

# **Recent Developments in New and Renewable Energy Policy & Measures in Japan**

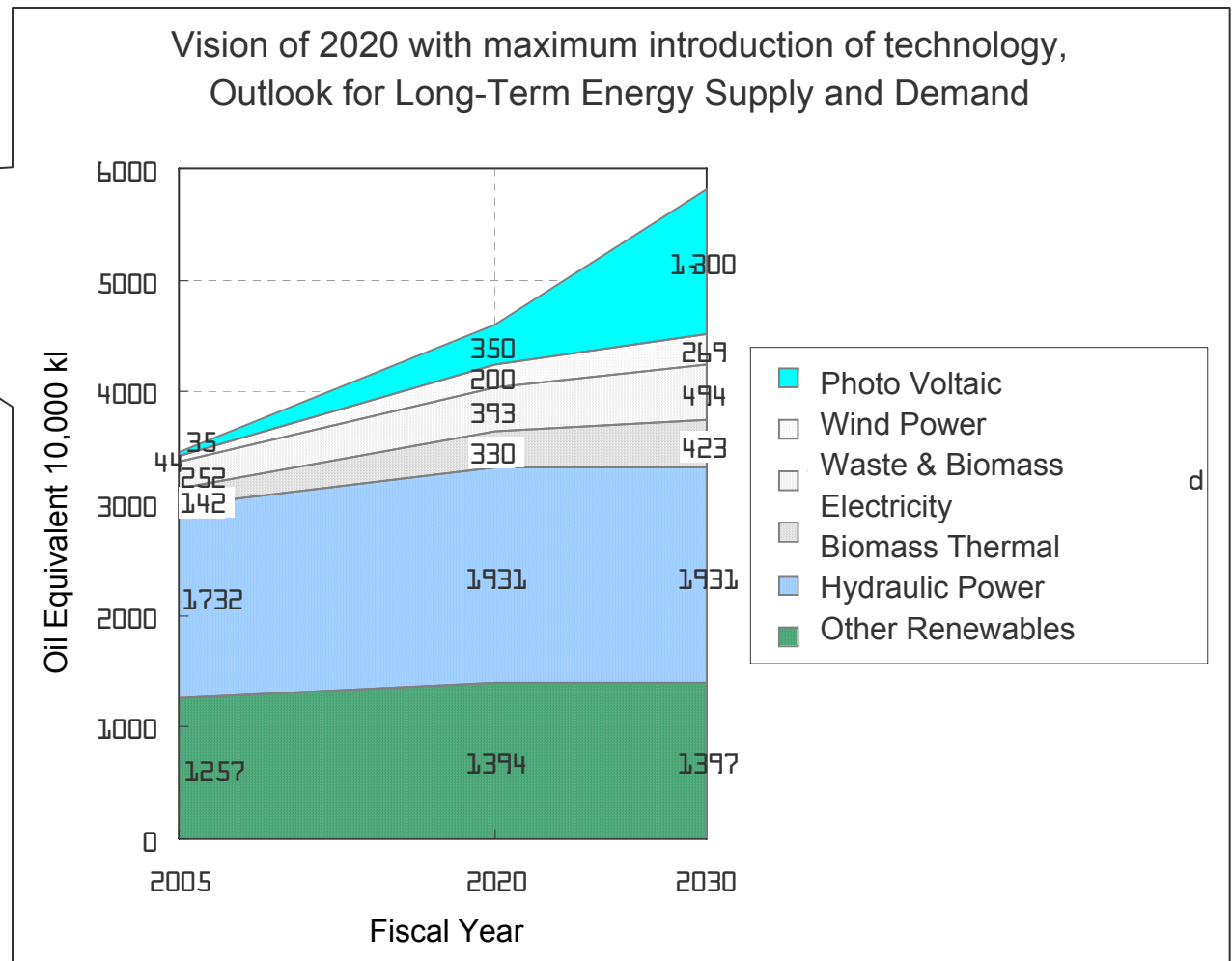
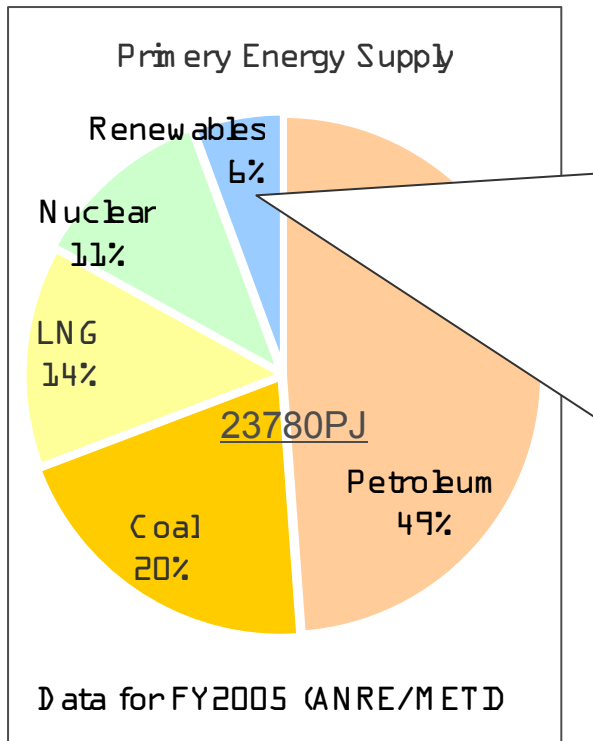
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New and Renewable Energy Division  
Agency for Natural Resources and Energy (ANRE)  
Ministry of Economy, Trade and Industry (METI)

## **Overview of New and Renewable policy**

- Targets**
- Overview of Policy**
- RPS**
- Action Plan for Promoting the Introduction of Solar Power Generation**
- Incentives and regulations to install PV systems**

# Target of Photovoltaic/Renewable Energy



## Legal framework

- “Law on Promoting Use of New Energy” (1997)
- “Special Measures Law on Promoting Use of New Energy, etc., by Electric Enterprises”. RPS Law (2002)

## Budget aspect

FY 2008 budget related to new energy: 111.3 billion yen

- |                          |                  |
|--------------------------|------------------|
| - Technology Development | 30.9 billion     |
| yen                      |                  |
| - Demonstration testing  | 20.0 billion yen |
| - Deployment promotion   | 60.4 billion yen |

# New Utilization Targets under the RPS Law

## RPS Law (Special Measures Law on Use of New Energy by Electric Utilities or Renewables Portfolio Standards Law)

### <Utilization Target for fiscal 2014>

- 16 billion kWh as realistic and ambitious” goal.

### <Improvement of the RPS Law System>

- Photovoltaic power is recognized as twice its value (2011 – 2014).
- Small- and medium-scale hydraulic and geothermal power generation was included
- Biomass power generation: recognition of material recycle of wood chips.

### <Governmental Measures>

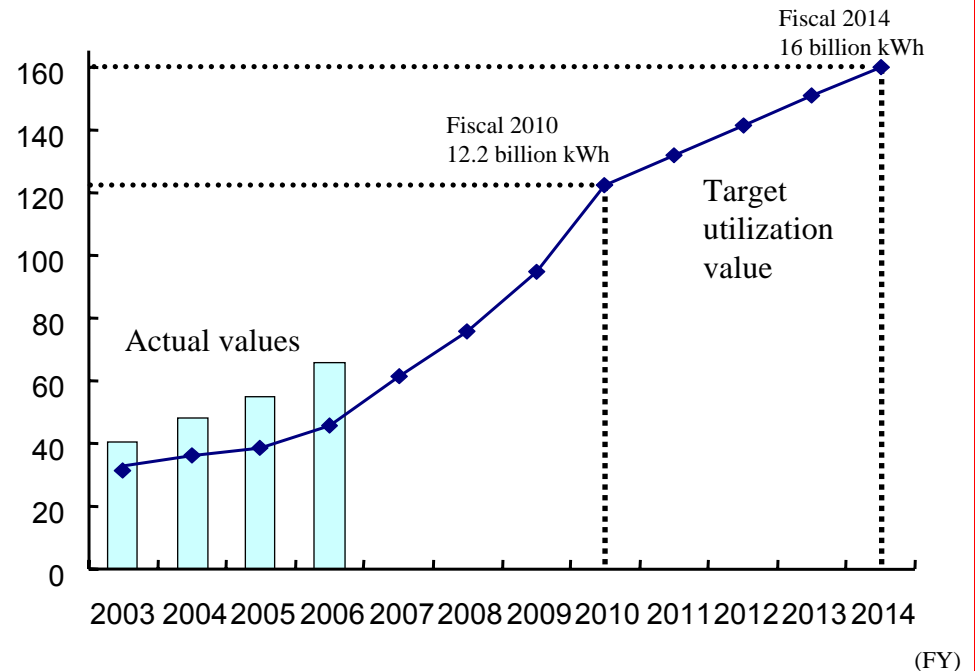
- The government in future will expand the potential for the introduction of new energy by reviewing various restrictions in addition to financial assistance for new energy.

\*Utilization of Green Certificate

\*Policies on system interconnection, etc.

\*Promotion of technological development to reduce cost of PV generation

Electricity utilization by new energy  
(100 million kWh)



Utilization targets

	Fiscal 2008 (actual generated values)	Fiscal 2014
100 million kWh	75 (0.7% of generated electricity)	160 (1.6% of generated electricity)

# Action Plan for Promoting the Introduction of Solar Power Generation

- To encourage players to promote solar power generation through concrete measures
  - increasing the amount of installations of solar power generation systems tenfold by 2020 and 40-fold by 2030 “Action Plan for Achieving a Low-carbon Society” (approved by the Cabinet in July 2008)
  - Promotion of the installation of solar power generation systems in homes, businesses and public facilities “Comprehensive Immediate Policy Package” (formulated by the government and the ruling parties in August 2008)

## Content

### (1) Measures on the supply and demand sides

#### (a) Supply-side measures

Technology transfer

Foster cooperation between solar cell manufacturers and housing companies  
formulate standard execution guidelines, etc.

#### (b) Demand-side measures

Build and enhance Next-Generation Energy Parks

### Residential sector

Dramatically increase the installation of solar power generation systems through subsidies for residential solar power systems or other means.

### Business sector

Promote installation by SMEs.

Promote “mega solar” (large-scale solar power generation plants) construction projects

### Public facility sector

Provide detailed information on installation examples for the owners of public facilities (roads, railroads, ports, airports, etc.)

Encourage information sharing between companies engaged in the solar power generation business and those operating public facilities

Promote installation in a greater number of public facilities (by enhancing public assistance available to such facilities).

### Educational institutions

- Increase the installation of solar power generation systems in elementary, junior high, and high schools as well as universities and other schools.
- Encourage schools to use solar power generation as a topic in their environmental education and certify those that have done so as model schools.

### (2) Building institutional infrastructure

improve institutional infrastructure, including regulatory instruments

### (3) Consolidating infrastructure for the solar energy-related industries, strengthening international competitiveness, and supporting international expansion

## Reference Existing examples

Roads  Slope in Highway



Osaka prefecture:200KW  Kanagawa prefecture:140KW

Railroad  Post-house



Airport  cargo terminal  
 planning



Haneda airport: 2000KW

image

Educational Institution   
window roofs of a school



Tokyo prefecture:21KW

Waterfront  Industrial complex  
 planning



(Osaka prefecture:18,000KW

image

# Incentives & Regulation to Install PV Systems

	Subsidies	Tax Incentives	Regulation
Residence	<p><b>70,000 yen per kW</b> start from Jan.2009</p> <p>(approx.10% of cost of system)</p>	<p>included in <b>Home Loan Taxation</b> amount to 1% of the loan balance is deducted from the income tax for 10 years</p> <p>also included in <b>Renovation Promotion Taxation</b> amount to 10% of the renovation cost (up to 5 million yen) is deducted from the income tax, in case of the renovation for energy conservation</p>	RPS Act
<p><b>Industrial Sector</b> (Factory, Buildings, etc.)</p>	<p><b>Upper Limit : 1/3 of Total Cost</b></p> <p>in case of large scale plants cooperate with local governments, upper limit : 1/2 of total cost</p>	<p><b>Investment Promotion Taxation for Improvement of Energy Supply &amp; Demand Structure</b></p> <p>amount to 7% of the total cost is deducted from the corporation tax or 30% special depreciation (for small and medium-sized enterprises)</p>	
<p><b>Public Sector</b> (Local Government, School, Hospital, etc.)</p>	<p><b>Upper Limit : 1/2 of Total Cost</b></p>	□□	

Currently considering a system to mandate electricity companies to buy surplus electricity at around twice electricity cost (49 yen/kwh instead of 24 yen/kwh)

**Thank You**