

Supporting a Green Future in Native American Communities

Ojibwe prophecies speak of a time during the seventh fire when our people will have a choice between two paths. The first path is well-worn and scorched. The second path is new and green. It is our choice as communities and as individuals how we will proceed.

The economy of the future is the green path and we are keenly interested in having our communities at the center of this transition. With reservation unemployment rates at between 15 to 80 percent and per capita annual incomes roughly one-sixth the national average, the well-worn and scorched path is not the solution. A path with food security, clean energy solutions and a green jobs initiative is a part of our prophecies and is, for our Mother Earth, essential.

by Winona LaDuke
Honor the Earth



Two generations ago, most tribal communities produced their food locally.

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The Challenges We are Facing

Two generations ago, most of the tribal communities in the north produced our food locally. Today, we buy food shipped from far away, whether by Wal-Mart, Food Services of America or SYSCO. The average meal moves 1,546 miles from farm to table². And because we also rely so heavily on petroleum to grow our food, some scientists suggest that we are using between 10 to 15 calories of fossil fuels to create one calorie of food³. This means that our food security is now tied to industrial food systems and oil. We are feeling the consequences of that relationship. Food prices are skyrocketing as the cost of oil rises. Food is costing more and more, not just in dollars but also environmentally and in terms of our physical and cultural health.

Nationally, tribes spend tens of millions of dollars on fuel assistance each year to support our low-income tribal members. That is a lot of zhooniyaa. As electricity and fuel prices continue to rise, the dollars we spend on energy will increasingly outpace all subsidies. We need to create long-term, sustainable solutions to poverty by creating a renewable, energy-efficient future. In a today's climate-challenged world, food sovereignty and energy sovereignty are the keys to creating green economies on tribal lands. Not only will these strategies be viable for tribal self-determination, but they will also lead to independence, jobs and sources of export revenues.

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Food Security

Approximately 50 percent of a tribal economy's money is spent outside the reservation on food and energy, the largest drains on tribal wealth. Native peoples often live in food deserts, meaning we have very few places we can easily get to that sell healthy foods. However, many of our traditional foods are drought- and frost-resistant making them less susceptible to food production problems associated with climate change. Traditional food restoration through organic farming is a means of restoring our food security but it can also help mitigate climate change by limiting and even absorbing carbon emissions.

Many tribes are implementing traditional food programs such as local food production, seed saving, educational workshops and ecological restoration work for wild rice, buffalo and other culturally essential foods. The Tohono O'odham Nation in Arizona received a Native Communities Grant from Honor the Earth and the funds are being used for programs that



Native American guide Don Chosa points out wild rice beds to one of six children whom will continue the tradition of harvesting wild rice each September. This is part of the Manoomin Project connecting young adults with their tribes to restore wild rice in Michigan. Other traditional food programs are helping keep native American history alive and connected with the land.

encourage traditional foods in school lunch programs. The tribe also conducts traditional food educational presentations at community events and hosts two farms that grow traditional foods, one of which is being transitioned into a learning center. In addition to food security, returning to a traditional diet has the potential to undo much of the illness and harm western foods have caused in our communities because traditional foods are healthier.

Energy Efficiency

Our current homes and buildings waste a great deal of energy. In fact, 30 percent of the energy we pay for in our homes and buildings is wasted because of inefficient construction and appliances. Energy efficiency and conservation are the simplest ways to save money and the first step toward creating a clean energy economy.

Weatherization and energy efficiency retrofits are also the first steps in energy sovereignty. The White Earth Land Recovery Project, working with the White Earth Band of Ojibwe and local utilities, is interested in weatherization renovations and alternative heating sources for the 700 homes that qualify for fuel assistance. The program is set to expand with a proposed local training program in both energy audits and weatherization and additional solar heating panel installations. Program staff also worked in collaboration with Honor the Earth, Little Earth of United Tribes, the Rural

Renewable Energy Alliance and Fresh Energy to install two solar heating panels on Little Earth's Elders Housing Unit in Minneapolis. Replicating this type of work in all reservations will save our people millions of dollars in utility costs and create thousands of meaningful jobs.

Renewable Energy

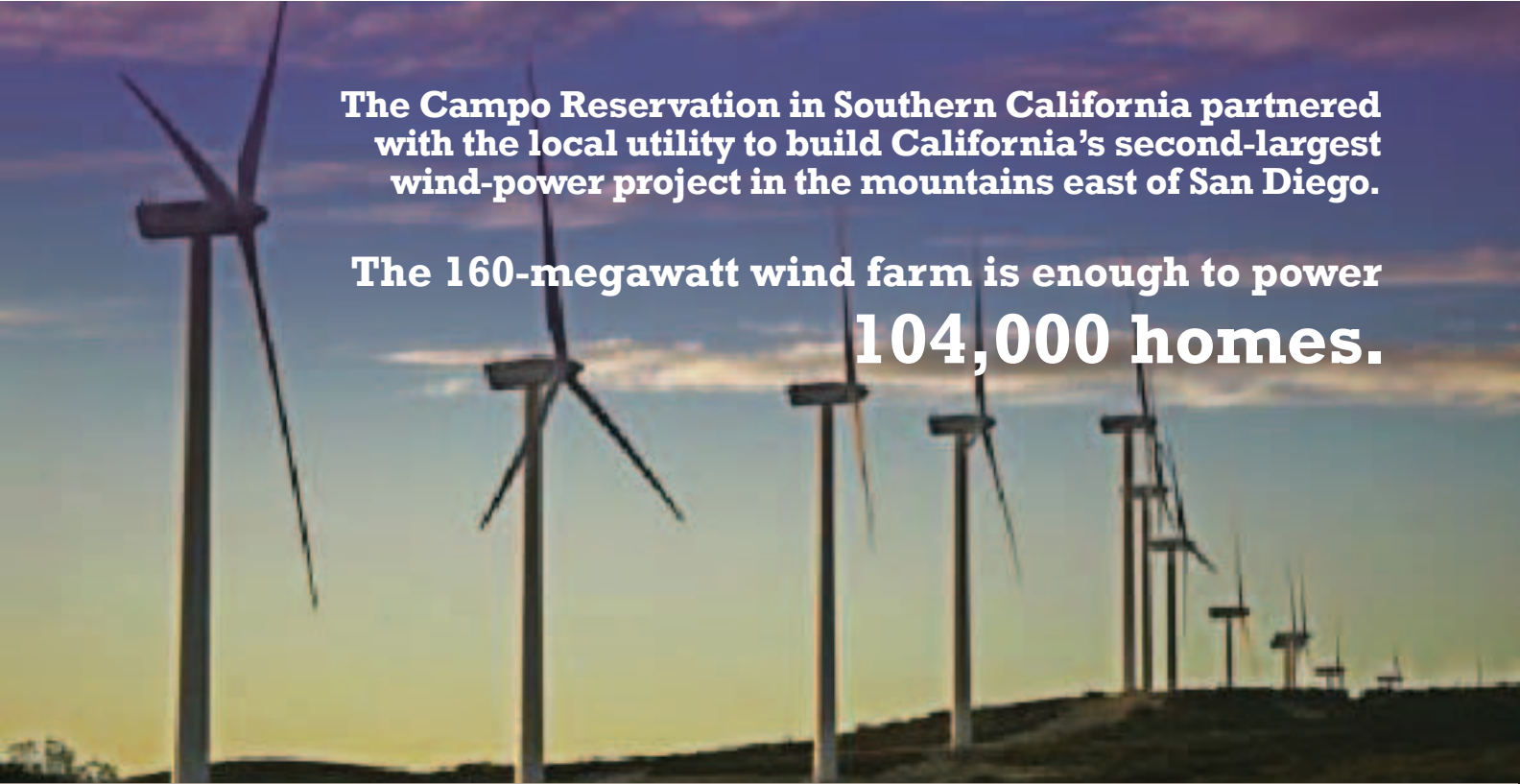
Like energy efficiency, renewable energy has excellent potential to create living-wage, dignified jobs. Tribal lands are incredibly rich in energy resources, holding an estimated 10 percent of the country's energy resources, which holds promise to create valuable job opportunities. The American Solar Energy Society estimated that renewable energy and energy efficiency were responsible for \$970 billion in industry revenues and 8.5 million jobs. Wind and solar energy generate 40 percent more jobs per dollar invested than coal mining.⁹

In order for the U.S. economy to stabilize carbon emissions, we will need to produce around 185,000 megawatts of new power over the next decade. The ten-year total projection for wind energy, according to the Renewable Energy Policy Project, entails the

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Reservation communities are amongst the windiest sites in the country, with studies indicating that reservations could produce from one-fourth to one-third of present installed electrical demand.⁴



The Campo Reservation in Southern California partnered with the local utility to build California's second-largest wind-power project in the mountains east of San Diego.

The 160-megawatt wind farm is enough to power 104,000 homes.

The wind farm on the Campo Indian Reservation in California sits in an area that San Diego Gas and Electric considers a major potential source for wind energy.

creation of 125,000 megawatts of power. This means up to 400,000 domestic manufacturing jobs in wind power alone. The new jobs of the green economy can and should include investment and progress in Native communities; both urban and reservation.

Tribal Wind Energy

Nationally, tribal wind power potential is tremendous. Reservation communities are amongst the windiest sites in the country, with studies indicating that reservations could produce nearly 15 percent of the nation's electricity. Wind energy represents an excellent opportunity for reservation-based employment and also represents a fuel source with economic predictability and security into the future. Many reservations in the Dakotas and Montana have class-six or class-seven wind, which is the best you can have.

In Minnesota, White Earth, Red Lake and several Dakota reservations have class-four wind, which represents good potential for commercial scale projects and the export of energy. The Shakopee Mdewakanton Dakota Community has installed a 1.5-megawatt wind turbine, solar hot water panels and a green roof. The community also partially owns a biofuels plant.

The White Earth reservation hosts a 20-kilowatt wind turbine and is looking to install 250-kilowatt and 750-kilowatt wind turbines over the next three years. The Campo Reservation in Southern California partnered with the local utility to build California's second-largest wind-power project in the mountains east of San Diego. At peak capacity, the 160-megawatt wind farm will produce enough power for 104,000 homes. The tribe has an equity stake and hopes to eventually own the project.

There is great potential for some of the ongoing demand for electricity generation to be met by tribal installations and tribal power. Actualizing this potential will require resources and investment, training, and a national strategy that incorporates Native peoples.

Tribal Solar Energy

Solar also has vast potential for self-sufficiency, revenue and jobs for First Nations. Tribal lands could produce an estimated 17 trillion kilowatt of solar electricity annually, 4.5 times total U.S. annual electrical generation.

The U.S. Department of Energy's Tribal Energy Program, which provides financial, technical and educa-

tional assistance to tribes, has funded several solar projects, both feasibility studies and installations, on tribal lands. The Jemez Pueblo tribe, in New Mexico has taken it a step further and is building the first utility-scale solar plant. The project is slated to include 14,850 solar panels on 30 acres. The estimated at \$22 million project and will be financed through government loans, grants and tax credits. With a transmission line already available at the site, and an average of 310 sunny days a year, the 4-megawatt solar project is expected to generate \$25 million in revenue over the next 25 years for the tribe



Green jobs advocates celebrate after their campaign to bring green jobs to the Navajo Nation succeeded as the Navajo Nation Council voted to create a green jobs policy and establish a commission to pursue grants and opportunities for green color job development.

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through the sale of the electricity. As well, there is interest in putting a solar power project of at least 200 megawatts on the former Black Mesa coal strip mine, which has the potential to create a good energy source out of an ecologically bad history.

Clean Energy, Local Food, Green Jobs: Bright Future Tribes across the country are proving that it's possible to take control of our future by looking to clean energy, food security and the promises of the growing green economy. For example, on the Dinetah-Navajo Nation in Arizona, the first green jobs bill among First Nations was passed to create the Navajo Green Economy Commission. Committed to zero or minimal CO2 emissions and other pollution, the Commission will focus on sustainable green manufacturing, local and

self-sufficient business ventures and traditional agriculture projects.

In recognizing the links between food, health, fuel poverty and energy, we can address the global challenge of climate change and peak oil and the economic and health challenges afflicting our communities. By investing in energy efficiency, renewable energy and local food systems, Native communities can help secure a place in the developing green economy and ensure a sustainable future. Native nations, the federal government, and private enterprise are helping to make this a reality, but the pace of change and financial support needs to be greatly scaled up.

In the end, we as Indigenous peoples need to control our own destinies by exercising food and energy sovereignty. Our future generations are counting on us.

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