

University of Colorado Law School

Colorado Law Scholarly Commons

EESI: The Energy & Environmental Security
Initiative [Newsletter] (2007)

Newsletters

8-2007

EESI Newsletter, no. 2, Aug. 2007

Energy & Environmental Security Initiative (University of Colorado Boulder)

Follow this and additional works at: <https://scholar.law.colorado.edu/eesi>



Part of the [Energy and Utilities Law Commons](#), [Energy Policy Commons](#), [Environmental Law Commons](#), [Environmental Policy Commons](#), [Indigenous, Indian, and Aboriginal Law Commons](#), [Law and Society Commons](#), [Public Policy Commons](#), and the [Sustainability Commons](#)

Citation Information

EESI: The Energy & Environmental Security Initiative [Newsletter], no. 2, Aug. 2007 (Energy & Envtl. Security Initiative, Univ. of Colo. Law Sch.).



William A. Wise Law Library
COLORADO **LAW**
UNIVERSITY OF COLORADO **BOULDER**



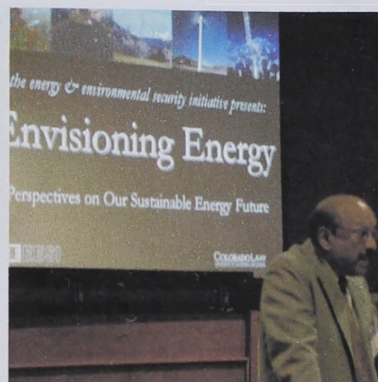
Getches-Wilkinson Center Collection

EESI: THE ENERGY & ENVIRONMENTAL SECURITY INITIATIVE
[NEWSLETTER], no. 2, Aug. 2007 (Energy & Envtl.
Security Initiative, Univ. of Colo. Law Sch.).

Reproduced with permission of the Getches-Wilkinson
Center for Natural Resources, Energy, and the
Environment (formerly the Natural Resources Law
Center) at the University of Colorado Law School.

EESI

the
energy &
environmental
security
initiative



also in this issue:



Five Speakers Convene for EESI's
"Envisioning Energy" Event
Page 2

Student Comment:
Cost Containment for Cap-and-Trade
Page 4

Interview with
Regent Cindy Carlisle
Page 5

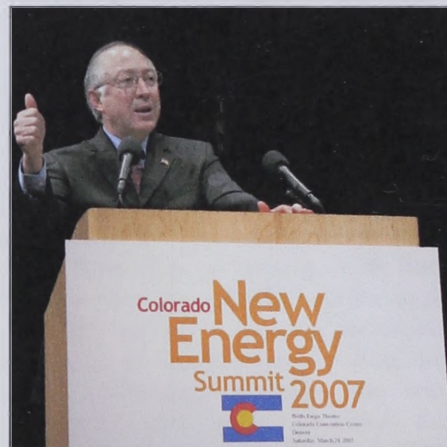
Project Profile: The International
Sustainable Energy Assessment
Page 5

Special Feature: A Message From U.S. Senator Ken Salazar Securing a New, Clean Energy Economy for the 21st Century

This summer, the Senate passed the *Renewable Fuels, Consumer Protection, and Energy Efficiency Act of 2007*, marking a significant step in our Nation's path towards a new, clean and sustainable energy future. This landmark legislation is undoubtedly one of the most important bills I have voted for as a member of the U.S. Senate, and I am confident that its passage will help provide our Nation with a roadmap for how to improve our National, economic and environmental security for years to come.

The *Renewable Fuels, Consumer Protection, and Energy Efficiency Act of 2007* will dramatically reduce America's energy dependence on foreign nations by increasing the amount of energy we produce here at home. It contains provisions to reduce crude oil consumption by more than 18 percent by 2020 by producing energy from renewable sources – including biomass, wind, solar and geothermal – on American farms, fields and forests. Increased production of homegrown biofuels will effectively serve our national security interests by reducing our dependence on oil from unstable regions around the world.

The bill will also help us increase our energy independence by making better use of the energy we consume. It will help the automotive industry embrace new, high efficiency technologies by providing items like loan guarantees for the manufacture of plug-in hybrids and advanced diesel vehicles, and it also makes a long-overdue increase to Corporate Average Fuel Economy (CAFE) car mileage standards.



"I applaud forward-thinking organizations such as EESI in their collective endeavor to step up to this challenge and to provide solutions that help facilitate the realization of a new, clean energy future." - U.S. Senator Salazar

See Senator Salazar, Page 5



EESI Profile: Kevin Doran, Senior Research Fellow

Mariah Zebrowski

Born in Wiesbaden, Germany, Kevin Doran is the EESI Senior Research Fellow. But more than this official title, Doran is the heart and soul behind EESI. Without him, it is likely that EESI would never have existed.

See Doran, Page 4

Heading Photos: Top - Dr. Guruswamy giving the greeting at "Envisioning Energy." Bottom - Audience at "Envisioning Energy."

Five Speakers Convene for EESI's "Envisioning Energy" Event Congressman Mark Udall headlines distinguished group of speakers

Kristen Cunningham

The message of the evening rang clear: Colorado, the United States, and the world face a daunting energy crisis, but recent political developments have taken strides towards mitigating this global problem.

Local leaders, professors, scientists, and other community members came in from the heat on Monday, July 2nd to hear five distinguished speakers' thoughts on a sustainable energy future: ; Colorado House Majority Leader Alice Madden; Director of the Governor's Energy Office Tom Plant; British Consul in Denver Kevin Lynch; and Director of the Colorado Department of Public Health and Environment Jim Martin. Each delivered fifteen minute talks on how their respective branches of state and national governments address climate change and the current energy crisis.

Despite a uniform enthusiasm about the recent political shift to greener law and policy, each speaker reminded the packed Wittermyer Courtroom that governments and citizens alike must continue to reduce carbon emissions and find alternative energy sources in order to ensure a promising future for upcoming generations.



Udall criticized the Bush Administration for its strong focus on carbon-based technologies, but praised the States—and Colorado in particular—for their efforts in passing environmental legislation, such as Colorado's Amendment 37. He then spoke about several bills in a comprehensive energy legislative "package" set to hit the floor after the July recess. Among other proposals, the bills in the package advocate carbon capture and storage, address global climate change research and data management, and propose tax incentives to increase the number of flex-fuel and hybrid vehicles on American roads (for more on current energy legislation, please see Senator Salazar's message, Page 1).

Udall kicked off the evening by relating how the new Democratic Congressional majority has addressed energy policy. "I'm bullish," Udall said. "With Democrats back in charge we intend to be fully engaged. The federal government has yet to scratch the surface of what we can do."

"With Democrats in the majority, we are in the position to set the agenda," Udall said. "But we can't force those who don't agree with us to bend to our will. We have to be creative about how we bring this package and its various elements to the floor, and then be creative in how we present them to the President."

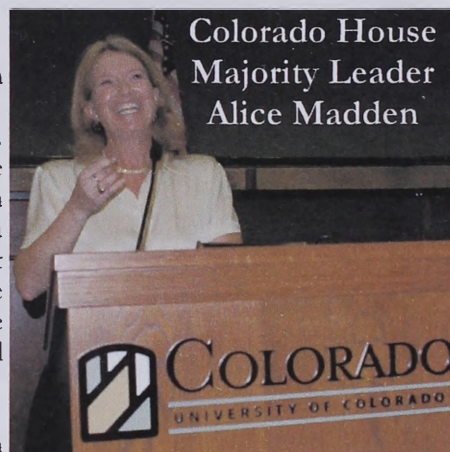
Udall closed his speech by emphasizing that clean energy and carbon emission reductions should be a national imperative. "Green is the new red, white, and blue," said Udall, quoting Tom Friedman. "There's nothing more patriotic than pursuing these new green technologies."

Madden followed Udall's upbeat presentation with even more optimistic words. "The times really are changing," Madden said. "2007 marks a very clear demarcation in time and a complete change of political will around this issue in Colorado."

Madden evinced chuckles from those in attendance with her stories of attempted environmental legislation under former Governor Bill Owens. She then emphasized the shift to a pro-environment stance when Governor Bill Ritter took office in January. With Ritter having signed over twenty environmental bills into law in the past seven months, Madden exuded a glowing satisfaction with the current direction of Colorado energy policy. She also mentioned several businesses—including the wind system manufacturer Vestis and solar provider Sun Edison—and their plans to bring renewable energy facilities to Colorado.

However, the House Majority Leader acknowledged the fact that the state still has a long way to go before it can successfully clean up its air, harness solar and wind power, and provide a self-sufficient and economically viable energy future. "We're creating new rules that welcome the growth markets of tomorrow," Madden said. "[But] Colorado is still on the verge of violating the Clean Air Act. We really need to act now."

Plant echoed these sentiments in his subsequent address. "Things are happening at a pace that is absolutely unheard of," Plant said. "We've accomplished so much, but we still have a long way to go."



See Envisioning Energy, Page 3

the energy & environmental security initiative

Envisioning Energy: (continued...)



**Director of the Governor's Energy Office
Tom Plant**

In keeping to Madden's theme, Plant spoke about the "doom and gloom" of the environmental movement under Owens, as well as the developments since Ritter took office in January. He talked about Colorado's solar, geothermal, and wind potential as well as the business opportunities renewable energy facilities will offer residents in rural Colorado.

"Logan County alone will see \$2.5 million every year in increased property taxes just from having a wind farm," Plant said. "AVA Solar is planning to spend \$40 million to develop a plant in Fort Collins."

Lynch shifted the event's focus from Colorado to the international stage, beginning his speech with an idealistic fairy-tale about politicians listening to scientists, solving the climate change problem, and then thanking the scientists for their help in making the world a healthier and happier place.



**British Consul
in Denver
Kevin Lynch**

"Well as you can guess, that's not an entirely true story," Lynch said. "We are not in the doom and gloom scenarios, nor are we anywhere near a fairy-tale ending. But without the input of China, India, and especially America, we will not get to a happy or satisfactory ending to this serious problem."

The British Consul General also emphasized the need for carbon capture and storage as well as a cap-and-trade system, similar to that under consideration in the United Kingdom. From there Lynch reminded the audience of the U.K. and U.S.' close alliance.

"The United Kingdom and United States have been friends for a long time," Lynch said. "Just because we have a disagreement does not mean we stop talking. We want to engage the U.S. government and we hope that the U.S. government will engage with us, especially to consider a cap-and-trade system for carbon dioxide. The time is right now for all of us to work together to solve this particular problem."

Jim Martin ended the evening with his presentation jokingly entitled, "Why I want to be Tom Plant." While echoing many of the earlier speakers' sentiments, Martin added that Colorado is known as the "Saudi Arabia of oil shale," but that technology has yet to find a way to extract the natural resource from shale rock.



**Director of the
Dept. of Public
Health &
Environment
Jim Martin**

He went on to mention the nitrification of high elevation lakes in Rocky Mountain National Park, as well as ozone exceedences at Mesa Verde. With some of Colorado's most prominent natural landmarks feeling the negative effects of climate change, Martin's tone was slightly less optimistic than that of Madden and Plant.

"The [task] of dealing with the environment and all of the interlocking pieces of environmental and energy security and climate change are daunting," Martin said. "They're enough to maybe keep you in bed in the morning."

Martin emphasized Ritter's commitment to the environment, but warned that there will still be a transitional period during which coal-fired power plants will continue to burn, people will continue to get around in cars and trucks, and developers will continue to put two air conditioning units in new homes to deal with increasing summer temperatures.

"The challenge will be how we deal with the transition period and still reduce carbon dioxide emissions in the atmosphere, deal with ozone on the surface, and deal with lake nitrification," Martin said.

To conclude the event, Martin called on the audience and other Colorado citizens to send the governor's office their ideas about solving climate change-related problems.

Plant best summarized the Envisioning Energy event by quoting an African proverb. "If you want to go fast, you go alone. If you want to go far, you go together," Plant said. "Our great challenge is that we want to go fast *and* far. We need to band together and commit ourselves to thinking about energy in an entirely new way."



Student Comment: *Kendall Burgemeister*

EESI Research Assistant
Second-Year Law Student

Cost Containment for Cap & Trade: An Upside for Everyone

The biggest roadblock to passing greenhouse gas (GHG) cap-and-trade legislation has been fear that any system would create larger-than-expected energy costs with a potentially disastrous impact on the economy. If a severe economic downturn did materialize, this would pose a major threat to the stability, credibility, and survival of the cap-and-trade system. Therefore, adequate cost-containment measures are crucial to achieving immediate action on GHG emissions, and to the long-term vitality of a GHG-limiting regime.

Congress has a wide range of cost-containment measures at its disposal. For example, systems that allow carbon emitters to bank and borrow permits, and to use carbon offsets as a substitute for buying permits, are scattered in various forms throughout many of the bills that have already been introduced to Congress. Going one step further, the Bingaman-Specter bill introduced on July 11 includes a price ceiling on emissions permits (a "safety valve") at \$12 per ton in the first year, rising by inflation plus five percent in each year thereafter.

Many corporations argue that banking, borrowing, and offsetting do not offer enough flexibility and security, while many environmentalists argue that a system with a safety valve is not potent enough.

On July 24, four U.S. Senators—two Republicans (Senators Lindsey Graham and John Warner) and two Democrats (Senators Blanche Lincoln and Mary Landrieu)—released a proposal aimed at minimizing the short-term negative economic impact of a GHG cap-and-trade system. The proposal was developed with the aid of the Nicholas Institute for Environmental Policy Solutions at Duke University.

The proposal, designed not to be standalone legislation, but rather to be an add-on to any of the other proposals, calls for the creation of a "Carbon Market Efficiency Board" that would monitor and, if needed, intervene in the carbon market just like the Federal Reserve Board does with the money market.

See Student Comment, Page 6

Doran: (continued...)

Doran moved straight into the field of non-profit environmental work after graduating from Andrews University in 1996. In addition to several other groups, Doran worked for the Fund for Public Interest Research, headquartered in Boston, Massachusetts and Washington D.C. He worked on fundraising, lobbying, proposal drafting, and environmental education. He also managed many of the Fund's offices across the country, including the offices in Los Angeles and San Diego, California; Eugene, Oregon; and Minneapolis, Minnesota.

After six years of non-profit environmental work, Doran enrolled at the University of Colorado Law School, where he was an editor of the CU Law Review. He obtained his J.D. in 2003, whereupon he began work as a research associate at the Natural Resources Law Center at CU. Under Jim Martin, who is now the Executive Director of the Colorado Department of Health and Environment, Doran worked on drafting and analyzing international conservation easements, figuring out how to work with foreign legal systems so that these easements could be used to protect private land.

Then, two and a half years ago, Dr. Lakshman Guruswamy approached Doran with an idea that he had been thinking about—a group that would research how to use law and policy to deal with the issue of sustainable energy. Initially working as an unpaid volunteer, Doran set about trying to get Guruswamy's idea off the ground. He researched. He analyzed. He organized. He fundraised. He made connections and contacts. "I had to wear a lot of hats," said Doran. But, by carefully balancing all of these jobs, EESI was born.

With dedication, time, and support from Doran, EESI has blossomed into an accomplished research center, with the mission of using law and policy at all levels to tackle the issue of sustainable energy. From being EESI's initial volunteer, Doran has turned EESI into a bustling office with a staff of seventeen. A single idea has become the seed for eight funded research projects, as well as three or four internal projects relating to law school curriculum development, assistance with environmental efforts on campus, and article publications.

"The more I learned about environmental issues, the more I saw that energy was a thread that ties everything together," said Doran. "If you can supply clean energy to people, it can alleviate a whole constellation of social problems that you can't really tackle adequately one by one. To me, it's a really great way of making a big difference by working on a single area that impacts many other areas. EESI is so exciting because we deal directly with energy issues and we educate students to become the kind of leaders who can competently handle these difficult issues."

According to Guruswamy, Director of the now flourishing EESI, "Kevin is a totally dedicated, innovative, imaginative, and brilliant guy who works relentlessly with superb results on EESI's many projects. He is a one-man band." And EESI applauds his performance.

the energy & environmental security initiative

Senator Salazar: (continued...)

Moreover, we have sought to capitalize on energy efficiency's "low-hanging fruit" by implementing improved efficiency standards for federal buildings and vehicles, which can potentially serve the dual purpose of conserving energy and saving billions of dollars for American taxpayers.

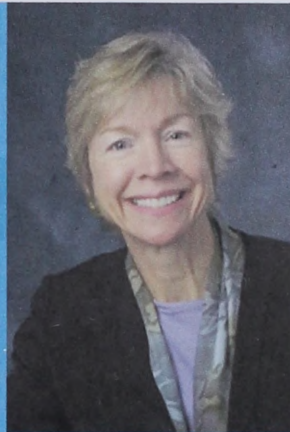
Through this bill, we will also begin to address questions of sustainability through a thoughtful and environmentally responsible energy policy. The challenge of how to tackle global warming and its affects will have few easy answers. One thing we can do today is determine how we can store carbon emissions and other harmful greenhouse gases that we currently release into the atmosphere. An increased investment in emerging technologies like carbon capture and sequestration, coupled with increased use of cleaner, low-emission fuels, will help ease our impact on the Earth's climate.

How we improve our energy security and reduce our dependence on foreign oil will prove to be a National, economic and environmental security challenge for years to come. I applaud forward-thinking organizations such as the Environmental Energy and Security Initiative (EESI) in their collective endeavor to step up to this challenge and to provide solutions that help facilitate the realization of a new, clean energy future. *The Renewable Fuels, Consumer Protection, and Energy Efficiency Act of 2007* is a good first step toward reducing our dependence on foreign oil, reducing our economy's vulnerability to oil-price shocks and reducing our impact on the earth's climate. I look forward to helping implement the provisions of the bill and expanding and diversifying our Nation's energy portfolio.

EESI would like to specially thank Senator Salazar for his contribution to our newsletter.

An Interview With Regent Cindy Carlisle

Paris Lumb



University of Colorado Regent Cindy Carlisle is an alumnus of the University, where she earned her Masters in English in 1977. She has continually supported and praised CU in its efforts to become more environmentally friendly, commending CU for being recognized among thirty North American Universities with strong commitments to clean energy and energy efficiency. She also admires student efforts, such as the Campus Climate Challenge, which incorporates a student-approved \$2.80 fee per semester per student to raise money for projects related to sustainable energy.

Carlisle, who is also on EESI's Advisory Board, provided a warm welcome at EESI's "Envisioning Energy" event on July 2. "Welcome to the University of Colorado," Carlisle greeted the packed courtroom, "and what should prove to be a provocative discussion about the most important issue of our time." She continued, "EESI has been pivotal in putting the University of Colorado at the center of the sustainable energy movement. I am proud to have been a small part of what's happening this evening."

See Regent Carlisle, Page 6

Project Profile: The International Sustainable Energy Assessment

Victoria Ravenscroft

The International Sustainable Energy Assessment (ISEA) is a comprehensive public database of international energy treaties. ISEA is designed to facilitate the cooperation and international engagement necessary to address challenges arising in moving to a more sustainable global energy regime.

ISEA International Sustainable
Energy Assessment

Access Database at
<http://lawweb.colorado.edu/eesi>

The ISEA database helps further cooperation by enhancing international understanding of optimal ways to utilize and configure international energy agreements. Through an analysis of the body of international energy agreements, researchers can begin to develop a picture of the current international energy regime; its faults and triumphs.

ISEA's research is centered around identifying and analyzing the impact of international agreements on (a) renewable energy technologies and markets; (b) markets, technologies and practices relevant to energy efficiency and conservation; and (c) conventional sources of energy, such as fossil fuels and nuclear power.

See ISEA, Page 6

the energy & environmental security initiative

Student Comment: (continued...)

Intervention could include expanding or contracting emitters' ability to use banking and borrowing of permits, and offsets. Intervention could also include temporarily increasing the number of permits available on the market.

This second option may draw comparisons to the "safety-valve" mechanism seen in some proposals, but should be less onerous to environmentalists because the number of excess permits that the Board could release would be limited, and any such increase would have to be countered by a decrease in permits available in future years. It is closer to a market-wide banking and borrowing system than a safety valve.

I like this proposal in that it focuses on limiting the adverse economic effects of a GHG cap-and-trade system, and it creates a Board that can monitor and fine-tune the cost-containment measures within parameters established by Congress. Both of these aspects would help to speed up the passage of GHG legislation. If I could make one modification, it would be to alter the second option mentioned above to make it closer to a safety-valve by not requiring permit increases—at least not increases authorized in the first couple of years—to be countered by future decreases.

If the cost of stabilizing atmospheric GHG concentrations really is just 1% of global GDP as the Stern Report suggests, or 1.6% of U.S. GDP that the EPA says is the cost of the McCain-Lieberman bill, then a prudently placed safety valve should not worry advocates for a firm cap—if the system works like it's supposed to, the safety-valve price will never be reached.

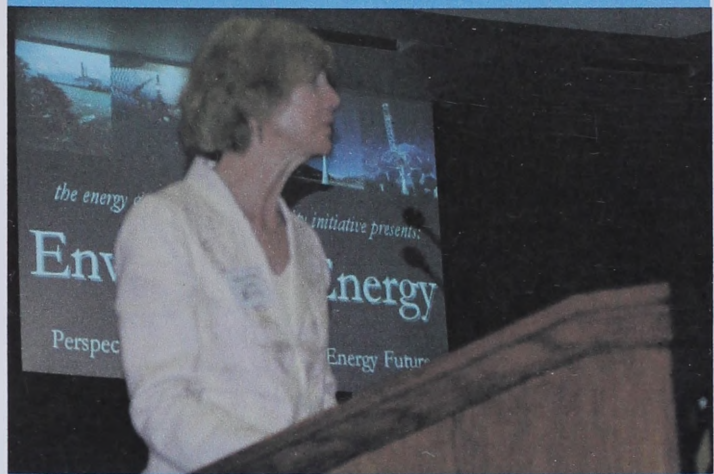
Also, a system with a price ceiling allows for setting a lower initial cap on emissions than a system without a price ceiling. I can't help but think that at least part of the reason the EU over-allocated permits in Phase 1 of the ETS was fear that an under-allocation would result in costs that the economy could not bear. With a price ceiling in place, this fear is alleviated.

Those who favor immediate action on GHG emissions should at least reexamine their opposition to terms that provide short-term protection to the economy in the initial phase of a cap-and-trade system.

Each issue of EESI News will feature a comment written by a student currently working with EESI. Each student author picks his or her own energy or environmental issue to comment on.

To contact Kendall with questions or comments about this article, please email him at: kendall.burgemeister@colorado.edu

Regent Carlisle: (continued...)



Prior to the event, Carlisle was gracious enough to answer a few questions about EESI and renewable energy. When asked about Colorado's role in promoting renewable energy, Carlisle was proud to say, "We are positioning ourselves as a leader," naming groups such as the National Renewable Energy Lab (NREL), the Colorado School of Mines, Colorado State University, and EESI as proof of this leadership. Though she lamented that the United States is so far behind in terms of renewable energy, she expressed approval that individual states, cities, and universities have taken the lead in reducing their carbon footprints.

When asked about EESI's project, the International Project on Energy Commitments and Compliance (IPECC) (see *Projects in Progress*, Issue One). Carlisle said that public access to information is essential in a democratic country. In her view, IPECC is an excellent resource for allowing people access to information that will enable them to speak to their elected officials about change and what needs to be done.

Carlisle feels strongly that universities need to be at the forefront of renewable energy and energy efficiency action. "I think students should be involved from the very beginning," Carlisle declared, mentioning that EESI is a good venue for student involvement. She went on to say that she thinks young people should be the ones to change policy, and will, in fact, be the ones to do so.

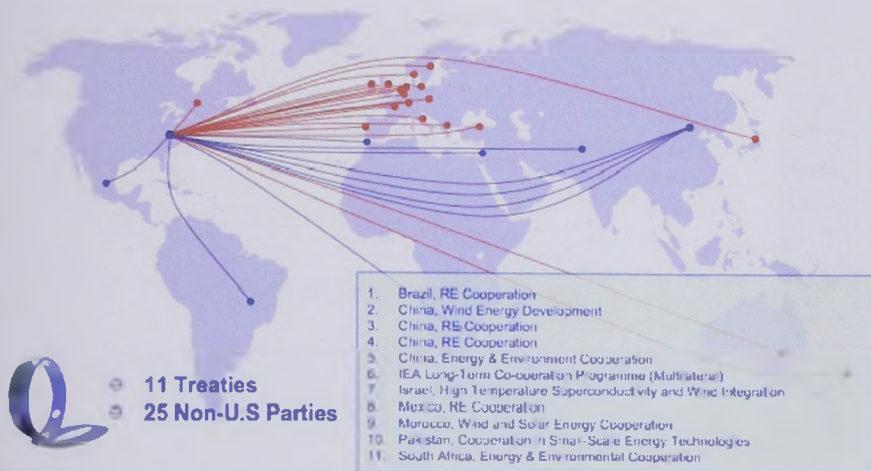
"I cannot tell you too many good and great things about Cindy," said EESI Director Dr. Lakshman Guruswamy. He continued, "Regent Carlisle is a true visionary, an intrepid leader, and a great regent who is leading CU to become an even more prestigious world class research and teaching university. She has been pushing CU to take seriously its mission to find sustainable energy solutions for the world's energy crisis." Guruswamy concluded, "Regent Carlisle has been a champion of EESI. She is like the wind behind our sails."

the energy & environmental security initiative

International Energy Treaties

ISEA: U.S. Wind Power Treaties

EESI



ISEA: (continued...)

The data and analysis compiled by the ISEA team is freely accessible online in a searchable database of bilateral and multilateral international energy agreements currently in force. In addition to the full text of each agreement, the unique character of the ISEA database will lie in its analysis of the implementation and impact of these agreements.

In so doing, ISEA will provide decision-makers, academics, industry personnel, researchers, and students with an invaluable tool for understanding the current and potential impact of international agreements on the attainment of a sustainable energy future.

ISEA is a huge undertaking. The outlay of

international agreements on energy is ever-changing and rapidly growing. As energy issues come to the forefront of international concern, international agreements will increasingly serve as an important tool to deal with these issues.

International energy agreements are increasingly recognized as instruments of international economic policy, and as mechanisms for leveraging scarce domestic research dollars with those of foreign countries. In this context, international energy agreements can provide scientists with opportunities to gain access to, and build upon, the research of other nations in areas that may have potential commercial value. Additionally, international agreements have facilitated the development of relationships that are essential to addressing many large-scale contemporary problems that are beyond the ability and resources of any individual nation.

The database currently spans five "analytical hubs": (1) the United States; (2) the International Energy Agency; (3) the European Union; (4) China; and (5) India. We are in the process of adding four additional hubs: (1) Russia; (2) Brazil; (3) South Africa; and (4) Mexico. While it will require periodic updates and expansion of the hubs, the ISEA database offers an excellent view of the current energy agreement outlay across the world.

One of the unique aspects of the ISEA project is that it doubles as a learning opportunity for students of international law. ISEA is staffed by one full-time research coordinator and up to twelve student research assistants. Working on the ISEA database offers the student researchers the opportunity to view international law in a way that they may not in the classroom. By providing hands-on experience for the student researchers, ISEA allows students to gain valuable research and analytical skills.

ISEA's marriage with the International Project on Energy Commitments and Compliance (IPECC) will complete the database's true purpose. IPECC will offer the public a user-friendly, searchable website that will allow for up-to-date analysis and information. The IPECC website will take the form of a wiki-system similar to Wikipedia (see Wikipedia.org). Input will be from experts in fields related to the subject matter of the agreements, and the site will allow commentary from the public as well, with the goal of making this kind of information freely available to the general public.

Questions? Comments? Please Contact:



Mariah Zebrowski,
Editor-In-Chief
Mariah.Zebrowski@Colorado.edu

Paris Lumb,
Assistant Editor
Paris.Lumb@Colorado.edu

