





## From the President

What better time than the occasion of CRS's tenth anniversary to reflect on where we've been and where we're headed into the future. In 1997, U.S. attention was focused on the restructuring of the electricity industry. CRS provided policy guidance on mechanisms for incorporating renewable resources, energy efficiency, and research and development into restructuring legislation and regulations through renewable portfolio standards, public-benefits funds, and other innovative programs. CRS also saw the need for-and developed-a program to certify renewable electricity sold in the direct-access market, because that piece of the puzzle was needed and there was no one else positioned to accept that task.

Ten years later, restructuring is less in the forefront, while-contrary to popular opinion in 1997-private investments in renewables and renewable energy certificates have become a multi-billion dollar industry. The credibility of the renewable energy market has hinged on independent third-party verification that these investments are real, that the money is going to actual renewable projects and that renewable energy is not being double-sold or double-counted. CRS helped create and launch the Low Impact Hydropower certification program, and with CRS's Green-e Energy program, can take credit for some of these outstanding accomplishments.

In 2000, CRS produced a whitepaper with participation by 150 stakeholders that laid out the potential market, policies, and market rules

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that would ensure renewable energy certificates (RECs) could became a viable financial tool to facilitate support for renewable energy projects. Today, customers can purchase RECs that represent the environmental and social benefits from a megawatt-hour (MWh) of renewable power without the need for power-purchase agreements. In 2007, more than 12 million MWhs of RECs were certified by Green-e Energy. This represented well over half of all renewable energy available in the U.S. voluntary market.

In 2003, CRS saw the need for a mechanism that would allow businesses that make a significant investment in renewables, either through distributed generation or purchases of renewables and certificates, to take credit for that commitment to clean energy. Thus, Green-e Marketplace was born, and at the end of 2007, 58 companies were using the Green-e logo to show their customers that they are major financial supporters of renewable energy.

CRS recognized the convergence of renewable energy, energy efficiency, and climate-change policies, and has worked over the past five years to merge and integrate these three critical policy areas. In 2007, we worked closely with the California Public Utilities Commission and other state and regional decisionmakers to spotlight the interaction between renewables, energy efficiency, and climate policy. Over the years, CRS has developed numerous policy documents and worked behind the scenes with international, national, and state decisionmakers to craft strong public policies to guide renewable energy, energy efficiency, and climate change, and the development of implementation tools. We provided technical support for the development of the Western Region Electricity Generation Information System (WREGIS) and other regional tracking systems and recently launched the independent nonprofit Environmental Tracking Network of North America to support this new market system.

Who would have thought in 1999 when CRS staff first began working in China that it would become a leader for renewable energy policy by passing one of the most comprehensive pieces of renewable energy legislation of any emerging economy in the world?

As a final cap on the past decade of accomplishment for CRS, we launched Green-e Climate, the first certification program for greenhouse gas offsets being sold in the retail market. This program, a result of years of stakeholder involvement, is a prime example of the entrepreneurial nature of CRS.

We have proven over the past decade that we have the vision, instincts, and guts to take on the difficult questions and issues that must be resolved for policies and markets to move forward to achieve a sustainable future. CRS will continue this role as we tackle the design of sound climate policy and the creation of effective tools to support policy implementation. It has been an honor to serve as the leader of CRS during this formative period, and it is with pleasure I pass the torch to Arthur O'Donnell to continue this journey.

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## 1997

- CRS officially established March 25, 1997
- Green-e Program launched December 1997

### 1998

Besides implementing Green-e, CRS was involved in various international projects (in Brazil, Argentina, and Southeast Asia)

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#### 1999

- Green-e Plus Program and Green Pricing Accreditation launched
- CRS begins China Sustainable Energy Program

### 2000

• Began work on Tradable Renewable Certificates (TRCs) and national guidelines

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• Informed RPS language in China's tenth Five Year Plan

### 2001

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Organized Green-e Verification

# **1997 2007** A DECADE OF ENVIRONMENTAL INNOVATION

### 2002

- Began certifying TRCs and organized international renewable energy policy meeting
- Started the Public Interest Energy
  Research (PIER) program

### 2003

- Wrote Regulator's Handbook on Tradable Renewable Certificates
- Started Western Region Electricity Generation Information System (WREGIS) project

## 2004

- Launched Product Labeling Initiative
- Green Power Board approves the Green-e National Standard
- MREP (purchasing) program launched

## Began work on Green-e Climate Standard Completed BCCL work

2006

- Completed RGGI work
  Launched WREGIS and Midwest Renewable Energy Tracking System
- Began Environmental Tracking Network of North America
- Began organizing the annual National Renewable Energy Marketing Conference

## 2007

- Revamped business lines
- Founder Jan Hamrin retires, Arthur O'Donnell hired as new executive director

## 2005

- China passes renewable energy law
- Published Achieving a 33% Renewable Energy Target

CRS is known for being a thought leader on issues related to the intersection of renewable markets and climate policy. CRS has been effective at developing innovative solutions that create win-win options for policymakers and the larger renewable energy market. We have used this skill to support our climate advocacy at the State and regional level. In 2007, CRS engaged at the California Public Utilities Commission and the California Air Resources Board in the implementation of California's landmark climate change policy, AB32. We were also active in the Western Climate Initiative process to design a model rule for carbon regulation for the electricity sector. This work continued into 2008. We demonstrated our leadership through our efforts to ensure that private investment in renewables, energy efficiency, and distributed generation are able to take carbon reduction credit in the Regional Greenhouse Gas Initiative.

One of CRS's greatest strengths is its keen understanding of the relationship between policy and markets. CRS has used this knowledge to provide expert assistance to states, trade associations, governments, and private parties. CRS authored or edited several papers in 2007 that contribute significantly to the body of knowledge around renewable policy and markets. CRS wrote a paper for the Commission for Environmental Cooperation on *The Hedge Value of Renewable Energy*. We also authored a *Review of Renewable Energy in Global Energy Scenarios* for the International Energy Agency (IEA). We edited the REN21 report on *Opportunities for the Rapid Deployment of Renewable Energy in Large Energy Economies* focusing on renewable energy as a major GHG reduction tool. We coauthored a landmark whitepaper, *The Potential for Energy Saving Certificates as a Major Tool in Greenhouse Gas Reduction Programs*. We provided policy assistance to the newly formed Renewable Energy Marketing Association and we completed our seventh year of working on the China Sustainable Energy Program, providing policy assistance to the Chinese government on renewable energy policy.

CRS also has developed expertise in the area of certificate-tracking as a policy implementation tool. We advised three states—California, Minnesota, and New York—on the design, governance, or implementation of renewable policies using certificate tracking systems. Finally, CRS laid the legal groundwork for launching the Environmental Tracking Network of North America, a new nonprofit that will provide a forum for the coordination and cooperation of existing and emerging systems issuing, tracking, or registering electric generation, conservation certificates, and other environmental attributes in North America.

## Clean Energy and Climate Policy



One of CRS's greatest strengths is its keen understanding of the relationship between policy and markets.





2007 was a significant year for CRS's consumer-protection programs. The Green-e program, established in 1997 to support the sale of credible voluntary renewable energy products, reached record volumes. In addition, the program expanded with the Green-e Governance Board's approval of the governing documents for Green-e Climate, a program that certifies and verifies products in the emerging market for voluntary greenhouse gas emission reductions (a.k.a. carbon offsets).

## Consumer-Protection Programs

#### **Green-e Energy**

2007 was a year of maturation for Green-e Energy. Green-e Energy Certified renewable energy sales topped 15 million MWh, a 50 percent increase from 2006 and the largest volume of sales ever verified by the program. Certified sales of renewable energy certificates (RECs) reached more than 13.3 million MWh. Nearly 300,000 residential customers bought Green-e Energy Certified renewable energy, 90,000 more than in 2006. Commercial purchases drove much of the program growth, with over 15,000 commercial customers choosing Green-e Energy Certified products, more than double the number in 2006. As of year end, there were 72 companies participating in Green-e Energy (173 when all utility distributors are included), selling 100 certified products, up from 60 companies offering 76 products in May of 2007.

#### **Green-e Climate**

2007 was also a watershed year for the development of the newest Green-e program, Green-e Climate. In June 2007, the Green-e Governance Board approved The Green-e Greenhouse Gas Emission Reduction Product Certification Program Standard (since renamed the Green-e Climate Standard) after two stakeholder consultation periods. This Standard sets the general guidelines for the program and defines the principles and criteria that will be used to evaluate the eligibility of GHG offset projects. In October of 2007, the Green-e Governance Board approved The Green-e Climate Protocol for Renewable Energy following two stakeholder consultations. This Protocol specifies the eligibility for renewable energy facilities in the United States to sell greenhouse gas emission reductions under Green-e Climate. The program has attracted much interest, including more than 20 news stories directly referring to the development of the program (including the *New York Times, Washington Post, Christian Science Monitor,* and public radio) in addition to numerous stories in online media outlets, and formal participation in the program's development by over 70 stakeholders.

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#### **Green-e Marketplace**

Environmental performance is guickly becoming one of the metrics that organizations use to measure the success of their core business, and many companies are considering buying renewable energy for the first time to reduce the carbon footprint associated with their electricity use and to support the growth of renewable energy sources. In 2007, Green-e Marketplace saw an increase of certified renewable energy purchased to 2.7 million MWh compared to 114,000 MWh in 2006. Many of the businesses and other organizations that joined in 2007 had never purchased renewable energy but they understood the importance (and benefits) of showing environmental leadership by using the Green-e logo to convey their commitment to stakeholders. By the end of 2007, the number of organizations participating in Green-e Marketplace was 55 compared to 38 in 2006. The program continues to grow and includes organizations from a wide range of industries including retail, banking, food/beverage and business services. In 2007, the minimum renewable energy purchasing requirement to participate in Green-e Marketplace was increased and now aligns with the U.S. EPA's Green Power Partner Leadership level requirements. This change will help drive demand for renewable energy and increase the value of the logo by only allowing those organizations with the strongest environmental commitments to join. PepsiCo was the biggest REC purchaser in 2007, with a total purchase of over 1.1 million MWh, representing 100% of its total energy use. The company is currently using the Green-e Marketplace logo on their SunChips brand snacks. As the program becomes more successful, it has the potential to educate millions of consumers about the benefits of renewable energy and their options for purchasing it.



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#### **Carbon Neutral Alliance**

In 2006 CRS began to develop a pilot program to provide resources and guidance to grantmakers, their grantees, and other environmental nonprofit organizations interested in developing strategies to reduce their own carbon footprints, including calculating a detailed greenhouse gas inventory and identifying ways to reduce electricity and fossil fuel use. The Alliance also provides a forum for members to discuss sustainability and leading-edge efforts worldwide to reduce carbon footprints. At the end of 2007, this new initiative was officially launched as the Carbon Neutral Alliance and quickly attracted several member organizations. Members at the end of 2007 included the Nathan Cummings Foundation, Rockefeller Brothers Fund, The San Francisco Foundation, Sempervirens Fund, Surdna Foundation, Trust for Public Land, and the Wolfensohn Family Foundation. Find out more at www.carbon-neutral-alliance.org.

#### **Environmental Tracking Network of North America**

CRS prepared to launch the Environmental Tracking Network of North America (ETNNA) as its own nonprofit organization after growing it as a program for several years. ETNNA is a voluntary association of certificate tracking systems, regulators, and interested market participants that are vested in preventing double-counting and promoting harmonization among certificate tracking systems in North America. Such harmonization will encourage trade, create a common currency for certificates of generation, prevent double counting, and support new and emerging markets. Find out more at www.etnna.org.

#### **Publications**

The Potential for Energy Savings Certificates (ESC) as a Major Tool in Greenhouse Gas Reduction Programs Written by Dr. Jan Hamrin, Dr. Ed Vine, and Amber Sharick, and funded by the Kendall Foundation, this paper—an investigation of energy savings certificates (ESCs, also called "white tags")—examines the status of ESCs in Europe and the United States and assesses their potential use to help fight global climate change by stimulating increased energy efficiency.

Fostering Renewable Electricity Markets in North America This paper provides an overview of the key market demand and supply-side drivers for renewable electricity in each of the three North American countries. It then identifies regulatory mandates, voluntary purchases, self-supply, and financial incentives as the most important drivers of a renewable electricity market in North America today.

A Review of the Role of Renewable Energy in Global Energy Scenarios The purpose of this report, sponsored by the IEA, was to explain why certain global energy scenarios contain larger shares of renewable energy than others, identify key assumptions, and recommend appropriate settings for assumptions critical to the role of renewable energy that might be used in future scenarios.

Promoting Renewable Energy Sources in Portugal: Possible Implications for China Written by Katrin-Dorothee Heer and Dr. Ole Langniß, this paper summarizes Portuguese policy measures to promote renewable energy development, with a focus on how Portugal has used both a feed-in tariff and large government tenders for wind power, focusing on specific elements of policy support relevant to China.

A Comparison of Wind Power Industry Development Strategies in Spain, India and China Written by Dr. Joanna Lewis, this paper compares the manner in which Gamesa

## **Community Initiatives**

## Publications and Public Engagements

(Spain), Suzlon (India), and Goldwind (China) became domestic leaders in their respective countries' wind industries. It reviews the respective policy environments for wind energy in these countries and how these policies have influenced the rise of a major domestic wind turbine manufacturer in each national context.

#### 2007 Public Engagements

NICSA panel on "Going Green in the Investment Management Industry," November 15, 2007, San Francisco. Alex Pennock spoke as part of a panel discussion.

Energy Efficiency Global Forum, November 11-14, 2007, in Washington, DC. Jan Hamrin spoke.

PowerShift 2007, November 2-5, in College Park, MD. Lars Kvale spoke.

Twelfth National Renewable Energy Marketing Conference, October 21-24, 2007, in Philadelphia, PA. Staff spoke, moderated panel discussions, and were present at our booth at this biggest marketer's conference of the year.

Economic Development Strategies For Utilities in a Sustainability-Sensitive Market, September 24-25, 2007, in Arlington, VA. Jennifer Martin spoke.

Arizona Department of Commerce Southwest Tribal Energy Peer Exchange, September 25-26, 2007, in Tempe, AZ. Jennifer Martin spoke.

Carbonmarkets USA , September 11-12, 2007, in San Francisco.

Workshop on REC Markets and Challenges, September 11, 2007, in Washington, D.C. Meredith Wingate spoke at this invite-only event.

Renewable Energy in the Pacific Northwest, August 9-10, 2007, in Seattle, WA. Jan Hamrin gave a presentation on "The Environmental Imperative Driving Energy Innovation."

AWEA Windpower Conference 2007, June 3–6, 2007, in Los Angeles. Meredith Wingate presented a poster on the 10-year retrospective of the voluntary market.

Ceres Conference 2007, April 25-26, in Boston, MA. Lars Kvale spoke on a panel entitled "Go Neutral: Carbon Offsetting for the Corporate World".

EUCI's 4th Annual Marketing Green Power Conference, April 19-20, 2007, in Chicago. Dan Lieberman spoke.

US Green Building Council-NCC Meeting, March 14, 2007, in San Francisco, CA. Alex Pennock spoke.

Global CO<sub>2</sub> Cap-and-Trade, March 5-6, 2007, in San Francisco, California. Lars Kvale presented in the panel "CO<sub>2</sub> Offsets in Voluntary & Regulatory Markets".

FRA's Environmental Trading 101 Seminar, February 7th, 2007, Chicago.

North America and The Carbon Markets, January 17-18, 2007, in Washington, D.C. Lars Kvale spoke on the "Offsets in North America: Where will the Supply Come From?" panel.

## 2007 Staff and Board of Directors

## 2007 CRS Staff

Martin Dooley Office Manager

Jennifer Giles Director of Sustainable Energy Initiatives

Jan Hamrin President

Laurel Hilton Director of Development and Strategic Initiatives

Lars Kvale Green-e Climate Manager

Matthew Lehman IT Specialist

Galen Lemei Legal Fellow

Dan Lieberman Co-Director, Clean Energy Policy, Design & Implementation

Jennifer Martin Director of Certification & Analysis

Andrew Nourafshan Program Analyst, Green-e Energy Alex Pennock Green-e Energy Manager

Aleka Seville Program Analyst, Green-e Marketplace

Scott Sheckman Development Manager

Jeff Swenerton Communications Director

Rachael Terada Project Manager

Jane Valentino Program Analyst, Green-e Climate

Meredith Wingate Co-Director, Clean Energy Policy, Design & Implementation

Dee Young Director of Accounting & Human Services

## **CRS Board**

Julie Blunden Vice President of External Affairs SunPower Corporation

Claudine Cmarada (Schneider) President, Solar Alliance Douglas DeNio Retired U.S. Park Service

Nancy Floyd Managing Director Nth Power

Jan Hamrin Ex-Officio Member President, CRS

Mark Levine Senior Staff Scientist Lawrence Berkeley National Laboratory

Karl Rábago Director, Global Regulatory Affairs Global Business Transformation Group The AES Corporation

Rick Sellers Director Arxiel Ventures

Byron Sher Former Senator California State Legislature

Carl Weinberg Principal Weinberg Associates

#### 2006-2007

**AES Corporation** Anonymous Contributor 1997–2007 Funders **Douglas DeNio EmPower** The Energy Foundation Nancy Floyd, Nth Power Google AdWords Henry P. Kendall Foundation HSBC - North America International Energy Agency **Joyce Foundation** Kema, Inc. Scott Miller, Korn/Ferry Intl.\* National Park Service New York State Energy Research and Development Authority **Oak Foundation** Karl Rábago **Renewable Energy Marketing Association** Renewable Energy Policy Network for the 21st Century **Robert and Patricia Switzer Foundation Rockefeller Brothers Fund** Silicon Valley Social Venture Fund The John Merck Fund The San Francisco Foundation **Timberland Foundation** U.S. Department of Energy / NREL U.S. Environmental Protection Agency Weyerhaeuser Company Foundation Wilson Sonsini Goodrich & Rosati\* Wolfensohn Family Foundation

#### 2004-2005

California Energy Commission Commission for Environmental Cooperation-Montreal Connecticut Clean Energy Fund Green Capital Network Joyce Foundation Mass. Technology Collaborative New Jersey Board of Public Utilities New York Community Trust **Oak Foundation** Renewable Energy and Energy Efficiency Partnership Rhode Island Renewable Energy Fund **Rockefeller Brothers Fund** Sacramento Municipal Utility District State of Nevada Energy Office Steven and Michele Kirsch Foundation The Energy Foundation The Izaak Walton League of America The John Merck Fund The National Park Service The San Francisco Foundation The Surdna Foundation U.S. Environmental Protection Agency Western Area Power Administration Western Governors' Association

#### 2002-2003

American Public Power Association California Energy Commission California Institute for Energy Efficiency Commission for Environmental Cooperation-Montreal Joyce Foundation National Wind Coordinating Committee New York State Energy Research and Development Authority Oak Foundation Rhode Island Renewable Energy Fund State of Nevada Energy Office The Energy Foundation The Surdna Foundation Turner Foundation U.S. Environmental Protection Agency Western Area Power Administration Western Governors' Association

#### 2000-2001

Alliance to Save Energy California Public Utilities Commission Emily Hall Tremaine Foundation Greenville Foundation Shell Foundation for Sustainability The Energy Foundation The Surdna Foundation U.S. Department of Energy W. Alton Jones Foundation World Bank/GEF

#### 1999-2000

California Energy Commission The Bullitt Foundation The Compton Foundation The Energy Foundation The John Merck Fund The Surdna Foundation U.S. Department of Energy U.S. Environmental Protection Agency W. Alton Jones Foundation William Penn Foundation Winrock International World Bank/GEF

#### 1997-1998

California Energy Commission International Energy Agency Rockefeller Brothers Fund The Energy Foundation The Independent Energy Producers Association The John Merck Fund The Surdna Foundation U.S. Department of Energy U.S. Environmental Protection Agency William Penn Foundation

\* indicates in-kind contributors

## Financials

#### **Statement of Activities**

Year Ended December 31, 2007

| L                                    | Inrestricted | Temporarily Restricted | <u>2007</u> |
|--------------------------------------|--------------|------------------------|-------------|
| Revenue and Support                  |              |                        |             |
| Support                              |              |                        |             |
| Government Contracts                 | 118,767      |                        | 118,767     |
| Grants                               |              | 640,000                | 640,000     |
| Contributions                        | 8,561        |                        | 8,561       |
| Total support                        | 127,328      | 640,000                | 767,328     |
| Revenue                              |              |                        |             |
| Certification Fees                   | 619,781      |                        | 619,781     |
| Conference Fees                      | 346,026      |                        | 346,026     |
| Consulting                           | 115,499      |                        | 115,499     |
| Total Revenue                        | 1,081,306    |                        | 1,081,306   |
| Net assets released from restriction | 462,931      | (462,931)              |             |
| Total Revenue and Support            | 1,671,565    | 177,069                | 1,848,634   |
| Expenses                             |              |                        |             |
| Program Services                     | 1,270,322    |                        | 1,270,322   |
| General and Administrative           | 391,384      |                        | 391,384     |
| Fundraising                          | 64,697       |                        | 64,697      |
| Total Expenses                       | 1,726,403    |                        | 1,726,403   |
| Change in Net Assets                 | (54,838)     | 177,069                | 122,231     |
| Net Assets, Beginning of Year        | (4,984)      | 120,623                | 115,639     |
| Net Assets, End of Year              | (59,822)     | 297,692                | 237,870     |



The Center for Resource Solutions (CRS) is a national nonprofit with global impact. CRS brings forth expert responses to climate change issues with the speed and effectiveness necessary to provide real-time solutions. Our leadership through collaboration and environmental innovation builds policies and consumerprotection mechanisms in renewable energy, greenhouse gas reductions, and energy efficiency that foster healthy and sustained growth in national and international markets.



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