

# **Super-efficient Equipment and Appliance Deployment (SEAD) Initiative**

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# Overview

- SEAD is an international market transformation initiative to accelerate the deployment of super-efficient equipment and appliances.
- Partners work together in voluntary activities to:
  - “**raise the efficiency ceiling**” by pulling super-efficient appliances and equipment into the market through cooperation on measures like incentives, procurement, awards, and R&D investments;
  - “**raise the efficiency floor**” by working together to bolster national or regional policies like minimum efficiency standards;
  - “**strengthen the foundations**” of efficiency programs by coordinating technical work to support S&L activities.

# Overview

- SEAD is an activity (task group) within the International Partnership for Energy Efficiency Cooperation (IPEEC); multilateral agreement under the Clean Energy Ministerial
- Cooperative Agreement established with the Collaborative Labeling and Appliance Standards Program (CLASP) to serve as SEAD Operating Agent
  - Initial US support of >\$4M; pledge of \$20M over 5 years
  - ClimateWorks Foundation (CWF) co-funding for CLASP global research and country programs complementary to SEAD
  - Sweden support of \$135K start-up funding
- Significant in-kind support from SEAD participants via provision of policy and technical experts

# Current SEAD Participants



Australia



Brazil



Canada



European  
Commission



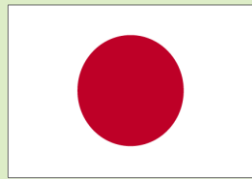
France



Germany



India



Japan



Korea



Mexico



Russia



South Africa



Sweden



United Arab  
Emirates



United Kingdom



United States

**\*\*Note: China is an Observer to the SEAD Initiative**

# Participation & Coordination

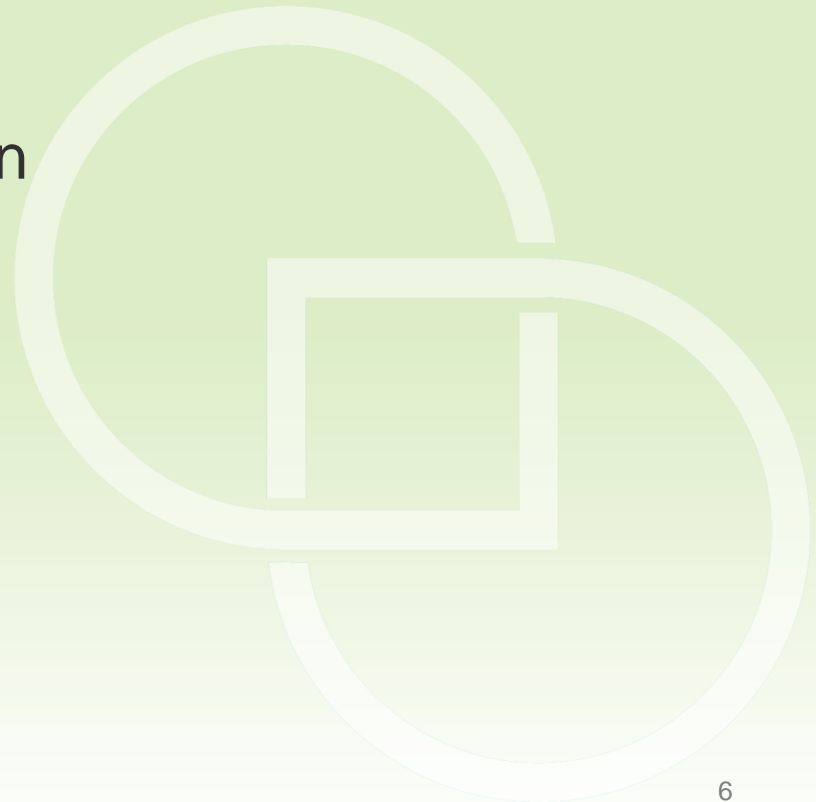
- Participants include experts in national governments, labs (e.g. LBNL), NGOs (e.g. CLASP).
  - Partners engage in specific areas of interest (not required for every activity).
  - All partners participate in information-sharing efforts, such as program schedules and technical details.
  - Information collected and created through SEAD is shared among SEAD partners. Some information is shared with the global public.
- Coordination with the Asia-Pacific Economic Cooperation (APEC) EGEE&C on ESIS and CAST projects, and with the International Energy Agency (IEA) 4E implementing agreement

# Primary Objectives

- Engage stakeholders (governments, private sector, NGOs) to tap the large potential for global energy use reduction, consumer savings, and environmental benefits available through improved equipment and appliance efficiency.
- Provide a framework through which government experts, and others as appropriate, can engage in peer-to-peer collaboration on equipment and appliance efficiency topics.
- Inform IPEEC and other high-level international dialogues of the benefits and opportunities for action on appliance and equipment efficiency.

# Activities Overview

- Cross-cutting Technical Analysis
- Integrative Analysis Subgroup
- Awards
- Standards & Labels Collaboration
- Procurement
- Incentives



# Cross-Cutting Technical Analysis

- Develop Bottom-up Energy Analysis System (BUENAS) – a tool to enable comparison of energy savings potential and impacts of appliance efficiency measures across SEAD countries
- Develop [www.superefficient.org](http://www.superefficient.org) – a web portal for global appliance and equipment energy efficiency information sharing. Publicize important national analyses, research, standards, etc. to encourage harmonization.

*Active WG participants as of September 2011:*





# SUPEREFFICIENT.ORG

The website of the Super-efficient Equipment and Appliance Deployment (SEAD) Initiative

ACTIVITIES

PRODUCTS

REGIONS



## GET EFFICIENT

Transforming markets with energy saving appliances and equipment

### WELCOME TO SUPEREFFICIENT.ORG

*The website of the Super-efficient Equipment and Appliance Deployment (SEAD) initiative.*

An initiative of the Clean Energy Ministerial and a task within the International Partnership for Energy Efficiency Cooperation, SEAD...

### HIGHLIGHTS

#### Ministers discuss progress on appliance efficiency goals

Energy ministers assessed the results of SEAD's first year at their second Clean Energy Ministerial meeting in Abu Dhabi on 6-7 April 2011.

#### Appliance and equipment efficiency can displace 600 power plants by 2030

Technical analysis indicates energy efficiency savings in SEAD economies alone can save about 1,800 terawatt hours per year of electricity and 21 exajoules (EJ) of primary energy in two decades.

#### Street lighting toolkit facilitates procurement

The SEAD street lighting toolkit is now available and provides a quick, easy tool to help procurement officials deploy energy-efficient street lights.

# Cross-Cutting Technical Analysis

- Perform global, product-specific technical analysis as a foundation for all other SEAD activities
  - Televisions (completed)
  - Room Air Conditioners (final draft)
  - Ceiling Fans (final draft)
  - Domestic Refrigeration (new)
  - Other products TBD
- Prepare country- and product-specific analysis derived from global analysis as a means to support policy recommendations

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# Cross-Cutting Technical Analysis

- Integrative Analysis Subgroup
  - Provide a forum to share experiences conducting gap analyses
  - Share national processes for prioritizing products for developing and implementing S&L programs
  - Provide country-specific data to advance the development of BUENAS

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# Awards

- 2012 awards announced for flat-panel televisions
  - 4 regions x 3 TV size categories + global winners
  - Commercially available and emerging technology products to be evaluated
  - Testing per internationally-recognized IEC 62087 test procedure
  - Manufacturers from all countries may nominate products if sold in an Awards region
- Future award categories under consideration:
  - Computers and Monitors (Draft rules under development)
  - Electric Motors (Draft rules under development). Discussed with motors industry at 2011 EEMODS conference.

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# Awards

- Round-robin testing (RRT) will be performed to qualify test labs for verification testing prior to start of competition
- Test labs will be identified for each 4 regional TV awards: Australia, Europe, India, North America. RRT will include 6 sample products.
- RRT results will be of value to the international efficiency community.
- Would like to explore coordination with China through CNIS television RRT effort.

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# Standards & Labels

- Product collaborations to encourage peer-to-peer information sharing and collaboration
- Collaboration membership consists of national government representatives and technical experts.
- Encourage faster development of harmonized, stringent performance standards, labels, test methods, and metrics

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# Standards & Labels

- Collaborations have been established for 6 product categories and 1 energy-use mode of interest to SEAD member countries
  - Commercial Refrigeration (In progress, led by Korea)
  - Computers (In progress, led by UK)
  - Distribution Transformers (In progress, led by Canada)
  - Motors (In progress, led by USA)
  - Network Standby (In progress, led by Australia)
  - Solid State Lighting (Participants identified, Chair TBD)
  - Televisions (In progress, led by USA)

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# Standards & Labels

- Compile policy resources for key products
  - Posted on [superefficient.org](http://superefficient.org) as of August 2011, and will be updated continuously by product collaborations
  - Content for additional products to be developed in 2011-2012
- Catalog S&L program timelines to identify opportunities for collaboration – next updates late 2011
- Opportunity to form new product collaborations (e.g. regional, bi-lateral)
- Opportunity to conduct new activities to inform global harmonization – including contributions from APEC

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# Procurement

- Develop best practice guidelines for procurement program design and implementation
  - Examine existing procurement processes
  - Identify common barriers to procuring energy efficient products
  - Provide recommendations for improving existing processes and adopting effective standards for sustainable procurement
- Identify and promote innovative techniques for procurement program evaluation

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# Procurement

- Develop tools to assist public procurement officials with identification and assessment of energy efficient product options (e.g. street lighting tool available for download)
- Analyze international procurement specification coverage to identify “plug and play” opportunities to fill gaps
- Identify best-in-class efficient procurement requirements and compare with current international standards

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# Incentives

- Coordinate efforts with IPEEC Global Cooperation on Utility Delivery of Energy Efficiency (GCUDEE)
- Goals and activities:
  - Assess opportunities for collaboration to improve, expand, and coordinate appliance and equipment incentive programs
  - Survey of existing incentive programs and product specific technical analysis to assess opportunities
  - Initiate and facilitate collaboration and information exchange

# Thank You!

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