

## **REALIZED ACTIVITIES/OUTSTANDING IMPROVEMENT THROUGH PROMEEC PROJECT**



**By :**

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**WORKSHOP PROMEEC – ENERGY MANAGEMENT  
JAKARTA, 23 OCTOBER 2008**

## **OUTLINE**

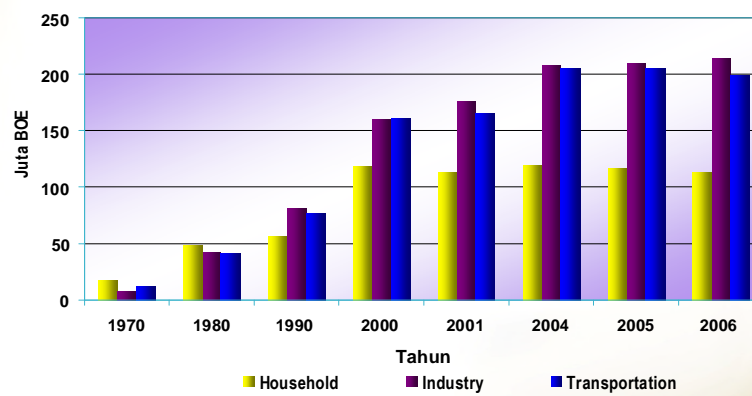
- **Background**
- **Energy Conservation Policy**
- **Energy Conservation Program and  
Implementation**
- **Conclusion**

## BACKGROUND

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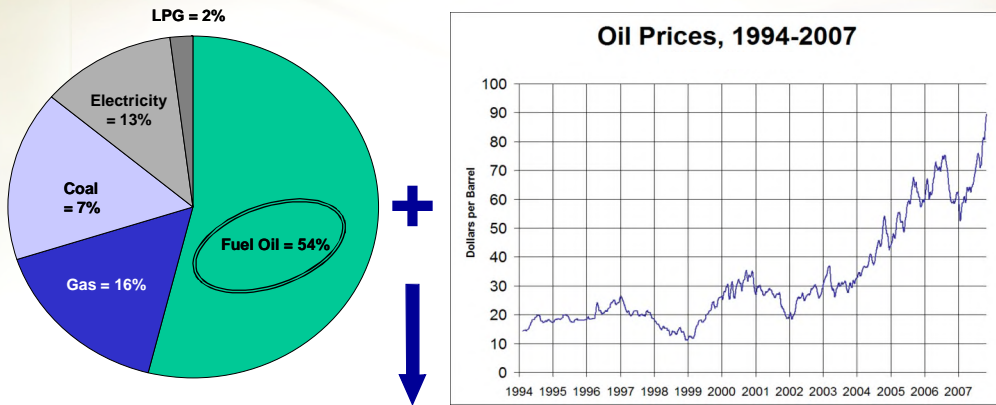
1. High growth of final energy consumption (7,8% in average during 1970-2006).

**Final Energy Consumption 1970 - 2006**



Source : DGEEU-MEMR, 2007

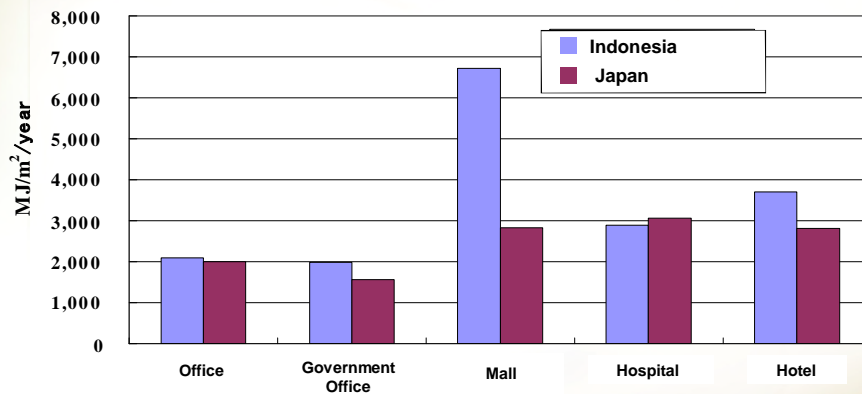
2. Escalating of world's oil price → Increasing government's burden on subsidy



In 2007, oil subsidy and electricity around Rp. 120,9 triliun ~ USD 13,4 billion

3. High energy intensity.

**Comparison Energy Intensity in Building Sector  
Indonesia - Jepang**



Source : Study on EE&C by JICA and DGEEU, 2008

## **ENERGY CONSERVATION POLICY**

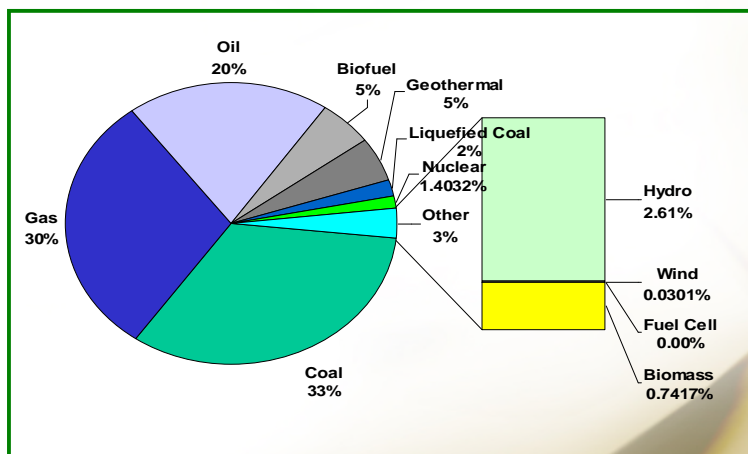
### **ENERGY CONSERVATION POLICIES**

- Presidential Decree No. 43/1991 on Energy Conservation
- Ministerial of Energy and Mineral Resources Regulation No. 100.K/48/M.PE/1995 on National Master Plan of Energy Conservation (RIKEN) 1995 and 2005
- Presidential Regulation No. 5/2006 on National Energy Policy
- Law No. 30/2007 on Energy
- Presidential Instruction No. 2/2008 on Energy and Water Efficiency

## PRESIDENTIAL REGULATION NO. 5/2006 ON NATIONAL ENERGY POLICY

- Energy Elasticity < 1 in 2025
- Optimum shares of primary energy mix in 2025

2006	
Oil	: 47%
Gas	: 22%
Coal	: 23%
Hydro	: 2%
Geothr	: 5%



## LAW NO. 30/2007 ON ENERGY (Issued August 2007)

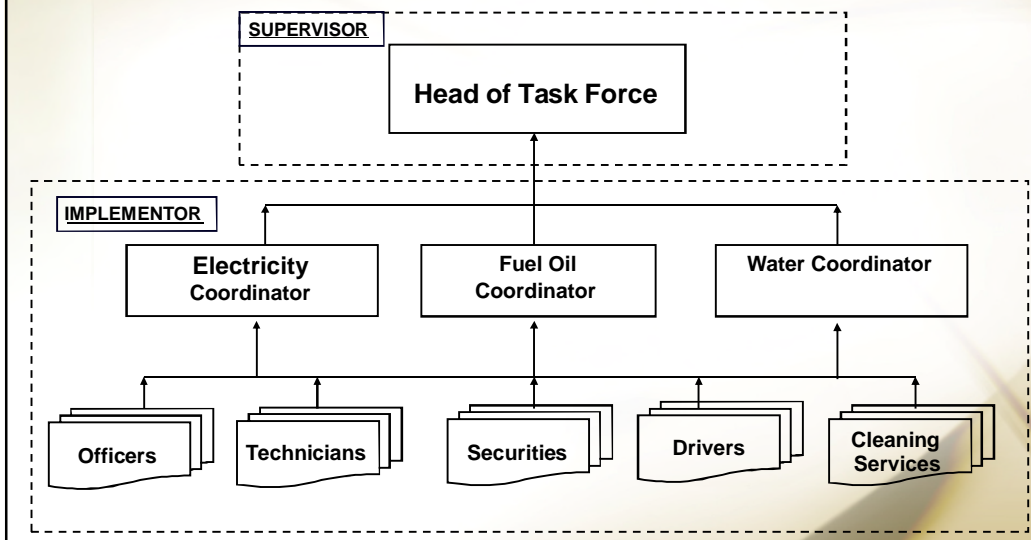
### Article 25 :

- Central and regional government as well as people should be responsible for the implementation of energy conservation program
- Energy conservation is conducted from up to down stream
- Government will provide incentive and disincentive for the energy efficiency and conservation implementation of energy consumer and producer of energy efficient equipment

## **PRESIDENTIAL INSTRUCTION NO. 2/2008** **ON ENERGY AND WATER EFFICIENCY**

- ✓ Instructs to central and regional governments :
  - To implement the energy and water efficiency measures in their institutions including lighting, air conditioning, electrical appliances, and official vehicles
  - To conduct energy and water efficiency program based on energy and water efficiency policies
  - To urge and socialize energy and water efficiency implementation to the private sector and people
  - To establish task force in each institution to monitor implementation of energy and water efficiency
- ✓ Establishment of National Team Work for Energy and Water Efficiency

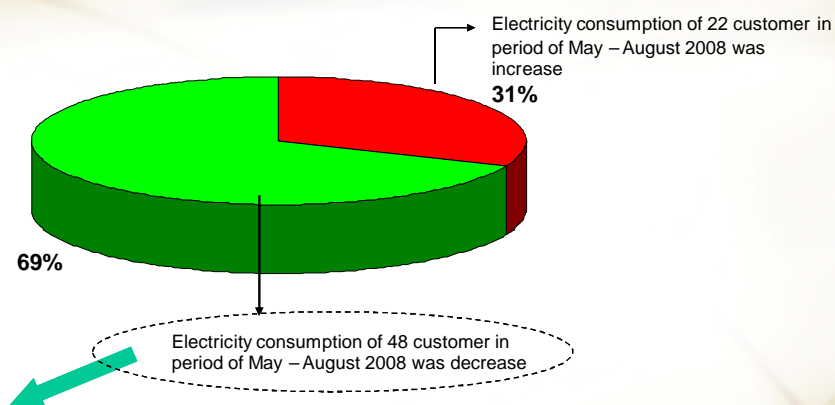
### **TASK FORCE FOR IMPLEMENTATION OF ENERGY AND WATER EFFICIENCY IN GOVERNMENT OFFICE**



## ACTIVITES OF ENERGY EFFICIENCY MOVEMENT 2008

- Province of Jakarta decided as national pilot project on water and energy efficiency program to be followed by other provinces
- 25 June 2008 in Balai Kota Jakarta : “Socialization of Task Force and SOP on Water and Energy Efficiency ”, attended by participants from building energy manager around Monas.
- 1 July 2008 in MEMR office : “Training on Energy Management and Energy Conservation Technique”
- 5 August 2008 in Balai Kota Jakarta : “Launching of DKI Jakarta Movement on Water and Energy Efficiency” by Minister of EMR and Governor of Jakarta Province.
- 10 August 2008 in Monas : “Launching the National Movement on Water and Energy Efficiency” by President RI
- Oktober : “Evaluation on the Implementation of Pilot Project”
- Oktober – December 2008 : Socialization and Training on Energy Management and Energy Conservation Technique” in several province.

## EVALUATION OF ELECTRICITY USED BY GOVERMENTAL CUSTOMER AROUND MONAS DURING MAY – AUGUST 2008 (TOTAL 70 CUSTOMER)



- There are activities to save energy consumption after Presidential Instruction issued on 5 May 2008
- Total energy saving is 1.022 MWh per month or Rp. 620 million per month
- Each customer achieves average energy saving is 25%

## ENERGY CONSERVATION PROGRAM AND IMPLEMENTATION

### ENERGY CONSERVATION PROGRAM (1)

NO	PROGRAM	ACTIVITIES
<b>Energy Policy/Regulation</b>		
1.	Law No. 30/2007 on Energy	Preparing the Draft of Government Regulation on Energy Efficiency which will be issued on August 2008
2.	Presidential Instruction No. 2/2008 on Energy and Water Efficiency	Preparing strategy, policy, program, target and time line on implementation energy and water efficiency
<b>Energy Supply</b>		
1.	Reducing electricity production cost Utilization alternative energy	<ul style="list-style-type: none"> <li>▪ Diversion fuel oil for power plant from HSD to MFO and gas</li> <li>▪ Utilization of renewable energy for electricity (<i>solar water heater, solar home system</i>)</li> <li>▪ Switching from oil to LPG</li> </ul>
<b>Energy Equipment Producers</b>		
1.	Labeling program	<ul style="list-style-type: none"> <li>▪ Attaching the label of energy efficiency level as a guidance for customer</li> <li>▪ The first stage will be implemented for energy efficiency lamp</li> <li>▪ Preparing Ministerial Decree for the implementation of labeling system in CFL</li> <li>▪ Preparing testing procedure for television and refrigerator</li> </ul>

## ENERGY CONSERVATION PROGRAM (2)

NO	PROGRAM	ACTIVITIES
<b>Demand Side Management</b>		
1.	Creating Public Awareness	<ul style="list-style-type: none"> <li>▪ Conducting seminar/workshop and public advertisement of "energy saving" in newspaper and electronics media and talk show</li> <li>▪ Dissemination of brochure, leaflet, and sticker on energy efficiency</li> <li>▪ Conducting National Energy Award 2008 for building and energy management</li> <li>▪ Participating in ASEAN Energy Award 2008 for building and energy management</li> </ul>
2.	Education and Training	<ul style="list-style-type: none"> <li>▪ Training on energy efficiency and conservation by Centre for Training and Education – MEMR</li> <li>▪ Participated in the training on energy conservation in abroad conducted by JICA, ECCJ/ACE, etc</li> </ul>
3.	Partnership Program on Energy Conservation	<ul style="list-style-type: none"> <li>▪ Providing free of charge energy audit for buildings an industries</li> <li>▪ During 2003 -2007, energy audit service already given for 252 industries and buildings</li> </ul>
4.	Energy Manager	<ul style="list-style-type: none"> <li>▪ In 2007, already prepared standard competency of energy manager in building</li> <li>▪ In 2008, preparing energy manager accreditation mechanism, and standard competency for energy manager in industry management</li> </ul>
5.	Clearing House of Energy Conservation	Develop Clearing House of Energy Conservation as information center of energy conservation activities
6.	Utilization alternative energy	Solar PV for urban that launched since 2003

## RESULT OF PARTNERSHIP PROGRAM ON ENERGY CONSERVATION 2003 - 2007

	2003	2004	2006	2007
<b>Funding</b>	- (PLN)	- (PLN)	Rp. 2,4 Billion (APBN)	Rp. 25 Billion (APBN)
<b>Participant</b>	5 industries and 6 buildings	3 industries and 6 buildings	21 industries and 11 buildings	138 industries and 62 buildings
<b>ENERGY AUDIT : Saving Potential per year</b>	78,4 GWh = Rp. 50,8 Billion	14, 8 GWh = Rp. 6,9 Billion	40,7 GWh = Rp. 40,4 Billion	519 GWh = Rp. 289 Billion
<b>MONITORING : Saving Acquired per year</b>	34,4 GWh = Rp. 22,2 Billion	14,1 GWh = Rp. 8,2 Billion	30,1 GWh = Rp. 19,9 Billion	On going

## **ACTIVIES OF FOREIGN COOPERATION ON ENERGY CONSERVATION**

- ASEAN for “Promotion of Energy Efficiency and Conservation (PROMEEC)”
- JICA for “Study on Energy Conservation and Energy efficiency Improvement in Republic of Indonesia”, which focus on development of energy manager system, labeling system and DSM.
- Denmark for “Energy Efficiency in Industrial, Commercial and Public Sector”, which strengthen energy conservation clearing house, and develop demonstration project of energy efficient building
- Netherlands for “Training on Energy Efficiency for Chemical Industry”.
- UNDP for “Study Barriers Removal on The Energy Efficiency Standard and Labeling Program (BRESL)”
- UNIDO for “*Promoting Energy Efficiency in the Industries through System Optimization and Energy Management Standards (EMS)*”

## **BARRIERS**

- Lack of awareness
- Lack of human capacity
- Lack of supporting policies
- Lack of incentive
- Lack of funding access

## **CONCLUSION**

- Energy consumption increases every year due to population and economical growth
- High energy intensity indicates inefficiency energy consumption
- Energy efficiency is the fastest solution to reduce energy subsidy
- Energy conservation have to be implemented by all stakeholder (government, private and public)
- Presidential Instruction No. 2/2008 mandate to governmental institution to be pioneer for national water and energy efficiency movement
- With energy law, energy efficiency and conservation activities could be more strengthened

**THANK YOU**