

Global Standards - solar heating and cooling ISO TC180 solar energy

Ken Guthrie

Chair ISO TC180



Outline

- ISO TC180
 - Structure
 - Standards

- ISO 9806:2013 Solar energy - Solar thermal collectors - Test methods

ISO TC180

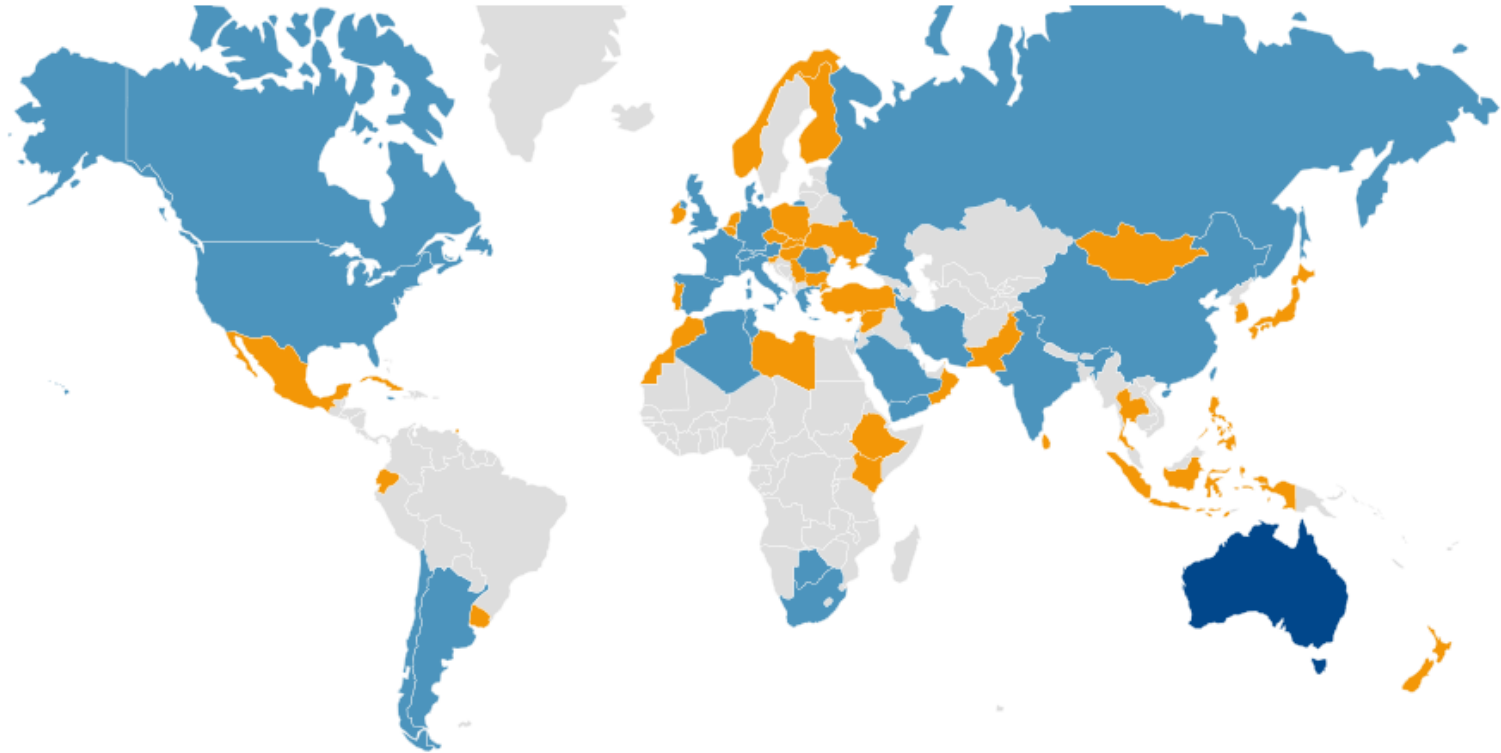
Secretariat	Standards Australia (SA)
Chair	Mr Ken Guthrie (Australia)
Secretary	Ms Erandi Chandrasekare, Standards Australia
Scope of the committee	Standardization in the field of solar energy utilization in space and water heating, cooling, industrial process heating and air conditioning.

16 ISO standards published by the TC and its SCs

Structure

Group	Title	Secretariat/ Convenor
TC 180/WG 1	Nomenclature	Convenor: TBA
TC 180/WG 3	Collector components and materials	Convenor: China He Zinian
TC 180/SC 1	Climate - Measurement and data	Secretariat: Australia Wolfgang Finsterle
TC 180/SC4	Systems - Thermal performance, reliability and durability	Secretariat: USA Jim Huggins

Members



● Secretariat

● Participating Countries (29)

● Observing Countries (40)

ISO TC180 Meeting Beijing October 2014



System performance standards

Reference	Title
ISO 9459-1:1993	Solar heating -- Domestic water heating systems -- Part 1: Performance rating procedure using indoor test methods
ISO 9459-2:1995	Solar heating -- Domestic water heating systems -- Part 2: Outdoor test methods for system performance characterization and yearly performance prediction of solar-only systems
ISO 9459-4:2013	Solar heating -- Domestic water heating systems -- Part 4: System performance characterization by means of component tests and computer simulation
ISO 9459-5:2007	Solar heating -- Domestic water heating systems -- Part 5: System performance characterization by means of whole-system tests and computer simulation

Collector standards

Reference	Title
ISO 9806:2013	Solar energy- Solar thermal collectors-Test methods
ISO 22975-3:2014	Solar Energy - Collector components and materials - Part 3: Absorber surface durability
ISO/DIS 22975-1	Solar Energy - Collector components and materials - Part 1: Evacuated tubes – Durability and performance
ISO/DIS 22975-2	Solar Energy - Collector components and materials - Part 2: Heat-pipes for solar thermal applications – Durability and performance
Future work	
22975-4	Part 4: Glazing material durability and performance
22975-5	Part 5: Insulation material durability and performance

ISO 9806:2013, Solar energy - Solar thermal collectors - Test methods

- **Completed and published in November 2013**
- **IEA SHC Task 43 *Solar Rating and Certification* includes promoting uptake worldwide as the basis of Global Solar Certification**

INTERNATIONAL
STANDARD

ISO
9806

First edition
2013-11-15

Solar energy — Solar thermal
collectors — Test methods

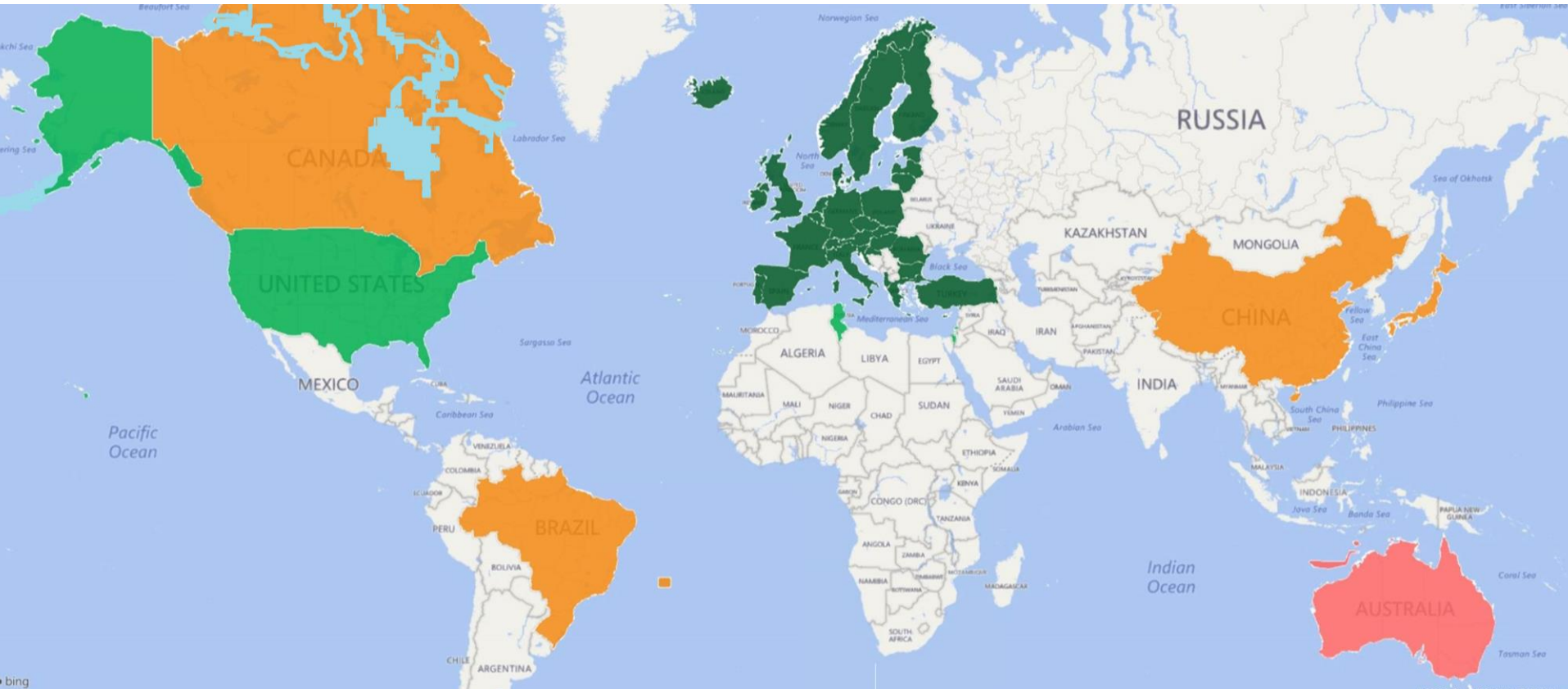
Énergie solaire — Capteurs thermiques solaires — Méthodes d'essai

Task 43 Questionnaire

Will ISO 9806 be used?

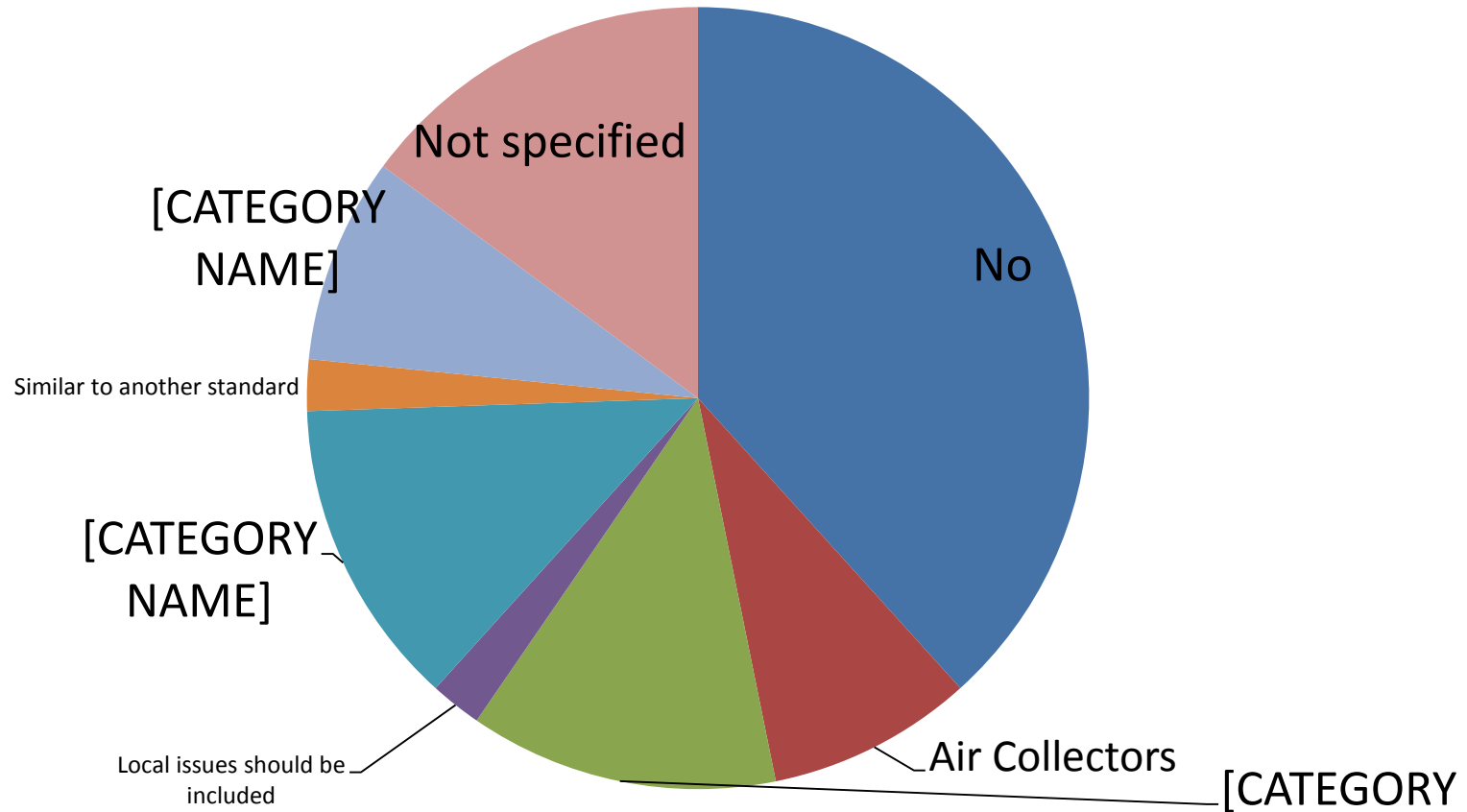
- Are you able to comment on the possible adoption of ISO 9806-2013 “Solar energy – Solar thermal collectors - Test methods” on behalf of your country?
- Is it likely that your country will take up or recognize the new ISO 9806 standard?
- What changes would need to be made in order for your country to adopt ISO 9806-2013 or to improve the standard?

Results - Likely adoption



Changes to improve ISO 9806

Are there any changes to ISO 9806 that you consider would improve that Standard?



EN/ISO9806 Future revision

- CEN TC312 will lead a revision of EN/ISO 9806 under the Vienna agreement.
- Expected to start in 2015.
- Non EU countries need to be active in the process.

THANK YOU



www.setransformation.com.au

www.iso.org/iso/iso_technical_committee?commid=54018