FACT SHEET:

RENEWABLE ENERGY AND YOU: COMMUNITY BENEFITS

Nebraska has great renewable energy potential. As this capability is capitalized upon, rural communities experience numerous benefits from wind, solar, storage, and electric transmission development, including tax generation that is invested back into local communities, new revenue generation in the form of direct land lease payments to farmers and ranchers, and job creation related to the development, construction, maintenance, and operation of the project.

Tax generation

Renewable energy development has the potential to transform local communities through new tax revenue. In place of property taxes, operators of energy-generation sites in Nebraska pay a nameplate capacity tax. This taxes the project's total generating capacity at a rate of $3,518 per megawatt and remains constant throughout the life of the project.[1]

The nameplate capacity tax is distributed in the same way as property taxes in the community and therefore supports essential services and infrastructure, such as public schools, roads, and emergency services.[2]

In 2020, renewable energy generated $6.75 million of tax revenue in Nebraska, a significant benefit for small, rural counties. Dixon County alone received $1.1 million.[3]

O'Neill Public School District, located in Holt County, has received $3,139,317.11 of nameplate capacity taxes since August 2017. The tax payments afforded the school system the opportunity to build a $13.2 million addition to the junior-senior high school that was completed in 2020. The addition includes three state-of-the-art science classrooms, a gymnasium, administrative offices, plus many additional classrooms. The new space will serve students for many years to come.[4]

Revenue generation

Landowners benefit from the stable income renewable energy development provides. Developers pay farmers to lease the land for the life of the project, which ensures reliable income to landowners no matter the weather.

These payments may be determined by several variables, including project size, land value, location, grid access, and project revenues; average land lease payments range from $700 to $1,200 per acre annually for solar,[5,6] and $8,000 to $10,000 annually per wind turbine.[7]

Job creation

There are myriad short- and long-term jobs that come with renewable energy projects. The projects employ planners, engineers, manufacturers, construction workers, transporters, and maintenance workers. In 2018, Nebraska employed more than 19,000 clean energy workers and saw a 3.5% growth in the industry.[8]

Beyond these direct employment opportunities, renewable energy draws the attention of data centers and big businesses seeking to operate in a sustainable environment. The establishment of these businesses near renewable energy sources provides employment opportunities for surrounding communities.

Conservation

Renewable energy can augment its value when combined with conservation practices.

The integration of native vegetation on the project site provides numerous benefits including habitat creation for at-risk pollinators and wildlife, improvement of soil health and water quality by preventing phosphorus and nitrogen loss, and protection against flooding events by reducing peak streamflow.[9]

Using grazing as a management strategy and incorporating beekeeping or other "agri-voltaic" enterprises into solar project sites allows for agricultural co-usage of the land, benefits the environment, and provides additional income opportunities for local farmers.[11]

According to one developer, a 124-megawatt wind farm with 50 wind turbines could create as many as 200 construction jobs and five full-time maintenance and operation jobs. The project could generate approximately $23 million in payments to local landowners and an additional $22.5 million in county tax revenue.[11]

Sources

1 "Nameplate Capacity Tax FAQs." Nebraska Department of Revenue, State of Nebraska, 2021, revenue.nebraska.gov/about/frequently-asked-questions/nameplate-capacity-tax-faqs. Accessed July 2021.

2 "Nebraska Revenue Sources." Nebraska Department of Revenue, State of Nebraska, September 2020, revenue.nebraska.gov/sites/revenue.nebraska.gov/files/doc/research/Revenue_Sources_2020.pdf. Accessed July 2021.

3 "Nameplate Capacity Tax Summary 2011-2019." Nebraska Department of Revenue, State of Nebraska, revenue.nebraska.gov/PAD/nameplate-capacity-tax. Accessed July 2021.

4 Amy Shane. Personal Interview, July, 19, 2021.

5 Robert Moore. "Weigh risks before signing solar lease." Farm Progress, Sept. 15, 2017, farmprogress.com/land-management/weigh-risks-signing-solar-lease. Accessed July 2021.

6 Hay, F. John, et al. "Solar Land Lease Considerations for Landowners." University of Nebraska-Lincoln Extension and The Ohio State University College of Food, Agricultural, and Environmental Sciences, Oct. 9, 2020, cropwatch.unl.edu/Bioenergy-Crops/Documents/Solar%20Leasing%20101%20Nebraska.pdf. Accessed July 2021.

7 "Wind Turbine Lease Rates - How Valuable is Your Wind Farm Lease?" Landmark Dividend, landmarkdividend.com/wind-turbine-lease-rates-2. Accessed July 2021.

8 "Nebraska: Home to 19,004 Clean Energy Jobs." Clean Jobs Midwest, 2019, cleanjobsmidwest.com/wp-content/uploads/2019/04/Nebraska_CJM-Exec-Summary-FINAL.pdf. Accessed July 2021.

9 Cody Smith. "Amplifying Clean Energy with Conservation Part Three: Exploring Wind Energy and Stewardship." Center for Rural Affairs, December 2020, cfra.org/publications/amplifying-clean-energy-conservation-part-three-exploring-wind-energy-and-stewardship. Accessed July 2021.

10 "Solar & Multiuse Farming." Solar Energy Industries Association, September 2019, seia.org/sites/default/files/2019-09/Solar%20Multiuse%20Farming%20Practices%20FactSheet%202019%20v3.pdf. Accessed July 2021.

11 "Project Overview: Gage Wind Project creates jobs, economic growth and clean energy." NextEra Energy Resources, 2021, nexteraenergyresources.com/gage-wind/project-overview.html. Accessed July 2021.