

Energy Conservation Policy in Japan

-Importance of Information Sharing for Enhancing Energy
Management-

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And Waste Heat Recovery Measures in India"

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Why Energy Conservation is important for Japan?



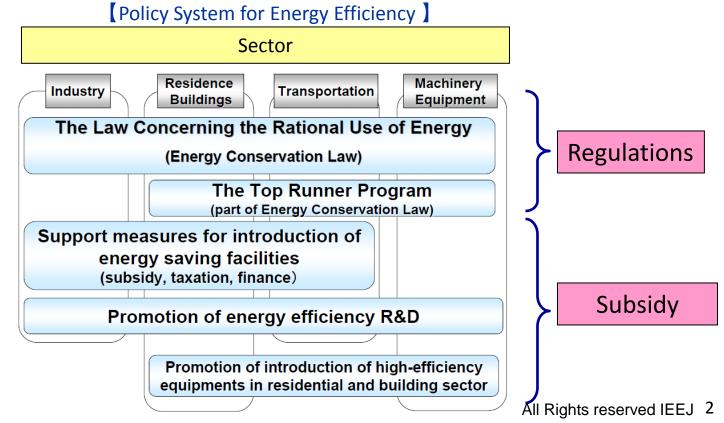
-Japan's Energy Conservation Policies & Measures-

High Dependence on Imported Energy and Middle East Oil
High Crude oil prices
High Share of heavy industries in energy structure

To Secure Energy Security and Cost Saving are urgent matter for Japan's economy.



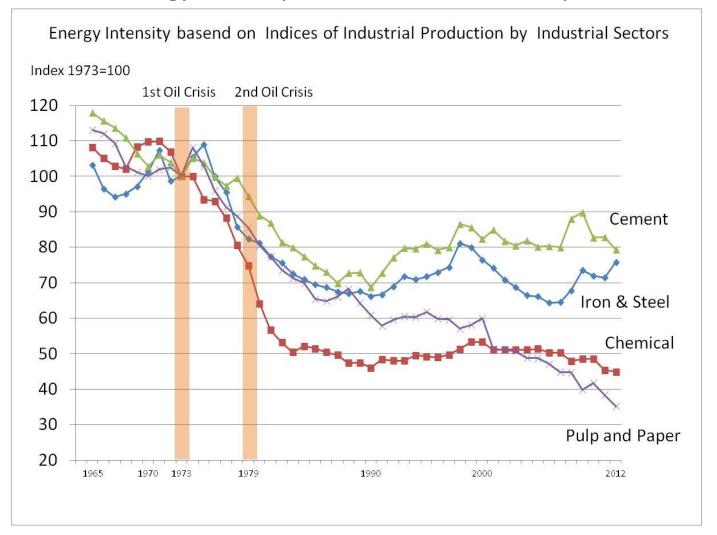
Energy Conservation
Law was established in 1979 with Industry Sector as its primary target.



How is the impact of policy and measures?



-Energy Intensity in Basic Material Industry-

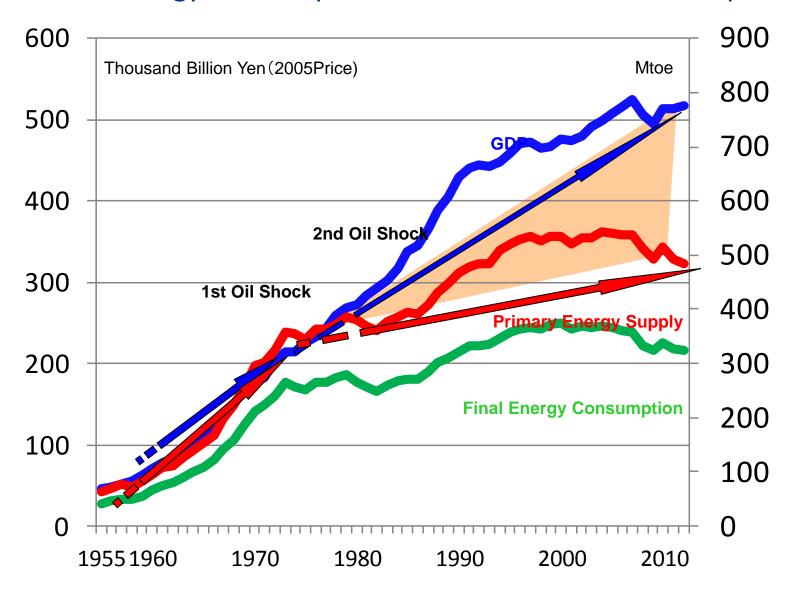


Source: IEEJ, EDMC Handbook of Energy & Economic Statistics in Japan 2014

Basic material industries such as Steel, Paper / Pulp and Cement Industries have improved their energy intensity after the 1st Oil Crisis

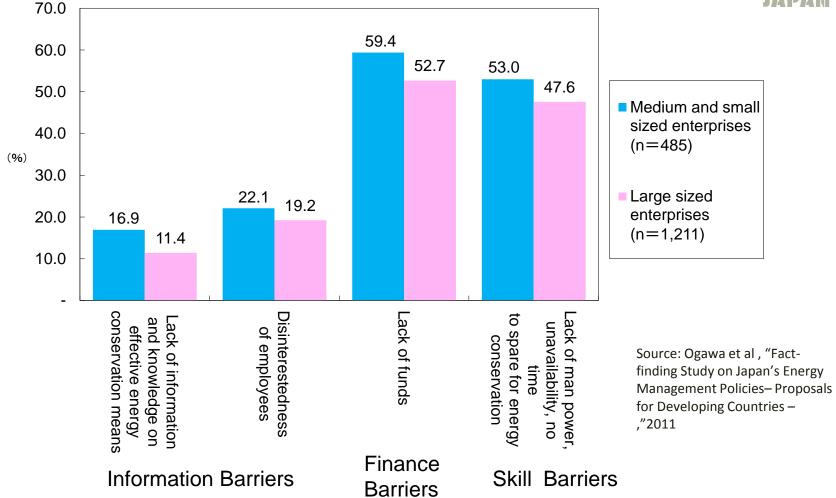
Energy Consumptions & Economic Growth

-Trends of Energy Consumptions & Economic Growth in Japan-



Barriers Against Energy Conservation Measures





- IEEJ conducted questionnaire survey to all industrial factories which consumes more than 3000kl(oil equivalent) per year in Japan. (Collection rate: 29.66%)
- Barriers against promoting energy conservation measures are "Finance barriers" and "skill barriers" which are common for both SMEs and large enterprise.
- "Information Barriers" is more significant among SMEs than among large enterprises.

Information sharing Structures & Policy Package – Experience of Japan

1921: JIE(The Japan Institute of Energy)



Sectoral target Since 1996 **Voluntary Action Plan** Government (METI, etc.) **Industries Since 1947** •Regulation of heat management **Program** Kinki Heat Engineering Association Budget Legal Framework (Energy Conservation Low) Energy Management System Institutes Energy Managers (Qualified Energy Manager) Planning/Reporting ECCJ, NEDO, IEEJ, JIE, Etc. JISF, FEPC, PAJ, JCASSOC, •Improved Energy Performance Etc. •Etc. **Common Activity Sectoral Activity** Information sharing Information sharing Companies Capacity building Cap building (Factories/Buildings) Supporting measures Supporting measures In Japan, energy 1910s: Movement of heat management Action management history is (Background: Smoke Prevention/Saving fuel cost/Limited coal resource) almost 1 century!

Source: Noda(IEEJ), Initiatives for Information Sharing of EnMS in 1927: Schooling of burning method (Old type Energy Audit) Japan & Energy Management Action Network (EMAK),2012

What is EMAK?



-Based on Japan's experience, information sharing of good practices are regarded as one of the cost effective actions for world energy saving -

Mission of EMAK: to promote awareness and demonstrate the importance of energy management and to enhance energy management activities in both factory and enterprise level.

- ●In 2009, Japan has launched information sharing platform "Energy Management Action Network" so called "EMAK" in cooperation with China, to disseminate the good practices to other countries.
- EMAK is one of the task groups under International Partnership for Energy Efficiency Cooperation (IPEEC). IPEEC is an autonomous international forum which includes developed and developing countries. Its purpose is to enhance global cooperation in the field of energy efficiency and to facilitate policies that yield energy efficiency gains across all sectors globally.
 - Information Sharing Through workshops/webinar programs, EMAK participants discuss and share information on efforts taken and best practices on energy management in various countries/regions.
 - Network building Identifying and building relevant EMAK audience, to enhance network through key communication channels, such as workshops.
 - Supporting Measures Disseminating publications, manuals and methodologies through portal-site, to help their successful planning, implementation and monitoring.

EMAK Leading Countries

Japan, China, Australia, and the United States

What is EMAK?



-What kind of information sharing tools are delivered through EMAK?-

EMAK Information Sharing Tools

- 1.Face to face workshops

 EMAK has organized 5 workshop in different countries with various themes.
- 2.Internet based seminars EMAK has organized 2 webinars.
- 3.Energy management information portal site

 Workshop and webinar materials

 Examples and best practices for energy management

 (100 good practices in factories are delivered)

EMAK portal http://www.iea.org/topics/energyefficiency/industry/emak/



Thank you very much for joining this EMAK workshop!