#### WE WILL START AT 10:00 AM (CET)

#### SESEC V Webinar 21: China Energy Labelling 2025: Regulations and Standards as of 2025

You are *muted*Use the *Q&A or Chat Panel* to submit your questions
Keep your questions *short and concise*Contact us: <a href="mailto:assistant@sesec.eu">assistant@sesec.eu</a>
Welcome to our website: <a href="mailto:https://sesec.eu/">https://sesec.eu/</a>



Seconded European Standardization Expert in China (SESEC) Project



### China Energy Labelling as of Oct 2025

Oct 21, 2025

#### **SESEC INTRODUCTION**

Partners and Role



SESEC is a visibility project co-financed by five European partners



#### **SESEC Partners**

- European Commission (EC)-The executive body of the European Union; Responsible for proposing legislation, implementing decisions, upholding the treaties and day-to-day management of the EU; DG Grow is the main partner (80%)
- European Free Trade Association (EFTA)-Iceland, Liechtenstein, Norway and Switzerland; Intergovernmental organization set up for the promotion of free trade and economic integration to the benefit of its four Member States; None EU members;
- **CEN**-European Committee for Standardization
- CENELEC-European Committee for Electrotechnical Standardization
- **ETSI**-European Telecommunications Standards Institute









#### SESEC INTRODUCTION

A Project co-funded by EC, EFTA, CEN CENELEC & ETSI

- Promote European and International standards in China
- ❖ Improve contacts between Project Partners and different levels of the Chinese administration, industry and standardization bodies
- ❖ Enhance visibility and understanding of the European Standardization System (ESS) in China.
- Gather regulatory and standardization intelligence
- Undertake technical lobbying



#### Goals

- The SESEC initiative supports **EC policy** and **ESOs strategic objectives** in China.
- Our ultimate goal is the enhancement of EU-China dialogue and cooperation
   in the field of standardization.
- It is notably expected to support the Framework Cooperation
   Agreement in place between the ESOs and SAC.

### Project's Priorities

#### **Priorities of SESEC**

#### Horizontal:

- China Standards 2035
- Belt and Road Initiative
- Standardization Reform
- Institutional Changes in Chinese Government
- Market Access (e.g CCC)

## Digital Transition

- IT in General
- Data
- Artificial Intelligence
- Quantum
- Industrial IoT
- 5G/6G

## **Green Transition:**

- Energy Efficiency
- China RoHS
- Green Product Assessment
- Decarbonization
- New Energy ( e.g.Hydrogen)
- Recycling

# SESEC's English Website For European stakeholders www.sesec.eu



www.sesec.eu



## SESEC V China Standardisation Newsletter

July - August 2025



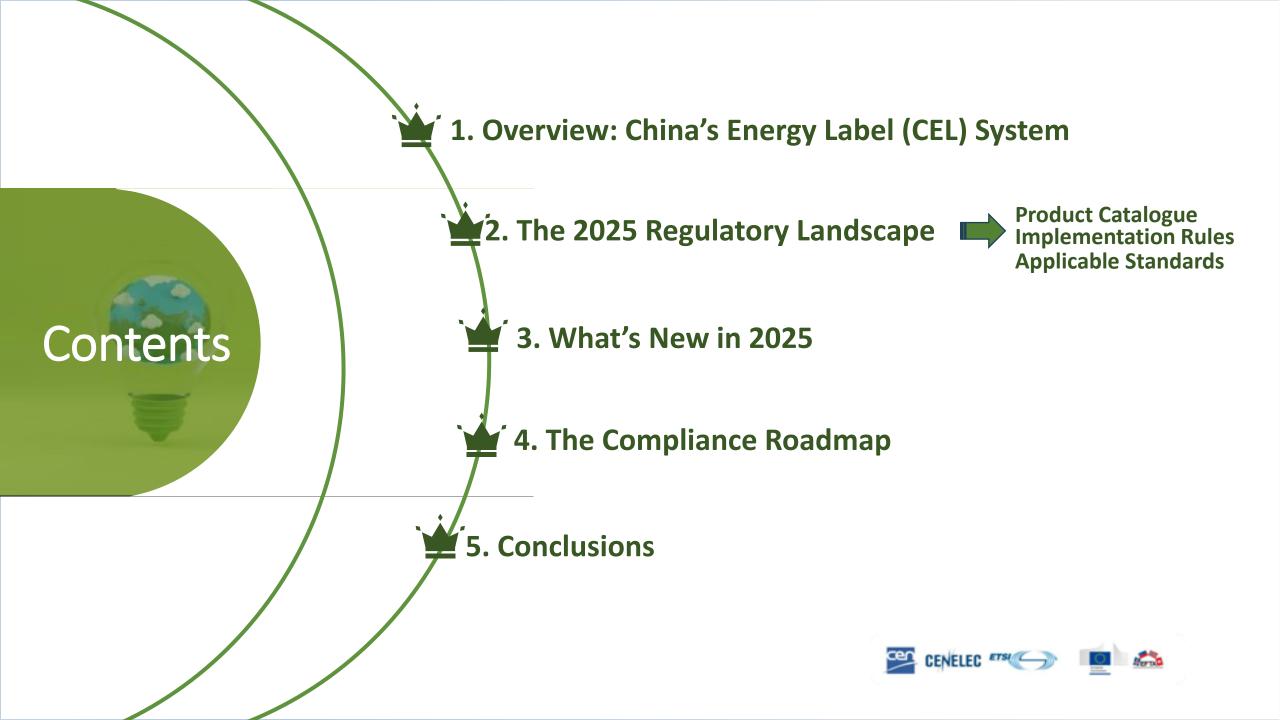
# China Energy Labelling 2025: Regulations and Standards

21st Oct 2025

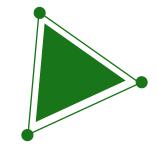




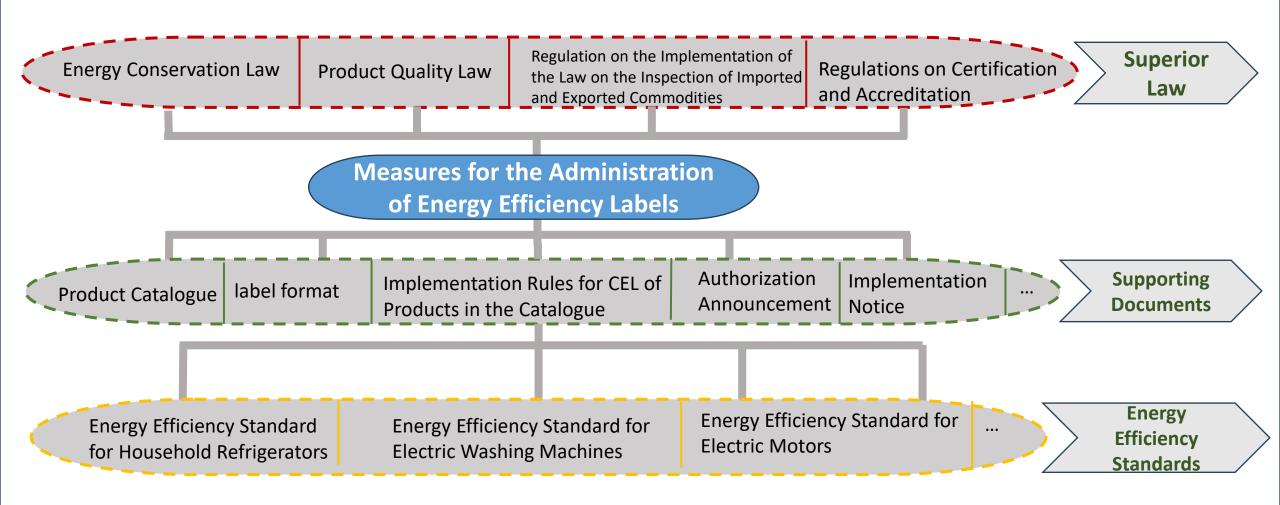




# Overview: China's Energy Label (CEL) System



#### 1. Overview: China's Energy Label (CEL) System



Framework of CEL System





#### 1. Overview: China's Energy Label (CEL) System

#### **Overview of the CEL System**

#### **Implementation Date**

March 1, 2005

#### **Product Scope**

**17** batches of product catalogs have been released, with the latest update of **38** product categories as Sep 2025

#### **Supervision and Penalties**

Supervision: National and local

inspections

Penalties: Rectification, sales bans, fines

#### **Testing**

By manufacturer (self-declaration) or certified 3rd-party bodies

#### **Testing Methods**

Based on relevant national standards

#### **Competent Authorities**

National Development and Reform Commission (NDRC) State Administration for Market Regulation (SAMR)



#### **Label Usage**

Printed & affixed by manufacturer/importer with nationally unified specifications and styles

#### **Authorized Institution**

China National Institute of Standardization (CNIS)

#### Nature of the System

Mandatory for the production, sale, and import of products within the catalogue

#### **Label Type**

Efficiency Grade: 1-3 or 1-5

• Level 1: Most efficient

• Level 3/5: Market access threshold

#### **Technical Basis**

Mandatory energy efficiency standards for end-use energy-consuming products

#### **Implementation Pattern**

Manufacturer self-declaration + label registration + market surveillance





#### 1. Overview: Label Registration - Products and Testing Labs

As of the end of 2024



**26,000+** registered manufacturers

4 million+ registered
product models



According to official data, there were over 26,000 registered manufacturers and more than 4 million registered product models.

Since 2009, the laboratory registration system has been implemented, with over 2,000 institutions participating in energy efficiency label testing, effectively supporting the implementation of the energy efficiency labeling system.



**2,000+** participating testing institutions





#### 1. Overview: Evolution of CEL Appearance



The first edition of CEL



**Currently applied format** since 206

#### **Key Information on the Energy Label Energy Efficiency Grade (1-3):** Clear visual ranking, Grade 1 represents the highest efficiency. Core Efficiency **Metrics Energy Consumption/Key** Indicator: e.g., kWh/cycle, thermal efficiency (%). Product & **Producer Name (or brand) Producer Product Model Number** Identification **Mandatory Standard Number:** References the official GB standard used for testing. Compliance & Verification **QR Code**: Provides instant access to the official public record for verification.





#### 1. Overview: CEL System & EU EED

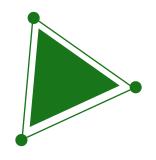
#### **China-EU Energy Efficiency Policy Comparison**

| Dimension               | China Energy Label System (2025 Update)                                                                                                                                                                                         | EU EED & EE1st Principle                                                                                                                                                                |  |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Core Concept            | Guides the market and consumers through product energy efficiency grading                                                                                                                                                       | Establishes energy efficiency as a <b>fundamental principle</b> of energy policy, systematically prioritizing demand-side resources                                                     |  |
| Target Setting          | Supports national carbon deduction goals by improving the efficiency of specific products                                                                                                                                       | A binding target to reduce <b>final energy consumption</b> by <b>11.7%</b> by 2030 compared to 2020 projections                                                                         |  |
| Key Measures            | Publishes the "Product Catalog (2025 Edition)" and implementation rules, covering appliances, motors, etc.                                                                                                                      | Implements a renewables-based and integrated<br>Energy System, sets annual renovation obligations for<br>the public sector (1.9%), and promotes Energy<br>Performance Contracting (EPC) |  |
| Binding Nature          | Mandatory: Products must be labeled and meet minimum standards                                                                                                                                                                  | <b>Mandatory</b> : The 2030 final energy consumption target is collectively binding on Member States                                                                                    |  |
| Implementation<br>Level | Focuses on end-use energy-consuming products                                                                                                                                                                                    | Integrated throughout the entire decision-making process (strategy, planning, investment)                                                                                               |  |
| Synergy & Differences   | <b>Aligned Path</b> : Both recognize energy efficiency as key to the energy transition. <b>Complementary Scope</b> : China's system targets the manufacturing side of products, while the EU directive covers system operation. |                                                                                                                                                                                         |  |





# The 2025 Regulatory Landscape



#### 2. The 2025 Regulatory Landscape-Newly Issued Announcement

On Sept 26, 2025, NDRC and SAMR jointly released announcement on.

China Energy Label Product Catalogue (2025 Edition)

(Document No. FGHRZR [2025] No. 1218)

With this update, China's energy efficiency labeling management now covers 38 product categories, thereby bringing the implementation rules into accordance with current national standards.



#### 国家发展改革委 市场监管总局关于印发 《中华人民共和国实行能源效率标识的产品目录 (2025年版)》及相关实施规则的通知

发改环资规 [2025] 1218号

各省、自治区、直辖市及计划单列市、新疆生产建设兵团发展改革委、市场监管局 (厅、委) ,江苏省工业和信息化厅,

根据《能源效率标识管理办法》(国家发展改革委、原国家质检总局2016年第35号令)规定,国家发展改革委、市场

类似用途厨房电器能源效率标识实施规则》自2025年11月1日起实施,有效期5年。2025年11月1日前出厂或

《永磁同步电动机能源效率标识实施规则》《空气净化器能源效率标识实施规则》自2026年1月1日起实施,有效期5 年。2026年1月1日前出厂或进口的产品,可延迟至2028年1月1日按实施规则加施能效标识。

《微型计算机能源效率标识实施规则》自2026年2月1日起实施,有效期5年。2026年2月1日前出厂或进口的产品,可 延迟至2028年2月1日按实施规则加施能效标识。

《燃气灶具能源效率标识实施规则》自2026年3月1日起实施,有效期5年。2026年3月1日前出厂或进口的产品,可延







#### 2. The 2025 Regulatory Landscape-Product Catalogue

#### As of Oct 2025, CEL Product Catalogue covers $\bf 38$ product categories in $\bf 5$ areas.

#### Household Appliances (10)

Ξ

#### **Refrigeration and Air Conditioning (8)**

- Electric Washing Machines
- Storage-type Electric Water Heaters
- Household and Similar Kitchen Appliances (household induction cookers, electric rice cooker, microwave oven)
- Household Gas Instantaneous Water
   Heaters and Gas Heating Water
   Boilers
- Household Solar Water Heating Systems
- Electric Fans
- Range Hoods
- Gas Stoves
- Household and Similar AC Ventilation Fans
- Air Purifiers

- Household Refrigerators
- Unitary Air Conditioners
- Heat Pumps and Water Chillers
- Room Air Conditioners
- Multi-connected (VRF) Air Conditioning (Heat Pump) Units
  - Heat Pump Water Heaters
- Ducted Air Conditioning Units
- Commercial Refrigerating Appliances (Refrigerated beverage vending machines, remote commercial refrigerated cabinets, self-contained commercial refrigerated cabinets)

#### **Industrial Equipment (9)**

- Small and Medium Three-phase Asynchronous Motors
- AC Contactors
- Displacement Air Compressors
- Power Transformers
- Ventilation Fans
- Welding Machines
- Commercial Induction Cookers
- Permanent Magnet Synchronous Motors
- Cage Three-Phase High Voltage Induction Motor





#### 2. The 2025 Regulatory Landscape-Product Catalogue

As of Oct 2025, CEL Product Catalogue covers 38 product categories in 5 areas.

#### **Electronic Information (6)**

- Monitors
- Copiers, Printers, and Fax Machines
- Flat Panel Televisions and Set-Top Boxes
- Microcomputers
- Projectors
- **Tower and Rack Servers**

#### **Lighting Equipment (5)**

- Self-ballasted Fluorescent Lamps for General Lighting Service
- High-Pressure Sodium Lamps
- LED Products for Indoor Lighting
- LED Luminaires for Road and Tunnel Lighting
- LED Panel Lights for General Lighting



#### 2. The 2025 Regulatory Landscape-Implementation Rules

As of October 2025, the energy efficiency labelling system is governed by a comprehensive set of

implementation rules.

34 Currently Active Rules

CEL 001-2016 Implementation Rules for Energy Efficiency Labelling of Household Refrigerators

CEL 003-2016 Implementation Rules for Energy Efficiency Labelling of Electric Washing Machines

CEL 004—2016 Implementation Rules for Energy Efficiency Labelling of Unitary Air Conditioners

CEL 005—2025 Implementation Rules for Energy Efficiency Labelling of Self-ballasted Fluorescent Lamps for General Lighting Service

•••

#### 42 implementation rules

(1 of 38 has 4 implementation rules)

8 New Rules
Pending
Enforcement

Implementation Rules for Energy Efficiency Labelling of Household and Similar Kitchen Appliances

Implementation Rules for Energy Efficiency Labelling of Microcomputers

Implementation Rules for Energy Efficiency Labelling of Gas Stoves

Implementation Rules for Energy Efficiency Labelling of Permanent Magnet Synchronous Motors

Implementation Rules for Energy Efficiency Labelling of Air Purifiers

Implementation Rules for Energy Efficiency Labelling of Cage Three-Phase High Voltage Induction Motor

Implementation Rules for Energy Efficiency Labelling of Commercial Refrigerating Appliances

CEL 046-2025 Implementation Rules for Energy Efficiency Labelling of Tower and Rack Servers





#### 2. The 2025 Regulatory Landscape-Implementation Rules

| New Rules Pending Enforcement                                                                               | Implementation Effective Date | Validity<br>Period | Transition Period            |
|-------------------------------------------------------------------------------------------------------------|-------------------------------|--------------------|------------------------------|
| Implementation Rules for Energy Efficiency<br>Labelling of Household and Similar Kitchen<br>Appliances      | Nov. 1, 2025                  |                    | Nov. 1, 2025-Nov. 1,<br>2027 |
| Implementation Rules for Energy Efficiency<br>Labelling of Microcomputers                                   | Feb. 1, 2026                  |                    | Feb. 1, 2026-Feb. 1, 2028    |
| Implementation Rules for Energy Efficiency<br>Labelling of Gas Stoves                                       | Mar. 1, 2026                  |                    | Mar. 1, 2026-Mar. 1, 2028    |
| Implementation Rules for Energy Efficiency<br>Labelling of Permanent Magnet<br>Synchronous Motors           | Jan. 1, 2026                  |                    | Jan. 1, 2026-Jan. 1,<br>2028 |
| Implementation Rules for Energy Efficiency<br>Labelling of Air Purifiers                                    | Jan. 1, 2026                  | 5 years            | Jan. 1, 2026-Jan. 1,<br>2028 |
| Implementation Rules for Energy Efficiency<br>Labelling of Cage Three-Phase High<br>Voltage Induction Motor | Apr. 1, 2026                  |                    | Apr. 1, 2026-Apr. 1, 2028    |
| Implementation Rules for Energy Efficiency<br>Labelling of Commercial Refrigerating<br>Appliances           | Apr. 1, 2026                  |                    | Apr. 1, 2026-Apr. 1, 2028    |
| CEL 046-2025 Implementation Rules for<br>Energy Efficiency Labelling of Tower and<br>Rack Servers           | Dec. 1, 2025                  |                    | Dec. 1, 2025-Dec. 1, 2027    |

Among the 8 implementation rules, 2 will enter into force in later 2025 and 6 will be effective in 2026, all of which are equipped with 2year transition period







#### 2. The 2025 Regulatory Landscape-Standards

As of October 2025, 38 Mandatory energy efficiency standards govern the product categories, with 35 currently effective and 3 set to take effect in 2026.

#### **Currently Effective Standards (35)**

GB 12021.2-2015 The maximum allowable values of the energy consumption and energy efficiency grade for household refrigerators

GB 12021.4-2013 The maximum allowable values of the energy, water consumption and grades for household electric washing machines

GB 19576-2019 Minimum allowable values of energy efficiency and energy efficiency grades for unitary air conditioners

GB 19044-2022 Minimum allowable values of energy efficiency and energy efficiency grades of fluorescent lamps for general lighting

GB 19573-2004 Limited values of energy efficiency and rating criteria for high-pressure sodium vapour lamps

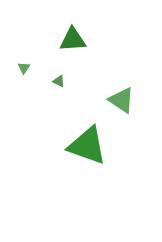
GB 18613-2020 Minimum allowable values of energy efficiency and values of efficiency grades for motors

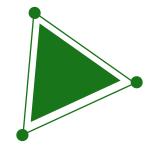
| Standards to be Effective (3)                                                                                                    | Effective<br>Date |
|----------------------------------------------------------------------------------------------------------------------------------|-------------------|
| GB 28380-2025 Minimum allowable values of energy efficiency and energy grades for microcomputers                                 | Feb. 1, 2026      |
| GB 30720-2025 Minimum allowable values of energy efficiency and energy efficiency grades for gas cooking appliances              | Mar. 1, 2026      |
| GB 26920-2024 Minimum allowable values of energy efficiency and energy efficiency grades for commercial refrigerating appliances | Apr.1, 2026       |





# What's New in 2025





#### 3. What's New in 2025

#### 1. Scope Expansion: New Kitchen Category

- √ Household Kitchen Appliances added as a new independent category
- √ Covers rice cookers, microwaves, induction cookers
- ✓ Energy management extends to daily-use kitchen ecosystem



#### 3. What's New in 2025

#### 2. Updated Implementation Rules Effective in 2025

Effective on Feb. 1, 2025 with a 2-year CEL 005—2025 Implementation Rules for Energy Efficiency Labelling of Self-ballasted transition period **Fluorescent Lamps for General Lighting Service** ② CEL 008-2025 Implementation Rules for Energy Efficiency Labelling of Water Chilling (Heat **Pump) Packages** ③ CEL 032-2025 Implementation Rules for Energy Efficiency Labelling of Water-Source **Ground-Source**) Heat Pumps Four rules for Heat Pumps and Water Feb. 1. 2025 with a **4** CEL 033-2025 Implementation Rules for Energy Efficiency Labelling of Lithium Bromide **Absorption Water Chiller (Heater)** Through the systematic (5) CEL 042-2025 Implementation Rules for Energy Efficiency Labelling of Low Amb formulation, revision, and Temperature Air Source Heat Pump (Water Chilling) Packages replacement of a large number Implementation Rules for Energy Efficiency Labelling of Household and Sim of implementation rules, the **Appliances** regulatory framework is CEL 019-2025 Implementation Rules for Energy Efficiency Labelling of Displa ensured to be clear, unified, **Compressors** CEL 020-2025 Implementation Rules for Energy Efficiency Labelling of Power Transand up-to-date. CEL 036-2025 Implementation Rules for Energy Efficiency Labelling of Household and Simus **AC Ventilation Fans** CEL 046-2025 Implementation Rules for Energy Efficiency Labelling of Tower and Rack Servers - Will be Effective on Dec. 1, 2025 with a 2-year transition period







### 3. Standard Upgrades: Higher Efficiency Bar Effective Standards in 2025

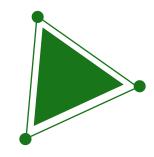
- ① GB 19577-2024 Minimum allowable values of the energy efficiency and energy efficiency grades for heat pumps and water chillers
- ② GB 21456-2024 Minimum allowable values of the energy efficiency and energy efficiency grades for household and similar kitchen appliances
- **3** GB 20052-2024 Minimum allowable values of energy efficiency and the energy efficiency grades for power transformers
- **GB 30253-2024** Minimum allowable values of energy efficiency and energy efficiency grades for permanent magnet synchronous motors
- ⑤ GB 36893-2024 Minimum allowable values of energy efficiency and energy efficiency grades for air cleaner
- **6** GB 43630-2023 Minimum allowable values of energy efficiency and energy efficiency grades for tower and rack servers
- **GB 30254-2024** Minimum allowable values of energy efficiency and energy efficiency grades for cage three-phase high voltage induction motor

#### Updated standards keep driving industrial technological advancement





# The Compliance Roadmap



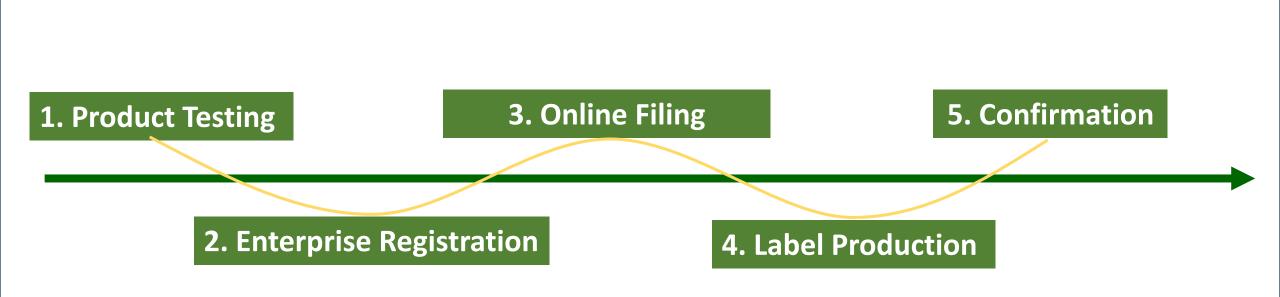
#### 4. The Compliance Roadmap-Core Principle

| Governance Model  Manufacturers self-declare + Label registration + Market surveillance  The manufacturer is the primary responsible party for the accuracy of energy efficiency information. |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
|                                                                                                                                                                                               |  |  |
| Legal Basis  China Energy Labeling Product Catalogue (2025 Edition)  Product-specific Implementation Rules for Energy Efficiency Labelling                                                    |  |  |
|                                                                                                                                                                                               |  |  |
| Official Platform  China Energy Label Website (www.energylabel.gov.cn)  All Label registration procedures are completed on this portal.                                                       |  |  |





#### 4. The Compliance Roadmap-Label Registration Process







#### 4. The Compliance Roadmap-Key Operational Details

#### **Product Testing Phase**

- ✓ Confirm Inclusion: Verify
   the product is listed in the
   China Energy Label Product
   Catalog (2025 Edition)
- ✓ Conduct Testing: Testing must be performed in CNISapproved laboratories, including both in-house and third-party facilities.
- ✓ Obtain Report: Receive the official "Test Report."

#### **Enterprise Registration**

- ✓ Access Portal: Navigate to the official Energy Label Filing System website ( <a href="https://www.energylabel.co">https://www.energylabel.co</a> m.cn/indexEnergy).
- ✓ Register Account: Complete the company registration with all required details.
- ✓ **Log In**: Use your credentials to access the filing system.



#### **Online Filing**

- ✓ **Select Product**: Choose the specific product model for filing within the system.
- ✓ Complete Forms: Fill in the online product filing application form.
- ✓ Upload Documents: Submit the electronic copy of the "Test Report."





#### 4. The Compliance Roadmap-Key Operational Details

**Key Operational Details** 

#### **Label Production**

- ✓ **Download Template:** Go to the "Download Zone" on the official website and download the correct label template for your product.
- ✓ Self-Produce: Manufacturers are responsible for printing and affixing the labels according to the template specifications.

#### Confirmation

- ✓ Public Query: Return to the official website and access the "Filing Announcement Query" section.
- ✓ Search Product: Search for your product by type and name.
- ✓ Verify Success: If your product's filing information is displayed, the process is complete and successful.





#### 4. The Compliance Roadmap-Label Application

#### **Print In-House**

**Accuracy**: Ensure all data (e.g., model, efficiency grade) exactly matches your filed record.

**Compliance**: Adhere strictly to the official specs for size, color, and layout.

Material: Use 80gsm or heavier art paper.

#### **Apply Correctly**

**Placement**: Affix to a prominent location on the product itself or its minimal packaging.

**Durability**: Ensure it is firmly attached and remains legible.





#### 4. The Compliance Roadmap-Critical Reminders & Risk Avoidance

#### Q1: What if we upgrade the product or need to change information?

A: Changes affecting energy efficiency metrics require re-testing and updating the Label registration. For non-core info (e.g., contact details), modify directly in the system.

Q2: Our product already has a top EU energy class (e.g., A). Is that sufficient for the China market?

A: No. This is a critical misconception. The testing standards and calculation methodologies between the EU and China are fundamentally different.

Q3: We have registered our product in the EU's EPREL database. Do we need to do another registration for China?

A: Yes, absolutely. The Chinese Energy Label filing system is a completely separate and independent system from the EU's EPREL.



#### 4. The Compliance Roadmap-Critical Reminders & Risk Avoidance

## Q4: Who is legally responsible for registering the product in China?

A: The registration must be submitted by a legal entity physically located in China.

This can be your:

- ✓ Local subsidiary
- ✓ Official importer
- ✓ Authorized representative

The parent company in Europe cannot directly register the product in the Chinese system. Ensuring you have a compliant local entity is a mandatory step for market access.

### Q5: How to avoid risks from market supervision?

A: **No Misrepresentation**: Ensure data consistency across the Test Report, Label registration Filing, and Physical Product. **Timely Updates**: Update Label registration info promptly when standards or rules change.

**Keep Records**: Safely store the test report, Label registration confirmation, and all related documents.





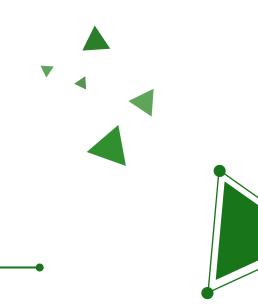
#### 4. The Compliance Roadmap-Summary

- ✓ Confirm First: Check the Directory to confirm product category and applicable rules.
- ✓ Execute Precisely: Test with a compliant lab, ensure authentic data, produce labels correctly.
- ✓ Remain Accountable: Complete the Label registration, accept market supervision, and adapt to changes proactively.





# 05 Conclusion



#### 5. Conclusion-Beyond Compliance - Creating Value

- Meeting Regulatory Requirements: Successfully completing the filing process is a fundamental obligation for the legal sale of products.
- Enhancing Brand Image: It demonstrates a company's commitment to energy conservation and environmental protection, strengthening consumer trust and brand reputation.
- **Promoting Market Fairness**: A unified energy efficiency label provides consumers with clear decision-making information, maintaining a fair competitive market environment.
- **Driving Green Innovation:** It incentivizes manufacturers to continuously improve product energy efficiency, contributing to global sustainable development.





#### <u>China Energy Efficiency Lable Website - 中国能效标识网</u>



