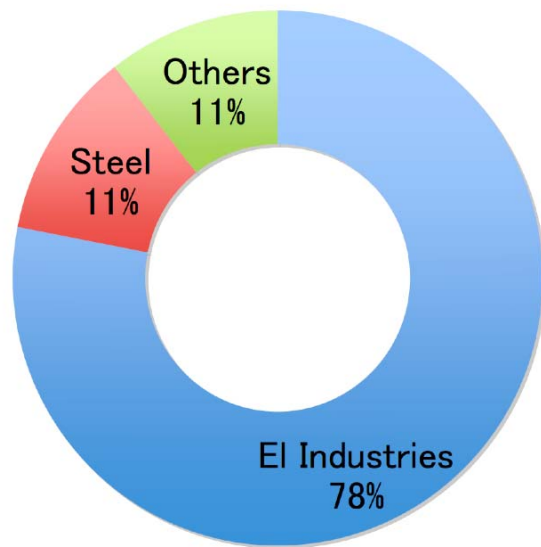


Source : METI Energy White Paper 2008

# 78% in surplus GHGs from electricity supply sector

However, no intervention, even more promoting coal power

Sectral share of surplus GHG  
(86 Mton CO2)



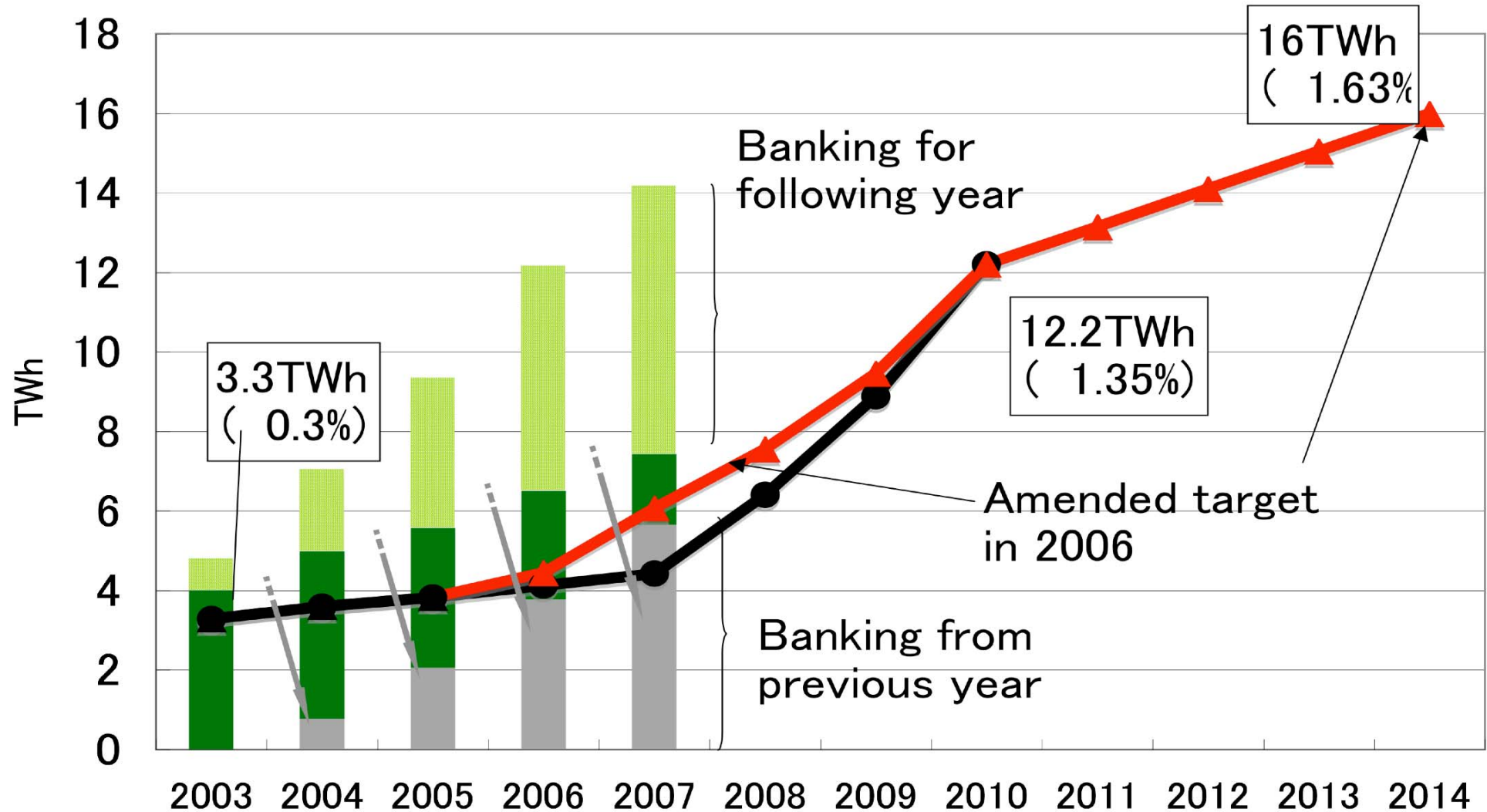
Coal power expansion plan

Tokyo	Hitachinaka No2	1000 MW	2013
Kansai	Maizuru No2	900 MW	Aug.2010
Chugoku	Osaki No1	500 MW	2018
Kyushu	Matsuura No2	1000 MW	2023
JPower	Isogo No2	600 MW	July 2009

(source)METI (March 2008)

# RES electricity policy lock in politically since 2003

RPS introduced in 2003 is politically locked in RES policy





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  - The Cabinet ~ METI ~ MoEnv
  - The Cabinet ~ LDP ~ Democrats
  - The Gov ~ KEIDANREN ~ FEPCO ~ NGOs ~ Media
  - The Central Gov ~ Tokyo Metropolitan Gov
- Divided and chaotic climate policy debate

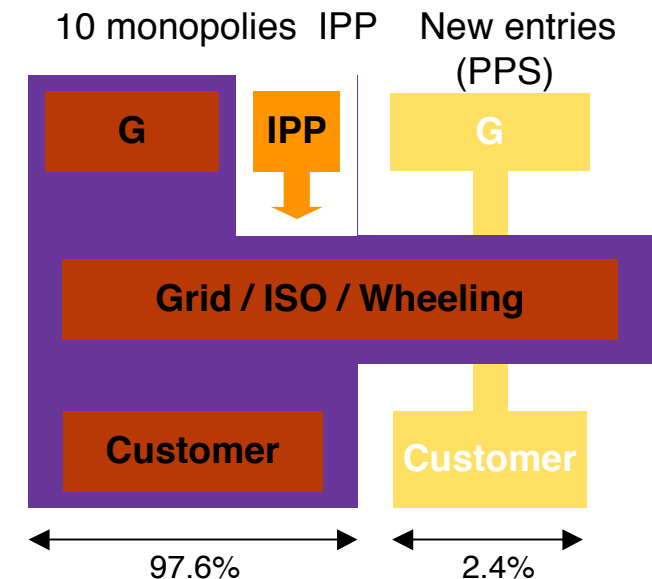
## Divided political power in the climate change policy arena

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- The Cabinet ~ METI ~ MoEnv
  - The war over legitimacy and power between METI and MoEnv
  - MoEnv competent to climate change, while METI competent to energy
  - METI is superior to MoEnv in influence on the Cabinet and political power with industries association
- The Cabinet ~ LDP ~ Democrats
  - LDP increasing climate change expertise, little more active than the Cabinet
  - Democrats more active attitude toward climate change issue, so far
- The Gov ~ KEIDANREN ~ FEPCO ~ NGOs ~ Media
  - The war on climate discourse, very much polarized
  - The media is biased through “closed media clubs” under the gov and industry
  - Even climate skepticism coming up with on the media after G8, with “cap & trade skepticism” promoted by the industry
- The Central Gov ~ Tokyo Metropolitan Gov
  - Only Tokyo Metropolitan Gov urges climate and renewable policy “against” the central government

# Japan's electricity market structure and political landscape

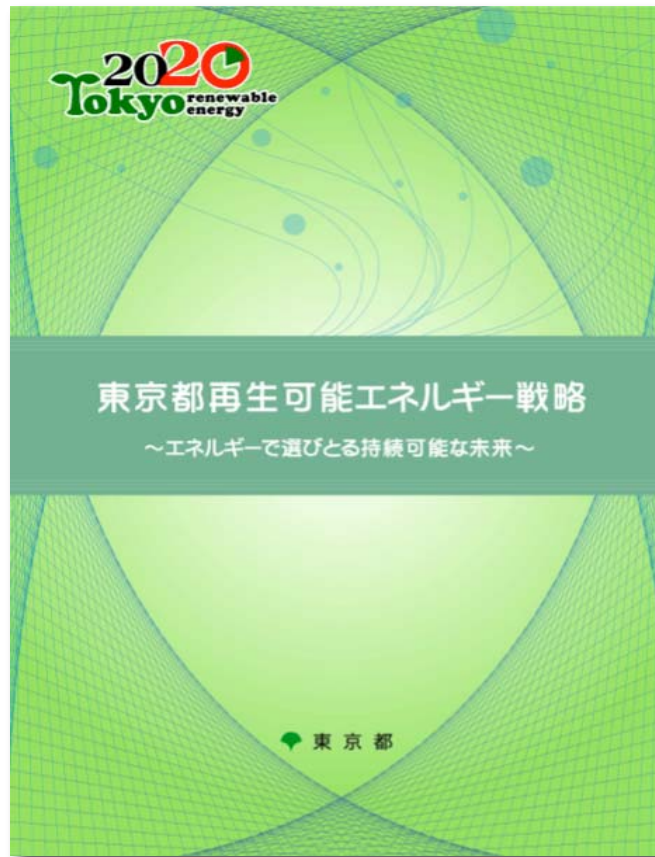
- Regional & de-facto functional monopoly
  - 10 major electricity suppliers cover 10 regions separately
  - Market monopoly; 97.6%
  - Grid monopoly and ruling by themselves
  - Political monopoly;
    - All electricity suppliers are the most “giant” companies in each region, consequently, the most influential political actors both national and local governments
- Political structure
  - Bureaucratic democracy
    - METI (the Ministry of Economy Trade & Industry) control whole process of energy policy
    - Relying its political power on 10 major electricity suppliers through regulation
  - Parliamentary political structure
    - LDP (ruling party) is closely harmonized with by 10 major electricity suppliers directly and indirectly
    - Democrats (largest opposition party) is critically influenced by industry labor union



# Tokyo Renewable Energy Strategy (2006)

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Tokyo Metropolitan Government (TMG) decided ambitious renewable energy strategy under strategic collaboration between Tokyo and ISEP with common value / vision / attitude and different role



## ***Tokyo's target = "20% RE by 2020"***

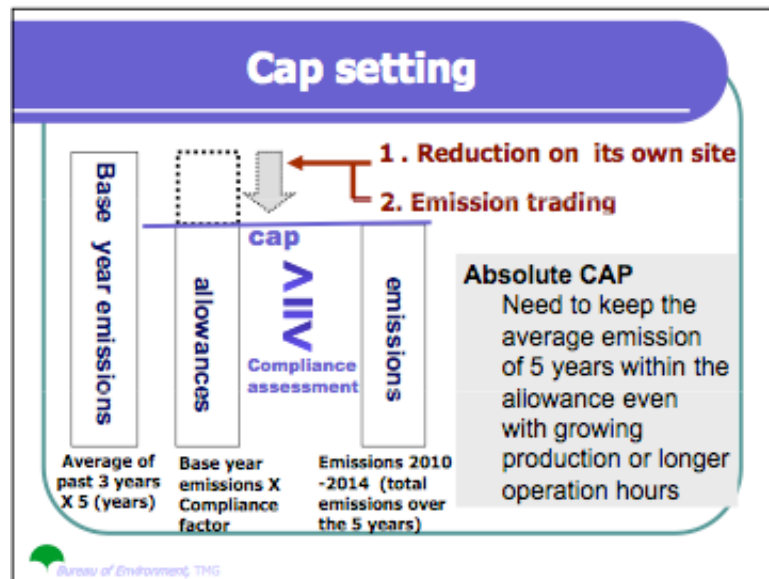
- Applying "Principle of subsidiary" for renewable energy policy
- Exergy and demand-side strategy
- Demand-pull policy

## ***Strategic collaboration***

- Common value / vision / attitude
  - Leading "sustainable energy society"
  - Local initiative for policy innovation
  - Normative but pragmatic
- Different role
  - Local government and independent NPO
  - Secretariats and official committee member

# The first mandatory CO2 cap & trade in Japan (2008.6.25)

Tokyo Metropolitan Government (TMG) approve the first mandatory CO2 cap & trade bill in Japan, which will effect in 2010



## **2007.6 “Tokyo Climate Change Strategy”**

- Proposal of integrated climate program including cap & trade, local carbon tax and local FIT for solar PV

## **2007.7 ~ 2008.1 Open discussion**

- 3 times stakeholder dialogues conclude to introduce new policy

## **2008.3 Tokyo env council recommendation**

- To introduce new cap & trade into the ordinance

## **2008.6.25 Tokyo local congress approval**

- To introduce new cap & trade into the ordinance

## **2010.4 Start of Japan’s first cap & trade**

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- Divided and chaotic climate policy debate over;
  - Climate change tax
  - Cap & trade
  - Renewable energy and other energy supply mix change
  - Strong nuclear myth and climate risk reality

## Divided and chaotic climate policy debate

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- Climate change tax
  - Still long way to be “on the agenda” under the most “esoteric” political culture
  - METI’s conspiracy and politics “against” climate change tax, with keeping energy tax as their territory
- Cap & trade
  - The central “battle field” so far
  - Industry associations strongly against, with keeping “voluntary agreement” as counter measures
  - METI behaves “strongly against” along with industry associations, while policy hegemony battle against MoEnv
  - MoEnv strongly support, while weak political power
  - LDP; more positive than METI and industries
  - Democrats ; strongly support
  - TMG : officially decided to introduce in 2010
  - The Cabinet ; start with “trial” in 2008, but not committed “full”
  - As the result, national “trial” scheme must be very much complex

## Divided and chaotic climate policy debate (cont.)

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- Renewable energy and other energy supply mix change
  - FIT debate again come up with on the agenda because of solar PV competition lost
  - METI strongly against FIT irrationally
    - even METI go for “lobby” both for LDP and Democrats with showing “IEA Germany review 2007”
  - LDP favorable to FIT because of core person(s) expertise
  - Democrats neutral to FIT because of core person(s) expertise
- Strong nuclear myth cause to climate risk reality
  - METI and EI industry rely on nuclear very much for their climate change measure by expanding new capacity and improving capacity factor
  - However, nuclear reality shows rather “climate risk” than “its solution”, furthermore the earthquake hit Kashiwazaki-Kariwa nuke power station to make situation worse

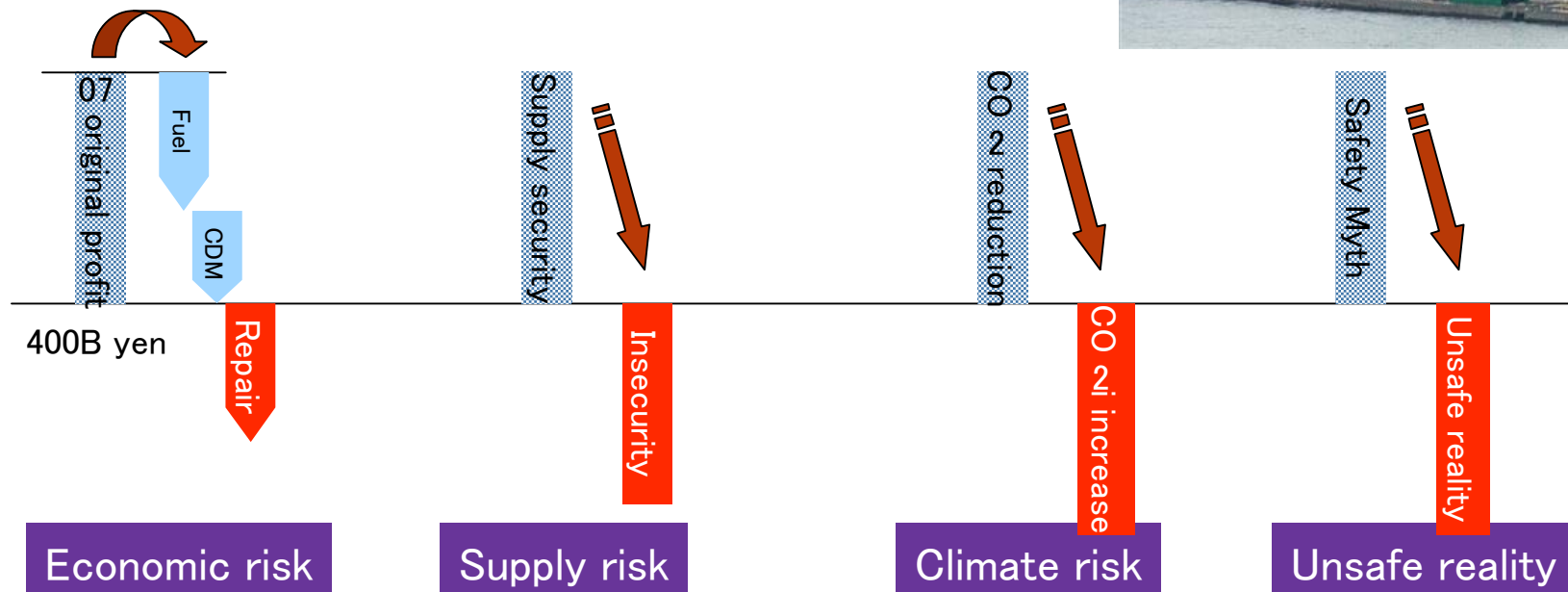
year	2000	2001	2002	2003	2004	2005	2006	2007	2010
Capacity factor (%)	81.7	80.5	73.4	59.7	68.9	71.9	69.9	60.9	88



# Upside down of nuclear myth into nuclear reality

The earthquake hit Kashiwazaki-Kariwa nuclear power station (7.8 GWe) on July 16th 2007 exposed opposite aspect of nuclear power

- from “climate solution” to “climate risk”
- from “cheap power” to “economical risk”
- from “supply security” to “supply risk”
- from “safety myth” to “unsafe reality”



## In summary

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- Climate change policy politics in Japan are heavily polarized and becomes more and more chaotic
- Debates over climate change policies continues without any effective policy measures are scheduled to introduce
- Although Japan's climate change policy is obviously failure so far because of energy policy failure, it still keep going on same track
- Strong policy lock-in both nuclear and electricity monopoly block to change in energy policy toward climate change friendly direction
- RES policy is also locked-in under METI's politics as well as electricity monopoly
- TMG challenge could explore the new math to climate change policies change