



CFL Labeling Program in Indonesia

Awang Riyadi

*Ministry of Energy and Mineral Resources
Republic of Indonesia*



Content

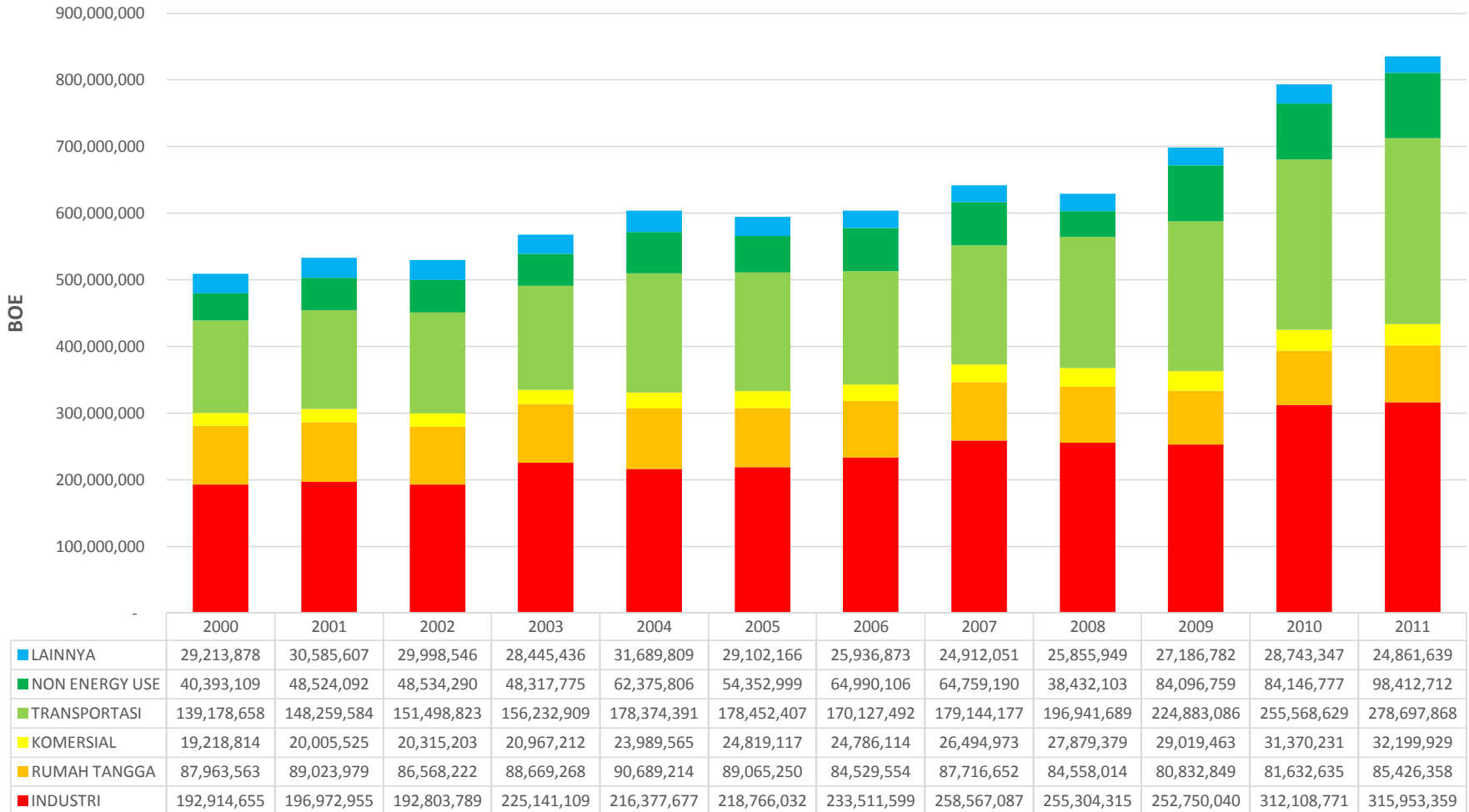
- **Current Condition**
- **Policy Direction**
- **Labeling Program**
- **CFL Labeling**
- **How to Comply**
- **Monitoring Verification and Enforcement (MVE)**

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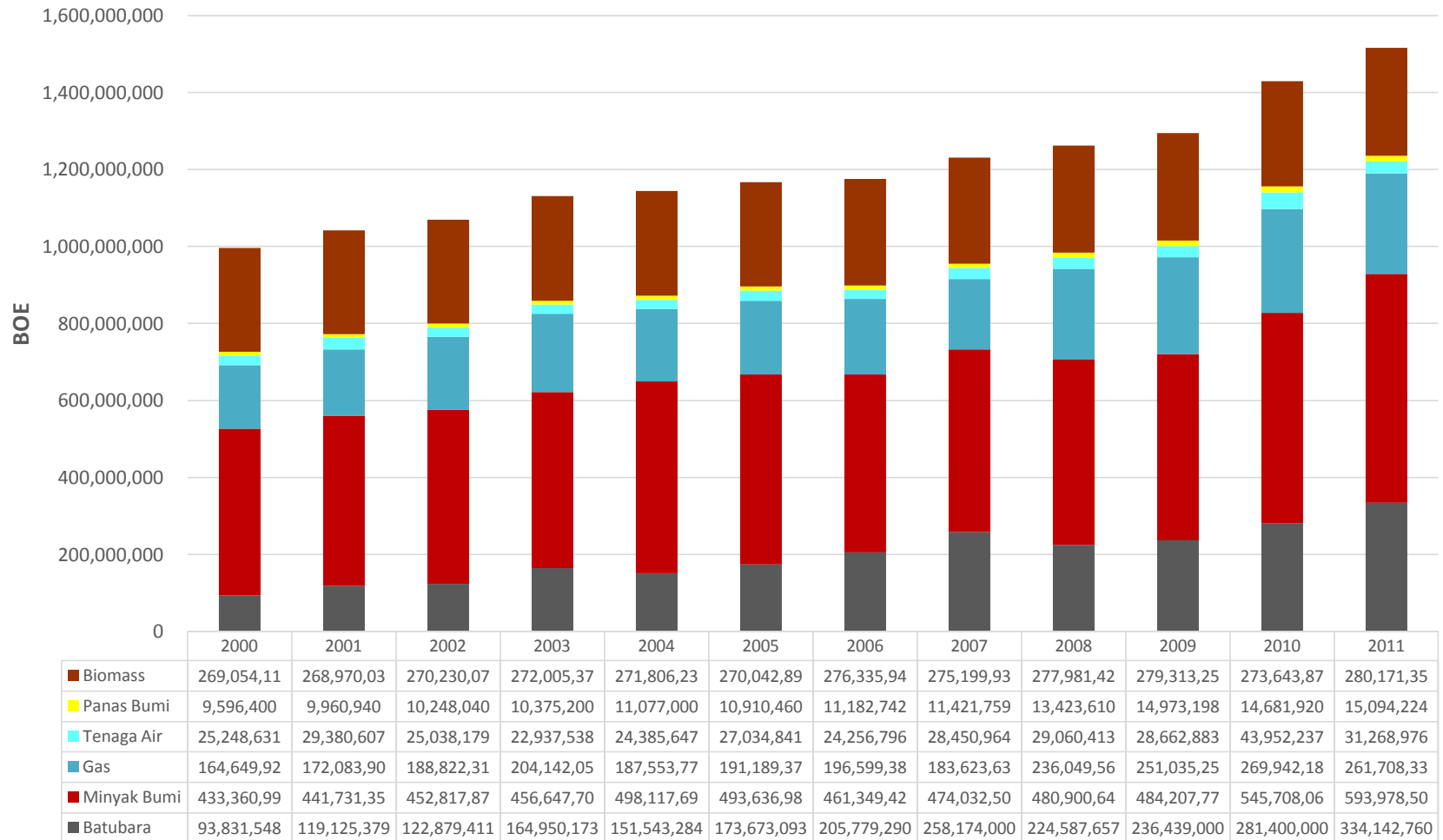
Final Energy Consumption (BOE)

4



Primary Energy Supply (BOE)

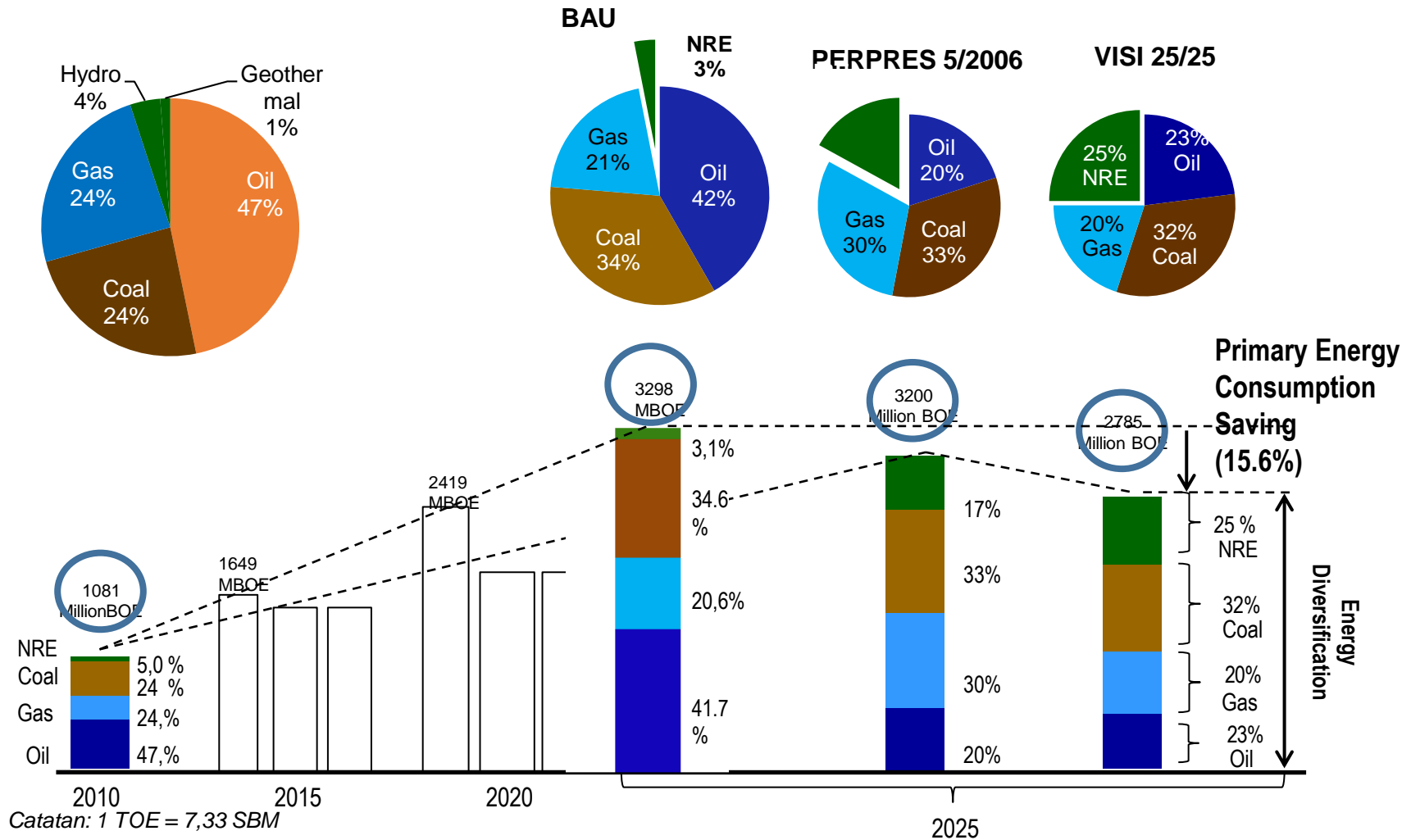
5



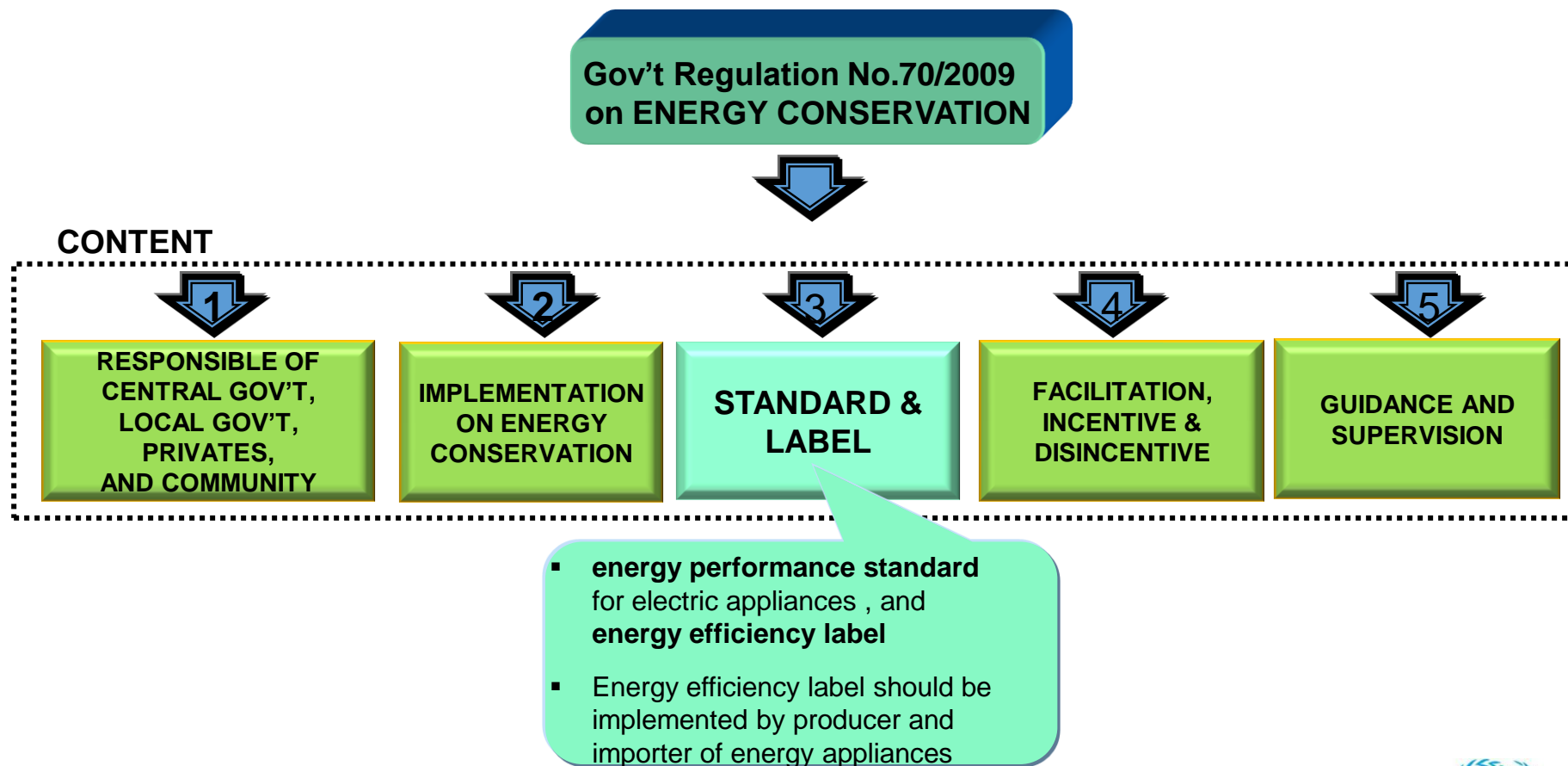
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Policy Direction

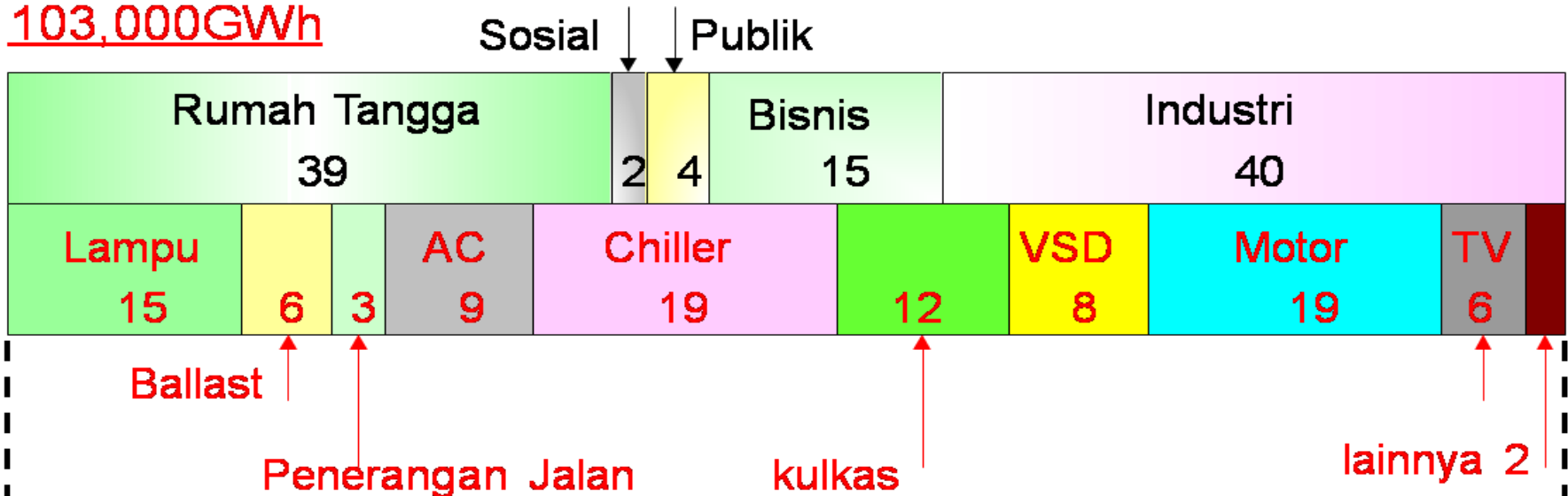


Government Regulation on Energy Conservation



Potential Saving from Household Appliances

103,000GWh



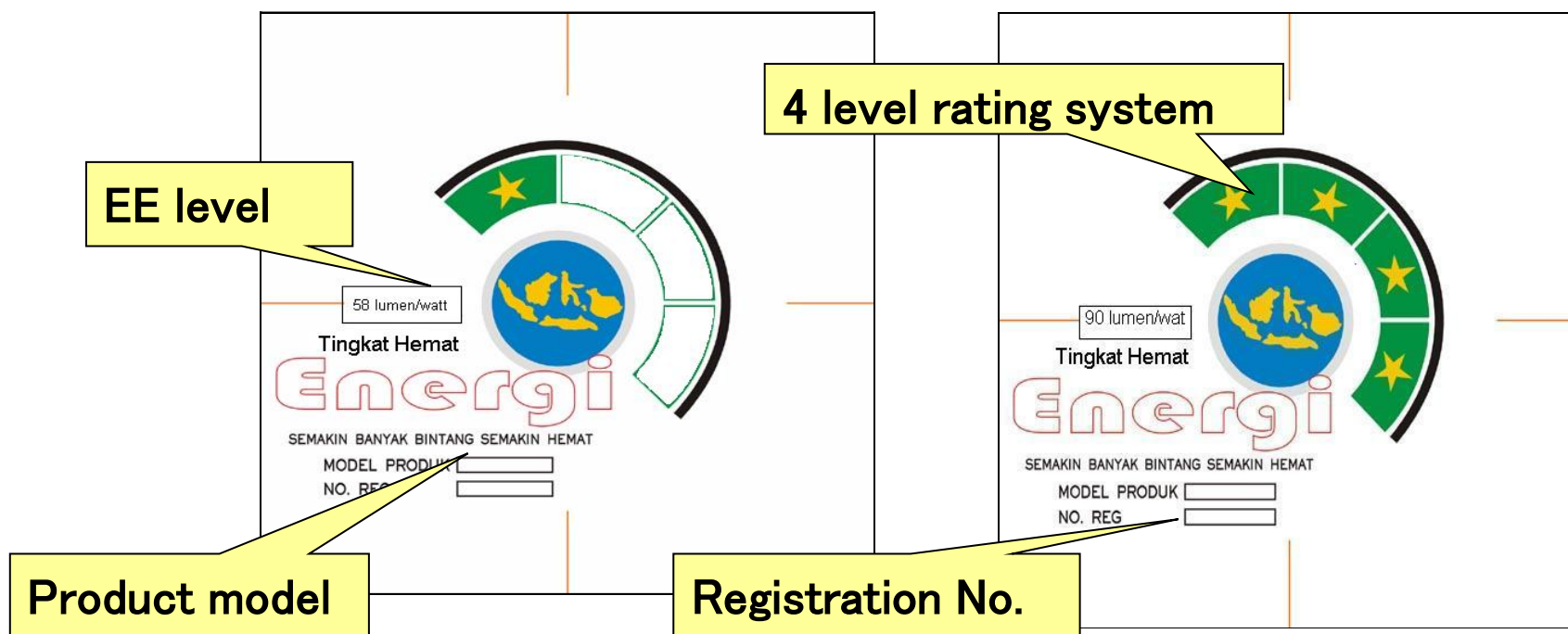
66,000GWh



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Comparative Label (SNI 04-6958-2003)



Target Products for Labeling

1. Compact Fluorescent Lamp
2. Refrigerator
3. Room Air Conditioner
4. Television
5. Electronic Ballast
6. Electric Fans
7. Rice Cooker
8. Motor
9. Washing machine
10. Electric Iron



Progress of Testing Standard and Labeling

APPLIANCE	SNI SAFETY	SNI ENERGY PERFORMANCE	LABELING
CFL lamp	V	V	V
Refrigerator	V	V	DRAFT
Air Conditioner	V	V	DRAFT
Electric Fan	V	DRAFT	DRAFT
Rice Cooker	V	DRAFT	DRAFT
Ballast Electronic	V	DRAFT	Preparation
Electric Motor	V	DRAFT	Preparation

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CFL Labeling Program

- **Objective:** introducing energy saving level as a guidance for consumer and to promote energy efficiency
- **Testing procedure refer to:** SNI IEC 60969 : 2009
- Label for energy saving marks: SNI 04-6958-2003
- **Self Declaration of Conformity (SDoC):** SNI ISO/IEC 17050-1: 2010
- **Legal basis for mandatory:** Ministry Regulation (MEMR) No. 6/2011 on Energy Labeling for CFL was issued as a legal basis. Mandatory will be impose in May 2013 □ being revised
- CFL is a pioneer for Labeling Program

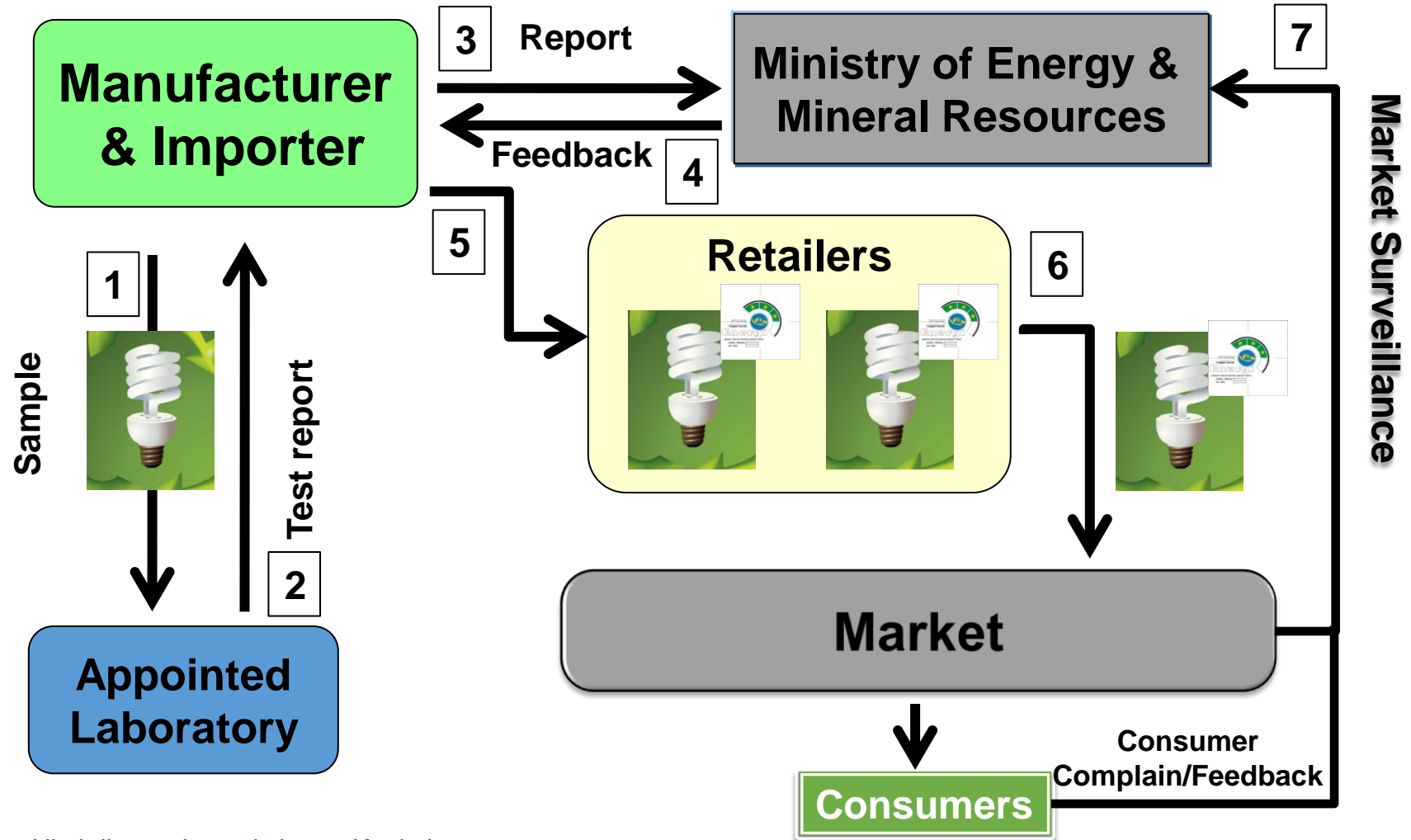
The Regulation in Brief

- CFL sold in Indonesia market is obliged to have EE label
- It is mandatory to have license to affix the label
- The performance that is claimed in the label should be based on test result from recognized/accredited lab and must be confirmed by accredited/appointed conformity institution/certification body.

Object of CFL labeling Regulation

- Cool day light (6500K) → being revised
- HS Code: 8539.31.90.20
- Pre-requirement: it is mandatory to comply with safety standard of SNI 04-6504-2001 or it's revision (fluorescent lamp for general use – normative ref: IEC 60968: 1988, IEC 60695-2-1, IEC 60360, IEC 60238, IEC 60061-3: 1969, IEC 60061-1:1969)

SDoC (Self Declaration of Conformity) System



4 Star Rating System

Combine the Comparative Label and MEPS

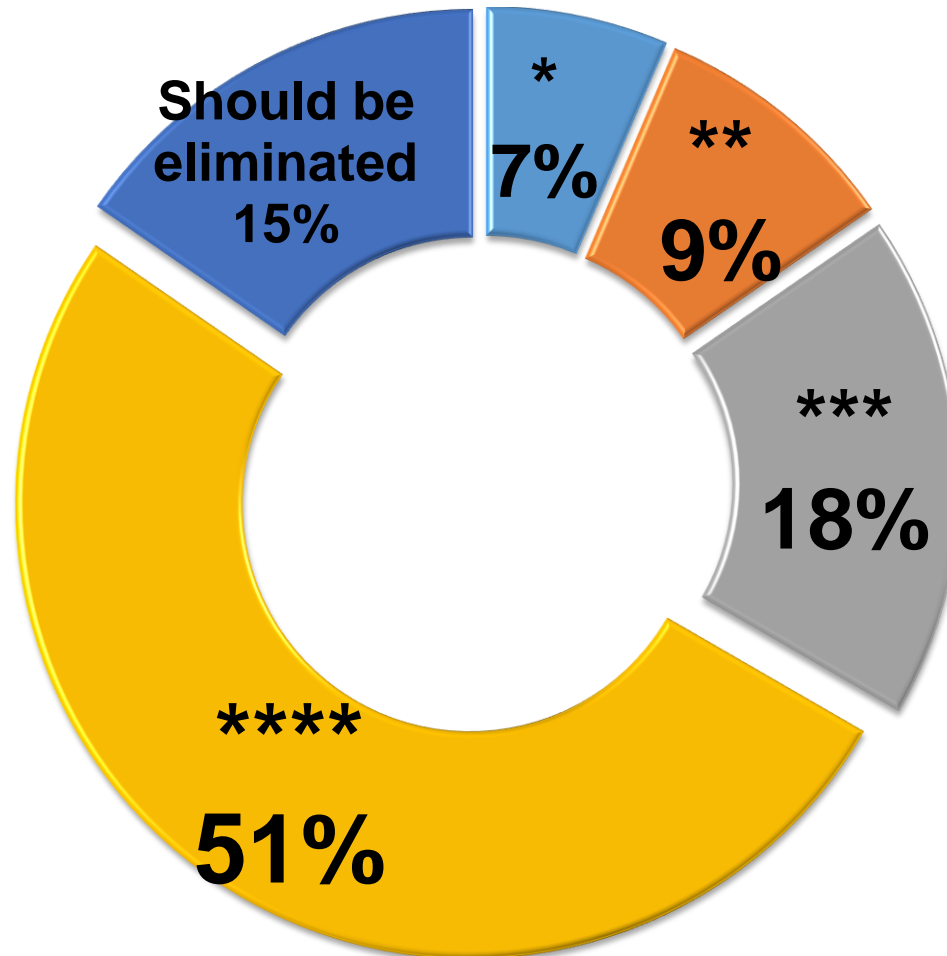
MEPS

Minimum EE level for each category



Power (Watt)	★	★★	★★★	★★★★
	1 Star	2 Stars	3 Stars	4 Stars
5 – 9	45 – 49	>49 – 52	>52 – 55	> 55
10 – 15	46 – 51	> 51 – 54	> 54 – 57	> 57
16 – 25	47 – 53	> 53 – 56	> 56 – 59	> 59
≥ 26	48 – 55	> 55 – 58	> 58 – 61	> 61

Previous CFL Profile



Source: Palaloi, CFL Survey in Indonesia Market 2011, BPPT

Progress (status of April 2014)

10 (ten) Companies have already submit the EE Label declaration:

1. **PT Panasonic Lighting Indonesia**
2. **PT Philips Indonesia**
3. **PT Star Cosmos**
4. **PT GE Lighting Indonesia**
5. **PT Panca Aditya Sejahtera**
6. **PT Osram Indonesia**
7. **PT Gunawan Elektrindo**
8. **PT Golden Visalux**
9. **PT Samudra Karya Mulia**
10. **PT Golden Batam Raya**

In total:
22 Brands with 57
Models
(approx: 11% of total CFL
Brands)

Revision of CFL Standard & Label Regulation in Indonesia (waiting for signed by Minister)

Color Temperature Classification

- **Before**

only Cool day light (specify as 6500K)

- **After**

Two classification :

1) 2700 K up to < 4400 K ;

and

2) ≥ 4400 up to 6500 K

Star Rating Revision

4 star rating system

BEFORE

Combine the Comparative Label and MEPS



MEPS

Minimum EE level for each category

Power (Watt)	★	★★	★★★	★★★★
	1 Star	2 Stars	3 Stars	4 Stars
5 – 9	45 – 49	>49 – 52	>52 – 55	> 55
10 – 15	46 – 51	> 51 – 54	> 54 – 57	> 57
16 – 25	47 – 53	> 53 – 56	> 56 – 59	> 59
≥ 26	48 – 55	> 55 – 58	> 58 – 61	> 61

2700 K up to < 4400 K

Power (Watt)	Effication Value (Lumen/Watt)			
	1 Star	2 Stars	3 Stars	4 Stars
≤ 8	< 34	≥ 34	≥ 44	≥ 54
$> 8 - 15$	< 38	≥ 38	≥ 48	≥ 58
$> 15 - 25$	< 42	≥ 42	≥ 52	≥ 62
$> 25 - 60$	< 46	≥ 46	≥ 56	≥ 66

≥ 4400 K up to 6500 K

Power (Watt)	Effication Value (Lumen/Watt)			
	1 Star	2 Stars	3 Stars	4 Stars
≤ 8	< 33	≥ 33	≥ 42	≥ 51
$> 8 - 15$	< 37	≥ 37	≥ 46	≥ 55
$> 15 - 25$	< 41	≥ 41	≥ 50	≥ 59
$> 25 - 60$	< 45	≥ 45	≥ 54	≥ 63

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Submission of Declaration

- Producer/Importer submit it's declaration of conformity to Director General of New Renewable Energy and Energy Conservation
- Attachment:
 - Self Declaration of Conformity refers to SNI ISO/IEC 17050-1: 2010 (self declaration procedure of the suppliers-general requirements)
 - Copy of Testing Report

Pre-Requirements for the Supplier:

- Fulfill the legal license :
 - industry/importer license
 - Brand register or license
- Implemented the Management System Standard (SNI ISO 9001:2008 or it's revision/another equal standard)
- Producer should have it's own accredited testing lab or having partnership with accredited independent testing lab.
- Importer should have certificate of testing report of the product (CFL) from appointed testing lab.

Accredited Testing Lab in Indonesia

(There are 8 testing lab capable to test according to SNI IEC 60969 : 2009 but only 2 are accredited)

<i>Name of Laboratory</i>	<i>Accreditation</i>	<i>address</i>
<i>Puslitbang Teknologi Ketenagalistrikan dan Energi Baru Terbarukan (P3TKEBT) – Kementerian ESDM (Center Research for electricity, New, Renewable Energy, and Energy Conservation – Ministry of Energy and Mineral Resources)</i>	<ul style="list-style-type: none">• <i>Safety</i>• <i>Performance</i>	<i>Jl. Ciledug raya Kav. 109 Cipulir Kebayoran Lama, Jakarta Selatan 12230. Telp: 021-720-3530, Fax: 021-720-3525. http://www.p3tkebt.esdm.go.id/index.php?lang=en</i>
<i>Balai Besar Bahan dan Barang Teknik (B4T) – Kementerian Perindustrian (Center for Material and Technical Product – Ministry of Industry)</i>	<ul style="list-style-type: none">• <i>Safety</i>• <i>Performance</i>	<i>Jl. Sangkuriang No. 14 Bandung 40135 Telp: 022-2504088, 022-2504828, 022-2510682 Fax: 022-2502027 http://www.b4t.go.id/lang/en/</i>

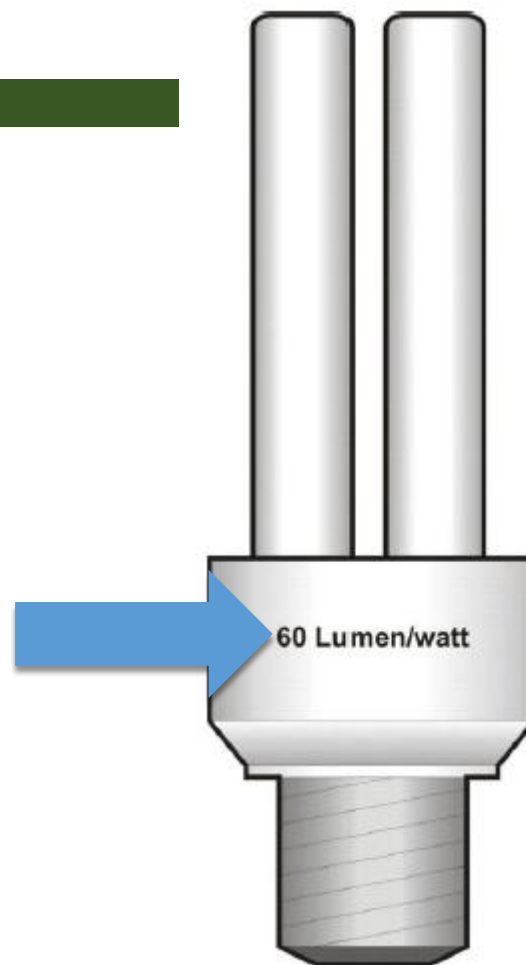
Appointed Lab in Indonesia

(recognized to conduct testing an EE certification but not accredited yet (in the process of accreditation). Mandated to be accredited as soon as possible, maximum grace period is 2 years)

<i>Name of Laboratory</i>	<i>Address</i>
<i>Balai Pengujian Mutu Barang (BPMB) Ministry of Trade</i>	<i>Jl. Raya Bogor Km 26, Ciracas, Jakarta Timur Telp: +6221 8710323, Fax: +6221 8710478.</i>
<i>Balai Besar Teknologi Energi (B2TE), BPPT</i>	<i>Kawasan Puspitek Gd. 620-622 Serpong, Tangerang - Banten Telp: +6221 7560550, 7560092 Fax: +6221 7560904</i>
<i>Balai Riset dan Standardisasi Industri Surabaya Ministry of Industry</i>	<i>Jl. Jagir Wonokromo No. 360, Surabaya 60244 Telp: +6231 8410054, Fax: +6231 8410480.</i>
<i>PT Sucofindo</i>	<i>Jl. Arteri Tol Cibitung No. 1 Bekasi 17520 Telp: +6221 88321176; Fax: +6221 88321166</i>

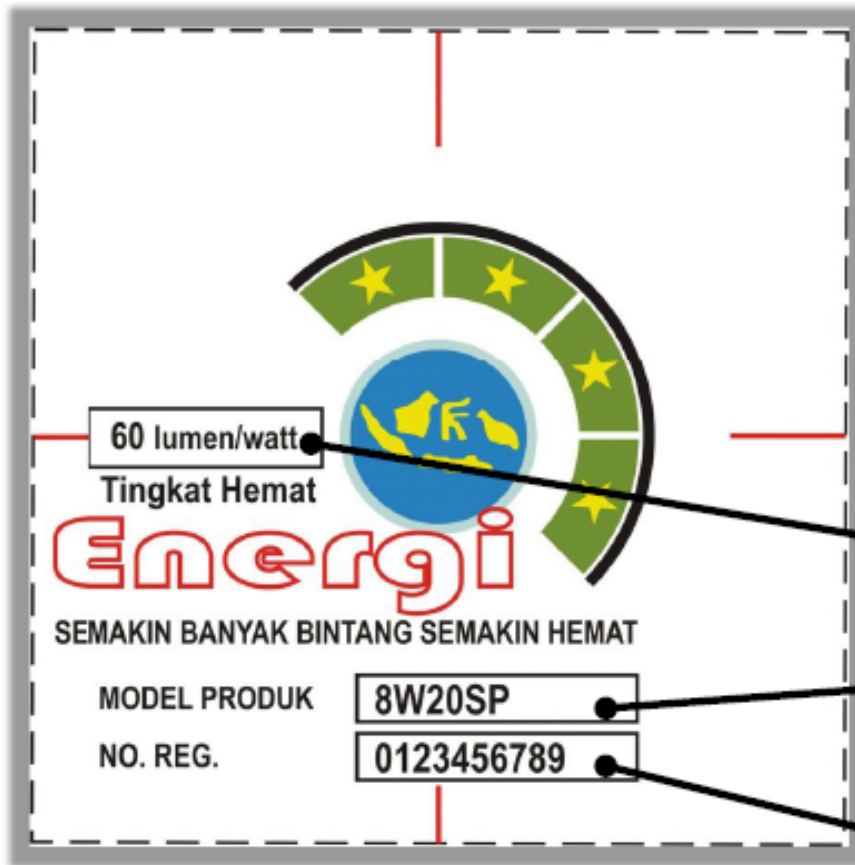
Label Marking

- Packaging : Energy Efficient Label as SNI 04-6958-2003 (detail will be explained next)
- Lamp : Efficacy Value should be affixed in the lamp holder



The Label:

Energy Efficient Label

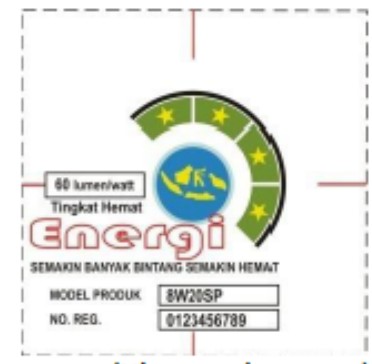


Images used for product labels on ballasted lamp refers to SNI number 04-6958-2003 about Purposes for Domestic Electricity – Energy Efficient Label (size can be adjusted to the size of packing light).

Lumen value according test result.

Model Name from manufacturers.

Number issued by the testing laboratory



The technical drawing illustrates the design and layout of a product label for 'ENERGI'. It is divided into two main sections: 'Ukuran Kata/kalimat' (Word/Phrase Size) and 'Posisi kata/kalimat' (Word/Phrase Position).

Ukuran Kata/kalimat (Word/Phrase Size):

- ENERGI:** The word is shown in a stylized, outlined font. The total width is 20 units, and the height is 3 units. The 'Tingkat Hemat' (Economy Level) is indicated as 9.4 units.
- SEMAKIN BANYAK BINTANG SEMAKIN HEMAT:** The phrase is shown in a smaller, outlined font. The total width is 25 units, and the height is 1 unit.
- MODEL PRODUK:** The product model name is shown in a smaller, outlined font. The width is 9.3 units, and the height is 1 unit.
- NO. REG.:** The registration number is shown in a smaller, outlined font. The width is 5.1 units, and the height is 1 unit.

Posisi kata/kalimat (Word/Phrase Position):

- ENERGI:** The word is positioned in the upper right section of the label. The 'Titik pusat bola dunia' (World map center point) is marked at the top right corner of the word.
- SEMAKIN BANYAK BINTANG SEMAKIN HEMAT:** The phrase is positioned below the word 'ENERGI'.
- MODEL PRODUK:** The product model name is positioned below the phrase.
- NO. REG.:** The registration number is positioned below the product model name.

The drawing includes various dimensions and labels to specify the layout and size of the label components. The 'Tingkat Hemat' (Economy Level) is a key feature of the label design.

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Malaysia, April 2014*



Technical drawing of a star-shaped part. The part has a circular base with a diameter of $\varnothing 2.3$. The star is formed by five points, each with a width of 1. The drawing shows the part from a top-down perspective, with a dashed line indicating the center of the circular base.

(milimeter)

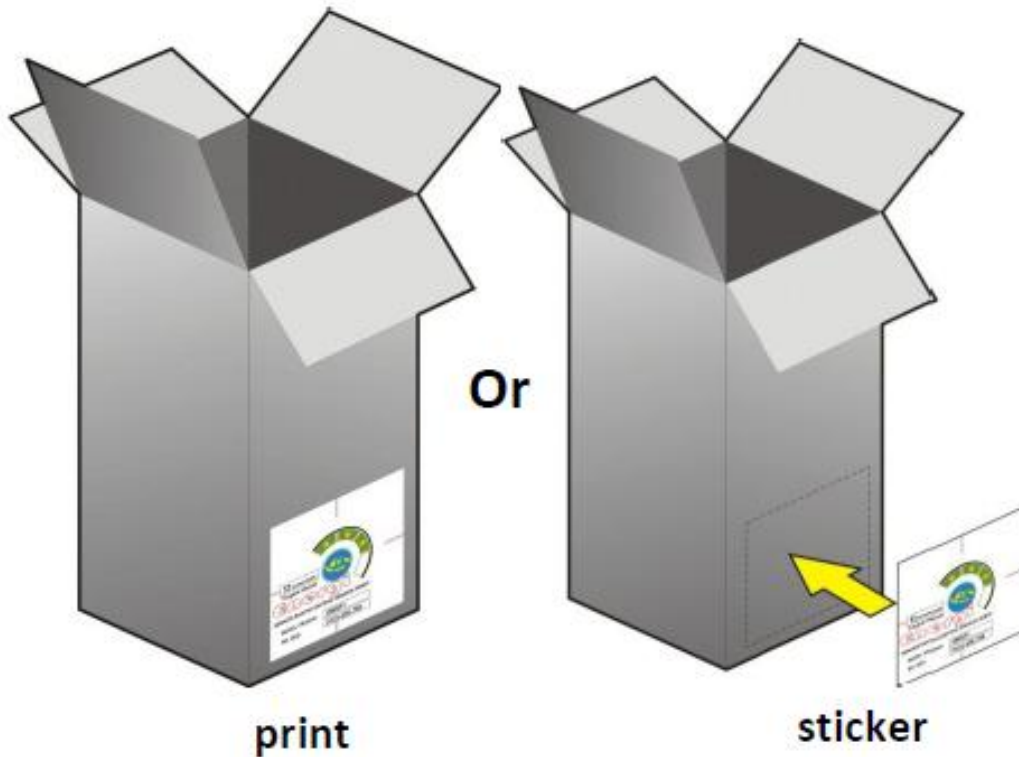
The Detail: Font

Word / Sentence	Font	Color	Thick & Border Color
“Tingkat Hemat”	Arial (Bold)	Black	Without Border
“Energi”	Bauhaus 93	White	Red (Pantone 483 C) Thick Line : 0.2 mm
“SEMAKIN BANYAK BINTANG SEMAKIN HEMAT”	Arial (Bold)	Black	Without Border
“MODEL PRODUK”	Arial (Bold)	Black	Without Border
“NO. REG.”	Arial (Bold)	Black	Without Border
BACKGROUND COLOR LABEL		White Glossy	
MATERIAL LABEL & ADHESIVE		Determined as needed.	

The Detail: Color



The Detail: Placement



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Monitoring Verification and Enforcement (MVE) will focus on:

- License to put energy label
- Label itself (mandatory to put label)
- Conformity of the performance that is claimed as in the label

Product Sampling

- Sample will be randomly collected from:
 - Store(s)
 - Factory(ies)
 - Warehouse(s)
- Sample treatment:
 - Number of samples is 20 for each type/model
 - It is required that minimum 15 of the samples can withstand during 100 hours of aging period
 - Energy Efficiency (Efficacy) range of tolerance is 20% from its claim

Sanction for Non-Compliances

- Mandatory for producer/importer to withdraw the non compliance products and then demolish or re-export the non-compliance products with their own cost.
- Government will send a written warning up to three times. Three months is given for following up the warning.
- If it is happened that up to third warning and still disobeyed, then the license will be withdrawn → consequences: 1) the products in the market is illegal, 2) considered as violation of law of consumer protection and due to this violation, the producer/importer have to face lawsuit under pinalty of maximum 5 years imprisonment or fine of Rp. 2 billion (around USD 175 thousand).

Contact Us

For more information please to contact:

Ministry of Energy and Mineral Resources

Directorate General of New Renewable Energi and Energy Conservation

Directore of Energy Conservation

Address : Jl. Pegangsaan Timur 1A, Cikini, Jakarta 10320

Telp : 021-529-04235

Fax : 021-255-29106

Email : info@ebtke.esdm.go.id

Website: www.ebtke.esdm.go.id

THANK YOU

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Malaysia, April 2014*



Format of the Submission Letter

(company letter head)

Nomor : XXXXXXXX-XX-XXXX
Date :
About : Suppliers Declaration of Conformity
Attachment : One file

Dear
Directorate General of
New Renewable Energy and Energy Conservation
Ministry of Energy and Mineral Resources

The undersigned is:

Name :
Position :
Company Name :
Company Address :

Submit a statement of compliance for suppliers of lighting products swaballast according to a form.

The information contained in the Declaration of Conformity Supplier is true. If the future there is a deviation from the truth of the information in this statement, we are ready to accept the consequences in accordance with laws and regulations.

Such statements are made as tagging requirements on energy saving mark ballasted lamps.

<<place and date>>

Stamp
duty

<<Name, Position >>

Format of the Declaration

1. Contain the name and address of the company issuing the declaration of conformity.
2. In this declaration, the object is self ballasted lamp being labeled.
3. Contain Informations :
4. Name/Type Product/ Type Swaballast Lamps
5. Name of Manufacturers/Brand Holder that manufacture or import swaballast
6. Efficacy (lumen/watt) is ratio value between the powerful light generated (lumens) and ballasted lamp power (watts).
7. The number of stars indicates the level of energy efficiency (the more stars the more efficient) and filled according to the table based on the value of its efficacy criteria on energy-saving mark ballasted lamp.
8. The number of products containing the estimated amount swaballast lighting products manufactured / imported for one year by the publication of the Declaration of Conformity.
9. Additional Information contains additional information supporting the statement of compliance, such as a sign or label similar energy saving abroad that have been obtained, the reference testing laboratory accreditation document, attachment test results, and others.
10. Contains the name of the testing laboratory and its signature, official name and seal / stamp test lab.
11. Contains the name of the company issuing the declaration of conformity with the signature, official name and seal / stamp of the company.

DECLARATION OF CONFORMITY SUPPLIERS FORM

(Company letterhead)

Declaration of Conformity Supplier

(1) Issuer's Name :

Issuer's Address :

(2) Object of declaration : Self ballasted lamps

(3) The object of the declaration as detailed below is in conformity with the certificate of testing report as attached:

Name / Type of Product	Manufacturers / Brand Holder	Efficacy (Lumen/Watt)	Star Level	estimated amount of product labeled
.....
.....
.....

Additional Information:

(4)
.....

<<place and date >>

(5) Name of Test Laboratory

.....

.....

<<Name, Position & stamp laboratory>>

(5) Signed for and behalf of

.....

.....

<<Name, Position & Stamp company>>