Super-efficient Equipment and Appliance Deployment (SEAD) Initiative

Governments working together to save energy, turn knowledge into action and advance global markets to encompass energy efficient products

What is the SEAD Initiative?

The Super-efficient Equipment and Appliance Deployment (SEAD) Initiative is a voluntary collaboration among governments working to promote the manufacture, purchase, and use of energy-efficient appliances, lighting, and equipment worldwide. SEAD is an initiative under the Clean Energy Ministerial (CEM) and the Energy Efficiency Hub (EE Hub) and is coordinated by the International Energy Agency.

At its core, SEAD is about governments working together to save energy, turning knowledge into action to advance global market transformation for energy efficient products.

SEAD’s 25 participating governments collaborate to accelerate and strengthen the design and implementation of appliance energy efficiency policies and related measures.

Product energy efficiency policies and programmes are proven, cost-effective methods for lowering energy costs for consumers and increasing the resilience of economies. They are often the lowest-cost tool available to governments for achieving significant emission reductions.

Why does SEAD matter?

The Problem

Global energy consumption by plug-in appliances continued to increase in 2020, driven by increasing ownership and use. New products and technologies are expanding access to modern conveniences and increasing quality of life across the globe. However, the associated growth in energy demand poses a challenge for governments trying to satisfy demand while continuing to address air pollution and combat climate change. The need for more efficient appliances is greater than ever.

The Solution

Energy-efficient equipment and appliances benefit both consumers and governments. Increasing efficiency lowers energy costs, enhances energy security, helps expand access to energy services and reduces harmful emissions. In particular, recent evidence shows that standards have helped halve the energy consumption of key appliances in the longest-running appliance efficiency programmes.

How does SEAD work?

Since its inception in 2009, SEAD has developed tools, conducted technical analyses, and provided member governments with access to high-quality research and expertise around a variety of product areas and market transformation activities. The Initiative convenes regular discussions focused on specific policy and technology areas, and facilitates cooperation among member governments to leverage existing resources and maximise policy impacts.

The SEAD Initiative supports this effort through three main work streams.
The Product Efficiency Call to Action

In the lead-up to the UN Climate Change Conference (COP26) in Glasgow, in November 2021, governments were asked to come forward with ambitious 2030 emissions reduction plans. The Product Efficiency Call to Action seeks to drive ambition on product energy efficiency standards to reduce global greenhouse gas emissions, promote innovation, and ensure consumer access to affordable and high-performing technologies.

The Call to Action urges governments to commit to fast, ambitious action on appliance and equipment energy efficiency. So far, the governments of Australia, Brazil, Chile, Colombia, Denmark, Germany, Ghana, India, Japan, Korea, Nigeria, Panama, Sweden, Türkiye and the United Kingdom have signed onto the commitment.

During COP26, forty-one countries launched the Breakthrough Agenda – a commitment to work together internationally this decade to accelerate the development and deployment of the clean technologies and sustainable solutions needed to meet the Paris Agreement goals. SEAD was identified as one of the leading initiatives for international collaboration as part of government commitments to Breakthrough Power. The SEAD Initiative was also mentioned in the 2021 and 2022 G7 commitments to action, and in the G7 Communiqué by Environment Ministers. In the communique the G7 endorsed the SEAD goal of doubling the efficiency of four key energy-using products sold globally by 2030: lighting, residential cooling, residential refrigeration and industrial electric motor systems.

Who is SEAD?

SEAD government members include Argentina, Australia, Brazil, Canada, Chile, China, Colombia, Denmark, the European Commission, Germany, Ghana, India, Indonesia, Japan, Korea, Mexico, Nigeria, Panama, Russia, Saudi Arabia, South Africa, Sweden, Türkiye, United States and the United Kingdom. The European Commission and the governments of India, Sweden and the UK co-lead the initiative. The European Bank for Reconstruction and Development (EBRD) recently joined as a Multilateral Development partner organisation. The International Energy Agency (IEA) provides technical assistance, strategic advice, and management support to the SEAD Leadership Team, and coordinates the Initiative.

Other leading institutional partners who provide valuable support include CLASP and United for Efficiency.

How to get involved?

If you are interested in getting involved with SEAD, please contact: sead@iea.org

Version published October 2023