




# **Accelerating Energy Efficiency and Market Transformation through Appliance Standards and Labeling (S&L)**

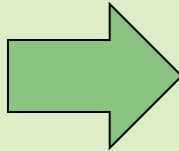
NARUC  
Washington, DC  
May 9, 2012

CLASP's primary objective is to provide **technical expertise and assistance** to global standards and labeling practitioners and policymakers to improve **energy efficiency in appliances, lighting, and equipment** worldwide, as well as reduce the emission of greenhouse gases that cause climate change.

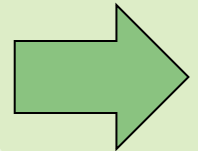
- Established in 1999 by the Alliance to Save Energy, the International Institute for Energy Conservation, and Lawrence Berkeley National Laboratory.
- Became a ClimateWorks Foundation Best Practice Network (BPN) in March of 2009. 
- CLASP has expanded and matured with more than 25 full time team members in offices in Beijing, Brussels, Delhi, and Washington, DC.
- Became the Operating Agent for the Super-efficient Equipment and Appliance Deployment (SEAD) Initiative in 2011.

**CLASP provides national governments and other stakeholders with technical assistance and expertise, including:**

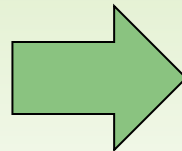
- ❖ S&L Program Design
- ❖ Product Prioritization Studies
- ❖ Product Specific Technical Analysis



- ❖ Design of Minimum Energy Performance Standards (MEPS)
- ❖ Label Design Research
- ❖ Test Method Development

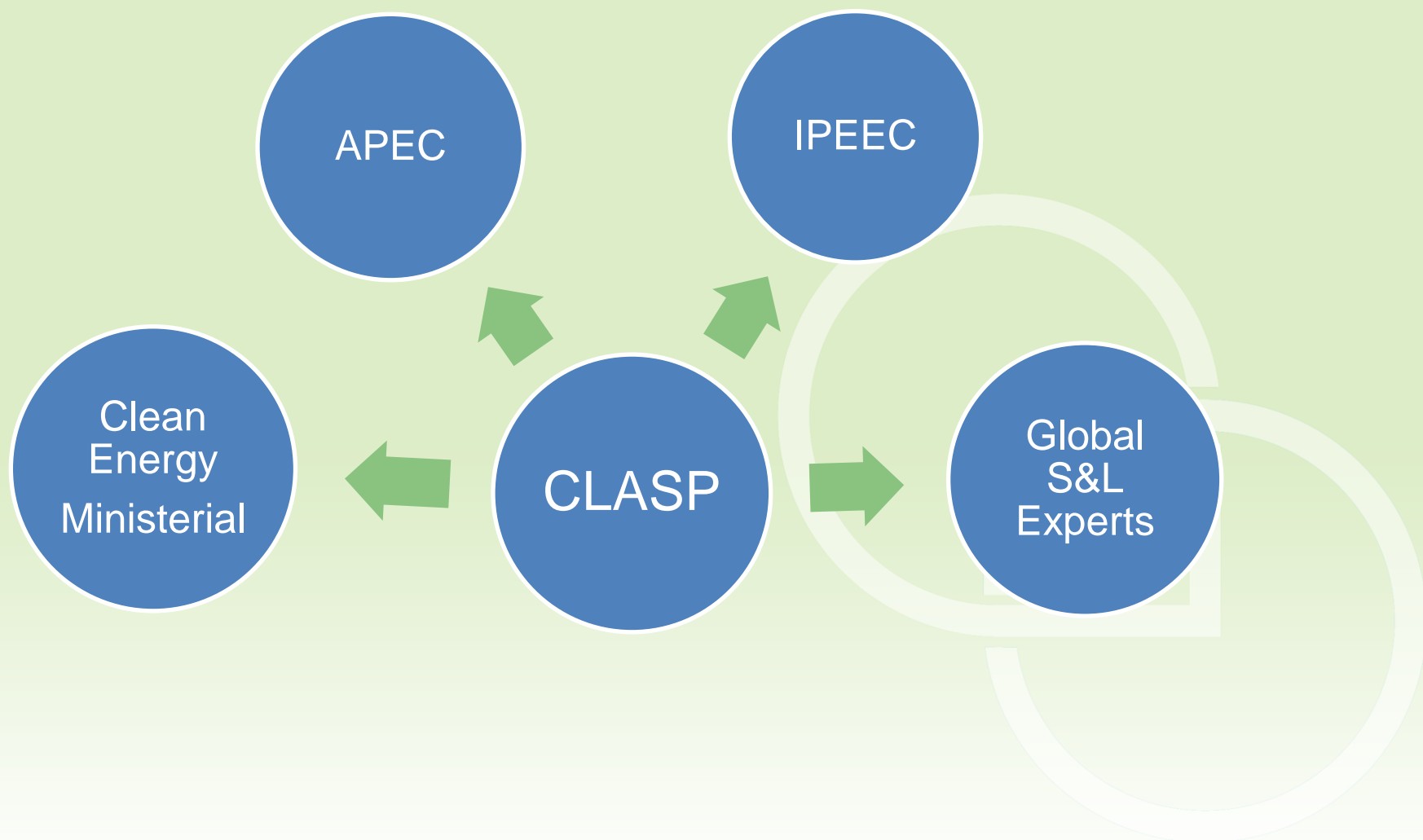


- ❖ S&L Impacts Assessment
- ❖ Market Impacts Studies
- ❖ Energy Savings Modeling



- ❖ Program Evaluation
- ❖ Training and Capacity Building

CLASP facilitates collaboration among a wide global network:



# CLASP impacts energy use through Country Programs and Global activities

## Country Programs

US

China

EU

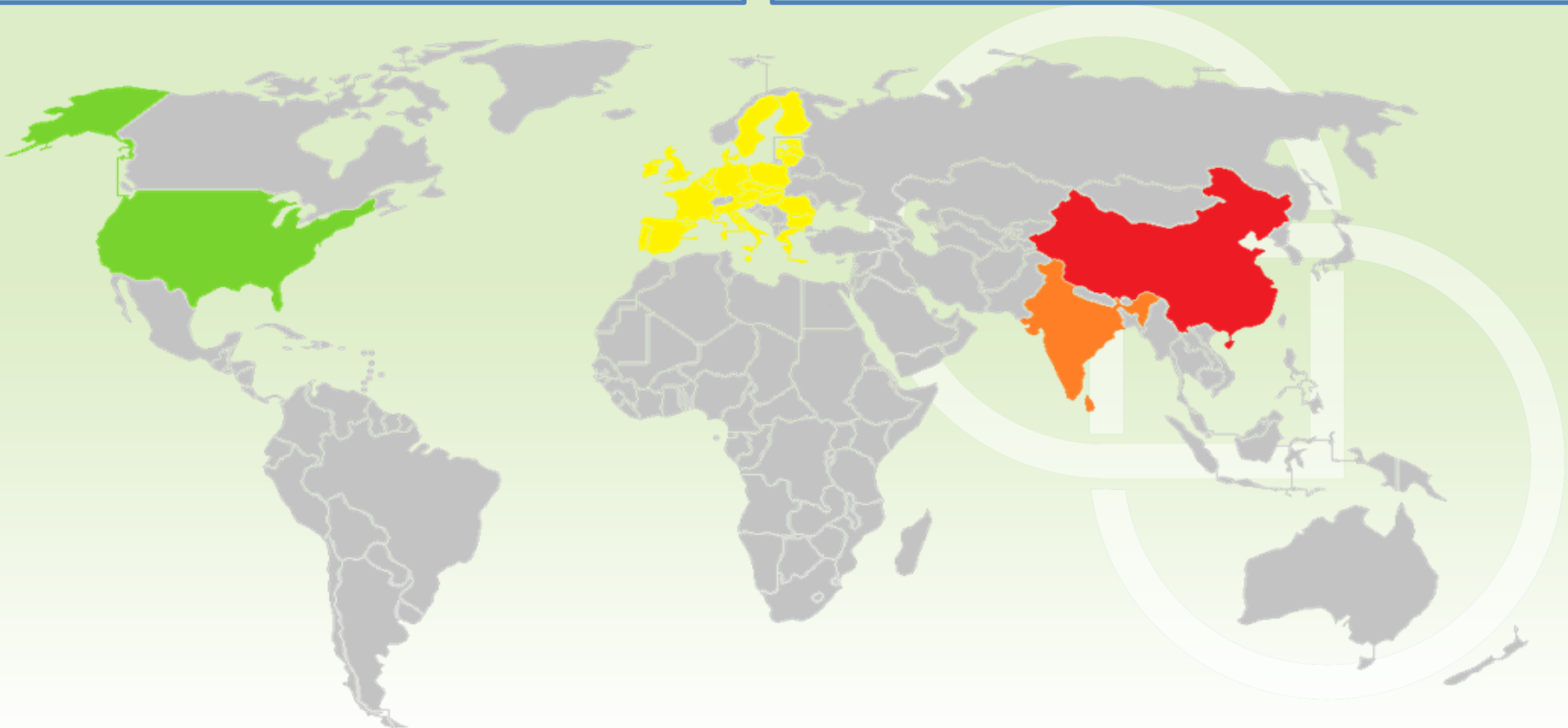
India



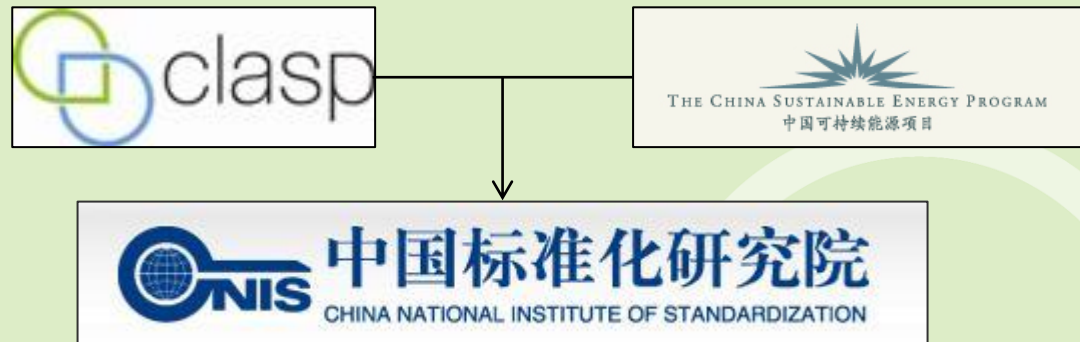
## Global Programs

Global  
Research

SEAD  
Initiative



**CLASP partners with the China Sustainable Energy Program (CSEP) to support the China National Institute of Standardization (CNIS) and other stakeholders in developing China's S&L program**



### ***Program Highlights:***

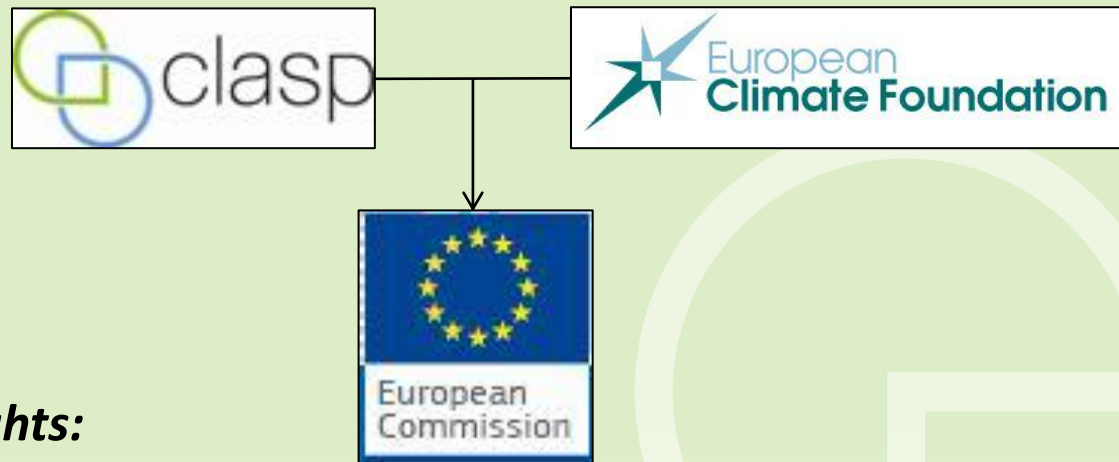
#### ***2011 Accomplishment:***

MEPS for printers and fax machines, which is estimated to save **16 TWh of electricity and cut CO<sub>2</sub> emissions by 15.3 million tons in 2030.**

#### ***2012 Project:***

Energy label implementation rules for three new products, with a **digital information system** to monitor and enforce mandatory energy labels.

**CLASP partners with the European Climate Foundation (ECF) to support the European Commission (EC) in developing the European Union's S&L program**



## ***Program Highlights:***

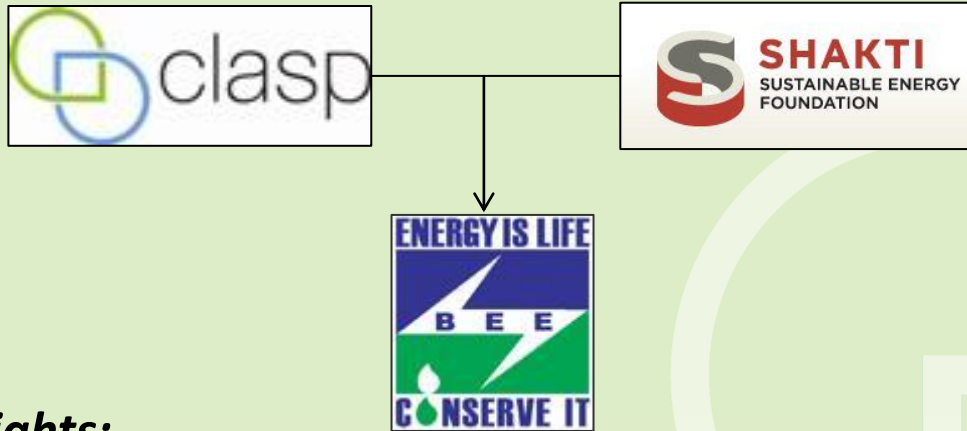
### ***2011 Accomplishment:***

Support of MEPS and energy labeling requirements for domestic air conditioners and non-residential ventilation fans, resulting in **45 TWh of annual electricity savings in 2020.**

### ***2012 Project:***

Assess efficacy of the new **EU energy label** for market transformation, and provide recommendations to the EC for improvement.

**CLASP partners with the Shakti Sustainable Energy Foundation to support the Bureau of Energy Efficiency (BEE) in the development and implementation of India's S&L program.**



### ***Program Highlights:***

#### ***2011 Accomplishment:***

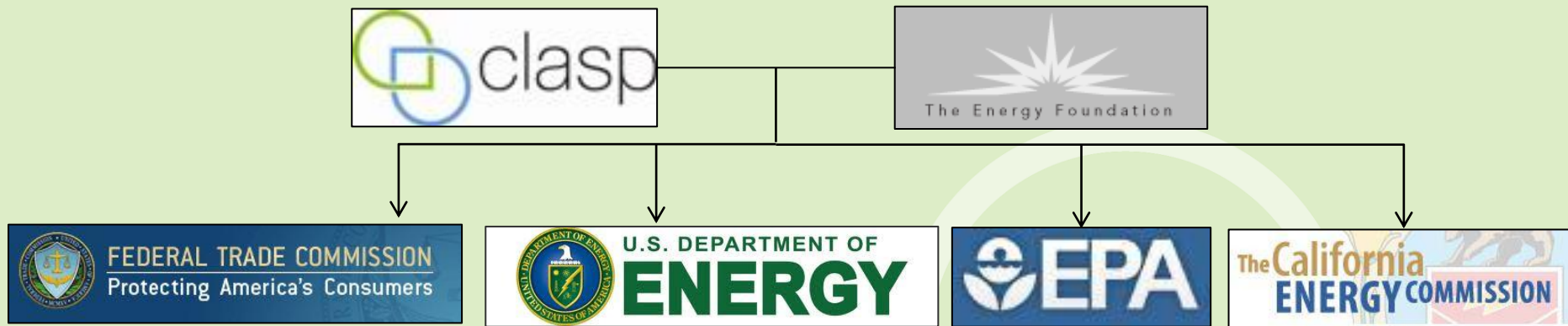
Development of **comprehensive performance, safety, and quality standards for LED lamps**. India is now the international front-runner on this energy efficient product.

#### ***2012 Project:***

Provide training and capacity-building to India product test labs to support the development of more robust **monitoring and verification**.



**CLASP partners with the Energy Foundation to support S&L programs in the United States managed by federal and state agencies.**



### ***Program Highlights:***

#### ***2011 Accomplishment:***

CLASP has released testing data on **computer graphics cards** that will support U.S. and global S&L programs to accurately measure desktop computer energy consumption.

#### ***2012 Project:***

**Market transformation** initiative to introduce super-efficient dryers into the North American market.

## Development of LED Standards in India

### Key Drivers

Identified as a national priority

- Lighting load, peak demand and overall energy consumption.

### Initiation Process (*Prior to June 2010*)

Bureau of Indian Standards (BIS) recognized the need for LED standards based on the Proposal moved from industry, utility and BEE.

### Development Process (*June 2010 – April 2011*)

- BIS National Committee on lighting constituted a special expert panel which includes BEE
- CLASP approached by BEE to develop the LED standards
- Series of consultative meetings of the expert panel – June 2010, June-April 2011
- CLASP provided technical assistance to BEE in the development of 10 LED standards – April 2011

### Review/Consultation Process (*April - July 2011*)

- Public comments on the working document invited – April 2011
- Review of the working document and key recommendations of the expert panel by BIS technical committee with stakeholder participation (April - July 2011)

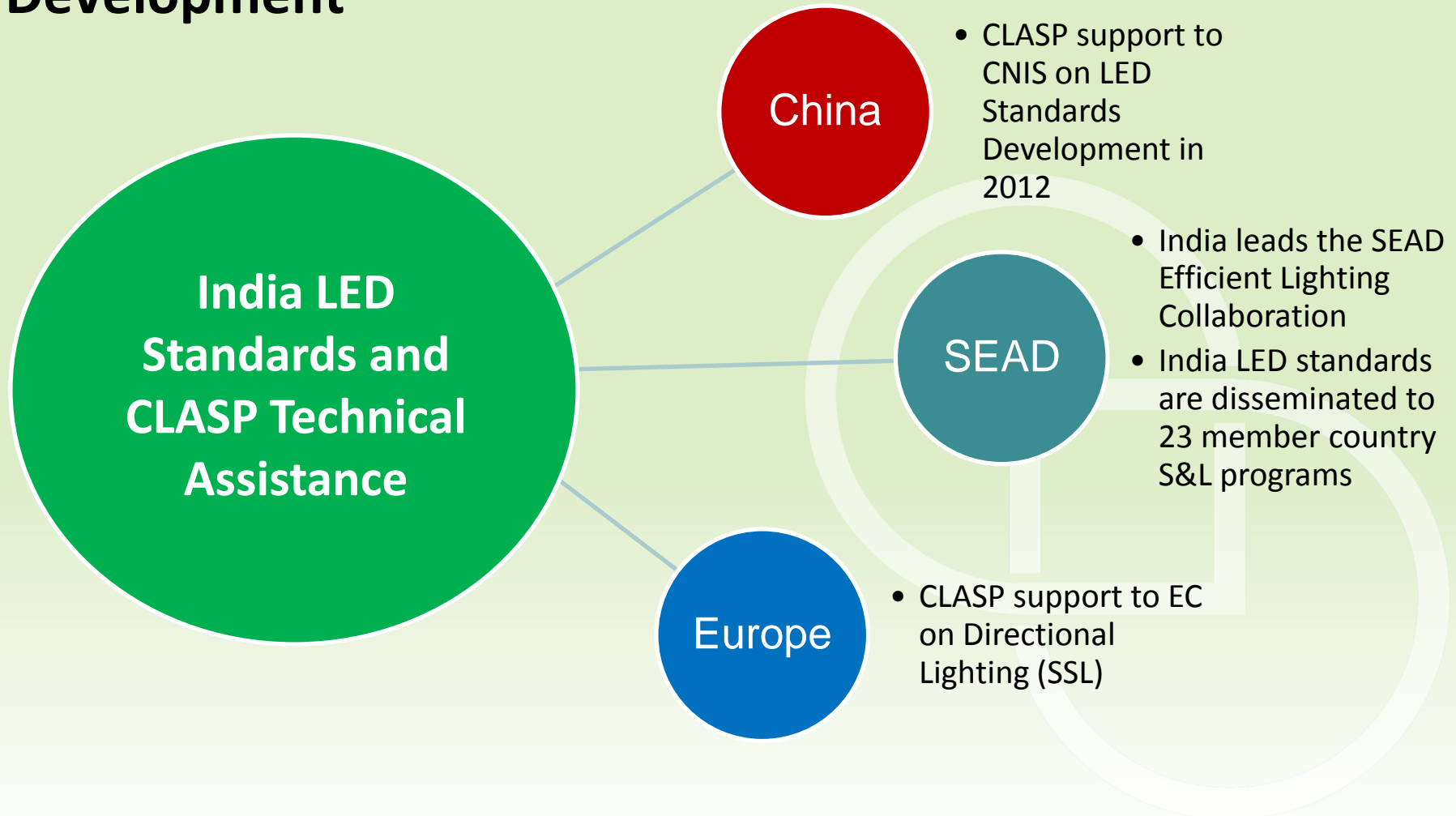
### Spillovers

- India lead the SEAD-LED standards Working Group
- Indian lighting industry positioned for global/regional LED manufacturing hub
- LED standards potential model for other venues like China, EU, etc.

### Outcome (July 2011)

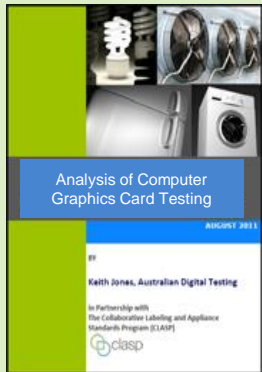
- LED standards approved by BIS technical committee – July 2011
- Standards officially published (February 2012)

## Potential Spillovers from India's LED Standards Development



# U.S. Study: Global Impact

## Analysis of Computer Graphics Card Testing



Disseminate Study

Disseminate Study

California Energy Commission (CEC)  
*State Standard*

U.S. Environmental Protection Agency (EPA)  
*ENERGY STAR Label*

European Commission  
*Standard*

Super-efficient Equipment and Appliance Deployment (SEAD) Initiative

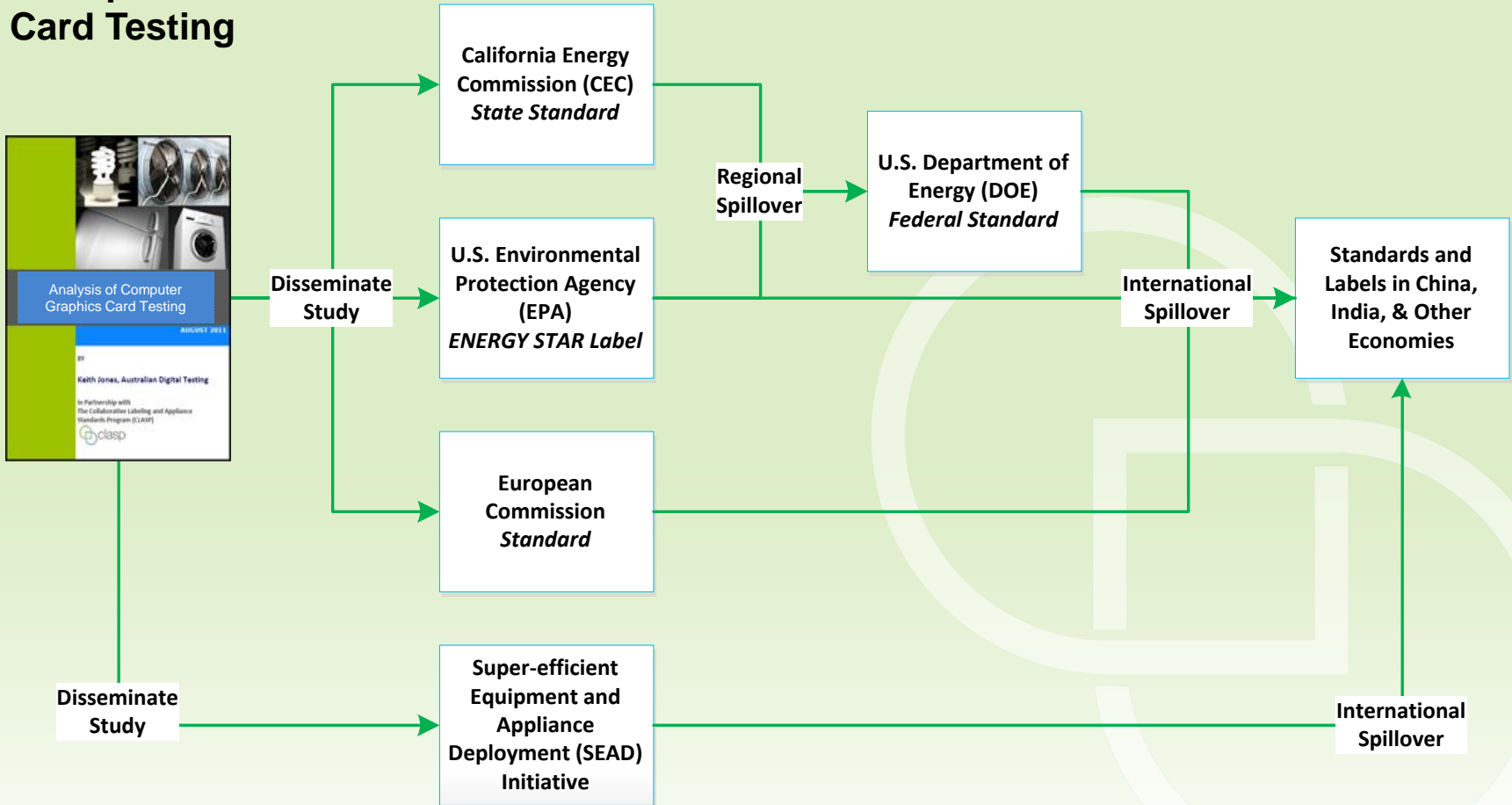
Regional Spillover

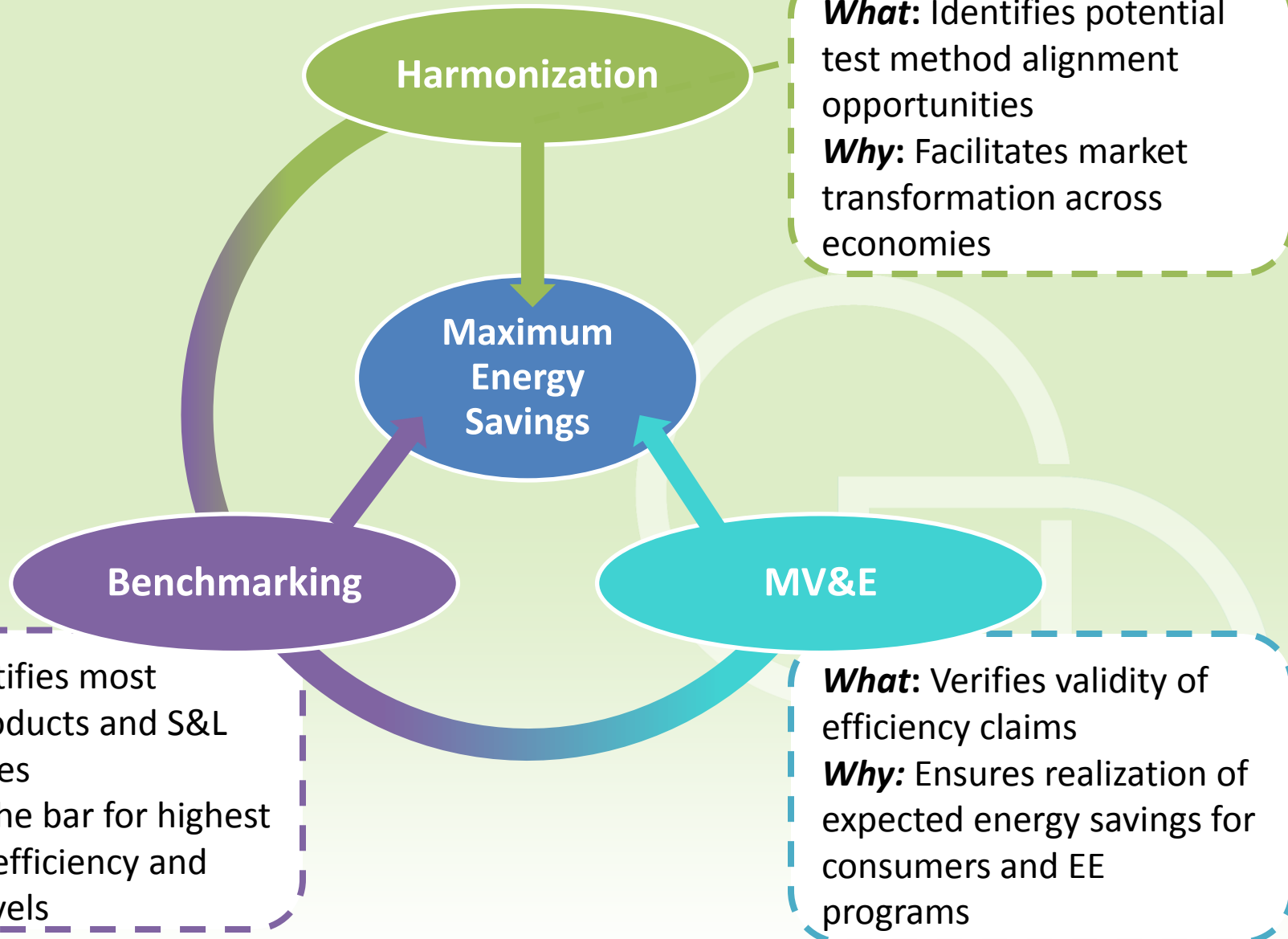
U.S. Department of Energy (DOE)  
*Federal Standard*

International Spillover

Standards and Labels in China, India, & Other Economies

International Spillover





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

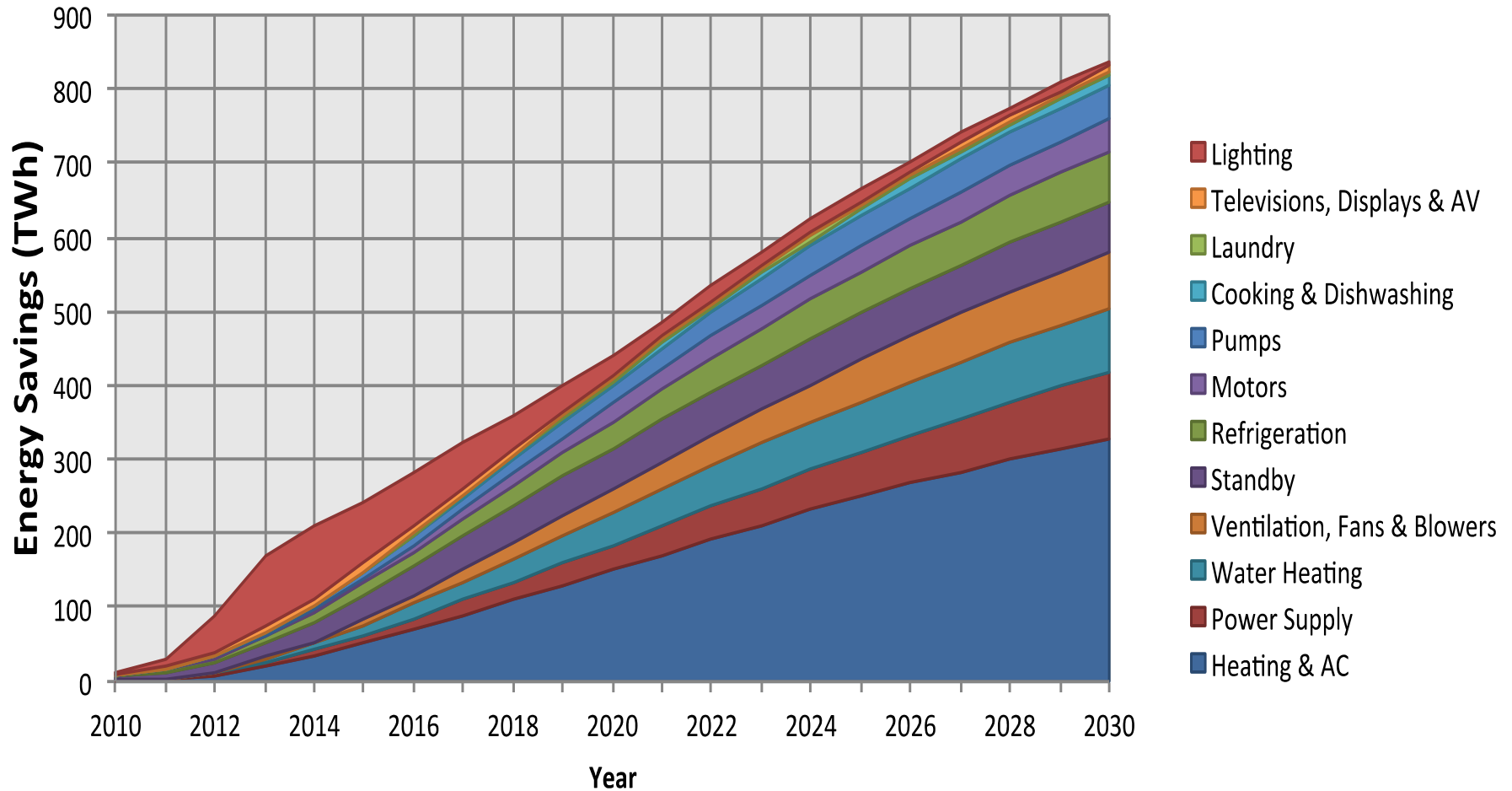
- A *global market transformation initiative* for super-efficient equipment and appliances
- Funded by US Department of Energy, UK, Sweden, and ClimateWorks
- CLASP is the Operating Agent
- Coordinates with international initiatives including APEC, IEA, SE4All



Participants

Observers

## Impacts of MEPS in SEAD countries since January 2010



## Direct Policy Influence

Impact S&L policy processes in SEAD economies:

- Product collaborations and directed research
- Mapping & Benchmarking studies and policy recommendations

## Innovative Global Programs

Implement groundbreaking international initiatives:

- SEAD Global Efficiency Medal
- Efficient Product Promotion Collaborative
- Cross-cutting research tasks



## High-level Access

Gain direct access to high-level policy makers:

- Moderating the Clean Energy Ministerial Super-Efficient Appliances Roundtable
- Delivering expert-level strategic briefings to Secretary Chu

## Global Outreach

Leverage Clean Energy Solutions Center to provide:

- Expert consultation services to diverse global governments and S&L practitioners
- Dissemination of global best practices through S&L webinars



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More information about CLASP's activities:

<http://www.clasponline.org/en/WhatWeDo>

More information about CLASP's Programs:

<http://www.clasponline.org/WhereWeWork>

More information about the SEAD Initiative:

<http://superefficient.org/>