International Cooperation on Advancing Equipment and Appliance Efficiency

The Superefficient Equipment and Appliance Deployment (SEAD) Initiative

What is SEAD?

- SEAD is a *global market transformation initiative* for deploying super-efficient equipment and appliances.
- SEAD has three goals:
  - To raise the efficiency ceiling
    - Pull super-efficient appliances and equipment into the market through cooperation on measures like incentives, procurement, awards, and R&D investments
  - To raise the efficiency floor
    - Work together to bolster national or regional policies like minimum efficiency standards
  - To strengthen the foundations of efficiency programs
    - Coordinate technical work to support these activities

SEAD Partners


Australia

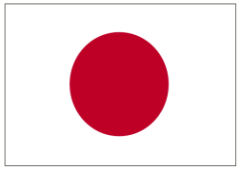

Canada


European Commission


France


Germany


India

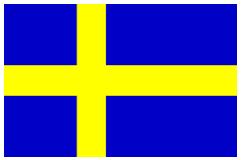

Japan


Korea


Mexico


Russia


South Africa


Sweden


United Kingdom


United States

SEAD is an initiative within the Clean Energy Ministerial and the International Partnership for Energy Efficiency Cooperation

SEAD Organization

- SEAD has five working groups. Members don't have to participate in all groups. Each group holds separate meetings.
  - WG1: Cross-cutting technical analysis
    - Develop tools and facilitate information exchange to inform prioritization of products for standards, incentives, and procurement
  - WG2: Global efficiency awards
    - Develop awards to recognize the most efficient commercially available and prototype appliance that is available internationally in each targeted category

U.S. DEPARTMENT OF ENERGY | National Development and Reform Commission (NDRC)

Lawrence Berkeley National Laboratory

How is SEAD Organized?

- WG3: Incentives
  - Develop and implement internationally coordinated incentive programs for highly efficient products
- WG4: Standards and Test Procedure Coordination
  - Accelerate national efforts to implement product efficiency standards;
  - Increase compatibility of test procedures
  - Enhance compliance with regulatory requirements
- WG5: Procurement
  - Develop awards to recognize the most efficient commercially available and prototype appliance that is available internationally in each targeted category

Highest value for Chinese participation

Benefits of Multilateral Cooperation

- For standards and test procedure coordination:
  - Technical work on standards in one country can be shared with others, thereby avoiding duplicative work.
  - Working together on coverage and timing of similar national standards can help to shape global markets, making more efficient products more widely available to everyone.
  - Harmonization of test procedures enhances global trade.
- International cooperation on awards, incentives and procurement leads to wider availability of higher efficiency products.

SUPEREFFICIENT.ORG

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

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 seeks to engage governments and the private sector to transform the global market for energy-efficiency equipment and appliances. This site, still in very active development, aims to serve as an online hub for appliance efficiency policy, connecting experts and policymakers with technical resources and each other. Read more about who we are and what we do here.

OUR WORK

STANDARDS & LABELS

Appliance efficiency standards under development in SEAD economies as of April 2011 have the potential to save more than 170 terawatt hours per year of electricity by 2030 – as much as is produced by about 60 mid-size (500 megawatt) power plants – and 3,600 petajoules per year of primary energy. These rules could tap about 10-15% of the total appliance efficiency potential in these economies.

HIGHLIGHTS

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 will facilitate procurement

Coming in June, the SEAD street lighting toolkit will provide a quick, easy tool to help procurement officials deploy energy-efficient street lights.

ASK AN EXPERT

STAY UPDATED

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ENERGY EFFICIENCY STANDARDS AND LABELS

Appliance efficiency standards currently under development in SEAD economies have the potential to save more than 170 terawatt hours per year of electricity by 2030 – as much as is produced by about 60 mid-size (500 megawatt) power plants – and 3,600 petajoules per year of primary energy. These rules could tap about 10-15% of the total appliance efficiency potential in these economies.

By requiring all products on the market to be energy efficient, standards usually produce substantial financial savings for individual and business consumers. Those 3,600 petajoules of potential final energy savings in 2030 translate into about US$50 billion/year of savings on energy expenditures. Energy labels supplement standards, educating consumers about the benefits of efficient products, enabling incentives and procurement to be focused on the most efficient products, and encouraging manufacturers to introduce new products, incorporating even more efficient technologies.

STANDARDS AND LABELS IN SEAD ECONOMIES

All SEAD partners already have in place minimum energy performance standards or labels for a range of products. The standards and labeling programs being implemented by a few countries now cover more than 40 distinct product categories, accounting for the majority of energy use in residential and commercial buildings, as well as significant energy uses in other sectors. The table below indicates the standards and labeling programs for several selected product areas in SEAD economies. For more details and more economies, search CLASP's Worldwide Summary of Standards & Labeling Programs.

Table: Status of Minimum Energy Performance Standards (S) and Labels (L) for Selected Product Areas

	AUS	CAN	EC	IND	JPN	KOR	MEX	ZAF	USA
Conventional Incandescent (Phase Out)	S	S	S			S	S	sv	S
Clothes Washers	L	S, L		Sv, Lv		S, L	S, L	lv	S, L
Residential Refrigeration	S, L	S, L	S, L	S, L	L	S, L	S, L	Lv	S, L
Commercial Refrigeration	S	S				S, L	S, L		S
Computers	S			sv, lv	L	L			
Distribution Transformers	S	S		S, L	L				S
Fans		S		Sv, L		S			
Motors	S	S	S	sv, lv		S, L	S, L		S
Room ACs	S, L	S, L	S, L	S, L	L	S, L	S, L	Sv	S
Standby Power			S				S	Sv	S
Televisions	S		S	sv, lv	L				L

ASK AN EXPERT

To seek expert advice on questions related to appliance efficiency policy, submit a question and it will be directed to an appropriate technical expert.

ASK AN EXPERT

RELATED RESOURCES

CLASP Standards and Labels Online Information Clearinghouse

Standards & Labeling Guidebook for Appliances, Equipment and Lighting

Compliance Counts: A Practitioner's Guidebook on Best Practice Monitoring, Verification, and Enforcement for Appliance Standards & Labeling

Note that links to external sites do not imply endorsement by SEAD, SEAD's partner governments, or the SEAD Operating Agent.

Some aspects of SEAD build on work China has been involved in through the APP and APEC. We would welcome Chinese participation in SEAD.

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