

WE WILL START AT 10:00 AM (CET)

SESEC V Webinar

Green Products Standards and Certifications in China

You are *muted*

Use the *Q&A or Chat Panel* to submit your questions

Keep your questions *short and concise*

Contact us: assistant@sesecc.eu

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Seconded European Standardization Expert in China (SESEC) Project

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 organisation 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



PROJECT PRIORITY DISCUSSION

Current Priority Topics

Horizontal Technical Priorities	Horizontal Political Priorities
Internet of Things	China Standards 2035
Information Security	Belt and Road Initiative
Artificial Intelligence	Standardisation Reform
5G in digitalization of industry	Made in China 2025
Automated Transport	Institutional Changes in Chinese Government
Medical Devices	Market Access
Green Technology	14 th Five-Year Plan

Stepping to Sustainability: Green Products Standards and Certifications in China

SESEC Presentation
5 December 2023



Contents for Today

Overview

1. Energy Efficiency & Labeling
2. Green Design Product

Assessment

3. Green Products Certification
4. Other schemes related to Green Products/Green Design Products
5. Carbon Reductions





Overview

- China has been vigorously promoting the development of green technologies/products.
- This commitment is evident in the efforts of multiple ministries. They tailored various initiatives to tackle different aspects of green technologies/products, including standardization and certifications .
- China's strategy for achieving a "carbon peak and neutrality" accelerated the introduction of carbon reduction tributes into green technologies/products and their standards.



China's initiatives on promoting green products

- "Energy Efficiency Labelling" set up by NDRC in 2004
- "China RoHS 2.0" launched by MIIT in 2018
- "Green Design (former Eco-design) Product Assessment" kicked off by MIIT in 2019
- "Green Building Materials Certification" by MoHURD in 2019
- "Green Product Certification" by SAMR in 2020
- "Green Express Packaging Certification" by the State Post Bureau in 2020
- and more.....

Energy Efficiency Labeling

"Administrative Measures for Energy Efficiency labeling", by NDRC + SAMR, *first released in 2004, updated in 2016*

- NDRC, together with SAMR formulates and promulgates the "**Catalogue** of Products of Implementing Energy Efficiency Labeling".
- They stipulates uniformly applicable standards, implementation rules, and energy efficiency label.

- **Self- Declaration.** Producers and importers of energy-using products included in the Catalogue may use their own testing laboratories or entrust third-party inspection and testing institutions to test the products and determine the energy efficiency level of the products in accordance with the mandatory national standards designated by NDRC and SAMR

The **Catalogue** has contained

42

Products





SAC TC20 has developed

66

Mandatory national standards (current effective).

Some are under revision recently, including permanent-magnet synchronous motor, cage three-phase high voltage induction motor, power transformer, and water chillers.

Among the 66 standards,

42 are adopted by

"Catalog of Products subject to Energy Efficiency Label"



20 are adopted by

"Advanced, Energy-Saving, and Admission Levels of Key Energy Consuming Products"

- Admission level == current energy efficiency level necessary for market access
- Energy-saving level == energy efficiency level for market access 3-5 years later
- Advanced level == the highest energy efficiency level at present

4 standards that haven't been adopted by above schemes must be followed as well due to their mandatory nature.

Green Design Product Assessment

"Made in China 2025" released by the State Council in 2016

- Build a green manufacturing system: support enterprises to implement green strategy, green standards, green management and green production.
- strengthen green oversight and improve the system of regulations and standards for energy conservation and environmental protection.

"Guidelines for Establishing Green Manufacturing Standards System" released by MIIT + SAC in 2016

- The green manufacturing standards system consists of comprehensive basis, green products, green factories, green enterprise, green park, green supply chain and green evaluation and service.

MIIT has selected standards for

159

Products

Green Design Product Assessment



2

General Rules

159

Product-specific Standards

6

National and Sector TCs

13

Associations

- MIIT publish and frequently update the "*list of green design product assessment standards*". The list now contains 2 general standards + 159 product-specific standards.
- 2 general standards: GB/T 32161-2015 (general assessment rules) and GB/T 32162-2015 (labelling requirements).
- 159 product-specific standards include a number of national standards and sector standards developed by 6 national and sector TCs, and more association standards developed by 13 associations.
- All these standards can support green design product assessment activities in 9 sectors, namely, petrochemicals, iron and steel, Non-ferrous metals, building materials, machinery, textile, communications, packaging, and light industry.

These standards have been used in

- 1. MIIT's "green manufacturing enterprises recommendation" initiative.**
 - 2. MIIT's "green design industrial product demonstration enterprise" initiative.**
- Passing the "green design products" assessment is a key indicator for their manufacturers to obtain the title of "green manufacturing enterprises" or "green design industrial product demonstration enterprise".

Green Products Certification

"Opinions on Establishing a Unified Green Product Standards, Certification, Label System"
released by the State Council in 2016

- The existing environmental protection, energy saving, water saving, recycling, low-carbon, regenerative and organic product certifications shall be integrated into a unified green product certification system

- SAMR, together with relevant departments, will issue the green product certification label, the certification catalog, and relevant standards in a unified manner.
- (Enterprises should) carry out green product certification according to the standards in the standard lists.

"Administrative Measures for the Use of Green Product Label" released by SAMR in 2019

- Provide mark for the certification

The **Catalogue**
has contained

19

Products



Standardization

- A “National Green Product Assessment Standardization General Working Group” (hosted by CNIS) has been set up in 2016 to coordinate standardization
- **19 product-specific standards** + GB/T 33761-2017”
General principles for green product assessment”
- GB/T 33761-2017 is under revision. Its draft for comments issued for opinions from 18 October to 18 December 2023.
 - Aims to enhance the consideration of low-carbon attributes, to support “carbon peak and neutrality” goals.
 - Will incorporate "Low Carbon Attribute Indicators", "Encouraging Requirements Indicators", "Product Carbon Reduction Report Framework and Requirements," as well as "Product Carbon Footprint Quantification Method and Declaration Report Framework."



3



Accreditation of Certification Bodies

In April 2023, China National Accreditation Service for Conformity Assessment (CNAS) released “*CNAS-SC28:2023 Plan for Accreditation of Green Product Certification bodies*”. The document provides specific requirements to accredit certification bodies for the Green Product Certification.

CNAS-SC28:2023 adopts a number of national and sector standards, including not only general rules, but also requirements dedicated to green products certification:

- *RB/T241 requirements for laboratory in the fields of green product testing*
- *RB/T242.1 Requirements for green products certification bodies—Part 1: General requirements*
- *RB/T242.2 Requirements for green products certification bodies—Part 2: Environment protection and resources conservation characteristics*
- *RB/T242.3 Requirements for green products certification bodies—Part 3: Renewable energy utilization*

New Standards Underway

Green product certification - General specification for intelligent mobile terminal (draft for review)

Specifications for China Green product certification mark and certification service data (drafting)

Specifications for business data management of green building materials product certification (drafting)

--- possible to be adopted by CNAS-SC28 in the future

China Eco-design/Green Products/Green Design Products

**Eco-design
Products**

Vs

Green Products

Vs

**Green Design
Products**

- In 2015, the national standard GB/T 32161-2015 “General Principle for Eco-design Products assessment”, defined the concept of “Eco-design product” *.
- In 2017 national standard GB/T 33761 “General principles for green product assessment”, Green product was defined with similar concept of Eco-design products.
- No definition for “Green Design products” , but GB/T 32161-2015 “General Principle for Eco-design Products assessment” was always referred when talking about Green design products in China.
- SARM Unified Green Products system vs. MIIT Green Design Assessment - Same functions, different schemes – **will be unified by SAMR**

* Section 3.2 and 3.3 of GB/T 32161-2015 “General Principle for Eco-design Products assessment”

*Section 3.1 in GB/T 33761 “General principles for green product assessment”,

China RoHS

“Administrative Measures for Restriction of Hazardous Substances in Electrical and Electronic Products” released by 8 ministries in 2016

- The state establishes the conformity assessment scheme for restricting the use of hazardous substances in electrical and electronic products.
- Electrical and electronic products included in the China RoHS Catalog must comply with relevant national standards and sector standards.

“Catalog of Compliance Management for the Restriction of Hazardous Substances in Electrical and Electronic Products (First Batch)” released by MIIT in 2018

- 12 products are subject to China RoHS scheme

“Implementation Arrangements for the Conformity Assessment System on Restriction of Hazardous Substances in Electrical and Electronic Products” released by MIIT + SAMR in 2019

The Catalogue has contained

12

Products



Standardization

Many standards have been adopted, with GB/T 26572-2011 (limiting values), SJ/T 11364-2014 (Label), and GB/T 26125-2011 (test methods) at its core.

Other important standards include, among others,

- GB 37876-2019 for conformity assessment
- GB 31274-2014 for management system
- SJ/T 11692-2017 for samples
- SJ/T 11467-2014 for risk assessment
- SJ/Z 11388-2009 for use period

Amendment No.1 to GB/T 26572 will be published soon. It will add four new substances, namely, DBP, DIBP, BBP, DEHP into China RoHS

Revision of SJ/T 11364 is underway.



Green Building Material Certification

“Guiding Opinions on promoting standards, certification and marking of green building materials products” released by SAMR + MoHURD + MIIT in 2017.

- The ministries develop green building material standards and certification in a unified manner.

“Implementation plan for green building materials product certification”, released by SAMR + MoHURD + MIIT in 2019

- Certification bodies shall meet the requirements of GB/T 27065 and RB/T 242
- Certification catalog and implementation rules are developed by SAMR + MoHURD + MIIT
- Labeling according to *“Administrative Measures for the Use of Green Product Label”*

The **Catalogue** has contained

51

Products



Standardization

- CNCA released “*CNCA-CGP-13 General rules for implementation of green building material certification*” in 2020. It states that the certification shall be conducted according to standards developed by the China Association for Engineering Construction Standardization (CECS).
- 51 CECS association standards, i.e., T/CECS 10025~10075, has been adopted, for the green assessment of 51 building material products.
- CECS are developing more assessment standards such as busway, double-sided stainless steel composite material, smart switch, smart socket and control equipment, water-based wood paint, fireproof window, etc. These standards are likely to be adopted in the future.



Green Express Packaging Certification

"Opinions on the implementation of green express packaging certification" released by SAMR + the State Post Bureau in 2020

- The ministries jointly establish a technical expert group for the certification, publish the certification catalogue and certification rules.
- Labeling according to *"Administrative Measures for the Use of Green Product Label"*

"Green Express Packaging Certification Product Catalogue (First batch)" and ***"Green Express Packaging Product Certification Rules"*** released by SAMR + the State Post Bureau in 2020

- 10 packaging materials subject to the certification

State Post Bureau issued ***"Technical requirements for assessment of green express packaging products"***

The Catalogue has contained

10

Products





Carbon Labeling Certification (To be established)

"Implementation Plan for the Coordinated Use of Quality Certification in Achieving Carbon Peak and Neutrality Goals", released by SAMR in **Oct 2023**

(China shall) have basically established by 2025 a robust carbon peak and neutrality certification system that comprises both direct and indirect carbon-related certifications.

The "Direct system" includes products' **carbon labeling certification**, carbon-related management and service certification, etc.

The "Indirect system" contains **green product certifications**, energy management system certifications, and environmental management system certifications.

"Opinions on Accelerating the Establishment of Product Carbon Footprint Management System", released by five ministries in **Nov 2023**

(the State) will introduce about 50 carbon footprint accounting rules and standards for key products by 2025, and basically complete the establishment of the **national product carbon labeling certification** system.

Carbon-related Standardization

On 1 Apr 2023, 11 ministries jointly released the “*Guidelines for Establishing the Standards System for Carbon Peak and Neutrality*”, outlining a standardization plan for China’s “carbon peak and neutrality” objectives.

Regarding product standards, the document highlights:

1. explore the formulation of carbon emission accounting and carbon footprint standards for key products
- 2 formulate and revise the assessment standards for green products
3. improve mandatory energy efficiency standards for key products and equipment such as household appliances, rural heating equipment, refrigeration and cold chain logistics equipment, industrial equipment, lighting products, data centers, new and renewable energy equipment, and machinery manufacturing equipment.

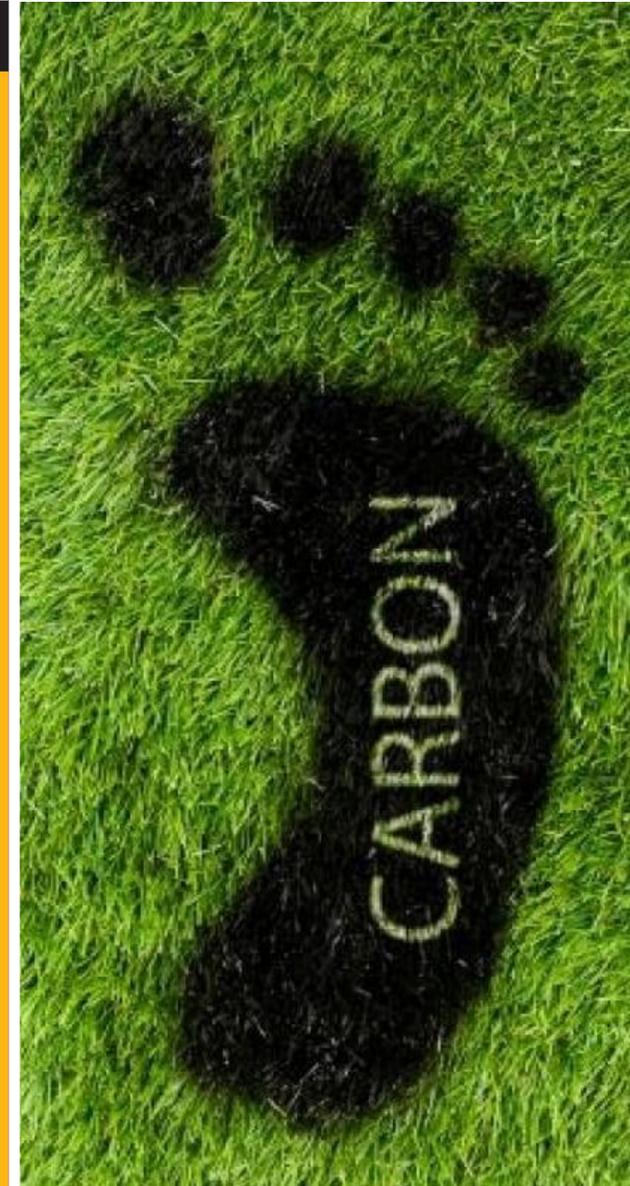
China’s carbon footprint Standards

ISO 14040:2006 has been identically adopted as GB/T 24040-2008 (Life cycle assessment - principles and frameworks); ISO 14044:2006 as GB/T 24044-2008 (Life cycle assessment - requirements and guidelines); and ISO 14025:2006 as GB/T 24025-2009 (Environmental labels and declaration)

Several product-specific life cycle assessment standards are developed, such as GB/T29156 for metal-plastic decorative panel, GB/T29157 for float glass, GB/T30052 for steel products, GB/T 41638.1 for bio-based plastics, etc.

SAC/TC207(Environmental Management) and SAC/TC548 (Carbon Emission Management) are jointly calling for comments on the national standard “*Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification (Draft for Comments)* “, from 2 Nov to 6 Jan.

----- the first general standard for carbon counting
----- based on ISO 14067:2018 but have some modification





S U M M A R Y

Summary

- Many initiatives co-exist, they are independent of each other.
- These initiatives have focuses on
 - i) different aspects of green product development, like energy saving, hazardous substance control, environment impact, etc., and
 - ii) different types of products, like electrical and electronic products, consumer products, building materials, package, etc.
- SAMR intends to unify them to a single system. This is reflected in SAMR successfully convincing the owners of China RoHS, the green building material certification, and the green express packaging certification to adopt a unified certification mark.
- There is still a long way to go to establish a unified green product certification system in China. Introduction of a new carbon labeling certification will make the situation more complex.





Summary

- The carbon (footprint) labelling certification may put new burden on enterprises, as China is desperately pursuing its “carbon peak and neutrality” in a tight time period.
- Energy Efficiency Labelling and China RoHS are legally binding, while others are voluntary. Nevertheless, all these govt-led initiatives have great influence on the Market.
- Standards are the foundation of all these initiatives. Keeping a close eye on them can help reduce compliance risk and facilitate business, especially those adopted by compulsory ones.
- A number of key standards are at call-for-comment stage. EU stakeholders are encouraged to make comments.



