



Renewable Taos Accomplishments During 2014

Renewable Taos, Inc., (RT) came together in November 2012, so we are celebrating our second anniversary. Once again, it's time to look back and assess what's been accomplished. Although it may seem that progress in local renewable energy has slowed, there have been significant breakthroughs this year that pave the way for more rapid progress in 2015.

RT's goal is to achieve a 100% renewable Taos. We consciously decided to include all energy consumed in Taos County -- electricity, home and office heating, business energy and transportation. Since transportation is responsible for around 40% of the CO2 emissions in Taos County, we realize it is an important part of our goal. Our focus on electricity lays the groundwork for future work on electric and fuel cell vehicles.

This year we decided to tie the entire Kit Carson Electric Cooperative (KCEC) service area into our activities. We've been working with governmental and community groups throughout the entire Enchanted Circle on the Joint Resolution on Renewable Energy. That represents an expansion of our mission.

This report uses the format developed for our 2013 report with a few modifications.

INTRODUCTION

World Developments. During late 2013 and throughout 2014 scientific associations around the world released a series of policy statements on climate change. The overwhelming consensus seems to be that the damage associated with the goal of limiting global warming to 2 degrees Centigrade was seriously underestimated. As we approach the 1-degree mark, many of the problems we hoped to avoid are already emerging.

2014 Turned Out to be the Warmest Year on Record. CO₂ and other greenhouse gas emissions continue to grow. We are now 40% over the pre-industrial concentration of CO₂ in the atmosphere, and greater absorption of CO₂ is causing serious effects in the ocean, our planet's primary sink for CO₂.

Some Favorable Developments in 2014. One of the most promising is news that Roman Catholic leader Pope Francis plans to issue a very aggressive encyclical on climate change and equality. The Pope's aim is to influence the 2015 UN negotiations on a climate change treaty.

President Obama struck an agreement with the Chinese to take aggressive steps on emissions. The terms of the agreement are inadequate to forestall serious disruption, but it was a promising first step. The Chinese announced very aggressive programs for increasing renewable energy's role in their development plans.

The U.S. Environmental Protections Agency issued a framework for reducing emissions from coal fired power plants. The continuing development of renewable generation technologies together with EPA regulation has great promise for spurring the transition to renewable energy in the electricity sector.

On the technology front, we're beginning to see a clear framework for a 100% renewable energy economy. It includes wind, water and solar energy generation plus Electric Vehicles and possibly hydrogen fuel cell transportation.

Breakthrough with Tri-State.

As a result of this breakthrough, the KCEC Board authorized additional solar generation in Angel Fire, Peñasco and Questa totaling 1.5 Megawatts. There are several other proposals for large arrays that depend largely on the resolution of the conflict with Tri-State.

New agreements between KCEC and energy suppliers will be of shorter duration and allow for transition to local renewable energy. We need to monitor developments carefully and continue to encourage rapid expansion of renewable energy. At one of our meetings at KCEC, Luis Reyes remarked that solar photovoltaic has reached price parity with coal generation. Plus, renewable energy is clean and protects our marvelous environment – no harmful particulate emissions causing respiratory and other diseases, low to very low water use, and no CO2 emissions leading to climate disruptions.

KCEC leadership and the entire community helped make this breakthrough possible. Both the incumbent and incoming Taos mayors, the entire board of KCEC, candidates for Town Council, the Mayor of Questa, most of the RT Board, and many other community leaders attended NM Public Regulatory Commission hearings in Santa Fe last Spring in support of the protest.

We will continue to monitor this situation carefully and provide input wherever it is constructive.

2014 ACCOMPLISHMENTS

1) **Organization.** We transformed our organization from a non-profit association into a non-profit corporation registered with the State of New Mexico. We also secured 501(c)(3) tax-exempt status from the U.S. Internal Revenue System for donors. We think this was an important step.

We continue to hold weekly meetings at the Taos County Administration Building on Monday at 1:00 pm. All are welcome. Our first annual Board Meeting is January 12, 2015.

2) **Education.** The Renewable Taos Lecture Series sponsored a continuation of the discussion between Bill Brown of RT and Luis Reyes of KCEC at the KTAO auditorium in February. We sponsored the event ourselves and requested support from the local

solar installers. Around 100 people attended. Bill and Luis discussed the issues confronting renewable energy in the near future. The most important of these were political and contractual obstacles, although important technical issues were also discussed.

Prior to the event we hosted a display of electric vehicles (EVs). Owners brought 3 Chevrolet Volts and Friday Motors brought another. We also had 2 Mitsubishi's and a Tesla S.

We began work on a new lecture on the ethical and moral issues involved in climate change this November. We've met with religious leaders from several churches and hope to hold a panel discussion with them on the ethics of climate change during February 2015.

These events provide education on renewable energy for the community, but they also are important ways for us to learn about the various issues involved.

3) **Communication.** The RenewableTaos.org web site with links to current news, educational videos, a calendar, and information about our programs has been updated regularly. We also brought up a Facebook page for RT. Several "My Turn" op-eds by members were published in the Taos News. Also, we had interviews with members on the radio and in the Taos News. We've maintained mailing lists and use them to communicate with our supporters about important issues and events.

4) **Work with Government and Local Institutions.** The Joint Resolution for Renewable Energy has been passed by each town and village in the Enchanted Circle plus the Kit Carson Co-op. We've spoken to the councils in Taos, Questa, Angel Fire, Eagle Nest, Red River, and the Taos Ski Valley. We also presented the Joint Resolution to the KC Board. We've started the process of taking the resolution to churches and business organizations. We followed up by talking individually to Town Council members, County Commissioners, and the Mayor of Angel Fire. There is a lot of support for transition planning and other projects. We are scheduling a work meeting with Enchanted Circle government officials this month.

5) **Regional Reach-out.** See items 4 and 6.

6) Legislation and Planning. Work on The Joint Resolution for Renewable Energy for Northern NM continues. See item 4 for more information.

The Community Solar legislation that we are proposing to the next session of the NM legislature has wide support. We held several meetings in Santa Fe that were attended by representatives from a variety of environmental groups and legislators to broaden support for the legislation. We have many sponsors in both the house and senate. The legislation will require suppliers like Tri-State to treat panels owned by members of KCEC and other rural electric Co-ops in the same manner that solar arrays at a private residence or business are treated. In other words, energy generated by community solar arrays will not be counted against any limits a Co-op negotiates with a supplier. The legislation also requires that for-profit generation and transmission companies like PNM allow community solar installations up to 5 megawatts. This legislation will make it possible for people who cannot or choose not to install rooftop systems to purchase local renewable energy. That includes renters, the poor, and the 70% of homes who do not have adequate solar exposure. If passed, this law will be an important victory for renewable energy.

8) Community Solar. See above. We are developing ties with other supporters of renewable energy in the legislature and among non-profits. The three new solar installations approved by the KCEC Board may offer community solar panels. This is a development we want to encourage.

9) Federal and State Government. We are working closely with Representative Gonzales and Senator Cisneros as well as many other legislators. Senator Peter Wirth has attended several of our meetings in Santa Fe. We have made presentations before the NM Science and Technology Committee and the Committee for Economic and Rural Development. We did not have any initiatives with the Federal government this year.

10) Taos Area Solar Tours. Bill Brown led a tour of San Luis Valley solar installations this summer. There is a complex of five installations including two 30-megawatt facilities in east central San Luis Valley. They generate more than 90 megawatts of energy. This complex is instructive for us. It is in a relatively small area. It has minimal water requirements. And, it generates approximately the amount of energy consumed in the KCEC service area. The complex is unobtrusive even though one of the facilities has tracking towers more than 50 feet high. The entire complex needs around 20 full-

time workers to operate. It's easy to imagine a similar complex in the Enchanted Circle generating energy for local use and export to neighboring urban areas, generating tax revenues for local government, and supporting a small but stable and well-paid work force.

11) Self-Education. This summer three board members traveled to Boulder Colorado where we met with the City government officials in charge of their new municipal utility and several members of the citizens' committee that helped in the work. The City of Boulder is using eminent domain to take the local distribution network with the aim of providing a stable source of clean energy to the community. Over 100 community members, many of them from the University, participated in the studies and research that led the Boulder City Council to make the decision. The government department and citizens' support group were charged with development of a plan that would deliver clean energy at or below the cost of energy delivered by Xcel Energy, a large investor-owned utility whose generation is largely coal. The planning committee did a lot of modeling and projected savings in the tens of millions over the next 15 years for a municipal utility focused on renewable energy. We also visited a company that provides modeling software for electricity consumption and generation and met with a scientist at the National Renewable Energy Laboratory (NREL). The primary takeaway was that 100% renewable can be delivered cost competitively even without factoring in the other benefits of clean energy.

Two Board members also attended a 3-day conference on Geothermal Energy in Pagosa Springs Colorado. We learned about the benefits of geothermal which are really quite extensive. Not only can it be used to generate electricity, but also geothermal is very useful in a variety of small to mid-size business enterprises, principally greenhouses. Taos County is very rich in geothermal, and it holds mid-term promise for providing baseload energy. Another learning was that geothermal involves expensive prospecting, lots of technical expertise, and lots of regulation. Up-front costs are in the millions.

12) Future Financing. We've identified several private foundations that might issue grants for RT activities. We've submitted two proposals, one to the McCune Foundation and the other to the Frost Foundation. We will explore others in the coming year. We want to work with local governments on development and planning grants and have initiated exploratory meetings. We've been receiving about \$30 per

month from the Cid's re-usable bag program. Memberships (\$50 annually) are up. We purchased Quickbooks for Non-profits and have worked on getting our finances more organized. We are also following up on Renewable Energy for America (REAP) grants and guaranteed loans for small businesses from the Department of Agriculture.

13) Relationships. We have built solid relationships with KCEC, Taos County, the Town of Taos, and the Sustainability Committee in Angel Fire. We plan to work with them on transition planning in the coming year. At the suggestion of two Taos Council members, we are working with them on a joint powers agreement of all local governments. Our legislative work has yielded good contacts among elected officials and leaders of statewide environmental groups.

14) Rocky Mountain Institute's (RMI) eLab Accelerator Program. RMI is one of the most prominent energy efficiency and renewable energy organizations in the world. Founder Amory Lovins is world renowned for his work on energy efficiency. RMI has a department that focuses on renewable energy and utilities. They hold an annual conference called the eLab Accelerator that brings teams from different parts of the country to a 5-day workshop with utility and environmental consultants. The eLab accelerator helps refine plans for demonstration projects and utility business model adjustment. Renewable Taos is drafting a proposal for participation in this year's conference. If we reach agreement, a team from the KCEC service area will attend the conference and draft an outline for renewable transition in our area.

15) Legal Work. We have received legal support from the Western Environmental Law Center who filed a brief in support of KCEC's protest of Tri-State's last rate increase on behalf of Renewable Taos. This work ended after the principal parties entered into mediated negotiations in March 2014.

16) Regional Development of Transmission Lines. We created a position statement on Tri-State's proposed Valley Corridor Transmission Line Project for presentation to the KCEC Board of Directors on July 30, 2013. We continue to monitor the transmission line proposal.

For information, visit renewabletaos.org or call William Brown at 575-776-1479, John Gusdorf at 758-5362, Jay Levine at 770-0587, or Bob Bresnahan at 776-5007.

