VIETNAM NATIONAL STANDARDS AND LABELING REQUIREMENTS

Bui Ngoc Bich

Vietnam Standards and Quality Institute

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MAIN CONTENT

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- Roadmap of labeling
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LEGAL FRAMEWORK

- The Law No. 50/2010/QH12, "Saving and effective usage of energy" dated 17 June 2010.
- Decree No. 21/2011/ND-CP dated Mar 29th 2011 providing details and measures to implement the Law on energy efficiency and conservation
- Decision No.51/2011/QĐ-TTg dated 12th Sept. 2011, stipulating list of products following energy labeling scheme and the roadmap.
- Decision No.68/2011/QĐ-TTg dated 12th Dec. 2011, stipulating list of products to be purchased in governmental budget plan.

The Law on Saving and effective usage of energy

- The Law includes 12 chapters, 48 articles to institutionalize the Party's and State's policies in developing national energy resources, ensuring energy security, using and exploiting domestic energy resources rationally to protect environment and to meet the demand of socio-economic development.
- The Law specifies the responsibilities of energy users in reporting current state of energy usage, in developing and implementing plans to use energy economically and efficiently at the unit. It also encourages the formation of a network of service organizations to implement energy-saving programs and projects in different localities.

Decree No.21/2011/ND-CP

Takes effect from May 15th 2011, provides regulations on statistics on energy use, key energy consuming facilities, energy efficiency and conservation in offices and units using State budget; ***energy labeling for energy consuming equipment and devices***; measures to promote energy efficiency and conservation; examination and inspection on energy efficiency and conservation.

Decree No.21/2011/ND-CP

- Facilities and equipment on the List of must-be-energy-labeled facilities and equipment must be labeled before being launched to the market. Energy labels include two types (as shown in the next page)
- Production facilities and importing enterprises shall execute the printing and sticking of energy labels for facilities and equipment which have been granted the certificates on energy labeling.
- 60 working days before the validity of the certificates on energy labeling expires, production facilities, importing enterprises must register for re-certification.

Principles of certification of energy saving products

a) Typical samples shall be tested to assess the suitability of products and goods for energy consumption requirements of the product.

b) The testing of typical samples must be conducted at designated laboratories.

c) Products after being certified as energy saving must be supervised in manufacturing facilities, warehouses or on the market.

Certificate of energy saving product

– Businesses that are granted the certificate of energy saving product are allowed to label their products with endorsement labels or comparative labels in accordance with the right types of energy saving product certified by the Ministry of Industry and Trade (MOIT).

– Certificates of energy saving products issued to enterprises have the maximum duration of three years.

Testing units

Labs to be considered and assigned to test energy using products as a basis for the certification of energy saving product:

1. Specialized laboratories accredited by the standards of VILAS system or labs accredited by accreditation bodies which have signed mutual recognition agreements (ILAC and APLAC);

2. Labs which are not accredited by the standards of VILAS system but capable of testing energy consumption criteria shall be inspected, assessed and assigned by the MOIT to test energy using products to perform energy labeling, regarding to: capabilities ; equipment and testing standards ; the record management system.

Testing results of labs certified by the IECEE Schemes system are also accepted.

Quantified criteria for designated labs

a) Professional capabilities:

- Having testers properly trained in energy engineering with college or higher degree and at least two years' experience in testing;
- Having labs leaders with university or higher degree in energy engineering and at least three years' experience in testing.

b) Equipment and testing standards:

- Testing equipment must be properly functional, be maintained, inspected and adjusted in accordance with standards and be accurate enough to perform testing criteria;
- Testing equipment and methods must be sufficient in quantity and appropriate for testing standards and other standards periodically prescribed by MOIT;
- Materials on testing standards and process must be represented in Vietnamese.

c) Development and maintenance of the record management system including:

- Training records of testers;
- Records on testing, adjustment, maintenance of testing equip.;
- Records on testing results.

ENERGY LABEL IN VIET NAM

- Endorsement label

- Comparative label

ENERGY LABEL IN VIET NAM

- **Endorsement label** is affixed to products having high energy efficiency according to Vietnamese National Standards (TCVNs).

  *(The products such as **CFLs, straight fluorescent tubes, ballasts,** distribution transformers, printers, photocopiers, monitors…)*

ENERGY LABEL IN VIET NAM

- **Comparative label** is affixed to products having energy efficiency according to grade 1 to 5 specified in TCVNs. Grade 5 is the best (5 stars), grade 1 is the minimum (1 star).

  (The products such as household appliances: Fans, refrigerators, air conditioners, washing machines, rice cookers, televisions …)

Information which must be shown on the label

Comparative *energy label* must contain at least the following information:

a) Certification Code

b) Name/code of product

c) Manufacturer

d) Importer

e) The part showing energy efficiency parameters (energy performance level

f) Energy consumption level of the product

g) Other Information (as defined in detail in the Decision on granting the certificate)

OBJECTS OF LABELING SCHEME

Decision 51/2011/QĐ-TTg stipulating list of products following energy labeling scheme and the roadmap (from Nov. 1st, 2011)

- Group 1: Household appliances: **Straight Fluorescent Tubes, CFLs, Electromagnetic Ballasts, Electronic Ballasts,** Air Conditioners, Refrigerators, Washing Machines, Rice Cookers, Fans, Televisions.
- Group 2: Office Equipment and Commercial Equipment: Photocopiers, Monitors, Printers, Refrigerated Display Cabinets
- Group 3: Industry Equipment: Electric Motors, Distribution Transformers
- Group 4: Transportation Vehicle: Cars having 7 seats and less.

ROADMAP OF LABELING

Products	2012	1st Jan. 2013	2014	2015
Straight Fluorescent Tubes, CFLs, Electromagnetic Ballasts, Electronic Ballasts				

Voluntary Mandatory

ROADMAP OF MEPS

Products	2012	2013	1st Jan. 2014	2015
Straight Fluorescent Tubes, CFLs, Electromagnetic Ballasts, Electronic Ballasts				

Voluntary Mandatory

OBJECTs AND ROADMAP

The Decision 68/2011/QĐ-TTg stipulating list of products to be **purchased in governmental budget plan**

- Subjects: Bodies use governmental budget
- Time in force: by 1st Jan. 2013
- List of products: 13 products (incl.: CFLs, SFTs, ballasts, elec. fans, air con., refrig., distribution transformers, public lighting equi., solar water heaters, TVs, monitors, printers, photocopiers)

OBJECTs AND LABEL

No.	Products	Label
1	Compact Fluorescent Lamps	Endorsement
2	Straight Fluorescent Tubes	Endorsement
3	Ballasts for Fluorescent Lamps:	
	a. Electromagnetic Ballasts	Comparative label with 5 stars
	b. Electronic Ballasts	Endorsement
	…	
8	Public Lighting Equipment	Endorsement

ENERGY EFFICIENCY TCVNs

No	Product	Applicable TCVN
1	Compact Fluorescent Lamps	TCVN 7896:2008
2	Straight Fluorescent Tubes	TCVN 8249:2009
3	Ballasts for Fluorescent Lamps:	
	3a. Electromagnetic Ballasts	TCVN 8248:2009
	3b. Electronic Ballasts	TCVN 7897:2008
	…	
8	Public Lighting Equipment	TCVN 8250:2009

1. TCVN 7896:2008 – Compact Fluorescent Lamps – Energy Efficiency

Power range W	Energy efficiency, lm/W			
	Color temperature T_c < 4 400 K		Color temperature T_c ≥ 4 400 K	
	The minimum	High	The minimum	High
from 5 to 8	45	55	40	50
from 9 to 14	50	60	45	55
from 15 to 24	55	65	50	60
from 25 to 60	60	70	55	65

2. TCVN 8249:2009 – Tubular Fluorescent Lamps – Energy Efficiency

Power range W	Energy efficiency lm/W			
	Color temperature T_c < 4 400 K		Color temperature T_c ≥ 4 400 K	
	The minimum	High	The minimum	High
from 14 to 20	58	72	55	70
from 20 to 40	60	78	58	75

3a. TCVN 8248:2009 – Electromagnetic ballasts for Fluorescent Lamps – Energy Efficiency

Rated Power W	Ballasts' efficiency factor (BEF)	
	The minimum	High
18 (T8)	3,00	3,33
20 (T10)	2,81	3,10
35 (T8)	1,87	2,04
40 (T10)	1,73	1,90

3b. TCVN 7897:2008 – Electronic ballasts for Fluorescent Lamps – Energy Efficiency

Rated Power W	Ballasts' efficiency factor (BEF)	
	The minimum	High
18	4,78	5,52
20	4,37	5,05
32	2,68	3,04
36	2,40	2,68
40	2,27	2,47

4. TCVN 8250:2009 – High-pressure sodium vapour lamps – Energy Efficiency

Power W	Energy efficiency, lm/W	
	The minimum	High
50	65	75
70	75	80
100	80	90
150	85	100
250	95	110
400	105	120
1 000	110	130

Other TCVNs on CFLs

Ref. No.	Title	Specification
TCVN 7672 :2007 (IEC 60968:1999)	Self-ballasted for general lighting services – Safety requirements	Safety
TCVN 7673 :2007 (IEC 60969:2001)	Self-ballasted lamps for general lighting services – Performance requirements	Performance, color coordinates, color temps.
TCVN 7863 :2008 (IEC 60901:2000, adm. 3:2004)	Single-capped flurescent lamps – Performance specifications	Color index Ra, life expectancy (not less than 6000 h)
TCVN 7451-2:2005	High efficiency lighting products – Part 2: Methods for determination of energy performance	Power, Initial luminous flux, luminous flux maintenance coef. (not less than 80 % of ILF after 2000 h)

TCVNs on Tubular fluorescent lamps

Ref. No.	Title	Specification
TCVN 5175: 2006 (IEC 61195:1999)	Double−fluorescent lamps – Safety specifications	Safety
TCVN 7670 : 2007 (IEC 60081:2002, adm2:2003, adm3:2005)	Double-capped fluorescent lamps – Performance specifications	Performance, color coordinates, color temp., color index Ra, life expectancy (not less than 6000 h)
TCVN 7451-2:2005	High efficiency lighting products – Part 2: Methods for determination of energy performance	Power, initial luminous flux, luminous flux maintenance coef. (not less than 80 % of ILF after 2000 h)

TCVNs on Electronic ballasts for fluorescent lamps

Ref. No.	Title	Specification
TCVN 7590-2-3: 2007 (IEC 61347-2-3: 2004, a2:2006)	Lamp controlgear – Part 2-3: Particular requirements for a.c. supplied electronic ballasts for fluorescent lamps	Safety
TCVN 7674 :2007 (IEC 60929: 2006)	AC−supplied eletronic ballasts for tubular fluorescent lamps – Preformance requirements	Performance
TCVN 7451-2:2005	High efficiency lighting products – Part 2: Methods for determination of energy performance	energy performance

TCVNs on Electromagnetic ballasts for fluorescent lamps

Ref. No.	Title	Specification
TCVN 7590-2-8:2006 (IEC 61347-2-8:2006)	Lamp controlgear – Part 2-8: Praticualar requirements for ballast for fluorescent lamps	Safety
TCVN 6479 :2006 (IEC 60921:2004)	Ballasts for tubular fluorescent lamps – Performance requirements	Performance
TCVN 7451-2:2005	High efficiency lighting products – Part 2: Methods for determination of energy performance	energy performance

TCVNs on LEDs

- TCVN 8783:2011 (IEC/PAS 62612:2009), Self-ballasted LED−lamps for general lighting services − Performance requirements
- TCVN 8782:2011 (IEC 62560:2011), Self-ballasted LED−lamps for general lighting services by voltage > 50 V − Safety specifications
- TCVN 8781:2011 (IEC 62031:2008), LED module for general lighting − Safety specifications

- Further information on labeling program can be found at:

  http://tietkiemnangluong.com.vn/en/

- Further information on TCVNs:

  http://tcvn.gov.vn/en/

Thank you for your attention !