

## Japan's Energy Mix – The End of Quiet Politics

Llewelyn Hughes  
George Washington University  
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# Government – Radical Vision for Energy

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“...before the disaster...increasing our reliance on nuclear energy was central to the search for energy security and solving the problem of climate change...  
...but we became convinced that our nation’s energy strategy had to be reviewed from the ground up.”

- ◆ no extension to 40 year operating life of nuclear units
  - ◆ no new construction or expansion of units
  - ◆ restart existing units only after completion of safety review
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- ◆ increase role of thermal & renewables
- ◆ cut power demand by 10% by 2030; final demand by 19%
- ◆ fully liberalize power sector – promote competition between regional electricity monopolies

(Sep. 14, 2012)

## *“Quiet Politics”*

*Technical policy area*

*Insiders dominate*

*Limited public consultation*



## *“Noisy Politics”*

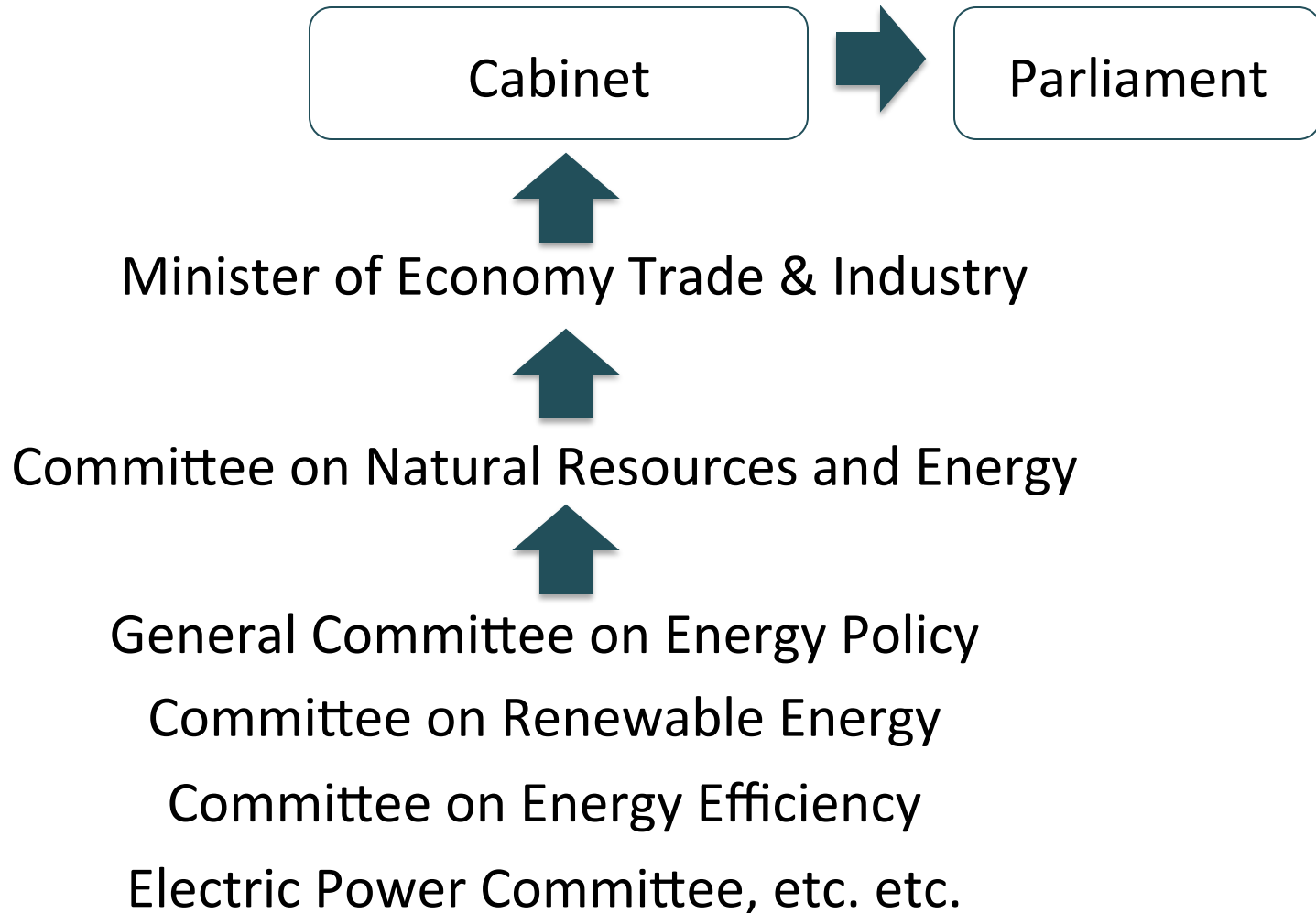
*Public interest increases*

*Multiple coalitions*

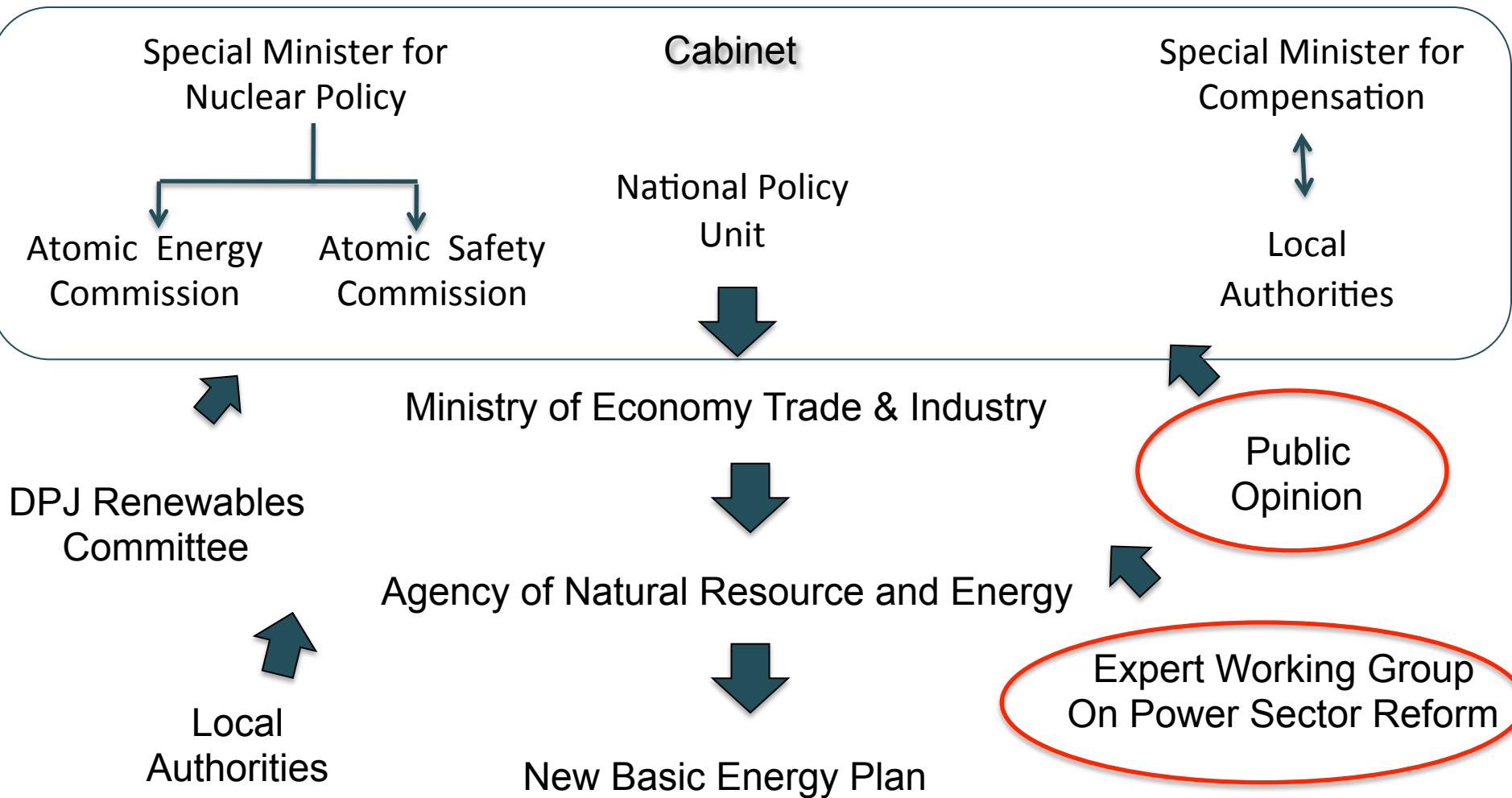
*Decisionmaking no-longer insulated*

# “Quiet” Politics

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# “Noisy” Politics



# Nuclear Under Siege – New Voices

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## *Power System Reform Expert Committee*

- ➡ Chairperson: Itoh Motoshige – economist
- ➡ Vice-chair: Annen Junji – legal scholar

## *Members*

- ➡ 1 investment analyst
- ➡ 3 economists
- ➡ 3 energy analysts
- ➡ 1 engineer
- ➡ 1 consumer representative

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- ➡ Full retail liberalization, separation of transmission, revitalize wholesale market

# Nuclear Under Siege – Public Opinion

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## *National Survey Data (Sep. 10, 2011)*

Do you support reducing nuclear power and eventually ending its use?

Strongly support	59 percent	}	92 percent
Somewhat support	33 percent		

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## *NPU Survey Data (July, 2012)*

Support For Nuclear Power?

0 percent scenario	26.8 percent	}	55.3 percent
15 percent scenario	14.3 percent		
Either 0 or 15 percent	14.2 percent		
20 – 20 percent	9.9 percent		

*What is Likely to Stick?*



# Law Establishing Nuclear Safety Commission

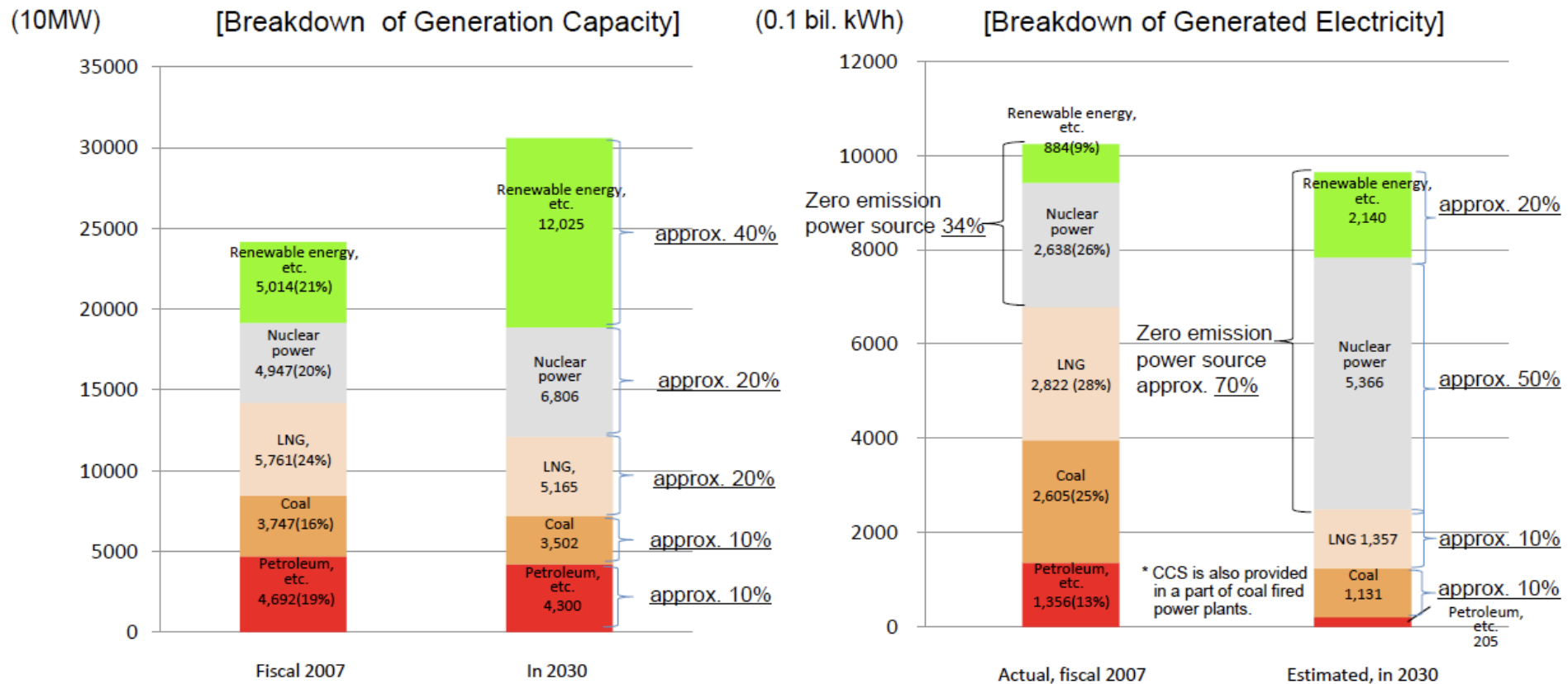
## Article 43-3-31

- ◆ Unit operation limited to 40 years, but one time extension of up to 20 years is possible

	2010s	2020s	2030s	2040s
Hokkaido	0	1	1	1
Tohoku	0	1	1	2
Tokyo	2	5	6	0
Chubu	0	1	1	1
Hokuriku	0	0	1	1
Kansai	7	2	2	0
Chugoku	1	1	0	0
Shikoku	1	1	1	0
Kyushu	1	3	2	0

# Consensus on Boosting Renewables

- "Renewable energy, etc." in 2030 includes electricity generated in households, etc.



# Feed in Tariff Rates (1 July 2012)

Fuel	JPY/kWh	USD/kWh	Years
Wind			20
< 20 kW	57.75 JPY	0.735	
> 20 kW	23.10 JPY	0.294	
Geothermal			15
< 15 MW	42.00 JPY	0.534	
> 15 MW	27.30 JPY	0.347	
Hydro			20
< 200 kW	35.70 JPY	0.454	
< 1 MW	30.45 JPY	0.387	
< 30 MW	25.20 JPY	0.321	
PVC			
< 10kW	42.00 JPY	0.528	10
> 10kW	42.00 JPY	0.528	20