




Program Status Report from the APEC-ESIS Secretariat


42nd Meeting of the APEC Expert Group on Energy Efficiency & Conservation

Nicole Kearney
Senior Associate, CLASP
November 12, 2013
Bangkok, Thailand

APEC ESIS Website

apec-esis.org [Visit APEC](#)



APEC Economies

Click on an economy below to access a detailed view of Standards and Labeling Programs in the APEC region.


Australia	Brunei Darussalam	California
Canada	Chile	China (PRC)
Chinese Taipei (Taiwan)	Hong Kong	Indonesia
Japan	Korea (ROK)	Malaysia
Mexico	New Zealand	Papua New Guinea
Peru	Philippines	Russia
Singapore	Thailand	United States
Vietnam		

News & Publications

News

- SEAD Global Efficiency Medal Competition Recognizes Most Energy Efficient TVs in Europe
2012-09-14 [READ MORE](#)
- China Ramps up Market Transformation Initiatives to Promote Energy Efficient Appliances
2012-08-21 [READ MORE](#)
- APEC Compliance Workshop Facilitates Dialogue and Collaboration on MV&E in the Asia-Pacific Region
2012-07-11 [READ MORE](#)
- CNIS Launches Major Consumer Awareness Campaign for China Energy Label
2012-07-10 [READ MORE](#)
- Clean Energy Ministerial Roundtable Highlights Opportunities to Accelerate Market Transformation for Super-Efficient Appliances
2012-05-21 [READ MORE](#)

About APEC-ESIS





clasp CLASP Global S&L Database

clasponline.org/en/Tools/Tools/SL_Search

making appliance energy efficiency the new global standard

Who We Are | What We Do | Where We Work | Resources | Tools | RFPs & Partnerships

Search CLASP's Global S&L Database [+ SHARE](#)

CLASP's Global S&L Database is an online resource that allows policy makers and S&L practitioners to compare policies and regulations across countries and by product; to explore specific information about those policies; and to view and understand the legislative framework and history of S&L by country and economic region.

TOOLS

- Search Global Standards & Label Information
- Economy Finder
- Policy Analysis Modeling System
- Tools for Getting Started
- Ask an Expert

By Product Group | By Economy

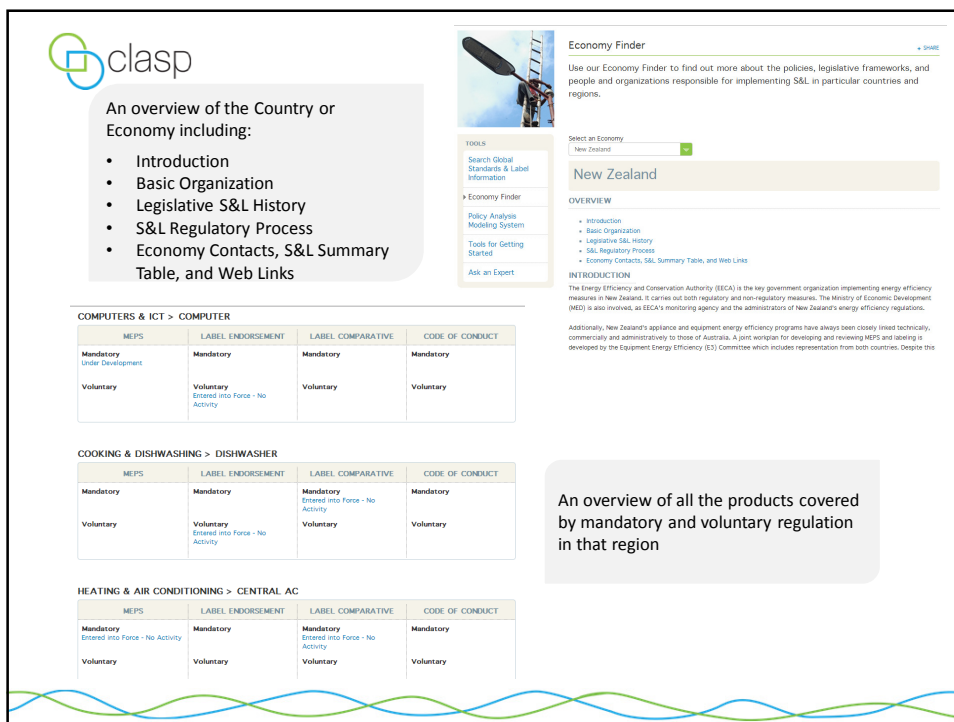
All Products
 Computers & ICT
 Compressors
 Refrigeration
 Miscellaneous
 Laundry

Lighting
 Standby
 Ventilation, Fans & Blowers
 Cooking & Dishwashing

Building Materials
 Water Heating
 Motors
 Heating & Air Conditioning

Power Supply & Power Conversion
 Pumps
 Office Equipment
 Televisions, Displays, & Audiovisual

Clear All or **Browse**



clasp Economy Finder [+ SHARE](#)

Use our Economy Finder to find out more about the policies, legislative frameworks, and people and organizations responsible for implementing S&L in particular countries and regions.

Select an Economy: **New Zealand**

New Zealand

OVERVIEW

- Introduction
- Basic Organization
- Legislative S&L History
- S&L Regulatory Process
- Economy Contacts, S&L Summary Table, and Web Links

INTRODUCTION

The Energy Efficiency and Conservation Authority (EECA) is the key government organization implementing energy efficiency measures in New Zealand. It carries out both regulatory and non-regulatory measures. The Ministry of Economic Development (MED) is also involved, as EECA's monitoring agency and the administrators of New Zealand's energy efficiency regulations.

Additionally, New Zealand's appliance and equipment energy efficiency programs have always been closely linked technically, commercially and administratively to those of Australia. A joint workshop for developing and reviewing MEPS and labeling is developed by the Equipment Energy Efficiency (E3) Committee which includes representation from both countries. Despite this

An overview of the Country or Economy including:

- Introduction
- Basic Organization
- Legislative S&L History
- S&L Regulatory Process
- Economy Contacts, S&L Summary Table, and Web Links

COMPUTERS & ICT > COMPUTER

MEPS	LABEL ENDORSEMENT	LABEL COMPARATIVE	CODE OF CONDUCT
Mandatory <small>Under Development</small>	Mandatory	Mandatory	Mandatory
Voluntary	Voluntary <small>Entered into Force - No Activity</small>	Voluntary	Voluntary

COOKING & DISHWASHING > DISHWASHER

MEPS	LABEL ENDORSEMENT	LABEL COMPARATIVE	CODE OF CONDUCT
Mandatory	Mandatory	Mandatory <small>Entered into Force - No Activity</small>	Mandatory
Voluntary	Voluntary <small>Entered into Force - No Activity</small>	Voluntary	Voluntary

HEATING & AIR CONDITIONING > CENTRAL AC

MEPS	LABEL ENDORSEMENT	LABEL COMPARATIVE	CODE OF CONDUCT
Mandatory <small>Entered into Force - No Activity</small>	Mandatory	Mandatory <small>Entered into Force - No Activity</small>	Mandatory
Voluntary	Voluntary	Voluntary	Voluntary

An overview of all the products covered by mandatory and voluntary regulation in that region




Global S&L Database

- Online resource that allows policy makers and S&L practitioners to compare policies and regulations across countries and by product.
- Includes **48 economies** and two regional associations (APEC and SEAD)
- Covers **17 product** categories of appliances, equipment and lighting
 - Sectors include residential, commercial, industrial or multi-sector
- Distinguishes policy types, policy status, and effective dates of implementation
 - Policy types include MEPS, Endorsement label, Comparative label
- Links to:
 - Implementing Organization
 - Policy or legislation document or website



ESIS Status Summary


- **Content Updates:**
 - 2013 research completed to update all countries and economies listed in the standards and labeling (S&L) database
 - New project focused on S&L policies in the Middle East: Egypt, Iran, Israel, Jordan, UAE and two new additions with Qatar and Saudi Arabia
 - 48 economies now included which account for over 91% of the world's total energy consumption
 - "SAVE TO EXCEL" feature allows users to easily export query results into an excel format to facilitate analysis of data on an aggregated level




Current Funding

- The Super-efficient Equipment and Appliance Deployment (SEAD) Initiative of the Clean Energy Ministerial currently provides funding for the following activities:
 - Hosting and maintenance of ESIS webpage;
 - Update of economy content in the database;
 - CLASP’s continued role as ESIS Secretariat; and,
 - CLASP’s participation at APEC meetings

- Currently ESIS has received no additional economy contributions



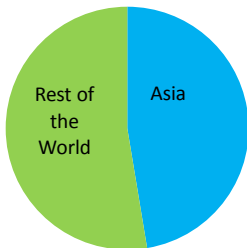



Use of S&L Database

Since December 2011:

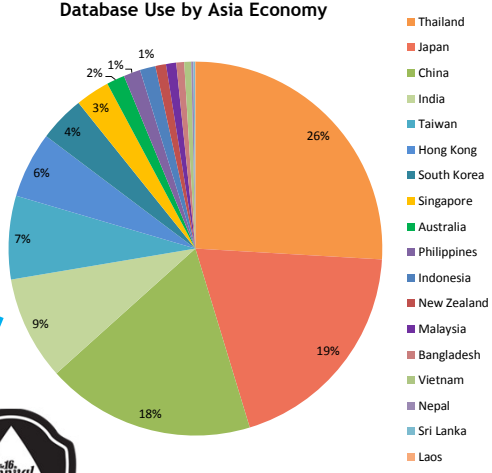
- Visitors from **77 countries**, economies, or territories
- Over 15,000 page views
- Cited in technical analysis from IEA 4E, LBNL, and US DOE


CLASP S&L Database: Use by Region






Database Use by Asia Economy









2013 S&L Database Updates

Economy	Status
Australia	Completed
Brunei	Completed
Canada	Completed
Chile	Completed
Chinese Taipei	Completed
Hong Kong China	Completed
Indonesia	Completed
Japan	Completed
Korea	Completed
Malaysia	Completed
Mexico	Completed



2013 S&L Database Updates

Economy	Status
Papua New Guinea	Completed
People's Republic of China	Completed
Peru	Completed
Philippines	Completed
Russia	Completed
Singapore	Completed
Thailand	Completed
United States	Completed
Vietnam	Completed

If APEC EGEE&C Member information is not accurate, please contact Nicole Kearney at nkearny@clasponline.org with corrections and edits



Thank you!

Please contact Nicole Kearney at nkearney@clasponline.org
with any questions or comments



SEAD-funded APEC-CAST Project Updates

42nd Meeting of the APEC Expert Group
on Energy Efficiency & Conservation

Nicole Kearney
Senior Associate, CLASP
November 12, 2013
Bangkok, Thailand





APEC- CAST

Primary objectives:

- Promote harmonized test procedures
- Support development of aligned energy efficiency standards and labels (S&L) in APEC economies
- Fund one or more projects each year over a 5 year period.




Review of Proposal Selection

Objective: Identify projects that can be launched in early 2014 and that will advance S&L development in APEC economies.

Collaboration between EGEE&C and the Super-efficient Equipment and Appliance Deployment (SEAD) Initiative:


- SEAD-funded APEC-CAST initiative
- Leverage technical expertise provided through the SEAD international technical collaborations

Administrator: The Collaborative Labeling and Appliance Standards Program (CLASP), as the SEAD Operating Agent.



Current APEC CAST Projects


SEAD-funded APEC CAST Project	APEC Economy Sponsor	Project Partners	Status
Evaluation and proposal for internationally aligned test methods and performance requirements for televisions	Australia Department of Climate Change and Energy Efficiency (DCCEE)	DCCEE, CLASP, Intertek	New Project Implementing Partner selected
Study of repair best practices and energy efficiency improvement potential through repair of electric motors	China National Institute of Standardization (China)	CNIS, CLASP, Econoler, International Copper Association	In Progress Task 1 completed Task 2 in progress
Evaluation and initial draft of harmonized test methods and level definitions for heat pump water heaters	Australia Department of Climate Change and Energy Efficiency (DCCEE)	DCCEE, CLASP, George Wilkenfeld and Associates, Korea Testing Laboratory, International Copper Association	Completed Next steps: Uptake and dissemination of recommendations



Televisions

Project description:


- Conduct technical analysis of regional, national and international test methods and performance requirements for TVs
- Conduct technical analysis of existing test loops associated with IEC 62087:2011
- Conduct technical analysis of automatic brightness control (ABC) for televisions
- Conduct technical analysis of existing voluntary and mandatory standards for television energy performance
- Propose internationally-comparable and aligned test methods and efficiency class definitions for TVs to be considered by policy makers setting MEPS and energy labels



Televisions

Project schedule:


Timeline	Activity
November 2013	Project kick-off
January 2014	Report comparing existing TV test methods and proposals to improve and align them
March 2014	Report outlining all energy performance levels suitable for segmenting the televisions sold in the APEC region
Early 2014	Workshop to present reports and seek feedback in conjunction with an IEC 62087 technical committee meeting
November 2014	Final report and Dissemination Workshop alongside APEC EGEE&C Meeting



Motor Repairs

Project description:


- Identify current best practices in motor re-winding
- Conduct market overview to compare best practices to existing practices used in APEC economies (focus on 5 economies: China, Japan, New Zealand, US, Vietnam)
- Conduct modeling and simulation to identify energy efficiency improvement potential of motor re-winding best practices
- Provide recommendations for the development of standards, highlighting the potential for energy savings through repair and preventative maintenance of installed motors



Motor Repairs

Project schedule (delayed due to initial lack of info for Task 1):

Timeline	Activity
September 2012	Project kick-off
October 2013	Report Task 1: Report of motor repair best practices and in-country case studies
November 2013	Report Task 2: Draft market overview
January 2014	Report Task 3: Analysis of energy efficiency improvement potential
March 2014	Final Report and Dissemination Workshop




Motors Repairs

Initial Findings

- In-Country case studies carried out in five representative APEC economies – China, Japan, New Zealand, the United States, and Vietnam
- Literature review of motor repair practices and field research through in-person interviews at motor repair facilities and with key stakeholders
- US most advanced repair practices and repair technology
- Japan and New Zealand also very advanced – some cultural differences and attitudes to motor repair differ
- Vietnamese and Chinese shops use both old and modern technology, with some good practices, still room for improvement
- Repair practices also vary depending on repair shop size





Heat Pump Water Heaters

Project description:

- Analyze existing regional, national, and international test methods, as well as test methods and standards in development
- Test 3 heat pump water heaters using 5 different test methods to compare strengths and weaknesses of each
- Recommend internationally-comparable test methods, standards, and efficiency level definitions



Heat Pump Water Heaters

Project schedule:

Timeline	Activity
October 2012	Project kick-off
March 2013	Technical analysis of existing test methods report distributed for stakeholder review
12 April 2013	International consultation workshop
February – June 2013	Testing and modeling and simulation
September 2013	Report dissemination workshop at EEDAL, Portugal
October 2013	Final report published online



Heat Pump Water Heaters

Project outcomes

- Seven relevant national / regional standards identified with some similarities between test methods
- Canadian and US standards more or less identical
- Results differ so much that results of one standard do not indicate efficiency of same water heater tested under a different standard
- Moving towards greater elaboration and difference rather than simplicity and convergence



Heat Pump Water Heaters

Project recommendations to improve harmonization

- Adopt a single common test method:
 - ISO agreed in principle to develop a new test standard for HPWHs
 - However, lengthy process and no guarantee ISO method will be adopted by economies with existing standards
- Work towards **internationally consistent approach** to testing:
 - Common method of testing for basic performance
 - Gradual process of confidence building and harmonization
 - Economies looking to adopt standards should consider existing test methods
 - Determine sets of HPWH MEPS efficiency levels → EL1 (low) to EL4 (high)



Heat Pump Water Heaters

Project recommendations to improve harmonization (2)

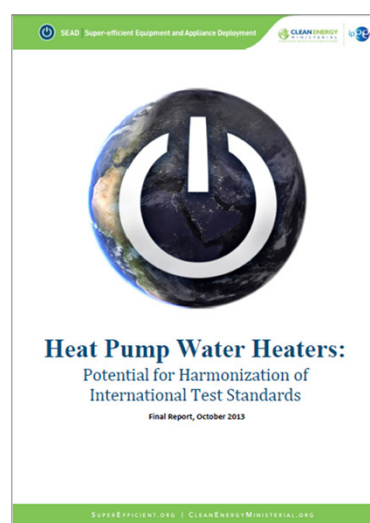
- Venues for implementation of recommendations:
 - ISO TC86/SC6 – broad coverage, but lengthy process
 - IEC – also broad coverage, so far only focused on electric water heaters
 - APEC/CAST – could formally endorse harmonization work and commit resources to support an expert to sit on appropriate technical committee
 - SEAD – could also formally endorse / support harmonization work
- Next Steps:
 - Agree a Harmonization Protocol
 - Develop standard product classification and basic test conditions (as in final report) to improve consistency
 - Undertake round-robin testing and analyze test results
 - Develop and validate a simulation model
 - Incorporate final test method and simulation method into standards



Project Dissemination

Heat Pump Water Heater Report and Workshop Presentations

- Available on the [SEAD website](#)
- Soon available on APEC EGEE&C website
- Will be promoted on [CLASP website](#)





Thank you!

Please contact Nicole Kearney at
nkearney@clasponline.org with any questions or comments

For more information on the Super-efficient Equipment and Appliance Deployment (SEAD) Initiative
and published reports please visit: www.superefficient.org

