clasp

Annual Report 2012

Appliances, lighting, and equipment consume a major share of energy globally – lighting alone accounts for 20% of total electricity use. This energy consumption stresses our scarce resources and drives up energy costs for everyone.

The Collaborative Labeling and Appliance Standards Program (CLASP) helps design policies for more energy efficient appliances, lighting, and equipment. We work hand in hand with policymakers and other stakeholders on every aspect of appliance efficiency – from helping structure new policies to evaluating existing programs. Appliance energy efficiency policies save consumers money, reduce power demand, cut air pollution, slash greenhouse gas emissions, and are among the most cost-effective forms of energy policy.

Since 1999, CLASP has worked in over 50 countries and collaborated with the world's foremost S&L experts. Our activities range from local to regional to global, helping decision makers determine and implement the most appropriate and cost-effective appliance energy efficiency solutions.

Overview

CLASP's Board President Dr Stephen Wiel introduces our first annual report. We then present an overview of who we are, what we do, and how we work.

Activity

This section focuses on CLASP's achievements over the years and collaborations of note in 2012. Christine Egan, our Chief Executive Officer & Executive Director, shares her highlights.

Operations

Meet CLASP's Board of Directors and learn about our generous donors who contribute resources and support.

Contents

President of the Board's statement

'The most important word in CLASP's name is the first word.'

Dr Stephen Wiel President of the Board

Dr Stephen Wiel President of the Board

In the past decade and half, CLASP has evolved from the fantasies of a small group of geeks in a national laboratory into a robust international NGO at the center stage of what is a government's most effective policy for avoiding energy waste.

What is the key to this remarkable journey? In my mind, the answer is clearly collaboration, or more accurately, a deeply infused collaborative spirit.

It began when three organizations agreed to pool their resources for the sake of the CLASP mission. The Memorandum of Understanding among Lawrence Berkeley National Laboratory, the Alliance to Save Energy and the International Institute for Energy Conservation signed on December 29, 1999 specified that, "...funding that the founding partners receive related to international standards and labeling... shall be dispersed...with the sole objective of enhancing the CLASP mission." Such an unselfish public-private strategic alliance was uncommon, yet its spirit laid the foundation for CLASP's future.

An even more remarkable act came five years later when the three founding organizations set loose their fledgling brainchild to become an independent non-profit corporation, free from their own governance – somewhat akin to sending your firstborn off to college. In that act they formalized the essence of CLASP.

This underlying dedication to the mission, rather than to us or to our organization, has led CLASP to a series of notable achievements. It was the US Agency for International Development that first believed in our vision and gave us a start. An early boost from the United Nations Foundation added vitality for several years.

And, we got lucky. Who can be sure that a relatively young Executive Director will mature into a remarkably effective organizational leader? We scored big when we hired Christine Egan in 2001. Also publishing the S&L Guidebook in the same year brought worldwide attention.

Then a remarkable thing happened in 2008. We came to the attention of the newly forming ClimateWorks Foundation. Our collaborative nature and open partnership was basic to how they wanted to build their own network. They adopted us and, with their support, we have grown tenfold within the past four years.

In this, CLASP's first published Annual Report, let me reiterate what I say to anyone who asks:

'The most important word in CLASP's name is the first word.'

Dr Stephen Wiel
President of the Board

Who we are

CLASP was first established in 1999 to mitigate the growing energy demand resulting from the use of appliances, lighting, and equipment.

Mission

To serve as the primary resource and voice for appliance, lighting, and equipment energy efficiency worldwide.

CLASP responds to the needs of S&L practitioners in targeted countries and regions. We provide strategic technical support to national governments and engage in capacity building and training of local partners. We collaborate with all S&L stakeholders, promoting local solutions and global best practices.

Vision

CLASP envisions a world in which appliances, equipment, and lighting are built for maximum energy efficiency and minimal contribution to global climate change.

Energy efficient appliances and products improve quality of life and the environment. They cut air pollution, reducing the need to invest in new power sources. They help conserve vital energy resources for the future, lowering energy costs for consumers and national and local governments. They foster technological innovation, draw consumer attention to our energy use, and strengthen competitive markets.

Values

Transparency
Inclusion
Collaboration
Service

CLASP's team members are supported by a network of long-term partners – global and regional experts in the various aspects of appliance S&L. We partner with these experts in an environment of transparency, inclusion, and collaboration, in order to accelerate the impacts and benefits of appliance energy efficiency.

Why appliance energy efficiency

Globally, appliances are being purchased at higher rates than ever before, and that means that we're using more energy – so much energy that we're straining electrical grids, leading to some of the worst blackouts in decades, and hiking up energy costs for everyone.

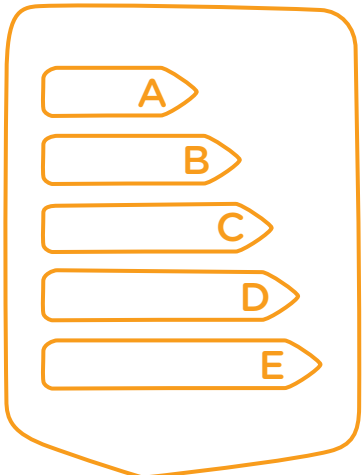
To keep up with demand, countries are investing in more sources of energy. Decisions about our energy investments have consequences for people and the environment. In the United States, for example, coal generates 44% of the electricity supply and is its single largest air polluter.

CLASP and our partners help design policies for more energy efficient appliances, commercial and industrial equipment, and lighting. CLASP's programs and activities range from local to regional to global, helping decision makers determine and implement the most appropriate and cost-effective appliance energy efficiency solutions.

CLASP works on the ground, policy by policy, and also convenes decision makers to catalyze transformative actions. Activities at each level build off of and inform each other to maximize policy impacts, including societal benefits and energy savings.

How S&L policies influence markets for more energy efficient appliances, equipment, and lighting

CLASP uses the complementary mechanisms of energy efficiency standards and energy labeling to achieve our objectives.



Energy standards

Minimum Energy Performance Standards (MEPS) establish the highest amount of energy a product is allowed to use. By establishing a maximum allowable energy consumption level, they remove the highest energy using, lowest efficiency products from the market.

Energy labels

Well-designed energy labels are powerful tools that provide information about product efficiency to consumers at the point of purchase. Labels also give manufacturers of high efficiency products a competitive edge for attracting energy savvy consumers.

Our appliances are a big part of our lives. Without thinking about it, we interact with energy consuming appliances and products every time we enter a house or building or walk down the street.

Home appliances

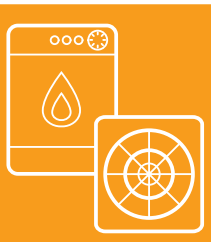
The home appliance markets in growing economies, such as China and India, are expanding rapidly. Refrigerators are one of the first purchases for newly middle class families. In India, 26% of homes own refrigerators and these refrigerators account for 25 TWh of electricity annually – about 11% of India's total residential electricity consumption and enough to power New York's 1.6 billion-passenger subway system for over 12 years.

Computers & home entertainment

Computers, monitors, printers and photocopiers are increasing their global share of energy demand. Globally, computer monitors consume 30–40 TWh of electricity each year. That is equivalent to the output of ten or more mid-sized coal fired power plants. Also, home entertainment products are among the fastest growing appliance markets. In China, televisions account for 7% of total residential electricity consumption.

Commercial / industrial

Commercial and industrial products and equipment include motors and distribution transformers. Electric motors, by far the largest single energy-using product, account for 45% of total electricity use globally. If the major economies adopted the world's best efficiency standards for motors, approximately 80 million metric tons of CO_2 emissions – equivalent to removing over 16.6 million passenger cars from the road for one year – could be saved by 2030.



Heating & cooling

The warming up and cooling down of our homes and buildings across the world has a huge effect on energy use. Across the globe, air conditioners are among the highest energy consuming products – and are often the first to be regulated because of their energy saving potential. If most major economies adopted the most stringent – yet cost-effective – efficiency standards for air conditioners, consumers globally would save USD $250 billion over a period of 15 years.

Lighting

The potential for efficiency gains in the lighting sector is substantial. Lighting accounts for up to 20% of the world's electricity consumption and 7% of global carbon dioxide emissions, equivalent to the combined total emissions of Germany and Japan. Switching to newer lighting technology is cost-effective and could mitigate up to 75% of these emissions.

Small appliances

Small appliance markets – including ceiling fans, cookers, stoves, microwaves, blenders and mixers – continue growing globally. According to some estimates, in China alone, outputs of rice cookers have reached almost 49 million units per year, with an annual growth rate of 18%. Annual energy use per unit is estimated to be 138 kWh, almost approaching that of television sets.

What we do

CLASP is an impartial and independent nonprofit organization. We assist with the design, implementation, evaluation, and enforcement of appliance standards and labels (S&L).

We work hand in hand with policymakers, technical experts, and other stakeholders on every aspect of standard setting – from helping structure new policies to evaluating existing programs.

We work in the following areas:

1 Developing minimum energy performance standards

Minimum Energy Performance Standards (MEPS) establish the highest amount of energy a product is allowed to use. By establishing the maximum level of energy use, they remove high energy using, low efficiency products from the market. CLASP provides market and technical analysis and strategic input to policymakers so that they can set policies according to national priorities.

2 Designing energy efficiency labeling

Well-designed energy labels are powerful tools that provide information about product efficiency to consumers at the point of purchase. Labels also give manufacturers of high efficiency products a competitive edge for energy savvy consumers. CLASP supports every step in the chain of the development, design, revision and use of labels.

3 Improving compliance

Monitoring, Verification, and Enforcement (MV&E) policies safeguard the energy savings of S&L programs and mean that manufacturers compete fairly. They ensure that products meet existing minimum requirements and live up to the claims on their energy labels. CLASP assists regulatory bodies to design and improve their national MV&E frameworks to reduce manufacturer non-compliance with appliance energy requirements.

4 Modeling impacts & guiding policy prioritization

Energy impacts modeling assists policymaker with prioritizing products for new and revised policies based on national priorities and the potential for energy and carbon savings. Once the policies are in place, impacts modeling helps evaluate their effectiveness and energy savings. CLASP partners with technical experts to develop impacts modeling tools and with policymakers to use those tools to set priorities and evaluate policies.

5 Comparing policies

Complicated technical details make comparing policies across economies extremely difficult; without these comparisons, regulators are unaware of how their national product policies measure up to those in other countries. When product policies are comparable, regulators can identify opportunities to raise the ambition of their national policies to the most energy saving levels.

6 Building capacity & sharing knowledge

Saving energy through more stringent S&L is made possible by increased best practice sharing and collaboration amongst policymakers and technical experts. Collaborations raise the bar for minimum efficiency performance regulations, strengthen the foundations for effective appliance policy, and push the envelope on emerging technologies. CLASP facilitates best practice sharing through training, targeted research dissemination, and freely available resources for S&L practitioners.

These two case studies illustrate the type of work we do – and our impacts.

Designing energy standards and labels in Ghana

In the 1980s and 1990s, Ghana experienced strong economic growth that brought with it a large increase in demand for energy. Because historically Ghana had not invested heavily in its energy infrastructure, it did not have the capacity to keep up with this growth.

In 2000, CLASP partnered with Ghana's Electrical Appliance Labelling and Standards Programme (GEALSP) to develop the first standards and labels for sub-Saharan Africa. CLASP worked with GEALSP to create energy efficiency performance standards and labels customized to Ghana's energy needs, culture, and economic reality.

CLASP and GEALSP developed an S&L plan, taking into account the potential effect of efficiency standards on low-income groups; the need to make it feasible and affordable for Ghanaians to purchase energy efficient products; and the need to make it attractive for Ghanaian manufacturers to produce energy efficient products.

Because of the strong effect of room air conditioners on peak electricity demand, GEALSP and CLASP agreed to implement room air conditioner standards first. Standards for lighting systems, refrigerators, and deep freezers followed.

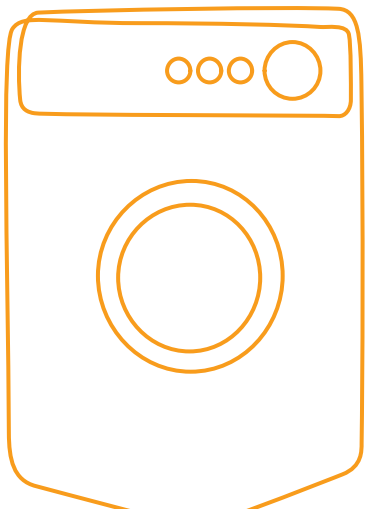
GEALSP and CLASP also conducted a consumer awareness analysis to assess comprehension of Ghana's energy label. Following the analysis, Ghana revised its label to be more effective in relaying product energy efficiency information.

Facilitating improved energy labeling for TVs in the US

The US Federal Trade Commission (FTC)'s Energy Guide label allows consumers to compare energy and cost efficiencies of various products and consequently make better economic and energy saving purchasing decisions. In 2009, the FTC sought comments on whether the label should be applied to home entertainment products, primarily televisions.

In response, CLASP facilitated an exchange of labeling best practices between US S&L experts and the Australian Government, which had recently undergone a similar policy process. Drawing on lessons learned in Australia, CLASP and its partners submitted technical analysis to the FTC suggesting revisions to the proposed labels for televisions and lighting.

Many of the group's recommendations were subsequently adopted, including the use of a material label versus an electronic one, increased label size, and consistency of label placement – all of which improve consumer understanding and label visibility. CLASP also provided insights that alleviated manufacturer concerns that a plastic 'cling' style label would damage the TV screen, enabling the FTC to approve the cling label option.



Our team

CLASP is comprised of an international and highly diverse team. We pride ourselves in the care and attention we take in the recruitment, development and retention of our team members.

Our people

As a result of the rapid expansion in our worldwide activities, CLASP has grown significantly in recent years. From a complement of just three full time staff in 2009, we have now grown to accommodate over 30 team members situated across the globe.

60 seconds with:

Pernille Schiellerup
Director, Europe Program

I am originally from Denmark and began my career working on appliances in England at the University of Oxford's Environmental Change Institute. My formative experiences working on standards and labeling included working on the UK's Market Transformation Program and the first evaluation of the EU's energy labeling framework directive.

I have been working with CLASP since August 2012. I happened to be having dinner with CLASP's then Director of Europe Programs, Anita Eide, on the evening her post was being advertised. It proved a happy coincidence!

There have been many interesting projects I have been involved with since I started with CLASP. Reviewing and revising existing standards and labeling measures to ensure that they continue to stimulate innovation and reduce energy consumption is crucial, but one that stands out is a study we launched in February this year which shows how much can be saved through the revision of existing MEPS and energy labels for seven important product groups in the EU. My favorite aspect about working with CLASP is that I know we can make a difference.

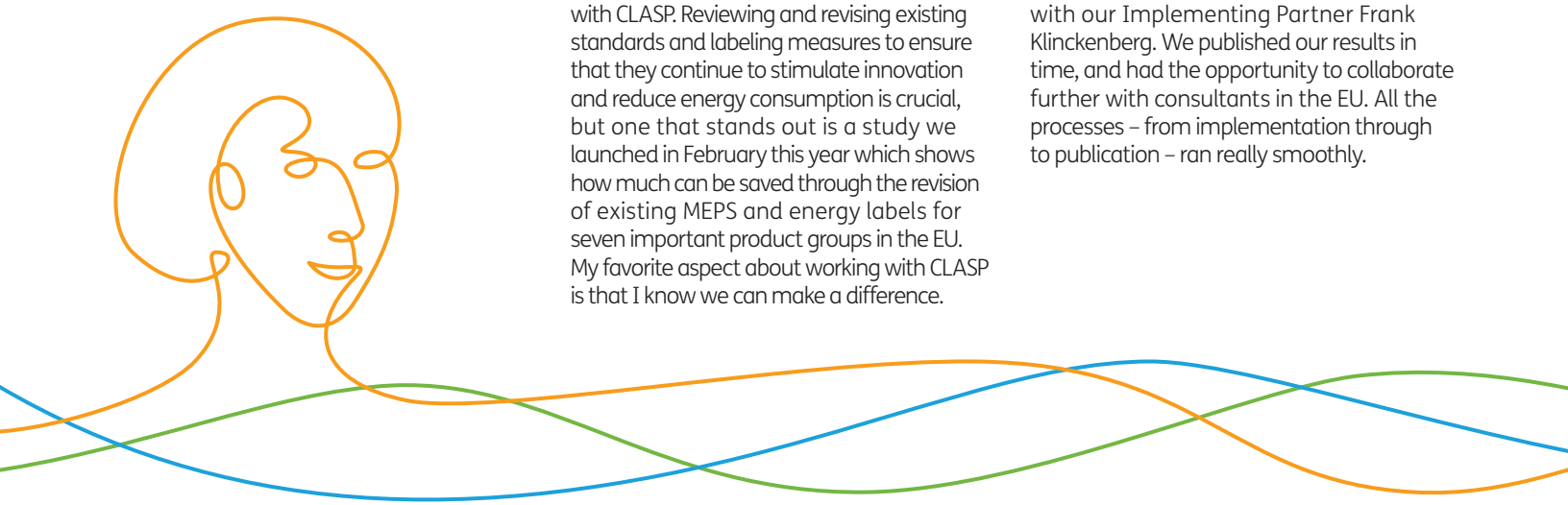
60 seconds with:

Ana Maria Carreño
Senior Global Research Associate

I am originally from Colombia and was born in Bogotá where my family lives. I have been in the States and with CLASP for over two years.

I really like the people I work with at CLASP, and there are many favorite parts of the job. When you work at a place like this, where there is a lot of collaboration, a great professional team, and people with good ethics and values, that really does make a difference.

A project that really stands out for me is one we completed in 2011; the scoping study for commercial refrigeration equipment. We had a good collaborative relationship with our Implementing Partner Frank Klinckenberg. We published our results in time, and had the opportunity to collaborate further with consultants in the EU. All the processes – from implementation through to publication – ran really smoothly.



‘We are unusually attentive to the recruitment and care of our staff.’

James Termin
Chief Operating Officer

60 seconds with:

Stephen Pantano
Director, SEAD Initiative

Shortly before I joined CLASP, I traveled to Beijing to participate in a meeting that CLASP had organized between the US EPA ENERGY STAR program and CNIS to discuss harmonization of test methods for IT products. Little did I know that less than a year later I would be the one organizing, planning, and moderating similar meetings for more than a dozen government agencies as the Operating Agent for the SEAD Initiative.

As the global need for more effective energy efficiency policies becomes ever more urgent, CLASP and its partners have continued to expand their great work to advance standards and labeling for appliances and equipment through SEAD and our many global and country-focused initiatives. I am excited to be a part of such a dynamic international organization that is dedicated to meeting these needs.

60 seconds with:

Corinne Schneider
Communications Manager

I joined CLASP at the very beginning of our growth. We were only three people then, working around the world with very close consultants, and our offices were co-located with another NGO.

I’m a writer, and Christine set me to work revising the website my first week. I found CLASP’s Guiding Principle there – guidelines for us and our Implementing Partners about how to collaborate neutrally with stakeholders in the context of limited resources and complicated trade-offs.

We worked mostly in developing and emerging economies at the time – CLASP originally hired me in part because of my developing country experience. It’s one of the first things I loved about working here – the attention to process and commitment to seeing that process through to the best quality product. I still see it in how we work now – how we get there is just as important as getting there.

Our team in 2012

Allison Fan, Research Associate, Global Research Program

Amit Khare, Consultant, India Program

Ana Maria Carreño, Senior Associate, Global Research Program

Anna Lising, Senior Associate, SEAD Initiative

Archana Walia, Director, India Program

Christine Egan, Executive Director and CEO

Christopher Wold, Senior Associate, US Program

Corinne Schneider, Communications Manager

Debbie Karpay, Research Associate, Global Research Program

Deepanshu Ahuja, Consultant, India Program

Ebony Beavers, Administrative Assistant

Elisa Lai, Research & Communications Coordinator

Eric Gibbs, Senior Director of Country Programs

Erick Gonzalez, Operations Manager

Eve Cope, Senior Accountant

James McDonald, Technology Steward

James Termin, Chief Operating Officer

Jayond Li, Technical Associate, China Program

Jenny Corry, Program Coordinator, SEAD Initiative

Kathleen Callaghy, Program Coordinator, Country Programs

Kunal Gupta, Finance Associate

Marie Baton, Technical Advisor, Europe Program

Matt Jordan, Program Manager, Global LEAP

My Ton, Director, Global Research Program

Neal Humphrey, Research Associate, Global Research Program

Nicole Kearney, Senior Associate, SEAD Initiative

Pernille Schiellerup, Director, Europe Program

Pradeep K Mukherjee, Consultant, India Program

Rituraj Borah, Consultant, India Program

Sarah Anhorn, Administrative Coordinator, Europe Program

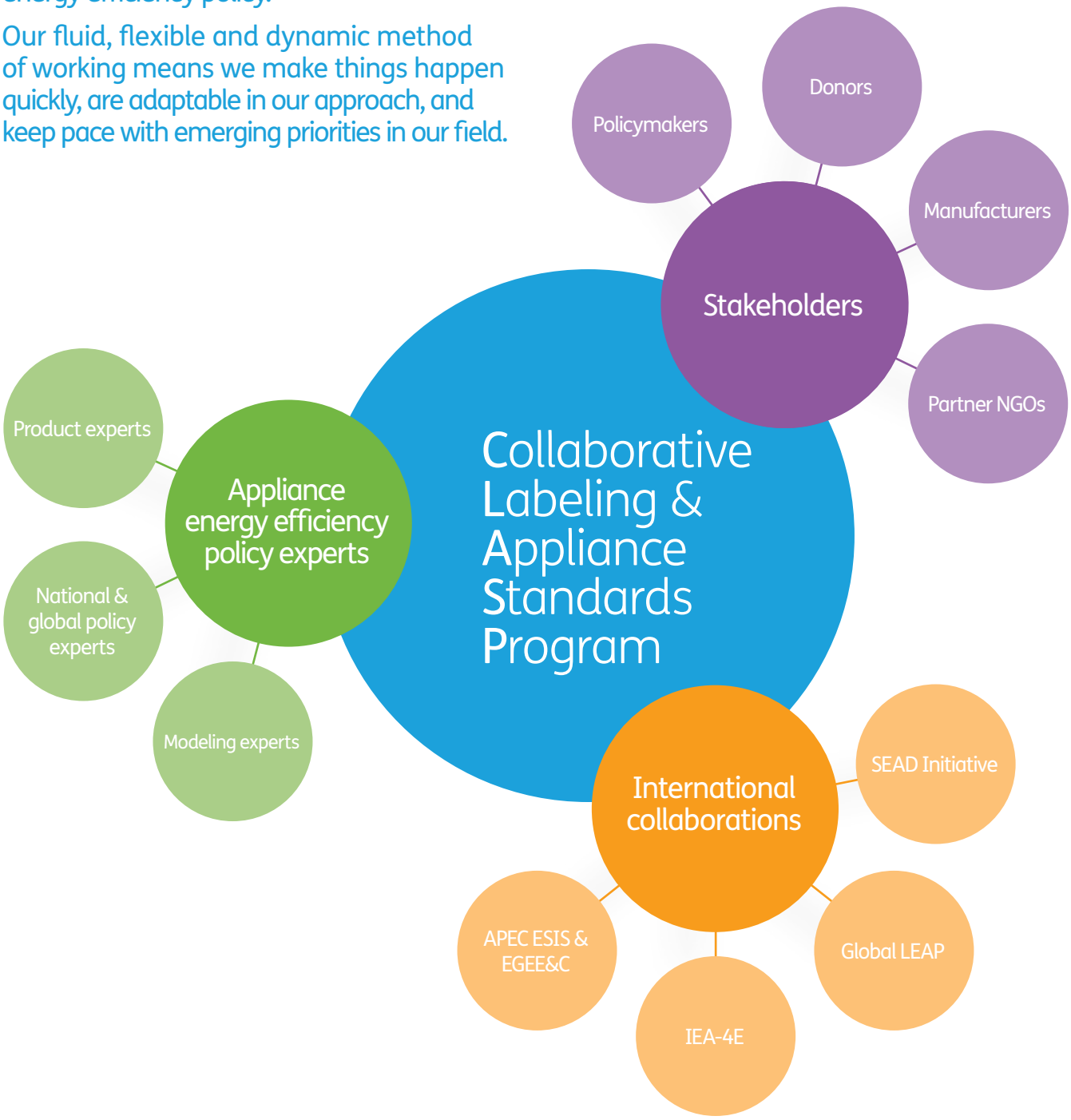
Steve Pantano, Program Director, SEAD Initiative

Steven Zeng, Director, China Program

How we work

At CLASP we take a collaborative approach in everything we do. We keep our core internal team lean and engage the best external experts in the world on appliance energy efficiency policy.

Our fluid, flexible and dynamic method of working means we make things happen quickly, are adaptable in our approach, and keep pace with emerging priorities in our field.



‘Collaboration is the most important word in CLASP’s name – our key principle’

Dr Stephen Wiel President of the Board

300
appliance energy efficiency experts in CLASP’s partner database in 2012.

CLASP connects standards and labeling experts across the world to ensure we produce the best results possible in any program or activity. We work with government agencies, policy and technical experts, and non-governmental organizations to advance policy decisions. We forge inclusive, collaborative, transparent and mutually beneficial partnerships across the globe.

60 seconds with:

Tanmay Tathagat
Technical Expert

I’m from New Delhi, and I’ve worked and traveled all over the world. I currently lead the Environmental Design Solutions (EDS) team working on climate change policies, energy efficient building design, building code development, energy efficiency policy development, energy simulation and green building certification process.

The EDS team has extensive experience in green building design, energy simulation, architectural and mechanical design, and green building certification process.

I first worked with CLASP in 2002, with the initial goal of helping India’s Bureau of Energy Efficiency develop energy efficiency policies for three products and build S&L capacity in India. Since then I’ve collaborated with CLASP on at least a dozen S&L projects in India.

60 seconds with:

Mia Forbes Pirie
Technical Expert

I’m from London, but have lived in France, Italy, Belgium, India and California. Somehow I always seem to be drawn back to London.

I ended up working in energy through a circuitous route. I was a lawyer working on mergers and acquisitions. I then did an MSc in Environmental Technology with a view to becoming an environmental lawyer. However, I found this interesting niche in energy labeling and standards where science, policy and regulation collide. My favorite part about this field is that it works and it makes a difference. But the most important thing is that it delivers and is cost-effective.

I’m now the director of a new consultancy, The Policy Partners. We bring together deep technical and deep policy knowledge from all around the world – I would say we are ‘well rounded’ and global and the human element is really important to us.

My first work with CLASP was leading a session on US Appliance Standards for a CLASP team training. The session focused on the US Federal Rulemaking process and some of its quirks. At the time, CLASP had a number of bright new staff and it was great to see their enthusiasm and dedication.

Tanmay Tathagat Policy Expert

Mia Forbes Pirie Policy Expert

Where we work

CLASP is truly international and has worked across six continents over the past decade.

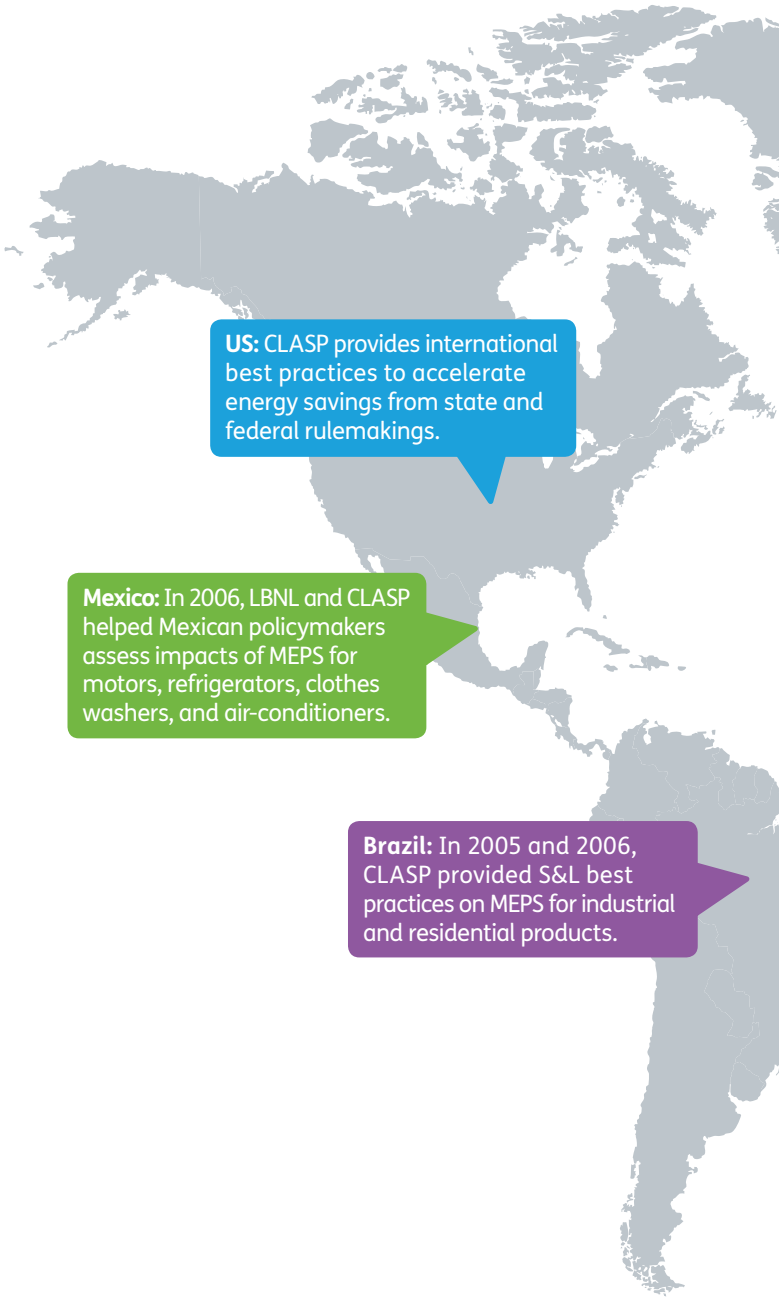
Since our inception, we have provided assistance to over 50 countries.

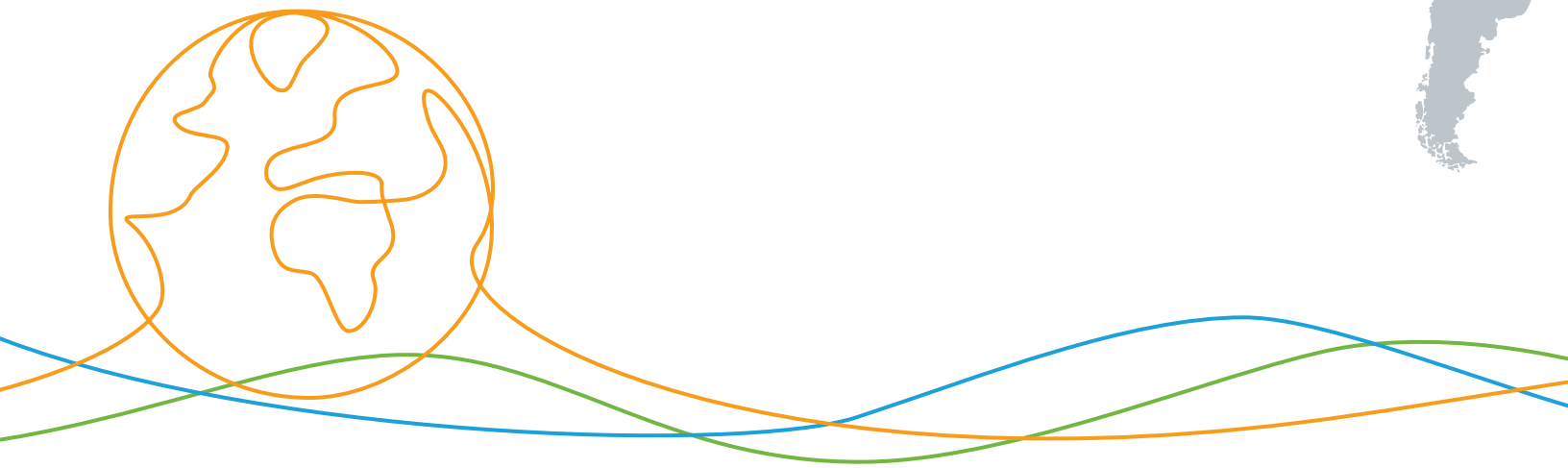
Between 2008 and 2012, CLASP assisted with the implementation of nine policies in China, Europe, India, and the US with an estimated 70 Megatons (Mt) of annual CO_2 savings in 2020.

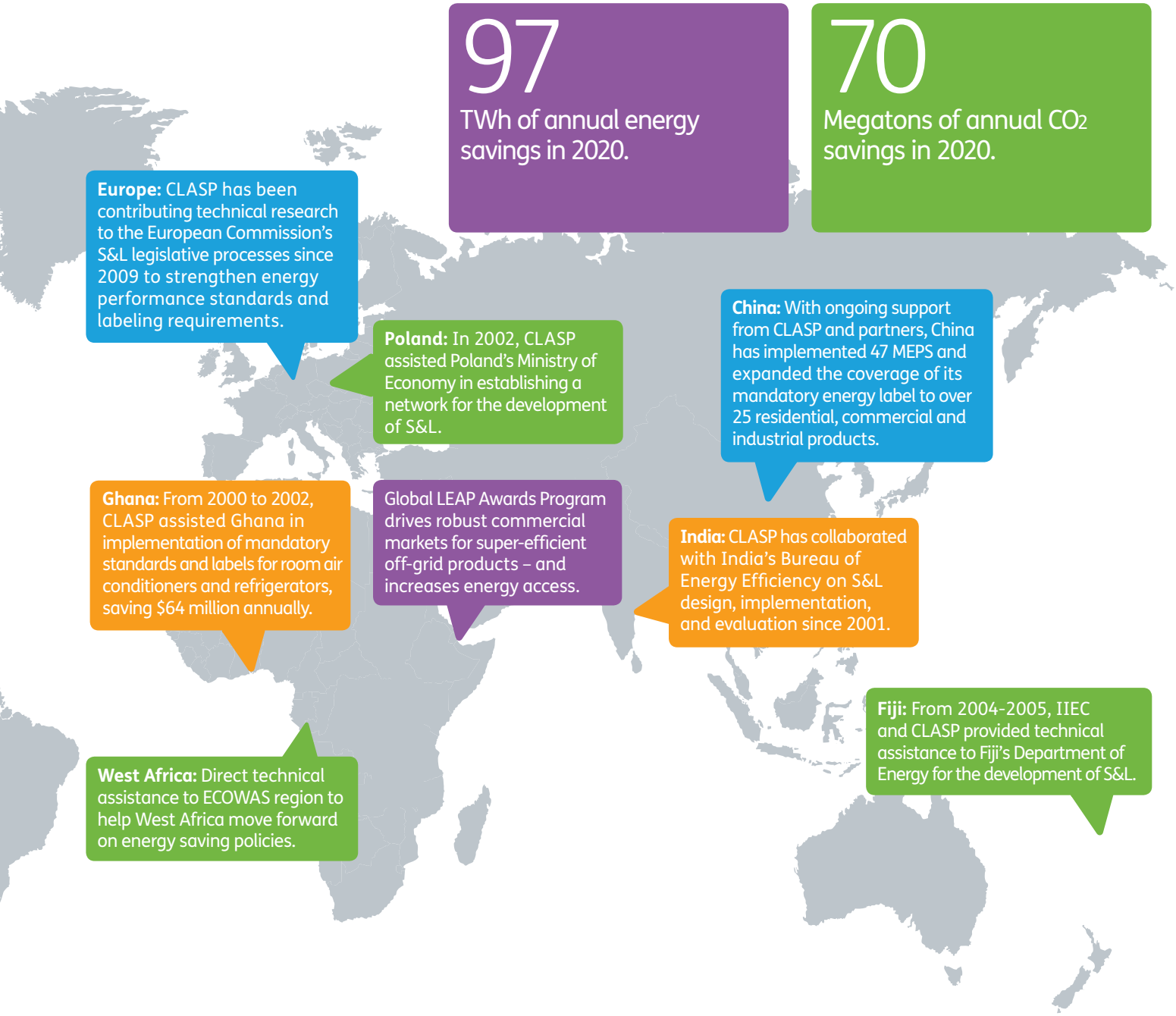
CLASP continues to leverage funding from diverse sources to provide direct support to governments for developing and strengthening their national standards and labeling initiatives. CLASP also conducts research with pan-regional applications and supports international collaborations in order to develop large-scale solutions for reducing energy globally.

CLASP has worked within – or alongside – the following countries and regions to assist the expansion and enhancement of energy efficiency standards and labeling over the past 13 years.

Argentina, Australia, Brazil, Canada, Chile, China, Colombia, Costa Rica, Ecuador, Egypt, El Salvador, Fiji, France, Germany, Ghana, India, Japan, Korea, Mexico, New Zealand, Peru, Poland, Russia, South Africa, Sweden, Tunisia, Uruguay, West Africa (Benin, Burkina Faso, Cape Verde, Gambia, Ghana, Guinea, Guinea-Bissau, Ivory Coast, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo), the European Union, United Arab Emirates, United Kingdom, United States, Vietnam.







97
TWh of annual energy savings in 2020.

70
Megatons of annual CO_2 savings in 2020.

Europe: CLASP has been contributing technical research to the European Commission's S&L legislative processes since 2009 to strengthen energy performance standards and labeling requirements.

Poland: In 2002, CLASP assisted Poland's Ministry of Economy in establishing a network for the development of S&L.

China: With ongoing support from CLASP and partners, China has implemented 47 MEPS and expanded the coverage of its mandatory energy label to over 25 residential, commercial and industrial products.

Ghana: From 2000 to 2002, CLASP assisted Ghana in implementation of mandatory standards and labels for room air conditioners and refrigerators, saving $64 million annually.

Global LEAP Awards Program drives robust commercial markets for super-efficient off-grid products – and increases energy access.

India: CLASP has collaborated with India's Bureau of Energy Efficiency on S&L design, implementation, and evaluation since 2001.

Fiji: From 2004-2005, IIEC and CLASP provided technical assistance to Fiji's Department of Energy for the development of S&L.

West Africa: Direct technical assistance to ECOWAS region to help West Africa move forward on energy saving policies.

CLASP in retrospect

CLASP has grown from a small team with an extended network of S&L experts to a larger organization of over 30 team members in Beijing, Brussels, New Delhi, and Washington DC. Here we chart our journey and highlight some of our most significant milestones.

1999 – 2005

CLASP formed as a result of the foresight and cooperation of three organizations – Lawrence Berkeley National Laboratory, the Alliance to Save Energy and the International Institute for Energy Conservation – who agreed to pool their resources in support of appliance energy efficiency policy in the developing world.

CLASP received start-up funding from the US Agency for International Development and the United Nations Foundation, and began working in India, China, Tunisia, Mexico, Brazil, Ghana, and Egypt – to name a few – on a number of standards and labeling projects.

2005 – 2009

In 2005, CLASP became an independent non-profit organization and expanded our mission to work worldwide. We published the second edition of our Standards & Labeling Guidebook in the same year, cementing its reputation as the go-to text for practitioners around the globe.

1999

CLASP formed.

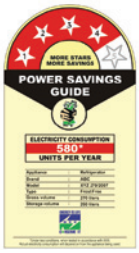
2000

First edition of CLASP S&L Guidebook published. Quickly became standard text for global S&L practitioners.

2001

CLASP assisted India's Bureau of Energy Efficiency on first selection of products for labeling.

2002



CLASP launched online Ask an Expert tool connecting S&L practitioners to expertise at no cost.

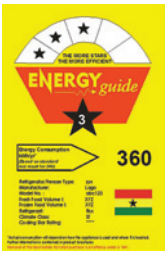
2003

CLASP became an independent non-profit organization.

CLASP

$64 million

CLASP worked with Ghana Energy Foundation from 2000-2002 to assist with the identification of products and develop S&L, saving Ghanaian consumers and businesses $64 million from AC standards alone.

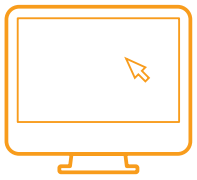


With support from USAID, CLASP and LBNL developed PAMS policy calculators which calculate potential benefits and savings of standards.

2004

CLASP and partners assisted Egyptian government with establishment and certification of a product testing facility.

CLASP developed and published online survey tools for policymakers initiating S&L for the first time.

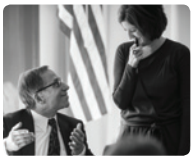


2005

CLASP provided technical assistance in Mexico for evaluation of Mexico's energy modeling tool.

CLASP launched its first website.

Christine Egan appointed as Executive Director.



CLASP assessed appliance testing facility capabilities in South Asia, including India, Sri Lanka, Bangladesh, and Nepal, with support from USAID's South Asia Regional Initiative.

115 TWh

Between 1999 & 2005, CLASP assisted with the implementation of 24 S&L, which will save over 115 TWh annually by 2020.

During these years, CLASP continued support to policymakers in India and China, and took up several new S&L projects, including in Argentina, Costa Rica, and El Salvador.

2009 – 2012

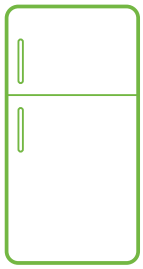
In 2009, CLASP became a ClimateWorks Best Practice Network for Appliance Energy Efficiency. With ClimateWorks' support, we grew our operations, expanding our teams in China and India and initiating work in the European Union and the United States.

In 2011, we became the Operating Agent for the Super-Efficient Equipment & Appliances Deployment (SEAD) Initiative, of the Clean Energy Ministerial, and began supporting the Initiative's efforts to engage governments and the private sector to transform the global market for energy-efficient equipment and appliances.

2006

India announced first voluntary categorical labels for ACs and fridges.

2007



2008

27Mt of CO_2

CLASP and LBNL assisted CNIS to verify energy performance of refrigerators on Chinese market.

S&L Guidebook published in 4 languages: Chinese, English, Korean and Spanish.

CLASP, BEE, and Consumer VOICE conducted India's first multi-lingual consumer outreach campaign for BEE's star label.

2009

CLASP opened office in Europe and began providing technical assistance on European appliance energy efficiency policies.

ClimateWorks FOUNDATION

CLASP partnered with the ClimateWorks Foundation's network of organizations as a Best Practice Network (BPN).

CLASP and LBNL provided product prioritization analysis and training to the Chilean government.

2010

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

CLASP analysis strengthened S&L for domestic ACs and non-residential ventilation fans in the EU, achieving annual energy savings of 45 TWh in 2020.

2011

CLASP joined the Super-efficient Equipment and Appliance Deployment (SEAD) Initiative, of the Clean Energy Ministerial, as the Operating Agent.

BEE launched India's first endorsement label for notebook computers.

2012

CLASP became Operating Agent for Clean Energy Ministerial's Global LEAP Outstanding Off-Grid Product Awards.

ENERGY EFFICIENT
ENERGY IS LIFE
BEE
CONSERVE IT
RECOMMENDED
BEE STAR Ver 1

CLASP initiated first project work in Russia.

Chief Executive's review

Our Executive Director & CEO Christine Egan has been serving CLASP – and the appliance energy efficiency community – since 2001.

Christine Egan Chief Executive Officer

Appliance energy efficiency has come a long way in the past decade. What began as a small, esoteric field for a handful of technical experts who all knew each other has burgeoned into an internationally-recognized priority area for combating climate change – encompassing a wide and diverse network of practitioners.

CLASP's development over the past 13 years has mirrored this growth. At the time of our founding in 1999, we were the only international partnership that focused exclusively on appliance standards and labeling. We conducted technical and policy assistance in Ghana, India, China, Mexico, and other locations on a project-by-project basis. We were doing what we do best – sitting in a room with a policymaker and their stakeholders, saving energy one policy at a time. Even after CLASP became an independent nonprofit, we were a small shop.

A decade later, CLASP is operating within a vibrant, global community of practitioners alongside initiatives like APEC ESIS, IEA-4E, Topten, and UNEP's en.lighten Initiative. China and India have developed advanced, holistic S&L programs that focus not only on developing standards and labels, but also on measures that deliver highly efficient products to consumers faster and ensure energy savings for everybody.

In the early years, we never anticipated something like the SEAD Initiative, where policymakers are sharing confidential information to accelerate and improve energy efficiency policies – saving the resources of time, money, and energy.

With the support of the US Department of Energy, the Clean Energy Ministerial, CLASP (in our role as the Initiative's Operating Agent), and others, appliance energy efficiency has gone public. We launched the first global competition for super-efficient appliances in 2012. Seeing appliance energy efficiency featured in the Wall Street Journal and championed by former US Energy Secretary Steven Chu speaks to how far we've come.

Throughout this period of change, two things have remained constant for CLASP. Firstly, our collaborative approach for getting the job done right. We've been working alongside technical experts in the CLASP network – such as LBNL, Econoler, EDS and Navigant – from the very first S&L policy in India, to our recent project in Russia. Secondly, our spirit of service. CLASP remains dedicated to serving the needs of the appliance energy efficiency community, whether promoting energy label awareness in China or off-grid lighting products to under-electrified populations in Africa and Asia.

Still, there's more to do. Appliances are being purchased at higher rates than ever before and global energy use – and carbon emissions – are on the rise. CLASP will continue meeting these challenges with innovative thinking, strategic partnerships, and our dedicated team.

We look forward to taking CLASP on the next step in our journey.

Christine Egan
Chief Executive Officer

2012 highlights

CLASP's programs and activities range from local to regional to global, helping decision makers determine and implement the most appropriate and cost-effective appliance energy efficiency solutions.

CLASP works in a worldwide capacity – conducting global research, convening decision makers, and providing the appliance energy efficiency community with resources and tools to replicate and accelerate the implementation of best practices.

In 2012, CLASP managed full-scale assistance programs in China, Europe, India, and the United States, and provided additional support to decision makers in Russia and the Economic Community of West African States.

We also continued to support policymakers in the 16 member governments of the Super-efficient Equipment and Appliance Deployment (SEAD) Initiative in their goal of transforming the global market for energy efficient equipment and appliances.

SEAD Initiative launches competition for world's most energy efficient TVs

The SEAD Initiative launched the first Global Efficiency Medal Award competition, identifying the most efficient flat panel TVs in the world and recognizing one TV with the most efficient emerging technology globally. The competition places top-performing super-efficient products in the hands of early adopting consumers and spurs innovation among manufacturers.

India leads the world in LED quality and efficiency standards

India became the first country in the world to create comprehensive standards for LEDs, a super-efficient lighting technology, when the Bureau of Energy Efficiency and the Bureau of Indian Standards published ten comprehensive performance, safety, and quality standards for LEDs, with technical assistance from CLASP.

CLASP website honored by Webby Awards

The CLASP website was selected as an Official Honoree in the Green category by the International Academy of Digital Arts and Sciences in the 16th Annual Webby Awards – the leading international awards honoring excellence on the internet. CLASP's redesigned website enables S&L stakeholders to use enhanced tools, access policy and technical resources, and navigate deep information intuitively and efficiently.

China

In recent years, China has adopted a holistic approach to appliance energy efficiency, strengthening compliance frameworks and launching several initiatives to accelerate the uptake of highly efficient appliances.

47 million

subway passengers viewed China's 2012 energy label awareness campaign.

Raising consumer awareness of energy labeling

Consumer awareness of energy labels – knowing what they mean and how to read them correctly – is essential to transforming markets toward more energy efficient products.

According to a 2010 CLASP assessment of consumers' awareness of the China energy label, 61.5% of consumers had seen China's comparative energy label and could recognize it, but only 18.3% of consumers had deep enough understanding to use the label to guide purchase decisions.

In June 2012, CLASP and the Energy Foundation's China Sustainable Energy Program collaborated with China National Institute of Standardization (CNIS) and the Beijing subway to launch a public awareness campaign of China's energy label. Posters displaying the message 'Beat the Energy Tiger at Home' were posted in ten Beijing subway stations, with an estimated 47 million passenger views.

In 2013, CLASP will initiate multi-city, appliance retailer trainings to further raise the awareness – and effectiveness – of China's energy label.

China works to accelerate consumer uptake of energy efficient products

In May 2012, the China State Council announced that it would allocate CNY 26.5 billion (approximately USD $4.2 billion) in subsidies to promote the purchase of energy-saving household appliances such as air conditioners, flat panel TVs, refrigerators, washing machines, and water heaters for one year. One month later, Chinese electronics retailer GOME announced that it would establish a special fund containing CNY 1 billion (USD $157 billion) to support the implementation of this policy.

Consumer rebates and subsidies complement appliance energy efficiency policies by accelerating the uptake of energy efficient products. In partnership with CNIS, CLASP began an evaluation of this program.

China's focus on compliance

CLASP has been assisting CNIS to improve its compliance frameworks for several years, primarily through laboratory assessments and improvements. In 2012, CLASP and CNIS partnered to translate CLASP's Best Practice Guidebook Compliance Counts into Chinese. The Guidebook provides step-by-step guidance for policymakers and practitioners to design and implement robust and effective compliance frameworks – ensuring that energy savings from S&L programs are realized.

‘CLASP has provided international experts who brought us international best practice and technical information. This is very useful especially when we are developing Chinese MEPS, such international best practice information can be a very good reference for us.’

Li Pengcheng, Director of International Cooperation, Environment and Resource Division, China National Institute of Standardization

China is one of the world’s largest manufacturers of household appliances, lighting, and other residential and commercial equipment. The country’s power consumption increased a staggering 69% over five years – from 2485 TWh in 2005 to 4200 TWh in 2010 – and sales of appliances have skyrocketed.

CLASP and our partners – notably, LBNL – have supported CNIS and other Chinese institutions since 1999 in their goal to reduce the energy intensity of the economy 40-45% by 2020 from 2005 levels, through the development and implementation of best practice appliance energy efficiency policy.

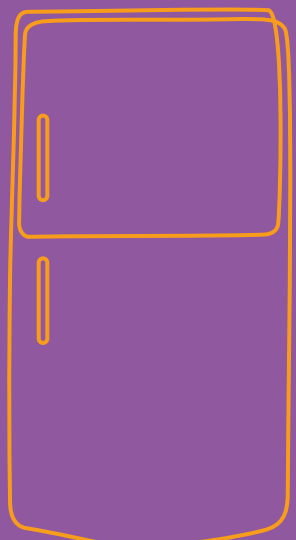
CLASP’s work in China has been possible thanks to generous support from the ClimateWorks Foundation, the Energy Foundation, Japan’s Ministry of Economy, Trade, and Industry, the United Nations Foundation, the US EPA, and US DOE.

In 2012, CLASP’s technical, strategic, and analytic support to CNIS resulted in several energy saving policies:

- In January 2012, two mandatory energy labels took effect – one for set-top boxes and another for printers and fax machines. Printers have an estimated energy savings of 0.55 $MtCO_2$ annually in 2020.
- Two new energy labels for solar water heaters and condensing unit refrigerated display cabinets became mandatory in September.
- Two mandatory standards for microcomputers and fluorescent ballasts took effect.

CLASP also provided technical support to CNIS on several products for which new or revised standards and labels are in draft phase. These include:

- An energy label for personal computers, which has an estimated savings potential of 7.47 $MtCO_2$ annually in 2020.
- New draft MEPS for Tungsten Halogen lamps and projectors.
- A revision to the stringency levels of the existing MEPS for flat panel televisions and external power supplies. In the revised TV standard, the minimum Energy Efficiency Index requirement for LCD TVs will be raised from 0.6 to 1.7, resulting in estimated savings of 13.4 $MtCO_2$ annually in 2020. The revised MEPS for external power supplies has an estimated savings potential of 35 $MtCO_2$ annually in 2020.



Europe

Since 2009, CLASP has been conducting rigorous technical analyses and research to support the European Commission's appliance energy efficiency policy processes, recommending energy-saving measures and best practices.

Our findings support the European Commission's goal to reduce CO_2 emissions 20% by 2020 from 1990 levels.

CLASP's work in the EU is made possible by generous support from the ClimateWorks Foundation and in collaboration with the European Climate Foundation, ECOS, eceee, and others.

Research and analysis

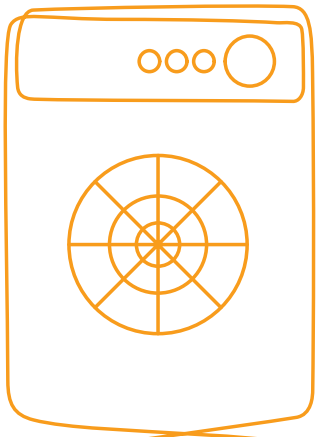
CLASP conducts neutral research and analysis in the EU to support the implementation of best practice appliance energy efficiency policy and supporting measures.

- In collaboration with eceee, CLASP initiated a product prioritization analysis in 2012, at the request of the European Commission (EC), to identify policy opportunities for high energy savings. CLASP identified an additional 40-70 terawatt hours per annum by 2030 that could be achieved from revisions to 11 existing Ecodesign and Energy Labelling regulations covering seven product groups. All 11 regulations are scheduled for review between now and the end of 2014. The analysis also provides a detailed evidence base that the EC can use to prioritize product policy revisions over the next two years.
- CLASP has undertaken a major assessment of the EU's energy label, considering the label's effectiveness at conveying information and promoting the most energy efficient products.
- CLASP is working to promote an enhanced, aligned, and strengthened appliance energy efficiency legislative framework in the EU by providing strategic technical analysis and advice to policymakers on the methodology for overall product prioritization, including revision of existing regulations; the evaluation of the implementation of the Energy Labelling Directive and the effectiveness of labeling scheme; and improvement and acceleration of the standard and label-setting process.

Best practice technical assistance, policy by policy

CLASP supports best practice policy implementation for energy savings in the EU by helping S&L stakeholders to:

- Increase the stringency level of appliance energy efficiency policies
- Raise the ambition of regulatory timelines
- Refine product definitions within policy measures.



Russia

CLASP initiated technical analysis and contributed strategic expertise for improved appliance energy efficiency policy in Russia for the first time in 2012.

CLASP's work in Russia was initiated in partnership with the European Bank for Reconstruction and Development (EBRD)'s Efficient Russia Equipment project and targeted high energy consuming products, complementary policies and capacity development.

Improving compliance

CLASP and its partners translated CLASP's guidebook Compliance Counts: A Practitioner's Guidebook on Best Practice Monitoring, Verification, and Enforcement for Appliance Standards & Labeling into Russian, making it available to national policymakers and stakeholders.

Compliance – ensuring the promised energy savings – is key to a successful appliance energy efficiency program.

Targeting high energy using products

CLASP conducted an air conditioning (AC) analysis that provides Russian decision makers with information on the current electricity use and impact of ACs in Russia, and is the first step towards identifying potential efficiency levels for this product. In 2011, air conditioners consumed about 12 TWh of electricity in Russia – more than enough energy to run the entire New York City subway system for six years.

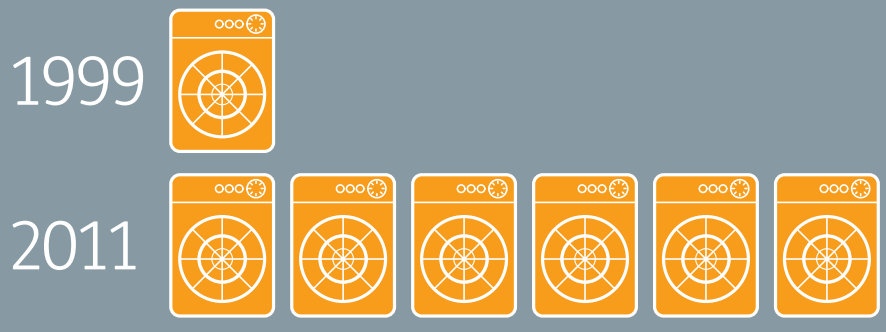
Energy use of ACs is increasing rapidly

ACs in Russia were estimated to consume about 12 TWh of electricity in 2011, a 6.5 times increase from the 1999 level.

12 TWh

In 2011, ACs consumed about 12 TWh of electricity in Russia – enough energy to run the entire New York City subway system for six years.

Energy consumption from ACs in 2011 was over 6 times higher than in 1999.



India

‘CLASP has had a huge capacity building effect in India; they have helped enable India to move from a zero capability in standards and labels to a position of global leadership.’

Ajay Mathur Former Director General, BEE

10

In 2012, CLASP and the Indian government developed 10 performance, safety, and quality standards for LED light bulbs.

India is one of the world’s fastest-growing economies, with rapidly increasing energy demand that outpaces the current supply, resulting in electricity deficits and black-outs.

CLASP provides technical and programmatic assistance to Bureau of Energy Efficiency (BEE) to design and implement appliance energy efficiency policies that reduce CO_2 emissions, lessen electricity demand, and mitigate electricity shortages.

CLASP first began work in India in 2000, and, since then, has collaborated with BEE, Indian and international technical experts, and manufacturers to design and implement all aspects of BEE’s appliance energy efficiency program.

CLASP’s work in India has been supported by the following organizations: the ClimateWorks Foundation, Japan’s Ministry of Economy, Trade and Industry, the Renewable Energy and Energy Efficiency Partnership, the United Nations Foundation, the US Agency for International Development, the US Department of Energy, the US Environmental Protection Agency, and the US Department of State.

Energy labeling in India – a matter of national pride

For over a decade, CLASP has assisted BEE with all aspects of its energy label design, implementation, evaluation, and improvement. Following the launch of BEE’s 5-star label for energy efficient refrigerators and air conditioners in 2006, CLASP and its partner Consumer VOICE complemented BEE’s efforts to improve consumer awareness of the label by conducting a nation-wide outreach campaign.

For the campaign, CLASP and Consumer VOICE worked through a network of NGOs in 14 Indian cities to raise awareness of the label. Promotional materials were translated into several languages, including Bengali, Gujrati, Hindi, Malayalam, and Oriya, and traveled via train, car, and ox-cart to reach targeted consumers.

National response was incredible. 35% of recipients responded to the attached survey, specifying their level of label comprehension. Several recipients wrote in comments indicating their dedication to reducing national energy consumption and pride in the launch of India’s first energy label.

CLASP supports India to set efficiency, quality, and safety standards for LED light bulbs.

In 2012, CLASP developed ten performance, safety, and quality standards for LED light bulbs and helped decision makers at BEE and the Bureau of Indian Standards accelerate the implementation of these policies. LED light bulbs are an emerging lighting technology, between two and six times more efficient than other light bulb options.

Introducing highly efficient technologies into consumer markets is a great way to accelerate energy savings. Quality and performance standards help ensure consumer satisfaction with new products. India's new standards can achieve savings of about 0.3 $MtCO_2e$ cumulatively by 2020, substantially reducing electricity demand and making India the international front runner on comprehensive LED policies.

Carbon mitigation through appliance energy efficiency policies in India

Since 2006, CLASP has helped BEE design and implement appliance energy efficiency policy for refrigerators, air conditioners, consumer electronics, televisions, and water heaters.

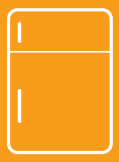
Televisions
Cumulative CO_2 avoided by 2030

4 million tons

Water heaters
Cumulative CO_2 avoided by 2030

47 million tons

Refrigerators
Cumulative CO_2 avoided by 2030



142 million tons

Room ACs
Cumulative CO_2 avoided by 2030

734 million tons

'CLASP has consistently supported BEE throughout the whole process of developing and refining S&L in India; this has made a huge difference to their effectiveness and the outcomes.'

Tanmay Tathagat, Energy Efficiency Policy Expert, India

With ongoing support from CLASP, India's Bureau of Energy Efficiency (BEE) has implemented energy efficiency labels for 14 products and saved over 7000 MW of electricity since the launch of its S&L program in 2006.

Evaluating & improving BEE's S&L Program

Demonstrating their commitment to an effective and sustainable appliance energy efficiency policy program, BEE worked with CLASP in 2012 to evaluate India's S&L program.

This included assessments of its practicality, flexibility, integrity, and simplicity in operation, and was complemented by a similar assessment, by CLASP and our partners, of BEE's compliance frameworks.

Building capacity in Indian test labs

Improving compliance frameworks – ensuring that energy savings are achieved – is an indispensable aspect of a successful appliance energy efficiency policy portfolio.

In 2010, CLASP collaborated with BEE to assess the ability of Indian product laboratories to test products correctly – in accordance with procedures dictated in labeling specifications – as well as to identify any gaps in knowledge or training. Following the assessment, the Government of India allotted USD $5.5 million to support training and capacity building in product testing laboratories.

In 2012, CLASP assisted BEE in the monitoring and utilization of over one third of these funds to train and build capacity in Indian testing labs. As test lab capabilities improve, compliance testing becomes more effective – ensuring that energy savings from S&L policies are realized.

BEE, CLASP, and the SEAD Initiative partner for best practices and greater energy savings

As part of the Super-Efficient Equipment and Appliance Deployment (SEAD) Initiative's Global Efficiency Medal Award competition for the most energy efficient flat screen TVs in 2012, CLASP worked directly with two test labs in India to train staff on international best practice testing for TVs.

BEE's testing for the awards also led to a rapid and unanticipated update of BEE's 5-star energy efficiency label to include LED-backlit televisions, an additional type of TV technology. Upon reviewing technical specifications for the label, CLASP and BEE recommended that these highly-efficient LED-backlit televisions be permitted to carry the 5-star energy label – ultimately promoting the sale of higher efficiency products on the market.

United States

In the US, energy efficiency S&L has the potential to reduce energy consumption by 14% in 2025, with significant impacts on greenhouse gas emissions.

CLASP provides international best practice consultation and technical assistance to policymaking bodies and decision makers in the US, capitalizing on opportunities to accelerate energy savings.

CLASP has been working in the US since 2009, with support from the ClimateWorks Foundation.

Transforming markets through international best practices

Clothes dryers account for 6% of residential electricity consumption in the United States, and they cost US consumers about $9 billion in energy every year. Approximately 85% of households in the US have clothes dryers – consuming as much energy as the entire state of Massachusetts in one year – yet they are the only major household appliance without an ENERGY STAR label or consumer rebate program.

CLASP supports a multi-year initiative to accelerate the introduction of super-efficient clothes dryers – a high energy-saving, leap-frog technology – into North American markets. This partnership – the Super Efficient Dryer Initiative (SEDI) – brings together the US EPA's ENERGY STAR program, manufacturers, and utilities in the US and Canada.

Super-efficient clothes dryers – similar to those available on European markets – offer a substantial opportunity for energy savings and CO_2 emissions abatement. In 2012, CLASP compared the energy consumption of European and US clothes dryer technology and calculated the energy saving potential of more efficient clothes dryers. The analysis demonstrated that European heat pump dryers use only 40–50% as much energy as North American electric dryers to dry the same amount of laundry.

CLASP and SEDI are using this analysis to support development of financial incentives for more efficient dryers, which will be introduced into the North American market in 2013 and 2014.

Quality standards for LEDs ensure consumer satisfaction – and energy savings

Quality testing of new, super-efficient technologies is vital to ensuring that consumers are satisfied with the products that save energy and money. CLASP partnered with the California Lighting Technology Center to conduct testing on LED lamps, focusing on quality characteristics important to consumers, such as color brilliance and uniformity. The test data supported the California Energy Commission in setting quality levels for a voluntary standard in California, which will inform consumer incentive programs from utilities for LEDs. The data will also assist EPA in setting specifications for an ENERGY STAR label for LEDs, promoting more efficient lighting in the US.

SEDI
SUPER EFFICIENT DRYER INITIATIVE

SEAD Initiative

The SEAD Initiative seeks to transform the global market for energy efficient equipment and appliances. Adoption of cost-effective appliance efficiency measures could save consumers in SEAD economies more than US$1 Trillion between 2010 and 2030.

International experts supporting the SEAD Initiative:

Lawrence Berkeley National Laboratory

Alliance to Save Energy

Digital CEnergy

EcoInstitute Barcelona

Econoler

Intertek

Mark Ellis & Associates

Navigant

Waide Strategic Efficiency

The Super-efficient Equipment and Appliance Deployment (SEAD) Initiative is a first-of-its-kind international government collaboration under the Clean Energy Ministerial. SEAD's objective is to advance global market transformation for energy-efficient products.

In the past two years, SEAD has expanded rapidly, becoming one of the most visible and successful initiatives under the Clean Energy Ministerial. SEAD is a unique forum for government representatives and leading experts in energy efficiency to share and leverage technical information, program insights, and resources.

In 2012, SEAD consisted of 16 member countries, including Australia, Brazil, Canada, the European Commission, France, Germany, India, Japan, Korea, Mexico, Russia, South Africa, Sweden, the United Arab Emirates, the United Kingdom, and the United States.

In total, SEAD economies account for approximately half of global energy demand.

SEAD participating governments leverage high-level political dialogues to advance on-the-ground appliance efficiency efforts. SEAD governments participate voluntarily in the Initiative and – based on their interests and areas of focus – choose varying degrees of involvement in SEAD's five main activities, including standards and labels, awards, incentives, procurement, and technical analysis.

CLASP has served as the Operating Agent for the SEAD Initiative since 2011. In this capacity, the SEAD team at CLASP provides dedicated and comprehensive support to the SEAD Initiative and member governments, working with international experts to develop the technical foundation that enables faster, easier adoption of cost-effective product efficiency policies. CLASP and our partners provide strategic advice, technical expertise, facilitation, and administrative and programmatic support.

In 2012, SEAD launched its first SEAD Global Efficiency Medal Award competition to identify the world's most energy efficient flat panel TVs. The winning manufacturers, Samsung and LG, entered products that are 33-44% more efficient than other similar TVs on the market.

The winner of the global emerging technology award – recognizing a product utilizing a new, super-efficient technology – is 50% more efficient than similar TVs and will be available for purchase in 2014.

As the only global mark of energy efficiency, the SEAD Global Efficiency Medal spurs innovation among manufacturers and puts top performing products in the hands of early-adopting consumers.

Global adoption of these winning products could save more than 84 billion kilowatt hours yearly by 2020 – enough electricity to power New York City for nearly a year and a half.

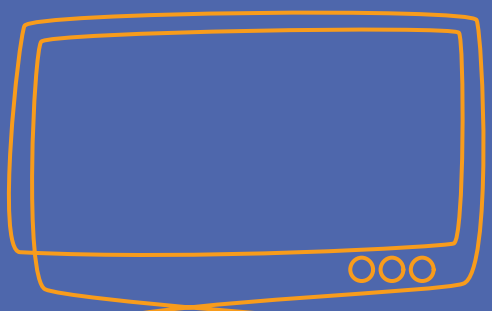
The success of the TV awards is to be followed up in 2013 with competitions for computer monitors and electric motors.

Street lighting consumes significant energy around the world. In the US alone, the estimated 26.5 million streetlights use as much electricity each year as 1.9 million US households – and generate greenhouse gas emissions equal to 2.6 million cars.

CLASP and the SEAD Initiative designed the Street Lighting Evaluation Toolkit – an energy savings calculator which helps governments evaluate energy consumption and calculate the energy savings potential of alternative product or technology choices, such as LED street lights.

The calculator is free, easy-to-use, and designed for decision makers. Local, state or provincial governmental purchasers can make more informed choices regarding street lighting designs to help achieve up to 50% in energy savings.

Since its launch in 2012, the Street Lighting Evaluation Toolkit has continued to gain widespread interest around the world, including municipalities in Armenia, South Africa, Sweden, and Togo. In Canada and India, the SEAD Initiative is working with city governments to launch pilot projects using the tool to identify energy efficient and cost-effective options for upgrading their street lights.



CLASP serves as Operating Agent for two programs under the Clean Energy Ministerial – the SEAD Initiative and Global LEAP. Clean Energy Ministerial participating economies account for 90% of global clean energy investment and 80% of global greenhouse gas emissions.

The SEAD team at CLASP facilitates development of regional S&L program in West Africa.

In 2012, the SEAD team at CLASP began providing strategic and analytic support to the Economic Community of West African States (ECOWAS) in support of the region's goal of doubling the annual improvement in energy efficiency by 2020.

ECOWAS – a regional group of fifteen Western African countries, including Nigeria, Senegal, Ghana, Cote D'Ivoire, Liberia, and Sierra Leone – is working to create a regionally coherent system of appliance energy efficiency policy, reducing costs for participating governments by sharing resources and replicating successes.

So far, CLASP and SEAD, in collaboration with the Lawrence Berkeley National Laboratory, have used our modeling tools to assess energy savings potential and scope priority products and policy actions for the region.

Analysis suggests the 15-nation ECOWAS region could save over 60 TWh of electricity per year by 2030 through the adoption of best practice energy efficiency policies for primary appliances – this is roughly equivalent to as much electricity as was consumed by the entire ECOWAS region in 2011.

Global LEAP

CLASP launches new, off-grid products awards program, under the Clean Energy Ministerial

Billions of people worldwide – most of them among the world's poorest – live without adequate access to electricity. Energy poverty depresses economic and educational opportunities, impeding lasting development gains.

In response to this issue, the Global Lighting and Energy Access Partnership (Global LEAP) Outstanding Off-Grid Product Awards Program, an initiative of the Clean Energy Ministerial, was launched in 2012.

The Global LEAP Awards encourage commercial markets for off-grid energy products by recognizing the most energy-efficient, affordable, highest quality products. In doing so, the program seeks to optimize these products' benefits and support self-sustaining commercial markets – which contribute to long-term development in off-grid communities.

CLASP – in its role as the program's Operating Agent – promotes and manages the Global LEAP Outstanding Off-Grid Product Awards to catalyze markets for off-grid energy products and services and promote energy access through innovation and competition.

Global research & knowledge exchange

CLASP accelerates energy savings from appliance energy efficiency by identifying, distilling, and comparing international best practices – and helping decision makers replicate those practices.

In the absence of a global climate agreement and facing prolonged economic slowdowns around the world, individual governments are increasingly investing in appliance energy efficiency portfolios as cost-effective ways to reduce national energy demand.

Momentum on implementing and improving appliance energy efficiency policy in major economies has created a domino effect around the world. Countries previously stalled in their efforts and entirely new players are setting ambitious new goals.

Given this momentum, it is more important than ever before to compare S&L policies worldwide, identifying the best-in-class among them and accelerating their implementation. CLASP does this by facilitating collaboration and communication among decision makers.

Comparing global policies and replicating successes

Replicating successful appliance energy efficiency policies can conserve government resources and save consumers money. However, comparing different countries' appliance energy performance requirements is difficult because of complicated technical details. Without these comparisons, regulators are often unaware of how their national product policies measure up to those in other countries. When product policies are comparable, decision makers can identify opportunities to raise the ambition of their national policies to increase energy savings.

CLASP targets most high-impact product globally to identify best-in-class policy options

Appliance benchmarking analyses focus on a particular product in a group of selected countries to identify S&L best practice and to characterize the most efficient models on the market. This provides international comparisons of energy efficiency performance and policy measures, laying the foundation for strong and comparable energy performance requirements at the global level.

CLASP, in partnership with Econoler, Navigant, CEIS, and ACEEE, completed a benchmarking analysis for residential air conditioners in 2012. The Cooling Benchmarking Study provides stakeholders with tools and insights for developing or updating S&L policies for air conditioners. The study also enables comparison of MEPS stringency and air conditioner efficiency around the world. This comparability allows stakeholders to better understand efficiency possibilities for air conditioners, which can lead to diffusion of efficient technologies and policies.

Distilling and exchanging international best practices is one of the core ways we service decision makers.

860

Mt CO_2 could be saved annually in 2020 if 13 major economies adopted standards using best available technologies, according to BUENAS.

Quantifying energy and cost saving policy options

Impact modeling and assessments help policymakers visualize money-saving impacts for consumers and electricity-conserving impacts for society. Policymakers use this information to help focus national or regional resources on establishing and improving cost-effective and robust appliance energy efficiency policy measures.

CLASP tools support policymakers' strategic priorities

To help policymakers prioritize appliance energy efficiency policy activities – and to measure the impacts and effectiveness of policies already in place – CLASP and the Lawrence Berkeley National Laboratory have collaborated since 2008 on the development and application of a policy analysis tool, the Bottom-Up Energy Analysis System (BUENAS). The SEAD Initiative and the International Copper Association have also supported BUENAS.

In 2012, CLASP and LBNL conducted several improvements to the tool, following a peer review completed in 2011. CLASP-supported economies and SEAD member governments can now use BUENAS to more effectively prioritize and allocate resources to the appliance policies and programs that deliver the greatest benefits. The model covers 12 major economies, which collectively contribute to 77% of global energy demand. It models end-use energy demand and projects energy and CO_2 savings based on specific efficiency targets for near to mid-term S&L policy implementation.

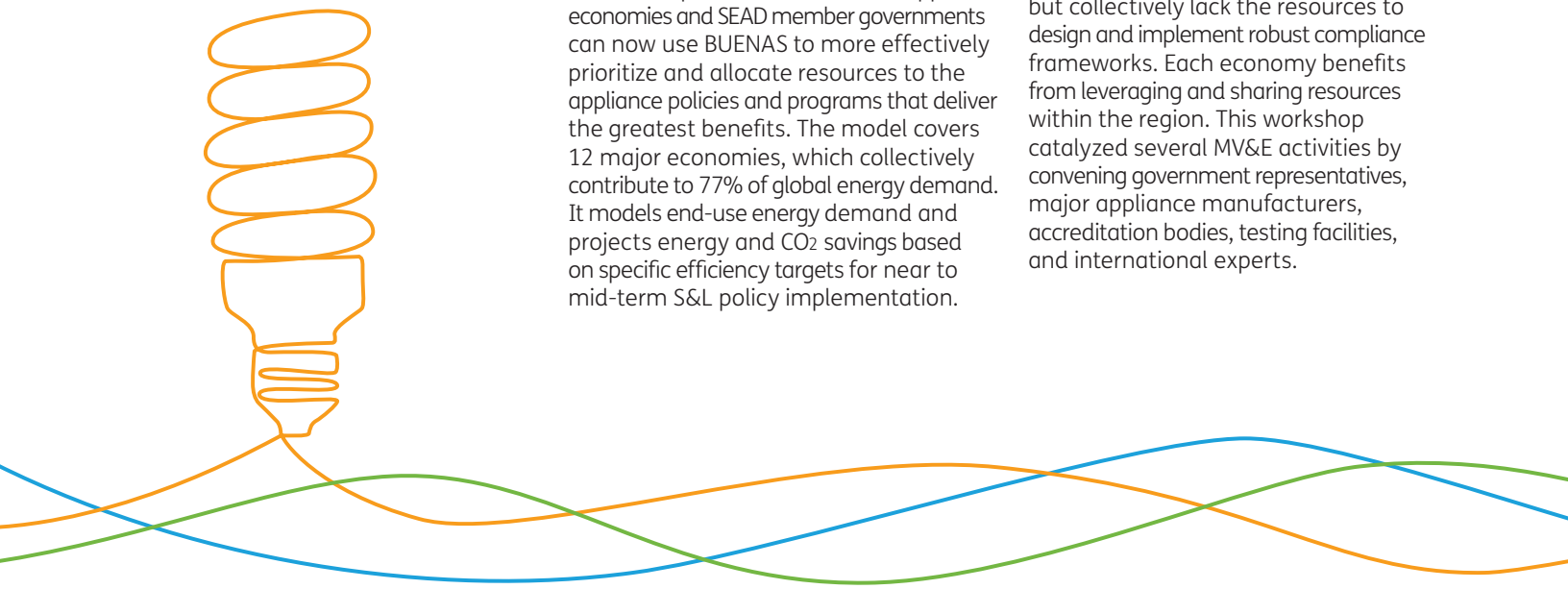
Safeguarding energy savings through compliance

Compliance frameworks safeguard the energy savings of S&L programs and mean that manufacturers compete fairly. They ensure that products meet existing minimum requirements and live up to the claims on their energy labels. The different aspects of compliance are called Monitoring, Verification, and Enforcement (MV&E).

Convening experts and sharing knowledge in the Asia Pacific region

CLASP has long-standing relationships with economies in the Asia Pacific Economic Cooperation (APEC) region, and provides continued support to facilitate collaboration on MV&E policies in member economies. In 2012, CLASP supported the development of more robust regional and country-specific MV&E frameworks in APEC economies through a workshop in Beijing for sharing and disseminating compliance best practices.

APEC economies manage a total of 32 energy labeling and 16 standards programs for over 50 product types, but collectively lack the resources to design and implement robust compliance frameworks. Each economy benefits from leveraging and sharing resources within the region. This workshop catalyzed several MV&E activities by convening government representatives, major appliance manufacturers, accreditation bodies, testing facilities, and international experts.



CLASP's award winning site communicates deep policy and technical information.

CLASP's targeted knowledge exchange:

- Helps economies improve their knowledge base and expertise
- Educates policymakers and catalyzes collaborations
- Encourages technology transfer and coordination
- Capitalizes on shared resources

In 2012, the CLASP website was selected as an Official Honoree in the Green category of the 16th Annual Webby Awards, which are the leading international awards honoring excellence on the internet. This award put CLASP in the top 10% of all work submitted, which included nearly 10,000 entries from over 60 countries worldwide.

CLASP is committed to improving dissemination of S&L best practices through online resources and tools. CLASP's honoree selection recognized the excellent content, structure and navigation, visual design, functionality, and interactivity of the CLASP website – all of which enable stakeholders to use enhanced tools, access policy and technical resources, and navigate deep information intuitively and efficiently.

CLASP's appliance energy efficiency policy database

CLASP's Global S&L Database is an online resource that allows policymakers and S&L practitioners to gain deeper understanding of technical and policy-oriented appliance energy efficiency information. The database provides legislative frameworks and history of S&L by country or economic region. It allows stakeholders to compare policies and regulations across countries and by product, and to explore specific information about those policies – such as level of stringency and policy implementation dates.

In 2012, CLASP continued to update the Global S&L Database and to expand the database to include more economies with S&L programs, such as Iran, Israel, Jamaica, and Jordan. Since January 2012, the S&L database has attracted over 16,000 page views from 77 different economies.

Energy & carbon savings

CLASP assists targeted countries and regions to develop and implement energy efficiency standards and labeling programs. Since 2008, a series of energy-saving policies have been implemented through CLASP's close collaboration with policymakers.

70

Mt CO_2 emissions and 97 TWh electricity annually in 2020.

CLASP quantifies the impacts of our work in terms of electricity (kilowatt or terawatt hours) reductions and greenhouse gas emissions (tons of carbon) mitigation.

Reductions in energy mean reduced demand for dirty power sources like coal, decreased air pollution, and that our electrical grids are better able to handle peak load and alternative forms of power through renewable energy sources.

Mitigating GHG emissions through energy efficiency policies is one of the fastest and most cost-effective ways to prevent dangerous climate change.

In order to quantify the impacts of policies implemented with CLASP's assistance, CLASP and LBNL use the Bottom-up Energy Analysis System (BUENAS) model, which measures the annual CO_2 mitigation potentials through 2020 in China, Europe, India, and the United States. CLASP had direct involvement in each of the policies listed, by supporting and engaging policymakers and other stakeholders and providing technical, market, and strategic policy advice.

In 2020, these CLASP-assisted policies will prevent annual CO_2 emissions roughly equivalent to 20 coal-fired power plants.

India
Room ACs

27
million tons
of CO_2 saved

EU
Room ACs

4
million tons
of CO_2 saved

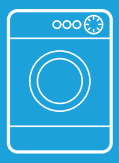
India
Water Heaters

2.6
million tons
of CO_2 saved

China
Distribution Transformers

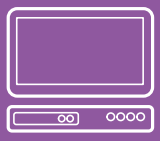
11
million tons
of CO_2 saved

US
Clothes Dryers



0.81
million tons
of CO_2 saved

China
Televisions



8.6
million tons
of CO_2 saved

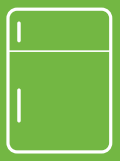
India
Televisions

0.36
million tons
of CO_2 saved

EU
Directional Lighting

9
million tons
of CO_2 saved

India
Refrigerators



6.3
million tons
of CO_2 saved

Board of directors

CLASP is governed by our Board of Directors, a dedicated group of environmental, business, and development leaders from around the world.

Dr Stephen Wiel President of the Board

Christine Egan Executive Director, CEO

Russel Sturm Secretary

Mark Hopkins Treasurer

John Millhone Board Member

Veerle Vandeweerd Board Member

Dr Stephen Wiel

President of the Board

Collaborative Labeling and Appliance Standards Program, US

Steve Wiel is a founder and Chairman of the Board of CLASP. He is an engineer by training with a 50-year career in various aspects of energy and the environment prior to retiring in 2005. He also sits on the Boards of the American Council for an Energy Efficient Economy (ACEEE) and the Global Cool Cities Alliance (GCCA).

Christine Egan

Executive Director, CEO

Collaborative Labeling and Appliance Standards Program, US

Christine Egan is the Executive Director & CEO of the Collaborative Labeling and Appliance Standards Program (CLASP). Ms. Egan has extensive domestic and international experience in all aspects of energy efficiency policy for appliances, and is an expert in consumer energy behavior and energy efficiency label design. Ms. Egan combines a strong understanding of public policy goal-setting with the ability to implement an organization's vision through ambitious targets and high-performance teams.

Russel Sturm

Secretary

Head, Energy-Water Access & Climate Change Advisory, International Finance Corporation, US

Building on his work developing innovative sustainable energy market development products for more than 25 years, Russell leads IFC's growing advisory business in climate change and energy and water access. Russell's work mobilizing commercial clean energy and energy efficiency financing with partner banks catalyzed IFC's current $0.5 billion annual business in new sustainable energy investment through banks.

Mark Hopkins

Treasurer

United Nations Foundation, US

Mark Hopkins is an internationally recognized expert with 40 years of experience in energy efficiency policy and program development. He directs the UN Foundation's efforts to help achieve the UN's Sustainable Energy for All energy efficiency objective by organizing a Global Partnership for Energy-Efficient Buildings. Previously, he was the EVP and COO of the Alliance to Save Energy.

Peter du Pont

Vice-President

Vice-President, Government & Clean Energy Consulting, Nexant Asia

Dr. Peter du Pont has 30 year's experience developing sustainable energy and efficiency programs in the US and Asia. Since 1989, he has worked extensively throughout the Asia region, in NGO, private-sector, and government-sector organizations. He currently manages the development of Nexant's clean energy business in the Asia region.

John Millhone

Consultant

Global Energy Metrics and Mosaics, US

John P. Millhone is an international consultant on energy efficiency and renewable energy programs. Since retiring from the US Department of Energy in 2003, he has served as a consultant for the Carnegie Endowment for International Peace, US National Academy of Sciences, and others. His energy experience reaches from the state level to the international level. Selected honors include the US Public Servant of the Year, US Energy Association, and the PersiVision Award, Lawrence Berkeley National Laboratory.

John R Mollet

Vice President

International Copper Association, Ltd, US

An advisor for sustainable energy practices, Mr. Mollet serves on the Board of Directors for CLASP, the Copper Foundation, and the International Institute for Energy Conservation, and on steering committees for several energy efficiency organizations. Mr. Mollet was the Vice President for partnerships in sustainable energy at the International Copper Association.

Marie-Vincente Pasdeloup

Consultant

International Communications Consulting

Marie-Vincente Pasdeloup is a communication consultant. Her focus is environmental issues, renewable energy, climate change, and energy efficiency. As a journalist she covered public policy in Washington before holding executive positions in corporate communications. Marie-Vincente holds degrees from Paris VII University and Northwestern University's Medill School of Journalism.

Richard Pollak

Managing Partner

Troutman Sanders LLP

Richard is Managing Partner of the Tysons Corner Troutman Sanders LLP and the Practice Group Leader for the firm's Lending & Structured Finance Practice Group. He represents financial institutions in a wide range of transactions, including structuring, loan workouts and restructurings, bankruptcy, creditor's rights, and lending to high tech companies.

Heather Thompson

Principal

HT Strategy, US

Heather Thompson was co-founder of ClimateWorks, a network of organizations working worldwide to reduce the threat of climate change. Now working independently, Ms. Thompson is focused on accelerating the strategies of ClimateWorks' Best Practice Networks. Previously, Ms. Thompson was a Principal at California Environmental Associates (CEA), leading the firm's work in philanthropic strategy. Ms. Thompson has lived and worked abroad and holds a master's degree in environmental economics.

Veerle Vandeweerd

Director of Environment and Energy

United Nations Development Programme, Belgium

Dr. Veerle Vandeweerd directs the Environment and Energy Group of UNDP, providing strategic direction and oversight to UNDP in mainstreaming environment, energy and sustainability into its development work in 166 countries. Before joining UNDP in 2007, Dr. Vandeweerd held leadership roles with the UNEP for 19 years based in Africa and Europe.

Donal O'Connell

Former Managing Director

Columbia National Real Estate Finance, LLC

Donal had a 32 year career in commercial real estate. Upon his retirement in 2008, he turned his energies toward contributing to community affairs. He is a member of the Development Advisory Committee of WAMU radio, is Co-President of the Sumner Citizen's Association, and is on the Board of the Little Falls Watershed Alliance.

Our funding

CLASP's work on appliance energy efficiency would not be possible without the generous support of our donors.

2012 Donors USD $500,000 and above

ClimateWorks Foundation

United States Department of Energy

2012 Donors USD $499,999 and below

Australian Department of Climate Change and Energy Efficiency

European Bank for Reconstruction & Development

Lawrence Berkeley National Laboratory

United Kingdom Department for Environment, Food & Rural Affairs

Graham Pugh
Director, Office of International Climate Change Policy and Technology, US Department of Energy

'An indispensible partner in our efforts to advance equipment and appliance efficiency under the Clean Energy Ministerial and its SEAD (Super-efficient Equipment and Appliance Deployment) Initiative, CLASP has excelled across a range of undertakings – from identifying and analyzing specific policy opportunities to strategic planning on how best to transform markets for super-efficient appliances and products.'

CLASP would also like to acknowledge all the institutions that have supported us over our thirteen year history:

Asia Pacific Economic Cooperation

Australian Greenhouse Office

ClimateWorks Foundation

Energy Foundation

Energy Efficiency Conservation Authority of New Zealand

Enova of Norway

Government of Sweden

Greenhouse Challenge Plus

Institute of Electrical Engineers of Japan

International Copper Association

Ministry of Economy Trade and Industry of Japan

Renewable Energy and Energy Efficiency Partnership

United Nations Development Programme

United Nations Department of Economic and Social Affairs

United Nations Environmental Programme

United Nations Foundation

United States Agency for International Development

US Department of Energy

US Department of State

US Environmental Protection Agency

World Bank

Financial statements

Statements of financial position

For the years ended December 31	2012 $	2011 $
ASSETS		
Current Assets		
Cash and cash equivalents	752,642	994,550
Federal grants receivable	520,550	453,799
Prepaid expenses and other current assets	74,048	44,393
Total current assets	1,347,240	1,492,742
Long-term assets	166,150	155,469
TOTAL ASSETS	1,513,390	1,648,211
LIABILITIES AND NET ASSETS		
Current liabilities	318,080	1,186,594
Long-term liabilities	42,992	51,901
Total liabilities	361,072	1,238,495
Net assets	1,152,318	409,716
TOTAL LIABILITIES AND NET ASSETS	1,513,390	1,648,211

Statements of activities and changes in net assets

For the years ended December 31	2012 $	2011 $
SUPPORT AND REVENUE		
Foundation grants	6,389,095	5,373,910
Government grants	1,520,640	1,058,169
Interest and other income	5,400	15,098
Total support and revenue	7,915,135	6,447,177
EXPENSES		
Program activities	7,135,732	6,415,653
Management and general	20,493	30,665
Fundraising	16,308	3,980
Total expenses	7,172,533	6,450,298
Change in net assets	742,602	(3,121)
NET ASSETS		
Beginning of period	409,716	412,837
End of period	1,152,318	409,716

Glossary

Terms, acronyms, and abbreviations used in this report.

CO_2	Carbon dioxide
TWh	Terawatt-hours or 1,000,000 MWh
Mt	Megatons or million tons
4E	Efficient Electrical End-Use Equipment Agreement (IEA)
AC	Air Conditioning/Conditioners
APEC	Asia-Pacific Economic Cooperation
APEC EGEE&C	Asia-Pacific Economic Cooperation Expert Group on Energy Efficiency and Conservation
APEC ESIS	Asia-Pacific Economic Cooperation Energy Standards Information System
BEE	Bureau of Energy Efficiency (India)
BPN	Best Practice Network
BUENAS	Bottom-Up Energy Analysis System
CEM	Clean Energy Ministerial is a high-level global forum to promote policies and programs that advance clean energy technology, to share lessons learned and best practices, and to encourage the transition to a global clean energy economy. For more information see www.cleanenergyministerial.org
CLASP	Collaborative Labeling and Appliance Standards Program
CNIS	China National Institute of Standardization
CWF	ClimateWorks Foundation
DOE	Department of Energy (USA)
EC	European Commission
ECOWAS	Economic Community of West African States
US EPA	US Environmental Protection Agency
EU	European Union
FTC	Federal Trade Commission (US)
Global LEAP	Global Lighting and Energy Access Partnership
GEALSP	Ghana Electrical Appliance Labeling and Standards Programme
IEA	International Energy Agency
IEEJ	Institute for Energy Economics Japan
IIEC	International Institute for Energy Conservation
LED	Light Emitting Diode
LBNL	Lawrence Berkeley National Laboratory
MEPS	Minimum Energy Performance Standards
METI	Ministry of Economy, Trade, and Industry (Japan)
MV&E	Monitoring, Verification and Enforcement
NGO	Non Governmental Organisation
PAMS	Policy Analysis Modeling System
REEEP	Renewable Energy and Energy Efficiency Partnership
S&L	Standards and Labeling policy activities or programs
SEAD	Super-efficient Equipment and Appliance Deployment (SEAD) Initiative
SEDI	Super Efficient Dryer Initiative
US AID	US Agency for International Development

Our publications

CLASP is committed to developing and sharing resources and analyses for standards and labeling practitioners around the world. We have included a list of notable publications from recent years, completed in collaboration with the world's foremost experts in our field.

A Standards & Labeling Guidebook for Appliances, Equipment and Lighting

CLASP's S&L Guidebook is designed as a manual for government officials and others around the world responsible for developing, implementing, enforcing, monitoring, and maintaining energy efficiency labeling and standards-setting programs. The Guidebook has been translated into several languages, including Chinese, Korean, and Spanish. Lead authors: Stephen Wiel and James E McMahon.

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

The Guidebook on MV&E Best Practice for Appliance Standards & Labeling provides step-by-step guidance for policymakers and S&L practitioners to design and implement robust and effective MV&E frameworks. The Guidebook demonstrates the importance of effective compliance frameworks in safeguarding current and future energy and greenhouse gas emissions savings from S&L programs. The Guidebook is now available in Chinese, English, and Russian. Author: Mark Ellis & Associates.

Comprehensive Programmatic Assessment of India's S&L Program

CLASP conducted a comprehensive institutional assessment of India's S&L program in 2012 to support the Bureau of Energy Efficiency in evaluating the program's practicality, flexibility, integrity, and simplicity in implementation. The assessment identifies barriers and constraints for effective implementation, as well as recommends strategies for accelerating and strengthening India's S&L scheme, including priority areas of focus and recommendations for training and capacity building. Author: Ernst & Young.

Opportunities for Success & CO_2 Savings from Appliance Energy Efficiency Harmonization

The study conducts an extensive investigation of the energy efficiency standards and labeling programs in place in China, the European Union, India, Japan and the US. The study shows that the vast potential for energy and CO_2 savings from upward-oriented harmonization of international S&L regulations would be achieved if the highest existing global regulatory requirements and the best current technology were adopted in the major economies. Lead Authors: Paul Waide (Navigant Consulting), Lloyd Harrington, and Michael Scholand.

China Energy Label Consumer Awareness Study

CLASP conducted an assessment of consumer awareness and retailer utilization of the China energy label in 2010. According to the assessment, 61.5% of consumers have seen the comparative energy label and can recognize it, yet only 18.3% of consumers have a deep enough understanding to use the label to guide purchase decisions. Author: All China Marketing Research.

Cooling Benchmarking Study Compares Air Conditioner Efficiency in Major World Economies

The study provides comparison of MEPS stringency and room air conditioner efficiency under various test procedures and energy efficiency metrics that are currently used in major world economies. The study, carried out in partnership with Econoler, Navigant, CEIS and ACEEE, provides policymakers and energy efficiency program managers with tools and important insights for developing or updating test procedures, labels, and minimum energy performance standards for room air conditioners.

Clothes Dryer Heat Pump Technology Offers Substantial Cost and Energy Savings for North America

Recent innovations in clothes drying technology offer new opportunities for energy savings. One innovation in particular – heat pump technology – has substantial savings potential. Dryers using heat pump technology use 50-60% less energy than conventional US dryers. A new CLASP report provides recommendations for introducing this technology into North America. Author: ECOVA.

Assessment of the Monitoring, Verification, and Enforcement Regime for the Energy Labeling Program in India

In 2012, CLASP engaged Mark Ellis, author of Compliance Counts – CLASP's MV&E Guidebook – to conduct an assessment of MV&E frameworks in India and to provide recommendations for a robust MV&E strategy for India's S&L program. The report provides a comprehensive picture of the current compliance framework and assesses the policy, legislative, physical, cultural, and financial constraints that affect it.

Survey on Compliance Programs for Appliance Standards and Labels

The study described in this paper focuses on the potential to improve the outcomes of S&L programs through ensuring that products within the scope of S&L programs adhere to the stated rules of these programs. This subject is often referred to as 'compliance' although it can also be broken down in a number of processes involving monitoring, verification and enforcement (MV&E). Author: Mark Ellis & Associates.

Contact

To learn more, please visit clasponline.org or write to us at info@clasponline.org

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