



**Asia-Pacific  
Economic Cooperation**

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**2011/SOM1/EWG/EGEEC/013**

Agenda: D2 4


## **Economy Update – Chinese Taipei**

Submitted by: Chinese Taipei



**37<sup>th</sup> Expert Group on Energy Efficiency and  
Conservation Meeting  
Washington, D.C., United States  
28 February - 2 March 2011**

**Economy Update- Chinese Taipei**  
**APEC EGEE&C meeting Washington DC**

 Bureau of Energy, The Ministry of Economic Affairs  
Chinese Taipei

1 March , 2011

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- **Closing Remark**

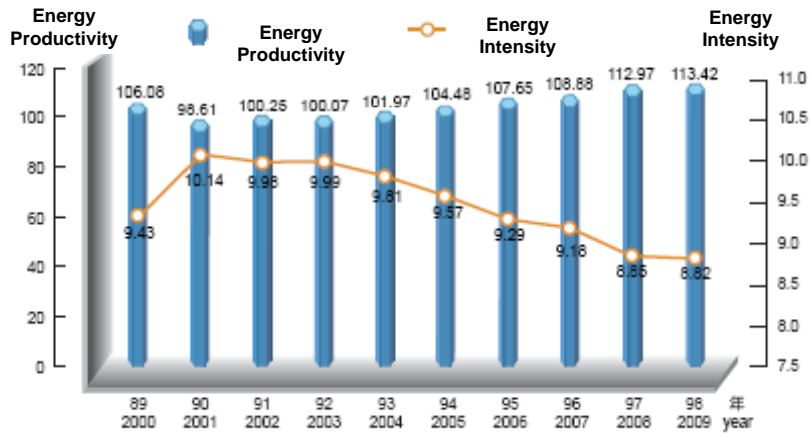
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## Energy Efficiency Update in Chinese Taipei

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## Trend for Energy Intensity



NOTE: 1. Source: Statistics Analysis, Bureau of Energy, Ministry of Economic Affairs.  
 2. Energy intensity = final energy consumption / actual GDP, actual GDP is based on price of 2000.

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## The Voluntary Energy Labeling Program

Benchmarks for Energy Label Products(31 product Categories)

Year	Categories
2001	(1)air-conditioners (2) refrigerators (3) dehumidifiers (4) clothes dryers
2002	(5)TVs (6) clothes washers (7) electric (8) fans, fluorescent lamps ( $\geq 32$ W)
2003	(8)fluorescent lamps ( $< 32$ W) (9)hair dryers (10) hand dryers
2004	(11)warm-hot water dispensers (12) chilled-warm-hot water dispensers
2005	(13) chilled-warm-hot drinking fountains (14) automobiles & light trucks (15) motorcycles (16) self-ballasted fluorescent lamps
2006	(17) thin film transistor-liquid crystal display (18) instant gas burning water heaters (19) gas burning cooking appliances (20) electric rice cookers
2007	(21)Electric Storage Water Heaters (effective on Jan. 1, 2008)(22) Electric Pots (23) Exit Lights and Emergency Direction Lights(24) DVD Products
2008	(25)Warm-hot drinking fountains (26) Luminaries (27) Integrated Stereo
2009	(28)Compact Fluorescent Lamp
2010	(29)Printer(new)
2011	(30) Copier (31) Air Cleaner (new)

4669 Energy Conservation Labeling certified models with 297 brand names on Feb. 21, 2011

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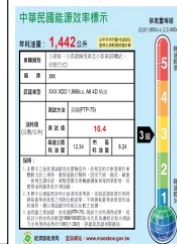
## The Mandatory Labeling Program

### Energy Efficiency Grading program –Mandatory Labels

- To show the consumers useful information as they choose among various models.
- To influence consumers' purchasing decisions to lead the product importers or manufacturers will likely take actions to improve energy efficiency of their products and to phase out low energy-efficient ones.
- The mandatory labeling of air conditioner, refrigerator, automobile and motorcycle had entered into force on July 1, 2010, and that of **dehumidifier** on **March 1, 2011** in which air conditioner and refrigerator consume nearly 55% of electricity demand of home appliances. The program will extend to other items year by year.
- Currently, there are 2,354 air conditioner models, 494 refrigerator models, 1,700 automobile models and 420 motorcycle models have completed mandatory energy label applications.



air conditioner



automobile

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## APEC LED Workshop

### for the Promotion and Application of LED Lighting Technology

#### •Purpose

To echo "The Joint Statement of 2009 APEC Ministers"

- Elimination of trade barriers of the four basic clean energy technologies (such as Wind, Solar, Clean Coal and High-Efficiency Lighting)
- Strengthen the International Standardization activities, especially in the standards related to energy and environmental issues

#### •Key Objectives

- To show how does Chinese Taipei successfully set up the LED lighting standards and contribute to industrial development with LED demonstration cases as well as public works
- To share the experiences of promotion and application on LED lighting technology with each others between APEC Member Economies, such as the United States Raileigh driven LED City program, the program of 10000 Street lights 10 cities in mainland China and others.

•Time: October 2011

•Place: Taipei City

•Budget: Self-funded by BOE, MOEA of Chinese Taipei

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## Draft Schedule

Time	Topic	Speaker
8:30 ~ 9:00	Registration	
9:00 ~ 9:20	Open remarks	
	1.	BOE /MOEA
	2.	APEC Secretariat
9:20 ~ 10:40	Keynote Speech	
	1. Policy Incentives for LED Lighting Industry	From MOEA/BOE
	2. Promotion and Application Status of LED Lighting Technology – Public Works	From ITRI
10:40 ~ 11:00	Break	
11:00 ~ 12:30	Speeches	
	1. 10000 Street Lights 10 Cities Program	China
	2. Expo 2010 Shanghai China	China
	3. Promotion and Application LED Lighting Technology	Hong Kong
12:30 ~14:00	Lunch Break	
14:00 ~ 15:30	Speeches	
	4. Application of LED Lighting Technology and Policy Incentives	Japan
	5. Application of LED Lighting Technology and Policy Incentives	Korea
	6.Reileigh LED City Program	USA
15:30 ~ 15:50	Break	
15:50 ~ 17:30	Panel Discussion	8 speakers Lead by ITRI
17:30 ~ 17:45	Closing Remarks	BOE/MOEA

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## Energy Efficiency Compliance Program

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### Regulative Framework of energy efficiency management

	Prior to the energy management act amended	After the energy management act revised
The conformity assessment procedures	<ol style="list-style-type: none"> <li>1. BOE is responsible for setting or amending MEPS BSMI assists to subsume MEPS into The Commodity Inspection Act and to implement the administration of MEPS. (These products have been incorporated into the commodities subject to inspection which should be executed application of inspection, verification, certification, border control and other items.)</li> <li>2. Application object : manufacturer or importer</li> </ol>	<ol style="list-style-type: none"> <li>1. BOE enforces the MEPS management and energy efficiency labeling scheme under the authorization of Energy Management Act.</li> <li>2. Because the implementation of MEPS management which must refer to border control and the consideration of administrative costs, BOE will be delegated the implementation of related administrative works to BSMI.</li> <li>3. BOE will add a service of labeling management</li> <li>4. Application object : manufacturer or importer</li> </ol>
Post-market surveillance actions	<ol style="list-style-type: none"> <li>1. BOE and BSMI enforce jointly the post-market surveillance actions under the authorization of Commodity Inspection Act.</li> <li>2. Application object : manufacturer or importer</li> </ol>	<ol style="list-style-type: none"> <li>1. BOE enforces the post-market surveillance actions under the authorization of Energy Management Act. (including the accuracy of energy consumption and energy efficiency labeling and the conformity of MEPS)</li> <li>2. Application object : manufacturer or importer and seller</li> </ol>
Related necessary work	<ol style="list-style-type: none"> <li>1. BSMI assists to subsume the energy efficiency (performance) testing methods of products which are designated by BOE into CNS national standards first, and then BOE will announce and implement the MEPS and labeling management later.</li> <li>2. TAF assists to subsume the energy efficiency testing methods of products which are conformed to the CNS requirements into the accreditation system first, and then accredited laboratories will implement the inspection services of energy efficiency. (including the type approval and post-market surveillance)</li> </ol>	

BOE: Bureau of Energy      BSMI: Bureau of Specification, Measurement and Inspection

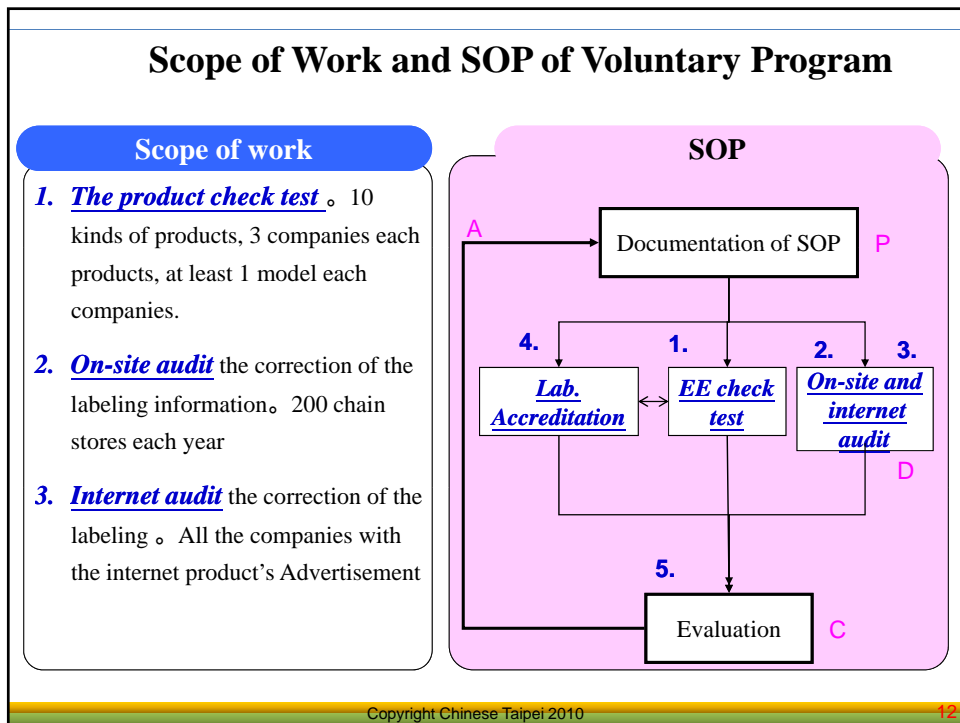
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### Article 14 of Energy Management Law

Article	Scope	Target
<p>The energy utilization facilities or apparatus, which are designated by the central competent authority, manufactured by local manufacturers or imported by merchants for domestic use should conform to the permit standards of energy consumption set up by the central competent authority. Meanwhile, <b>the said facilities or apparatus should be provided with a label which indicates its energy consumption and the energy efficiency.</b></p> <p>If the designated facilities or apparatus fail to conform to the permit standards of energy consumption, such facilities or apparatus should be prohibited from importing or selling on domestic market.</p> <p>If designated facilities or apparatus fail to put on the label, such facilities or apparatus should be prohibited from display or selling on domestic market.</p> <p>The central competent authority should announce the appropriate MEPS and its monitor method, and the labeling, verification and test method for energy consumption amount and energy efficiency.</p>	<ul style="list-style-type: none"> <li>① MEPS of designated energy utilization facilities or apparatus</li> <li>② <b>Mandatory energy efficiency labeling of designated energy utilization facilities or apparatus</b></li> </ul>	<ul style="list-style-type: none"> <li>① Use MEPS to eliminate low energy efficiency products</li> <li>② Use Mandatory energy efficiency labeling to lead the customers to choose high energy efficiency products, to achieve save energy and reduce carbon emission target.</li> </ul>

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## guidelines of the by law of the compliance program Mandatory Labeling Program

9. While conducting inspection of the energy efficiency rating labeling, the Central Competent Authority may conduct annual product sampling and testing; the Central Competent Authority may designate the sampled products and the dealer shall send the product samples to designated testing laboratory within the allowed time.

The energy factor obtained through such testing shall be greater than 95% of the labeled value; if not, the Central Competent Authority shall inform the dealer to conduct re-testing. The number of re-tested samples of the product with same product number shall double the number of the first-tested samples, and the dealers shall pay for all costs associated with the re-testing.

If the product re-testing has not been conducted, or not all tested model comply with the stipulated Energy Efficiency Ratio requirements, the Central Competent Authority shall inform the non-complying dealer to conduct corrective actions based on Article 21 of the Energy Management Act within designated period and shall take all relevant follow-up actions against the involved dealer

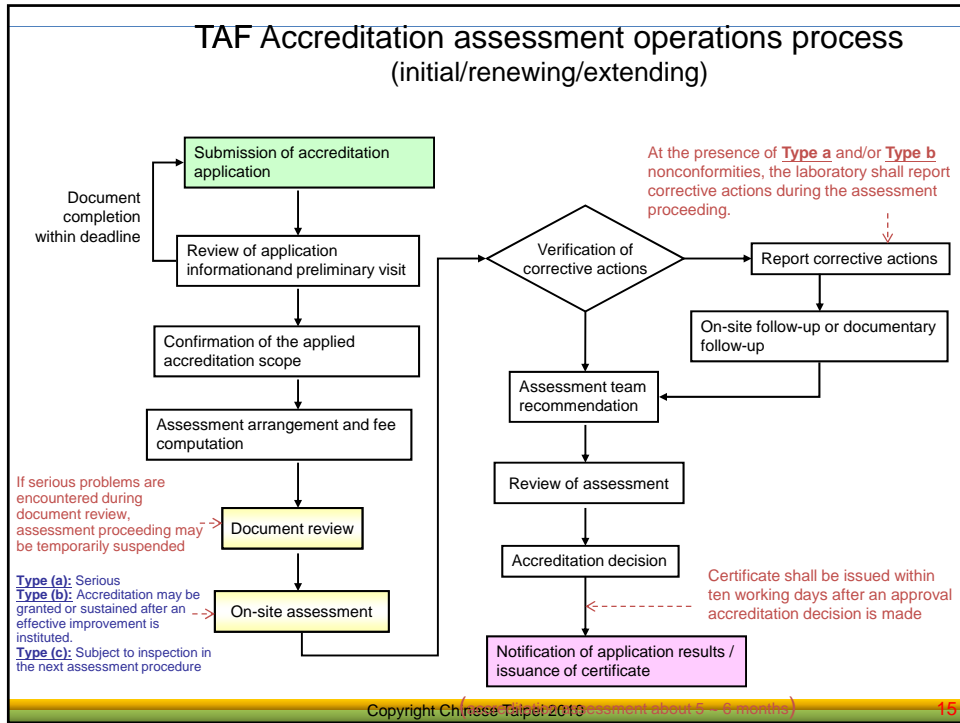
10. In principle, the number of products first sampled and tested shall be decided based on the sales number of the designated model number of the previous year, and one (1) sample shall be tested out of five thousand (5,000) units of such product model sold. If less than 5000 units were sold for that model number in the prior year, one (1) sample shall be tested. Nonetheless, the Central Competent Authority may change the sampling ratio based on actual needs.

## About TAF

- The Taiwan Accreditation Foundation (TAF) is the only national accreditation body in Chinese Taipei.
- TAF accreditation recognizes and promotes organizations by assessing, against international standards and criteria, their competence in providing specific types of certification, calibration, testing, inspection and proficiency testing program services.
- TAF plays an important role in various international accreditation co-operations and has significant connection to other accreditation bodies, regional bodies and accreditation related organizations.
- The TAF accreditation symbol is recognized and supported by Government and industries.



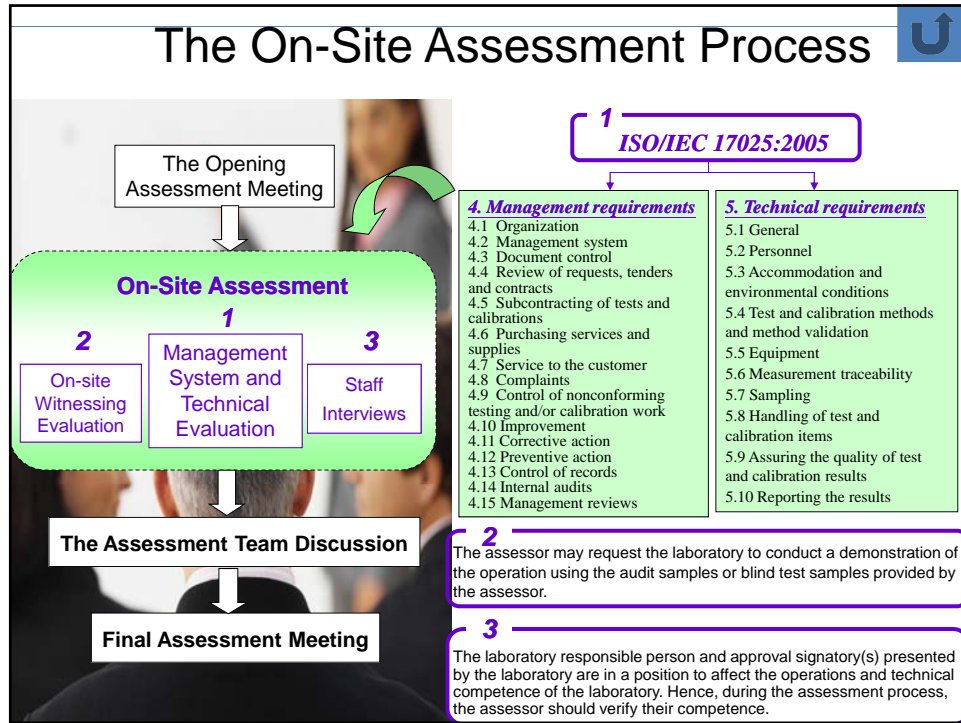




## Document review

- A document evaluation procedure is the procedure by which the Assessment Team evaluates the related documents and records of the laboratory to determine whether the documented systems of the laboratory comply with accreditation criteria. Including:
  - quality manuals
  - operating procedure
  - calibration / testing procedures, etc.
- There are three types of document evaluation result:
  - Significant management or technical information are properly manifested in the documents.
    - ✓ since no major problem is manifested
    - ✓ in the on-site assessment verification process
  - Several significant management or technical information are not manifested in the documents.
  - Many significant management or technical information are not manifested in the documents. The on-site assessment should not be conducted until it is verified that the laboratory has fully amended the pertinent documents.
    - ✓ The laboratory should complete the revision
    - ✓ and then arrangement of on-site assessment matters

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## Concluding Remarks

- The energy policy in Chinese Taipei aims at the integration of 3E (economic development, environmental protection, and energy security) and move toward sustainable development.
- A great achievement to energy efficiency program would require not only an **total-solution technology**, but also a successful **promotion program** and **compliance program**.
- The E.E. labeling compliance program in Chinese Taipei is in the **start up stage** and still need more work to enhance its legal system.
- Chinese Taipei welcome all the economies to Taipei for LED conference on **October this year**.





**Thank you for your attention**



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