

Promotion of higher efficient equipment in ASEAN







Funded by



Program team



Program implementation team













Funding



Steering Committee



ASEAN EE&C Sub-Sector Network

Advisory Committee

















Achievements to date



Country chapters assembling strategic stakeholders established ASEAN standards for air conditioners testing method harmonized to ISO 5151:2010 Regional policy roadmap to increase MEPS for ACs endorsed by ASEAN Ministers of Energy Meeting (June 2015) National policy roadmaps to increase MEPS and promote higher efficient ACs to be adopted in Thailand, Vietnam, Indonesia, Malaysia, Philippines, Myanmar, Laos in Jul-Aug 2016 **Capacity building program for local AC manufacturers** Capacity building for testing laboratories on ISO 17025

Consumer awareness campaigns and training of sales persons on benefits of higher efficient ACs to be implemented Aug-Dec 2016

Country chapters



Strategic stakeholders to support the implementation of national activities

INDONESIA

- Ministry of energy and mineral resources
- Accreditation agencies: SUCOFINDO, Baristan, TUV Rheinland
- Lab testing: B4T, Panasonic, Polytron)
- GABEL Indonesia Electronic Producers Association
- Air-con Manufacturer (Panasonic Indonesia, LG, Samsung, Sharp, Daikin Indonesia, Polytron, Maspion)
- Ministry of Trade, Ministry of Industry, Customs (Under Ministry of Finance)

MALAYSIA

Chairman: Energy Commission (Suruhanjaya tenaga) – Regulator

- MACRA Malaysia Air Conditioning & Refrigeration Association
- Department of Environment, NRE
- MEADA Malaysia Electrical & Electronics Distributors Association
- SIRIM Berhad standard working organization
- KeTTHA Ministry of Energy, Green Technology and Water
- SIRIM QAS International Conformity Assessment Body

VIETNAM

- General Directorate of Energy,
 Ministry of Industry and Trade
- Standards Dept., The Directorate for Standards, Metrology and Quality of Viet Nam
- Vietnam Standards and Quality
 Institute
- Refrigeration and Air conditioning Association
- Quatest 1
- Customers Association

PHILIPPINES

- Department of Energy, DOE
- Department of Trade and Industry Bureau of Products and Standards, DTI-BPS
- Department of Environment and Natural Resources -Environmental Management Bureau, DENR-EMB
- Philippine Appliance Industry Association, Inc, PAIA

THAILAND

- DEDE, Ministry of Energy
- TISI, Thai Industrial Standards Institute, Ministry of Industry
- EEI, Electrical and Electronic Institute
- EGAT, Electricity Generating Authority of Thailand
- FTI, Federation of Thai Industries
- Air con Association

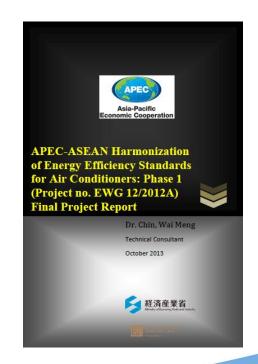
ASEAN Standards Harmonized



Achievements & plan

All ASEAN member states to use ISO 5151:2010 for the testing method for air conditioners by 2017 Adoption of ISO 16358 by 2020





Standards
harmonization
technical report,
October 2013

Standards Harmonization Technical Working Group meetings, 2013 EU-APEC-METI

ASEAN Regional Policy Roadmap endorsed



Achievements

Regional Policy Roadmap endorsed by 10 ASEAN member states (Ministers of Energy Meeting, AMEM) ASEAN Member states have agreed to increase MEPS for ACs over time

December 2014, Jakarta **Steering Committee** meetings June 2014 Manila



Capacity building for testing labs



Achievements

Training for testing laboratories from Thailand, Malaysia, Indonesia, Philippines, Vietnam Increased capacity to perform testing according to ISO5151:2010 and implement ISO 17025





<u>Completed</u> - Participants from Labs in 5 ASEAN countries including representative from ACE attended ISO 17025 training workshop, 17-19 August 2015, in Bangkok

Capacity building for local AC manufacturers



Ongoing

Training on advanced technology to increase energy performance of ACs



Done - Conference on Trend and Micro Groove Technology for Air con industry on May 22nd, 2015 July 2016: training of small-diameter copper tubes for heat exchanger

National consumer awareness campaigns



Objectives

Train sales persons in department stores on benefits of higher efficient ACs

Disseminate Smart Phone App and online Calculator to help understand economic benefits of higher efficient ACs

Government endorsement

THAILAND
Ministry of Energy

VIETNAMMinistry of Industry and

Trade

INDONESIA

Ministry of energy and
mineral resources

PHILIPPINES
Department of Energy

MALAYSIA Energy Commission

International support









Strategic partnerships

Consumer associations

Retail chains

Testing laboratories

AC manufacturers



ASEAN SHINE Lighting Chapter



- Under the leadership of UNEP
- Work program:
 - Work Package 1: ASEAN Regional Lighting Market Assessment (IIEC)
 - Work Package 2: Harmonized test standards for Lighting products
 - Work Package 3: ASEAN Regional Lighting Policy Roadmap for MEPS
 - Work Package 4: National Lighting Policy Roadmap and Capacity Building Activities for Policy Makers
 - Work Package 5: Capacity Building on monitoring, verification and enforcement for Compliance and Enforcement Authorities
 - Work Package 6: Capacity Building for Local Lighting Manufacturers
 - Work Package 7: Awareness Raising Campaigns and Activities for End-users

ASEAN SHINE in the future



- ASEAN SHINE platform maintained after end of EU grant (Dec2016):
 - Project Management Office by ICA (Bangkok)
 - Advisory Committee
 - Steering Committee
- Scope of work expanded from Air Conditioners to Energy Efficiency at large; expansion to Renewable Energy under consideration
- Objective: market transformation
- Approach:

Standards harmonization

CB for testing labs

CB for local manufacturers

Regional Policy Roadmaps

National Policy Roadmaps

End-users awareness campaigns



ASEAN SHINE in the future







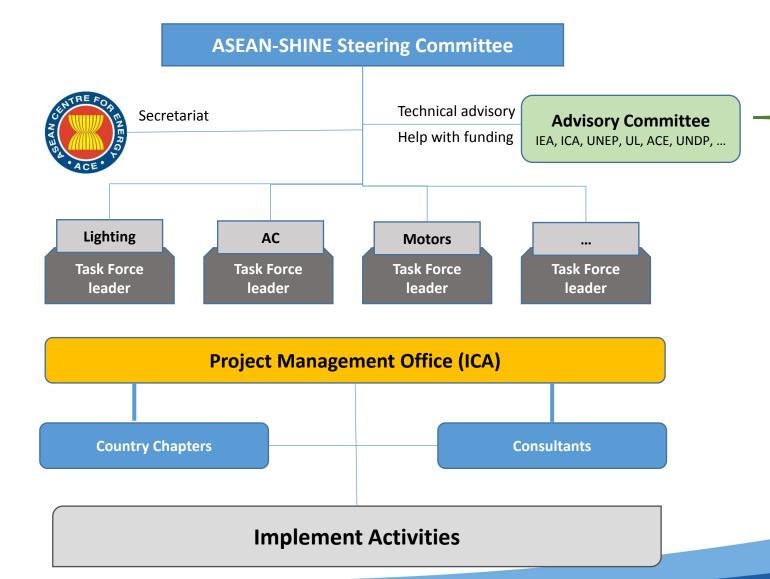












ASEAN SHINE in the future



- Action plans for motors, transformers, refrigerators, solar PV and solar thermal under preparation
- Regional stakeholders consultation workshop 26 July in Hanoi
- Draft regional policy roadmaps to be finalized within 1 year
- Action plans to be presented to the Donors Coordination Conference in October in Bangkok



Pierre Cazelles

Director – Partnerships Asia

International Copper Association

Email: pierre.cazelles@copperalliance.asia

Mobile: +86-159-0100-7376