



Asia-Pacific Economic Cooperation

THE 1ST WORKSHOP ON HARMONIZATION OF ENERGY EFFICIENCY TEST METHODS OF REFRIGERATORS

**(EWG 04 2014A – Technical Reference on Harmonization of Energy Efficiency Test
Methods of Refrigerators Toward the New IEC 62552 among APEC Region)**

**THE AFTERNOON OF 21ST OCTOBER 2014
BEIJING, CHINA**

**HELD IN CONJUNCTION WITH THE
44TH MEETING OF THE APEC EGEE&C**

Organizer: China Standard Certification Co., Ltd of China National Institute of
Standardization

Supporter: China National Energy Agency

INTRODUCTION OF THE WORKSHOP

1. BACKGROUND

The use of refrigerator accounts for a significant share of households' energy consumption in APEC region. And the energy saving potential is huge in many developing economies, following the results of a study conducted by the International Copper Association and the United Nations Environment Programme that if energy efficiency standards for refrigerators in ASEAN economies could be raised to EU level, the potential related energy savings corresponding to the use of these refrigerators could reach 8,531 GWh per year.

Energy efficiency standards are commonly used in different economies to promote energy savings of household appliances. Testing methods represent one of the most fundamental elements in applying energy efficiency standards. Currently, these testing methods differ greatly among APEC economies. This creates technical barriers to free trade in the region, and to further improvement of energy efficiency.

The new IEC 62552 standard has developed one performance standard for household cooling appliances which will be used worldwide for energy efficiency classes (labels) and minimum efficiency performance limits. Since the test procedures and test conditions for the determination of the energy consumption under IEC 62552-3 are quite different compared to the standards currently used by APEC economies, the values for energy consumption will be different for all existing energy labels. For example, CSC's has conducted a preliminary study to compare testing methods for frost-free refrigerators with a volume of 300L in China with the new IEC standard. The study suggests that the energy consumption corresponding to the IEC standard application is 10% higher than the one obtained when using the GB (Chinese national) standard. Hence, a detailed comparative study looking both at written standards and laboratory performance will greatly help economies understand the differences, and help them in the harmonization process. There are already signs that economies will apply the IEC standard: China has distributed a draft for the energy label which includes the most important definitions of the new standard (freezer unloaded, 16 degree and 32 degree ambient temperature etc), and Australia has announced via an official paper that it is planning to use the new standard in line with the revision of their energy label in 2015.

The proposed project will review the various testing methods for refrigerators used in APEC economies with the view to identify differences among these testing methods. In addition, the project will investigate the compatibility between these methods and the soon-to-be released IEC (International Electrotechnical Commission) 62552-3 (Household Refrigerators Appliances-Characteristics and Test Methods) in order to facilitate the harmonization of APEC economies testing methods with the IEC upcoming standard.

In the proposed project, approaches of comparative laboratory testing with standard refrigerator samples, especially the frost-free refrigerators will be taken to evaluate actual

performance and the difference in results between the used standard and the new IEC, and additionally, testing results from different economies will also be considered.

2. INTRODUCTION OF THE TECHNICAL WORKSHOP FOR THE PROJECT IN OCT 2014

Within support from the APEC EGEEC and EWG, and China NEA, the half-day workshop on technical working group meeting for the project will be held with the aims of:

- Exchange experiences and research results on the energy efficiency test methods of refrigerators in the world and the APEC region;
- Sponsoring economies suggestion on implementing the project following the project work plan.

The workshop will be organized by China Standard Certification Co., Ltd (CSC).

The workshop on specific themes and topics will allow in-depth discussions among participants.

AGENDA(DRAFT)

HALF-DAY WORKSHOP: afternoon of Oct 21, 2014

VENUE: the 5th meeting room in China Academy of Building Research (CABR) (No. 30 of the North 3rd ring road East)

14:00-14:10	Welcome address – By APEC EGEE&C Chair
14:10-14:20	Opening address – By Ms Zhang Shaojun, from CSC.
14:20-14:40	Work Plan of APEC project- “Technical Reference on Harmonization of Energy Efficiency Test Methods of Refrigerators Toward the New IEC 62552 among APEC Region” – by Contractor
14:40–15:00	Tea Break (Group Photo) Economies experience sharing
15:00~15:30	– Presentation from CHEARY China, Ms Qi Yun (Q&A 5 min)
15:30~16:00	– Presentation from Japan, Mr Minoru TEMMYO (Q&A 5 min)
16:00~16:30	– Presentation from Germany, Mr Wei Hong (Q&A 5 min)
16:30~17:00	– Presentation from Australia, Mr Christopher Evans (Q&A 5 min)
17:00 ~17:30	– Summary
18:00	Dinner