



# Current Situation and Challenges in Energy Efficiency S&L Policy Development in Indonesia

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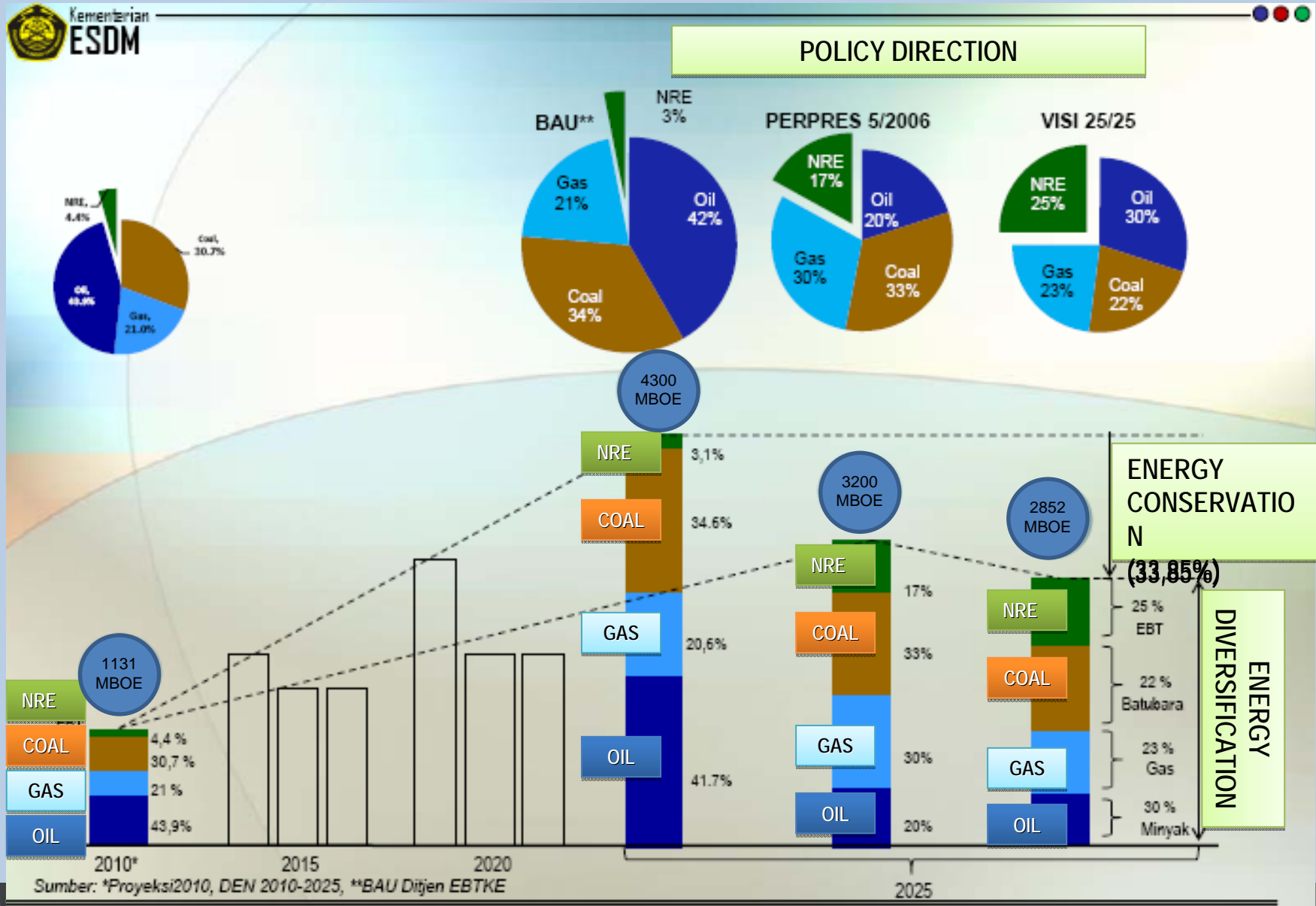
Shinagawa Prince Hotel, January 28th, 2011

# Outline

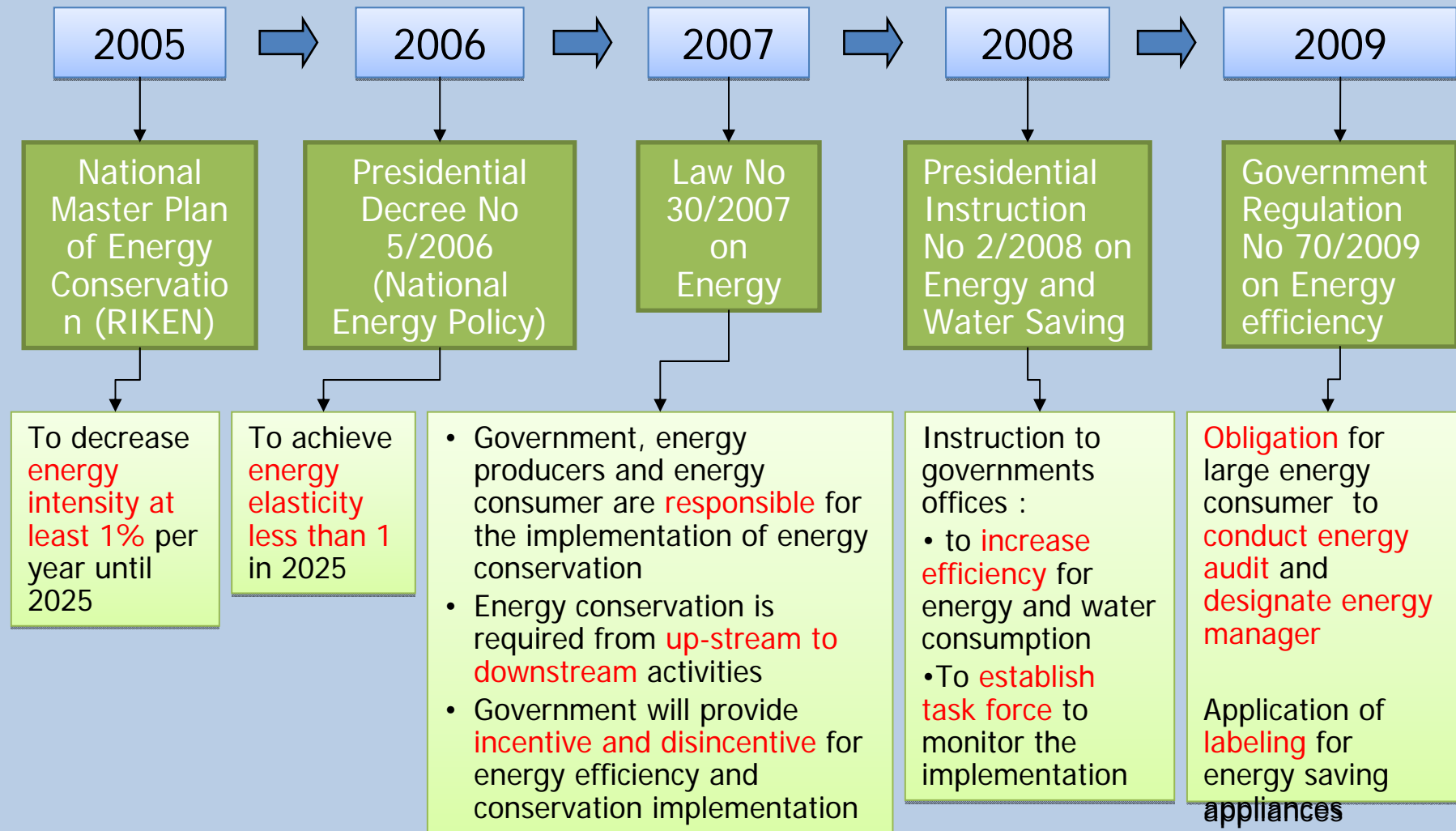
- Policy and Regulation Background in Energy Efficiency
- Energy Consumption Profile in Household Sector
- Product Certification and Labeling Procedure in Indonesia
- Challenges in implementation of EE Labeling Policy



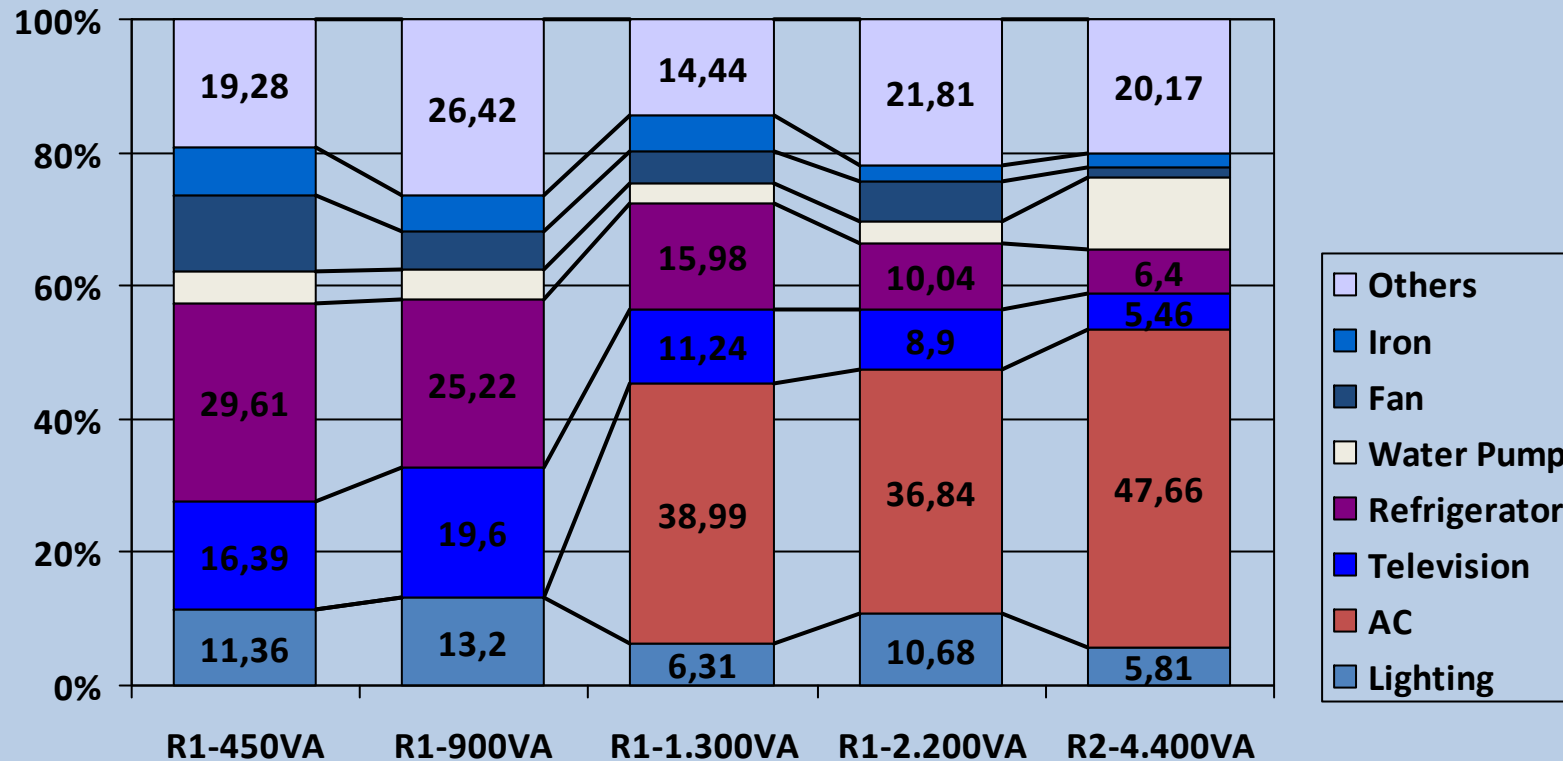
# INDONESIA ENERGY VISION 25/25



# Energy Conservation Policy and Regulation

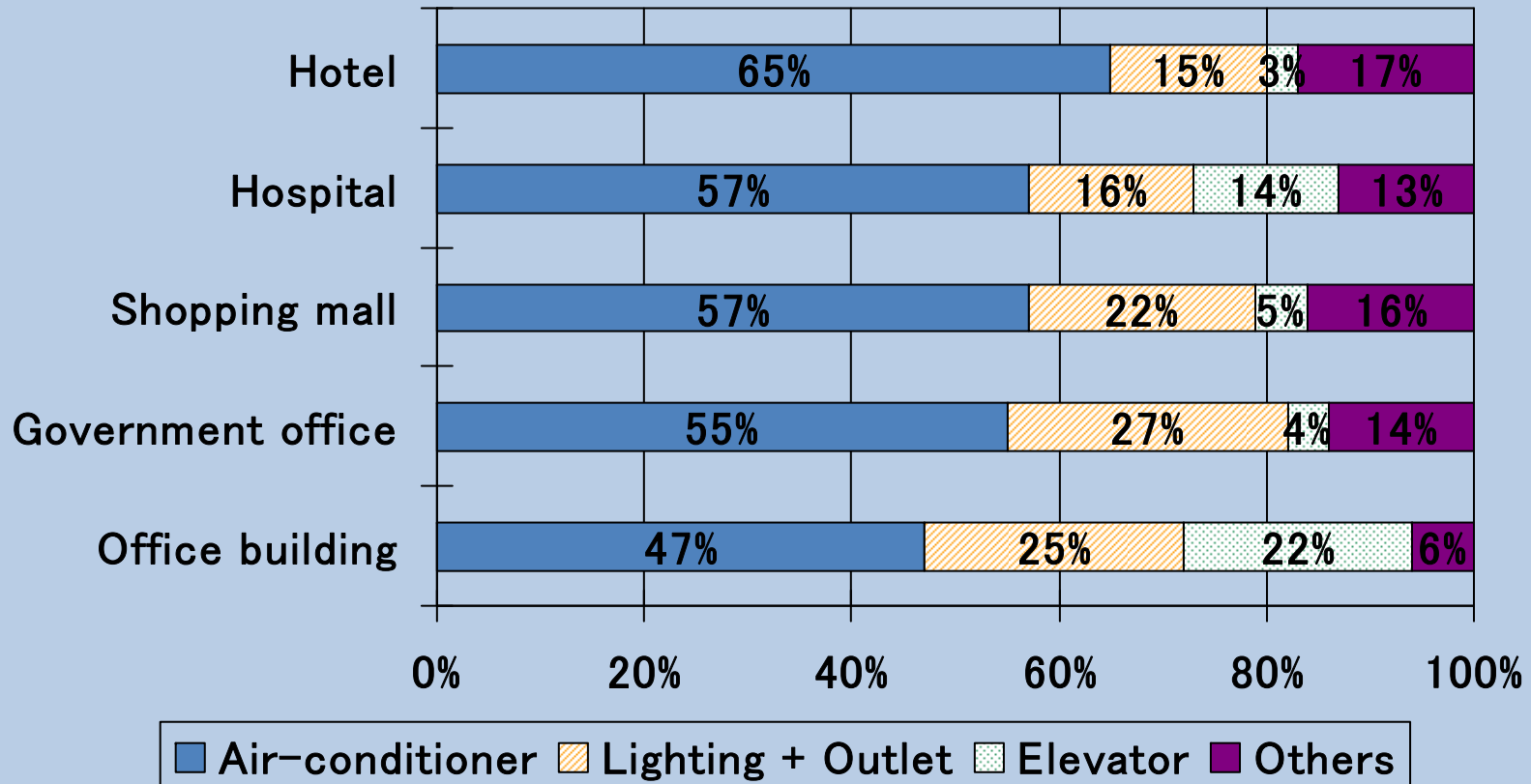


## Typical Electric Power Consumption in Residential Users



More than 50% of electric power consumption in Residential users is for Refrigerator, Television, AC and Lighting

## Typical Electric Power Consumption in Commercial Building

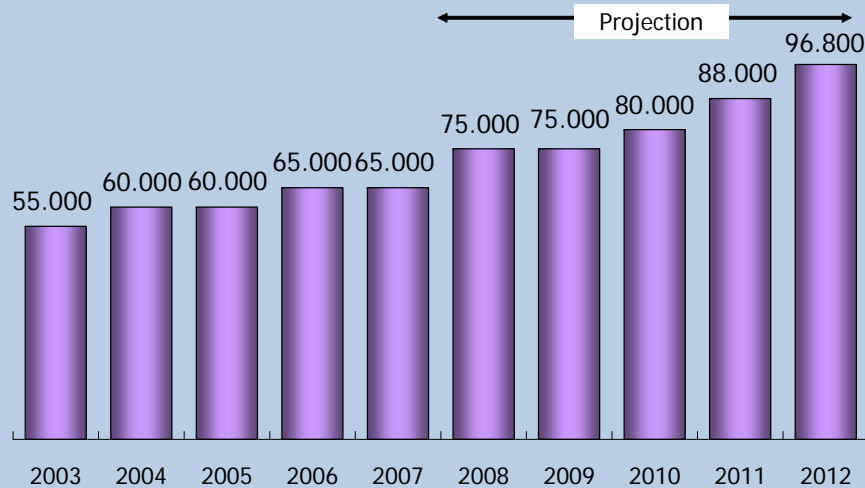


Most of electricity is consumed in air-conditioner and lighting.

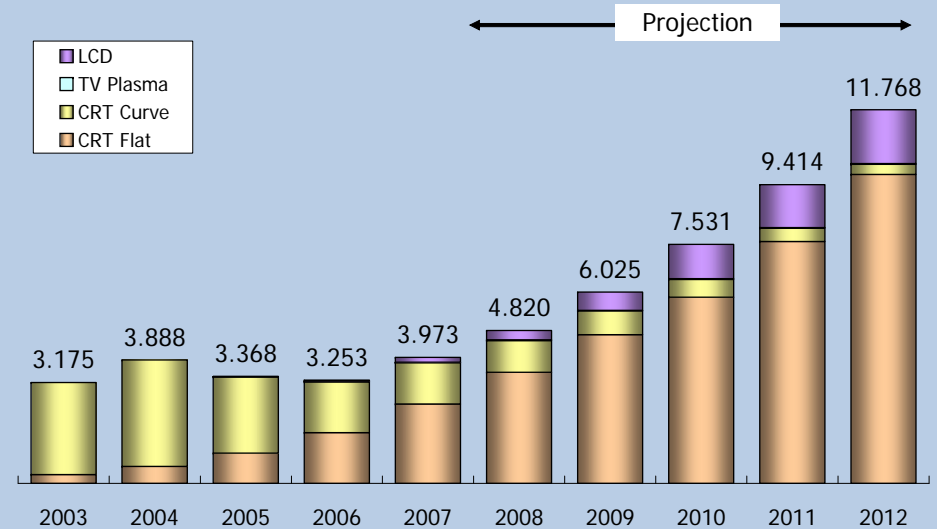


# Annual Sales of Home Appliances

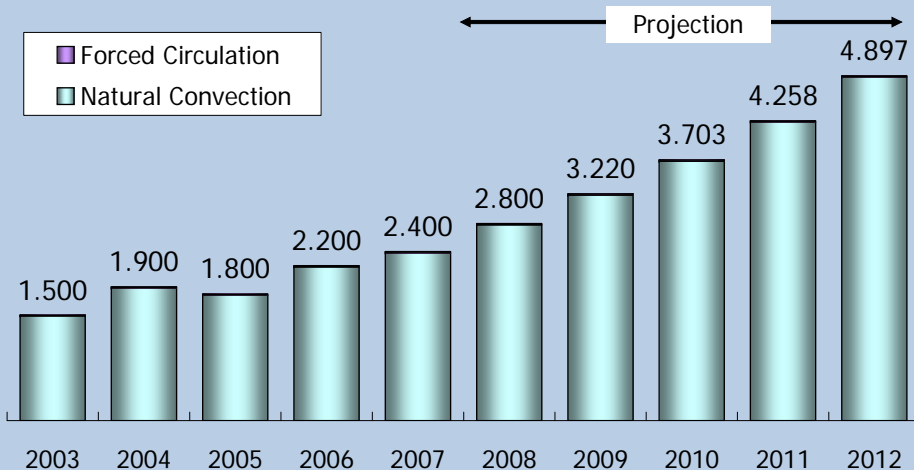
### ANNUAL SALES OF LAMPS (Thousand Units)



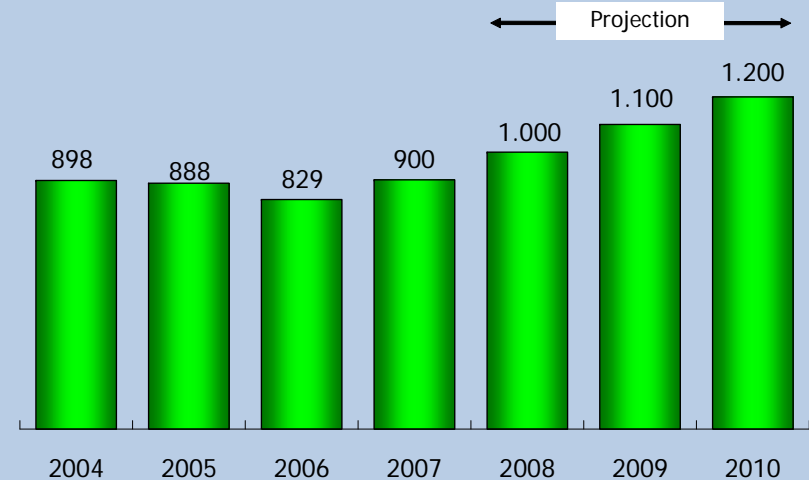
### ANNUAL SALES OF TELEVISION (Thousand Units)



### ANNUAL SALES OF REFRIGERATORS (Thousand Units)



### ANNUAL SALES OF AC (Thousand Units)





# INDONESIA PRODUCT CERTIFICATION



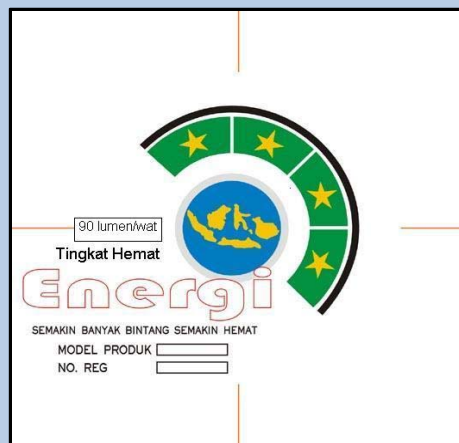
## STANDARD FOR PRODUCT SAFETY

- **MANDATORY** for some products (Foods, chemicals, electronic appliances, etc)
- Protecting the consumers from hazardous products
- Regulated by Ministry of Industry and Ministry of Trade



Will be extended to Performance Standard

## STANDARD OF ENERGY SAVING LEVEL LABEL



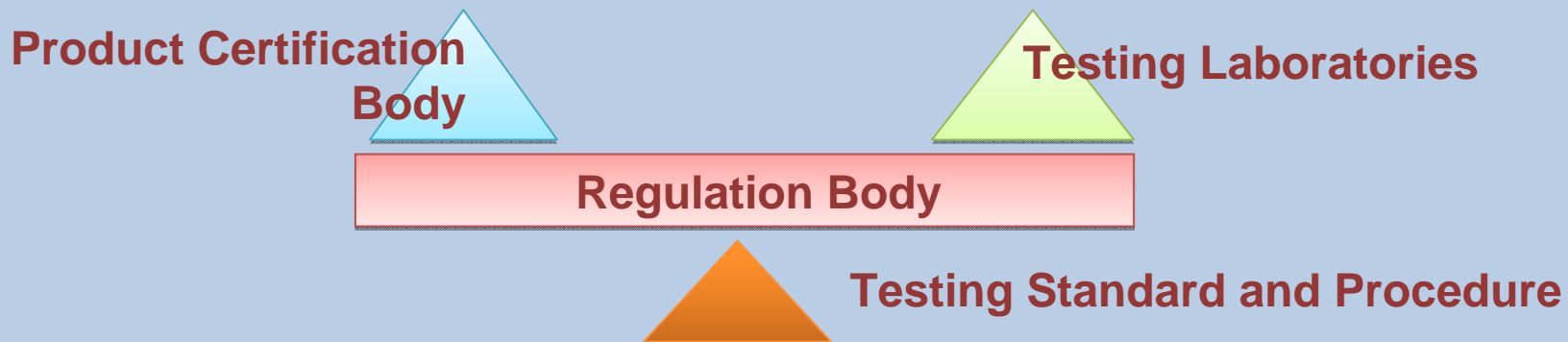
- For Electrical Household Appliances and it Kinds
- Voluntary for some of appliances
- Information for Consumers and Energy Management in Household Sectors
- Regulated by Ministry of Energy and Mineral Resources





Will be extended to Minimum Energy Performance Standard (MEPS)

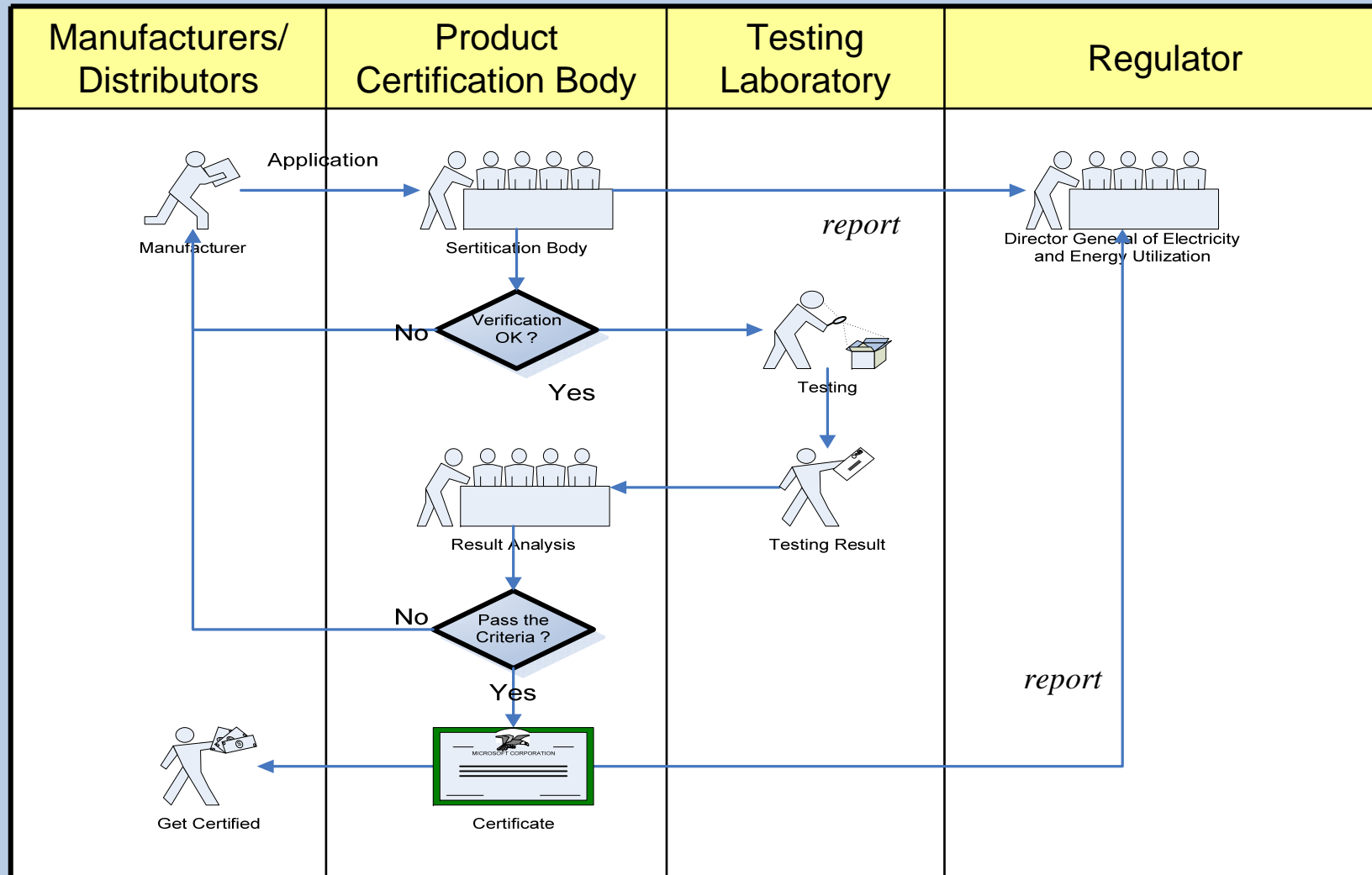


# Institutional Framework in Implementation of Labeling Policy in Indonesia



LABEL	Product Certification Body	Testing Laboratory	Regulation Body
	PUSTAND (MOI), PPMB (MOT) PT Sucofindo B4T (MOI)	LIPI (MORT), Baristand (MOI), B4T (MOI), BPMBEI (MOT) PT Sucofindo, Panasonic	Ministry of Industry Ministry of Trade
	PT TUV Nord Indonesia, PT EMI, PT Sucofindo	P3TKEBT (MEMR), B2TE (BPPT), PT Sucofindo, PT PLN Litbang	Ministry of Energy and Mineral Resources

# Flow Diagram of Product Labeling and Certification in Indonesia





# PRODUCT STANDARDIZATION POLICY AND REGULATION AUTHORITY

## REGULATION AUTHORITY



### STANDARDIZATION

**MINISTRY OF ENERGY  
AND MINERAL  
RESOURCES**



**MINISTRY  
OF  
INDUSTRY**





### DISTRIBUTION

**MINISTRY OF  
TRADE**



NEED INTENSIVE AND CLOSE COORDINATION AMONG THOSE MINISTRIES

# Road Map of Labeling Program

Label Application	2011	2012	2013	2014	2015
	CFL	TV and Refrigerator	AC and Fan	Washing Machine & Iron	Rice Cooker and Pumps
MEPS	??	??	??	??	??
 SNI : Safety	IRON, PUMPS, TV- CRT	AC, REF, Washing Machine	TV LCD, VDC, DVD,	??	??
SNI : Performance	??	??	??	??	??

## Progress on Energy Efficiency Labeling for Each Appliances

No.	Appliances	Standard		SNI Labeling	Energy Efficiency Labeling		
		Safety	Performance		Testing Procedure	Energy Efficiency Criteria	Certification and Labeling
1	CFL	O	O	O	O	O	(2011)
2	Fan	O	X	O	O	X	X
3	Television	O	X	(2011)	O	O	X
4	Refrigerator	O	O	(2012)	O	X	X
5	AC	O	O	(2012)	O	O	X
6	Electronic Ballast	O	O	O	X	X	X
7	Iron	O	O	(2011)	X	X	X
8	Washing Machine	O	O	(2012)	X	X	X
9	Rice Cooker	O	X	X	X	X	X
10	Electric Motor	O	X	X	X	X	X
11	Water Pumps	O	X	(2011)	X	X	X

# Testing Capability of the Laboratories

		Accredited	REF	AC	TV	Iron	Lamp Ballast	Rice cooker	Pumps	WM
GOV	B2TE-BPPT	△	△	△	○	○	○	○	△	X
	P2SMTP-LIPI	△	△	X	○	○	○	○	X	△
	BPMBEI – MOT	△	△	X	△	X	○	△	X	△
	BARISTAN – MOI	△	△	X	△	○	X	X	○	△
	B4T-MOI	△	X	X	△	○	X	X	X	△
	P3TKEBT-MEMR	△	X	X	△	△	○	△	X	△
PRIV	Sucofindo	△	△	X	○	X	X	△	○	△
	PLN-LITBANG	△	X	X	○	○	○	△	X	△
	Panasonic	○	○	○	○	○	○	○	○	○

# Public Consideration in Choosing Equipments (AC, CFL, Fan)

## AC

No	Consideration	F
1	Energy Consumption	24
2	Price	20
3	Brand	11
4	Warranty	11
5	Durability	4
6	Model (Color, Size, Shape)	2
7	Others	2
8	Function	1
9	Capacity	
10	Installation	

## Lamp

No	Consideration	F
1	Price	33
2	Brand	16
3	Energy Consumption	16
4	Capacity	11
5	Function	11
6	Durability	7
7	Model	3
8	Warranty	1
9	Installation	1
10	Others	1

## Fan

No	Consideration	F
1	Brand	30
2	Warranty	30
3	Size	30
4	Price	15
5	Model	6
6	Energy Consumption	6
7	Function	2
8	Capacity	1
9	Durability	
10		

2003, Market Survey by Indonesia University



# Challenges on Implementation of Energy Efficiency Labeling in Indonesia

- **Policy Aspect**

- Energy Law no 30/2007: “Insentif and disinsentif for energy conservation activities”
  - Insentif and disinsentif scheme is need to be established
- Government Regulation No 70/2009: “.. Obligation to label energy saving equipment”
  - Need Detil Guideline to implement the regulation
- Energy price policy

- **Technical Aspect**

- Non-standardized testing methodology and procedures
- Limited number of Accredited Testing Laboratories
- Limiter number of engineer/technician having sufficient testing capabilities

- **Institution Aspect**

- Too many regulation body are included in the system
- Lack of support from Industrial Association

- **Socio-Economic Aspect**

- Low People Awareness on Energy Saving
- Price is the most consideration in choosing equipments

IEEJ: February 2011



IEEJ: February 2011

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