

Wind Builds the Future in Rural Communities



Communities across the country, particularly those in rural areas, currently face a barrage of challenges as they seek to build vibrant local economies. Attracting and retaining young people, adequately funding schools, and providing essential services have all proved difficult in recent years. And that was before the COVID-19-induced recession added another layer of uncertainty. However, some communities are overcoming these obstacles better than others—those hosting wind projects.

Wind Builds the Future in Rural Communities

Wind projects pay over \$1.6 billion in state and local taxes and landowner lease payments every year, and this number only goes up as more wind projects come online. This critical revenue helps bridge budget shortfalls and allows communities to invest in their future, providing new resources to expand opportunities in their schools and social services. The jobs needed to build, operate and maintain wind projects offer young people careers that will support their families without needing to leave home, and lease payments provide farmers and ranchers a drought-proof cash crop that stabilizes agricultural economies.

The following case studies, spanning nine states, provide specific examples of local benefits wind projects create, and highlight the many ways wind is building a prosperous future.

O'BRIEN COUNTY, IOWA

Nancy McDowell, O'Brien County Supervisor

Nestled near the heart of the “wind belt” in the northwest corner of Iowa, lies a county known as one of the most wind-friendly areas in the state—O’Brien County. Since 2016, O’Brien County has hosted three wind farms, Highland I&II and O’Brien, producing over 500 MW of energy, putting them in the top three counties for total wind capacity in the state. O’Brien county has been vital to Iowa’s wind energy success story and continues to play a role in the state’s national leadership in utilizing this natural resource.

Between the added valuation and increased taxes, we were able to actually reduce tax rates when many counties in Iowa were having to raise taxes immensely to cover increased costs.

O’Brien County has looked to wind energy to grow its tax base, attract and retain a younger population, create jobs and provide valuable revenue to landowners who have been impacted by the struggling farm economy. The county has seen substantial increases in funding for its schools, a decrease in its property taxes, and a boost to the locals’ pocketbook, which has allowed many of the county’s farmers to pay off debts, expand their operations and send their children off to college.

During the construction of these wind farms, O’Brien County saw a massive economic boom. For three years, the county saw hundreds of workers dine and shop at its local businesses, rent and buy housing and utilize the local recreation. Many of these workers chose to stay in the county permanently to raise their families.

Challenges remain, however, for O’Brien. Like with other small, rural counties, O’Brien has an aging population, a lack of affordable housing and has too many job openings to fill with people. While wind energy has helped stimulant parts of the local economy, kept taxes low, and retain some of its younger population, it will take more to alleviate some of these local stresses.



■ Left: Construction of Highland Wind Farm
Photo: ©Brian Barkley 2015



Despite these challenges, the community has welcomed the benefits wind energy has brought to help sustain the county, while others feel the strain. COVID-19, while a hiccup in the road, has not burdened the county's budget, due in part of the revenue coming from its wind farms. O'Brien County Supervisor, Nancy McDowell, says their wind projects have been "very reassuring" and a "critical" part to their budget. McDowell adds, "Between the added valuation and increased taxes, we were able to actually reduce tax rates when many counties in Iowa were having to raise taxes immensely to cover increased costs."

CHEROKEE COUNTY, IOWA

Bill Anderson, Cherokee County Economic Development

Cherokee County, situated in northwestern Iowa, is an emerging wind energy leader in the state. The newly built 200 MW Glaciers Edge wind farm is one of two Iowa wind projects with purchase power agreements from corporate tech giant Google. Google's investment has resulted in 25 new jobs and \$1.5 million in annual property tax payments to the county, and a second phase of this project is currently under development.

Like with many smaller rural counties, Cherokee has faced challenges making the resources and infrastructure available to execute large-scale economic development projects, which is why Glaciers Edge is a success story. The collaborative spirit between the county government and the developer to bring this project to fruition has resulted in a diversified and vibrant local economy. Attracting and retaining a workforce also continues to be a challenge, but thanks to generous donors, the county now offers the Cherokee County Promise Fund which helps with tuition for those attending Western Iowa Tech Community College. All of this is an effort to provide a high quality of life, which then fosters growth in the county.

Another hurdle the county has had to face is the COVID-19 crisis,



■ Above: Glaciers Edge Wind Farm
Photo: ©Cherokee Area Economic Development Corporation
Left:

■ Left: Bill Anderson (Cherokee Area Economic Development) and Jacob Bossman (State Representative and Senator Grassley regional director) stand in front of a wind turbine blade where a signing ceremony was held to commemorate the completion of Google's Glacier's Edge Wind Project

which forced area small businesses to close their doors. While the county has now regained some footing with their community support to "buy local," many of the county's business leaders are still experiencing issues with sales and disruption to the supply chain.

Despite all of this, there is an optimistic view the endures among Cherokee's residents because of projects like Glaciers Edge, which has steadied the county's economic ship. Because of the economic benefits the project delivers to the community, such as funding for the school district and lease payments to landowner, many residents are looking forward to the second phase of Glaciers Edge Wind Project.

FORD/LIVINGSTON COUNTY, ILLINOIS

Jeff Bryan, Tri Point School District Superintendent

Prior to the investment from the wind industry in our community, we had been forced to cut our school staffing back to the bare bones. We had let 10 teachers go and downsized our support staff. Even with those measures we were running a \$300,000 operating deficit while grappling with unpredictable state funding. Under those circumstances, it's extremely difficult to retain talented teaching staff and offer our students the opportunities and support services they deserve.

The roller coaster of state funding for our district is certainly going to worsen in the current economic environment. The loss of tax revenue during COVID-19 and added costs to governments at all levels cast a huge shadow over future funding levels. Locally, we're also facing added costs to assist our students and teachers with online learning.

And we are being proactive about developing creative solutions to provide our teachers and families the best possible safe-guards next year. Steps such as enabling remote teaching should we need to provide precautionary quarantines for a teacher or class – anything we can do to avoid forcing teachers to take precautionary sick days and further disrupt their students learning.

With those funds, we have our own, local stream of funding allowing us to confidently make long-term investments in our district. To date, we have hired teachers, improved our buildings, and upgraded our technology.

The wind farms in our district have been life-changing for our students, our teachers, and the future of our district. The two wind farms in our district together generated over \$2 million in revenue in their first year on our tax rolls. We will see more than \$3 million in revenue over the life of these projects.

With those funds, we have our own, local stream of funding allowing us to confidently make long-term investments in our district. To date, we have hired teachers, improved our buildings, and upgraded our technology.

LOGAN COUNTY, ILLINOIS

William Thomas,
Logan County Economic Development Partnership

Logan County is no stranger to the economic benefits of wind development. With three wind farms operational today and a fourth under construction, it is enjoying significant new funding to invest in our communities, in services for our residents, and in long-term community revitalization for our towns and villages.

With Covid-19 impacting our local businesses, schools, and our two local colleges, we are fortunate to have the extra layer of

This newer source of revenue is more important than ever during uncertain economic times, including the COVID-19 pandemic. We're fortunate to have an extra layer of certainty in our budgets as a result of the local wind projects.

certainty in local budgets that harvesting wind provides. Reliable, locally controlled revenue sources allow us to continue major projects in the county, even in difficult economic times – including the renovation of county buildings and the construction of a new high school in Mt. Pulaski.

In addition to the significant tax revenues for basic services, the wind industry is an important new community partner for our region. The industry has responded to numerous local charities in need – often without recognition. Hill Topper wind farm, the most recently completed project, contributed \$110,000 to area economic development, allowing for the creation of a local food coop and renovation of historic buildings, including the historic former courthouse where Abraham Lincoln once practiced law in Mt. Pulaski.

The wind projects in our region generate hundreds of millions of dollars in capital spending across the state, and tens of millions of dollars in payments to landowners over the life of each wind farm. Our partnership with the wind industry also presents an important opportunity for future growth and prosperity outside the energy sector. Expanded access to clean and reliable new sources of energy make Logan County more attractive to additional new investment from industries of all kinds.

The Logan County Economic Development Partnership is proud to partner with the wind industry and further add to the diversity of energy that is helping Logan County and Central Illinois grow and prosper.

TIOGA (WILLIAMS COUNTY), NORTH DAKOTA

Dennis Lindahl, Director of Economic Development

Here in Tioga, we're looking to the future. Our city has focused a strategy on building a foundation for creating a community that addresses quality of life issues. We first spent a few years focusing on developing and growing local activities, especially focused on education. We developed and financed successful programs for 21st-century workforce like "Drone Camp for Kids," now in its 5th year.

Once activities were vibrant we turned our focus onto building facilities to host events, which led to our \$5.2 million dollar Community Center with an indoor play area and library, new police department, and new museum. The pandemic is posing challenges to the use of our new facilities, but the low population density and the increasing ability of people to work from home is now viewed as a potential asset to the offerings in our community.

This has brought us to our final focus, which is attracting

A wind project fits directly into what Tioga is seeking: jobs with a focus on skilled trades – mechanics, construction workers, electricians, and plumbers – that include using advanced technology and making use of our focus on STEM certification programs that we have invested in heavily.

industries. We now have a foundation for creating quality in people's lives and feel confident with our 'total package' of offerings and are courting several potential industries, which are showing tremendous promise.

One of those promising industries that we've begun to partner with is the renewable energy industry. Our area's first wind development is expected to be fully operational by the end of this year, and has brought new construction jobs and new funding for community resources with it. This project alone will help to support volunteer fire districts, school districts, and a community college in Williams and Mountrail counties, representing a significant investment into towns like Tioga.

A wind project fits directly into what Tioga is seeking: 21st century jobs with a focus on skilled trades-- mechanics, construction workers, electricians, and plumbers—that include using advanced technology and making use of our focus on STEM certification programs that we have invested in heavily. We're excited to continue to pursue opportunities with wind, and to see just what the future holds.

SPIRIT LAKE TRIBE, NORTH DAKOTA

Ryan Brown, Project Manager,
Spirit Lake Tribe

The Spirit Lake Tribe's commitment to wind energy aligns closely with our values as a community. We have a longstanding commitment to environmental preservation and energy efficiency – in fact, we completed construction on the first net-zero school on tribal land (and the first in North Dakota) three years ago, meaning that our school produces more energy than it consumes each year.

But this project also makes economic sense for our tribe and our broader community. The proposed project on our tribal land provides almost two-thirds of our energy needs, dramatically

The project on our tribal land provides almost two-thirds of our energy needs, dramatically reducing our annual utility costs and allowing us to achieve more energy independence. Especially in the wake of COVID-19, the cost savings and the measure of self-reliance provided by wind are a huge weight off our shoulders.

reducing our annual utility costs and allowing us to achieve more energy independence. Especially in the wake of COVID-19, the cost savings and the measure of self-reliance provided by wind energy are a huge weight off our shoulders.

While we work on support for the larger project, the plan in motion to install our 1.5 MW wind turbine is just one example of a growing shift towards alternative energy sources by Native American tribes. Around the country, more and more tribes are beginning to take advantage of renewable energy projects as a way to power our communities into the future. Wind energy and other forms of renewables can provide not only the energy independence and lower electricity costs that we're seeing right here on Spirit Lake Reservation, but also new job opportunities for locals and even the possibility of additional revenue streams – all while continuing to preserve our land for the next generation.

Ultimately, our ability to invest in wind energy will allow us to be able to invest in other priorities in the long run while furthering our commitment to sustainability. The utilization of wind power in our community is estimated to save us almost \$500,000 per year, which can be redirected toward other programs and services for our tribe. Those savings are a powerful tool to have at our disposal during economic downturns, and our shift to wind is one that we will be proud of for decades to come.

FORD COUNTY, KANSAS

Joann Knight, Ford County Economic Development

Southwestern Kansas sees some of the highest average wind speeds in the nation, and we've been able to turn this natural advantage into a new stream of revenue for rural communities throughout the area. Ford County in particular is home to one of the first wind developments in Kansas, and has been a hotspot of wind energy ever since.

The first phase of the Spearville Wind Energy Facility was just the third wind project to come online in our state, and it brought millions of dollars to Ford County and Spearville township. Over the life of the project, this first phase alone is expected to result in almost \$15 million of funds in total, including more than \$5 million for the local school district, almost \$4 million to Ford County, and \$3 million to Dodge City Community College.

These investments into our county's rural communities were just the tip of the iceberg. Since then, Ford County has seen two expansions of the Spearville project, and three additional developments – Ironwood, Western Plains, and Bloom Wind Farm – have all come to town, bringing additional revenue and strengthening our main streets, schools, and government services.

Each of these projects brings construction jobs and an influx of capital investment, as well as long-term maintenance jobs and added revenue for related local companies. For example, the construction of the Western Plains wind farm resulted in about 200 temporary jobs and three dozen permanent jobs in the community. The development also created additional economic

Particularly in uncertain economic times, our towns and counties can rely on wind to keep the lights on – both literally and figuratively.

opportunity throughout the supply chain – most notably, business for local Hutchison nacelle manufacturer Siemens Gamesa.

In short, wind developments have been a huge source of economic growth for Ford County and for other rural communities in western Kansas and across the country. Particularly in uncertain economic times, our towns and counties can rely on wind to keep the lights on – both literally and figuratively.

PRATT COUNTY, KANSAS

Kim DeClue, Pratt County Economic Development

Pratt County is proud to be a part of Kansas' success in wind power. Our county is already home to some of the best winds in the nation, and we look forward to continuing to develop our position as a leader in renewable and sustainable energy.

Each wind development brings a variety of economic benefits to our area, from an influx of capital investment to both short-term and long-term jobs. For example, the most recent completed project in our county created 250 jobs during construction in late 2018 and continues to power a dozen maintenance jobs while operational. We're also fortunate to benefit from World Wind & Solar's presence in our county – they not only provide maintenance services for existing developments, but also are committed to training technicians across the country with their mobile university.

Proceeds from our wind projects have also already helped fund 20 different taxing entities that provide community resources for Pratt County, from the animal shelter to the county's museum to the local community college. Soon, we'll also see progress on one of our largest projects to date supported by wind energy revenue: the county's new Public Safety Center. The new building will provide more necessary space and resources for the county's emergency medical services, fire and rescue, and emergency operations center teams. Wind power has proven to be a valuable partner in making these types of crucial investments into our communities and serving our citizens.

Wind has already driven growth in Pratt County and in other rural communities across the country, and Kansas is poised to take advantage of even more economic benefits as our wind footprint continues to grow. Just last year wind became the largest source of energy in our state, and only one other state in the nation generates more of their energy from wind power. This continued progress continues to open doors to steady streams of revenue for rural communities like ours, and paves the way towards a more forward-thinking future for Kansas.

TORRANCE COUNTY, NEW MEXICO

Wayne Johnson, County Manager

In Torrance County the challenges faced are those common to much of rural America: transportation, job creation opportunities which makes workforce development challenging, and the ability to attract new businesses outside of core established industries. Infrastructure as a whole is a challenge – everything from water to roads to rail access – those are all challenges for Torrance County. It's all tied together.

Torrance County's tax base is not built on GRT (gross receipts tax) as far as its budget is concerned. The County is heavily reliant on property taxes, but that generally changes exposure of a crisis like the COVID-19 crisis to a later exposure if at all. The County has had unexpected expenses related to the crisis.

Having wind projects in Torrance County has absolutely helped the County ride out the crisis and is going to help secure the County's economic future. There are currently two operational wind projects in Torrance County that are budgeted into overall revenue mix.. There are six more coming online before the end of 2021. None of that money is in the budget currently. Between existing wind projects, lagging indicators of health, constructions projects and additional workers in the County, the County may not feel the GRT changes in the budgetary process. With the latest projects coming online by the end of 2021, Torrance County anticipates a 30% increase in overall revenue as compared to the operating budget. Wind is a commodity in Torrance County and we are maximizing it.



SWEETWATER, NOLAN COUNTY, TEXAS

Formed in the late-90s around the Trent-Mesa project, the Sweetwater Enterprise for Economic Development (SEED) works with nine projects in Nolan County and the surrounding region. Ken Becker, Executive Director at SEED MDD, has seen the landscape go from no towers in 1998 to more than

1,300 in 2010 with more in the construction phase. The current turbines can produce over 2,000 megawatts of clean, renewable energy that is keeping the AC on during these 100 degree plus days in Texas.

Outside of energy generation, wind plays a vital role in local economies and the job market – Becker noted that despite the pandemic and oil and gas downturn, wind has remained a stable source of good-paying, technical jobs that help power communities in more ways than one. "I think the challenge



These jobs offer young workers the ability to provide a good living and high quality of life for their families, an opportunity that wasn't always available in rural settings.

for everybody is how are we going to operate, and do these challenges change the way we do things," said Becker. "We've been at this for 20 years, so it doesn't feel like a new industry for us anymore. We're part of the critical baseload renewable energy industry and we're not going to let the pandemic alter our course, a course people are relying on for power and jobs."

For the Becker's, wind is a family affair; Ken's two son-in-law's worked in the wind industry and traveled the United States. His daughter taught at Texas State Technical College and had wind students in her classes. Wind energy has afforded Ken's grandson, a wind technician in training, the opportunity to travel around the country and witness firsthand the profound impact wind has on communities nationwide. Becker also acknowledges wind's role in bringing families back to rural communities, saying "These jobs offer young workers the ability to provide a good living and high quality of life for their families, an opportunity that wasn't always available in rural settings."

As home to the most wind turbines in the region, Nolan County is a premier example of the widespread, positive effect wind has on Texas communities and the nation. If Texas were to be a country, it would be ranked as the 5th largest producer of wind energy in the world, and Nolan County alone would be the 28th ranked country on that list.

■ Kevin Carter, president of the Amarillo Economic Development Corporation.



OLDHAM, RANDALL AND POTTER COUNTIES, TEXAS

Wind makes an impact in every community it calls home – from clean power to high-paying jobs, wind offers a wide array of benefits beyond the homes and businesses it powers. Across the Texas Panhandle, including Amarillo, one of wind's documented benefits is the positive effect on the area's tax base.

Coupled with the lowest unemployment in the state, the Panhandle's wind industry presence helps distinguish the region as an economic outlier. "It goes back to our fundamental mission to build up Amarillo, which includes recruiting wind projects and manufacturers that contribute to a stronger tax base for many of the surrounding counties," said Kevin Carter, president of the Amarillo Economic Development Corporation. "Wind is creating regional wealth for these tax entities, and the capital expenditure has created more jobs."

Carter also addressed wind's staying power in the face of economic adversity, noting how wind's presence in the area means new jobs from wind manufacturers, new opportunities for students and workers and the ability to revitalize local economies. "These projects can have a big impact without using a drop of water, and that's a big reason our corner of Texas has been so receptive to wind. Neighboring counties like Oldham, Deaf Smith and Carson are traditionally ranching and farming communities that don't see major economic growth, and we appreciate the stable jobs and opportunities that our people can rely on," said Carter.

In next door Oldham County, wind is responsible for more than a billion dollars in community investment, and it has recently seen the expansion of that through repowering, which extends the lifespan of projects while contributing to the economy through temporary jobs to upgrade the turbines, community investment and stable, well-paying jobs.

Judge Don Allred of Oldham County has helped secure several wind projects in his county and recognizes the importance of the industry in the area. "Because Wildorado Wind Ranch was repowered, Oldham County is guaranteed to continue seeing great jobs, land-lease payments to landowners, and low tax rates that benefit our community," said Allred. "Wind energy has been and continues to be an irreplaceable resource for Oldham County."

HOLT COUNTY, NEBRASKA

Holt County, the eastern gateway to Nebraska's Sandhills region, is one of the state's windiest counties and home to Nebraska's largest wind farm, Grand Prairie. The 400 MW project online in 2016. Since then, it has meant new jobs and new farm income for area residents, an expanded sales

In a county with a population of around 10,200 people, fifty families can make a world of difference.

base for local small businesses, and added tax revenues for local governments and schools.

Darby Paxton, director of Holt County Economic Development, says wind energy initially breathed new life into the regional economy and has helped sustain it during the pandemic.

"From the increase in stays in hotel rooms to goods and services to spending money in local shops and restaurants, it is hard to find a local small business that does not boast of the increase in sales since the start of wind farm production," he explains. "Wind energy is now a part of the community. I shudder to think of how our businesses would have survived the latest pandemic without the increase in permanent residents in Holt County. In a county with a population of around 10,200 people, 50 families can make a world of difference."

William Tielke, chairman of the Holt County Board of Supervisors, agrees. "When you get a business that adds people to a region, like the windfarms, it helps every business on Main Street. Rural Nebraska needs people."

Additionally, in a county where agriculture is the dominant industry, wind energy has provided a crucial boost to farmers at a time when commodity markets have gone from bad to worse.

"It has absolutely made a difference," said Mike Zakrewski, a Holt County farmer and landowner. "As the ag sector cycled lower and lower, I have had more and more people come up to me and express interest and desire in hosting turbines. Having supplemental income that isn't tied to our agricultural cycles has been a godsend to our Grande Prairie neighborhood, and I sincerely hope we can build more renewable projects to help ensure a healthy future for rural Nebraska."

Amy Shane, Superintendent of O'Neill Schools, says taxes paid by Grand Prairie have helped finance a long overdue school expansion. "The nameplate capacity tax has replaced funds that would otherwise have to be generated through property tax asking. This has assisted in our being able to complete an addition at our high school." She also notes the opportunities the industry has created for her graduates. "Wind energy has created jobs for some of our young graduates and brought other workers to our region."

Zakrewski says evidence of this is easily apparent and provides hope for the future. "With the wind project, I now see kids on a daily basis who grew up here that have returned home to become turbine technicians. They are raising their families here, filling our schools, churches and stores. It's heartwarming to see, and it's exactly what rural areas like ours desperately needed."

ANTELOPE COUNTY, NEBRASKA

Nestled amidst the rolling hills of northeast Nebraska, Antelope County is the highest producing farm commodity county in the state. It is now also the top wind energy production county, approaching nearly 800 MW in wind energy capacity within county lines.



■ Lauren Sheridan-Simonsen, director of the Neligh Economic Development Office

The wind energy industry has integrated itself well, says Lauren Sheridan-Simonsen, director of the Neligh Economic Development Office. "We have experienced great relationships with local wind energy professionals who are involved in the local community and generously support local

non-profit organizations," said Sheridan-Simonsen. "The money from wind energy companies is definitely making it easier for landowners and producers to stay afloat. The benefits to local schools, AG societies and fire departments is a great benefit during the challenges we have faced over the past several years. The business that wind energy brings to local communities helps keep small business in business. Restaurants, grocery stores, convenience stores, hair salons, gyms, medical/dental/ chiropractic clinics, mom and pop shops and motels have truly benefited from the wind energy community."

I had just moved home after college and was looking for something I saw as a career rather than a job," Briese said. "The job opportunities created are vital to drawing in younger generations. I can't think of any other industry in smaller communities that creates jobs like the wind industry has.

Former Antelope County Board of Commissioners chairman and area farmer and landowner Leroy Kerkman says the county benefits as a whole, particularly by way of property tax relief, and that wind farms have become a natural part of the area's landscape. "I have experience with wind farm development both as a farmer and an elected official," Kerkman said. "Done the right way, wind energy development can benefit everyone. I live near turbines and they've become just another part of the landscape. In the meantime, they create home-grown energy and broaden our county's tax base, easing the property tax burden on landowners."

And Chelsey Briese, an operations support facilitator for one of the county's wind farms, said wind energy is a game-changer for younger people wanting to build careers and raise families in rural places. "I had just moved home after college and was looking for something I saw as a career rather than a job," Briese said. "The job opportunities created are vital to drawing in younger generations. I can't think of any other industry in smaller

communities that creates jobs like the wind industry has." Briese thinks wind energy will only continue to help rural Nebraska grow, if the opportunity it presents is embraced as such. "The resource and potential are here, why not capitalize on it?"

BENTON COUNTY, INDIANA

Paul Jackson, Benton County Economic Development Corporation

It's no secret that our rural communities have faced a number of challenges over the years – but in Benton County, solutions have emerged by the power harvested from its fields. It's only been relatively recently that new developments like increased access to high-speed internet and a shifting culture around remote work have begun to alter the way people earn a living, but this change is difficult to achieve in rural areas.

Paul Jackson, Economic Development Director in Benton County, believes that infrastructure plays an important role in the conditions of rural America. As Jackson pointed out, "almost everything is run through the internet these days."

Not only do rural areas face economic problems, but they also struggle to retain their population. Jackson stated that most kids in rural communities will not return after graduating high school and heading to college. For the sake of their future, Benton County desperately needed updated infrastructure, and they were able to afford it with the help of the county's wind farms.

Many rural communities, like Benton County, lack reliable access to high-speed internet. Nearby wind farms helped to rectify this inequity, providing over \$1 million of the \$6.2 million it cost to complete the project to run fiber optic line through communities in Benton County. This infusion of tax revenue from nearby wind farms helped offset the shortfall between a grant from the state and the full project cost. According to Jackson, Benton County's new fiber optic network will provide high speed, low-cost internet to 75-80 percent of its citizens by the end of 2020. The remaining 20 percent will have similar access through new wireless towers in the area. This undertaking, made possible in part by nearby wind farms, will make e-learning a new reality for Benton County residents and help attract new local business.

The rural internet improvements were just the tip of the iceberg as advancements have been taking place over the past decade. Thanks to wind energy, Benton County was able to allocate \$3 million to their local school corporation, advancing the quality of education. Since 2007 the wind farms in Benton County have generated \$38.4 million for road improvements. By 2038, \$26 million will be spent upgrading emergency vehicles and training EMTs to become paramedics. All of this revenue and investment has fueled the creation of 95 new jobs and the construction of a new tourism center, all while providing 988 MW of clean energy to the grid. Wind power has provided a level of economic stability and will do so for decades to come.

Benton County is an excellent example of the benefits of wind energy. Their wind farms have not only generated tens of millions of dollars for improving the county, but also help in the small steps



■ Randolph County, Indiana

we are taking toward reducing our carbon footprint. Wind energy offers rural communities across Indiana a unique opportunity to attract businesses, provide local residents with good-paying jobs, and build up a local tax base in a sustainable way. That much is clear from the success of wind energy in Benton County.

RANDOLPH COUNTY, INDIANA

Ceann Bales, Executive Director

Randolph County Community & Economic Development Corporation

It's not uncommon for rural communities to struggle as manufacturers close their doors and young people seek other opportunities due to the lack of good paying jobs. The tax base as a result also suffers, leaving local governments to scrounge for financial resources to support the infrastructure and operations of the community. These struggles have only been exacerbated by the pandemic, causing further strain on local businesses.

In Randolph County, funding for local government has taken a hit through a 30% loss in the gas tax with fewer people driving to work. The local income tax, which helps keep property taxes low, is also falling. The county projects a million-dollar shortfall heading into 2021, something that is unfortunately not unique to counties across rural America.

However, there is hope for counties like Randolph – counties with wind farms in their communities. The wind projects in the county have helped to overcome some of the struggles of a decreasing manufacturing base, and in turn, provide for high paying jobs, helping to retain young people. The wind turbines require

inspections and maintenance, which is a skilled trade.

Annual tax payments provided by EDP Renewables has helped purchase much-needed equipment for the community, such as a new ambulance for the county's emergency medical services. Farmers also benefit from the wind farm, receiving lease payments for hosting wind turbines on their land, leaving 98% of the land undisturbed. Furthermore, the wind projects provide annual payments for three of the five schools in the county. Each school has used its funds to update facilities and upgrade technology in order to improve the education children receive.

"The income generated by the wind in Randolph County have been instrumental in helping the county navigate the negative financial impact of the pandemic," said Ceann Bales, Executive Director of the Randolph County Community and Economic Development Corporation. "The farms will continue to generate income for our county, provide high paying jobs for our youth, and help ensure our rural schools prepare our youth for either the workforce, technical degrees, or college."

CAMPBELL COUNTY, SOUTH DAKOTA

Andrew Van Kuren, Campbell County Economic Development Corporation

There is no shortage of wind in Campbell County South Dakota and with it comes great opportunity. In December 2015, the Campbell County Wind Farm was completed with 55 turbines



■ Campbell County South Dakota.



■ Construction crews work on turbine construction for the Buffalo Ridge Wind Farm in Deuel and Brookings counties. South Dakota will soon be home to hundreds more wind towers across the state. Photo: Courtesy of Steven Wegman

being brought online generating 95 MW. The farm produces enough electricity to power approximately 25,000 homes for a year. With 700 homes in Campbell County, all of the electricity generated by the turbines runs through Basin Electric Power Cooperative. More is yet to come as Con Ed Development will soon begin phase two of the project to construct an additional 38 turbines, which are even more efficient with the advancements in technology.

Wind power has significantly increased the tax base for Campbell County. The original 55 turbines have been generating over \$300,000 in local taxes every year. The Pollock-Mobridge School District and Campbell County are both receiving over \$150,000 in taxes from the wind farm every year. The tax revenues will nearly double with Phase 2. The wind farms have also created about six full-time jobs in the region, which is significant considering the population of Campbell County is 1,466 people.

Development of wind energy has not been without some controversy in the community, but the county commissioners did it right – they took their time, they did their research, and they are applying knowledge they learned through the first phase of the project to implement zoning ordinances to meet industry standards and will apply zoning regulations to all aspects of the county, not just wind farms.

The many benefits seen by the county have proven valuable to Campbell County and should serve as a model to other counties in South Dakota.

DEUEL COUNTY, SOUTH DAKOTA

Joan Sacrison, Executive Director Deuel Area Development Corporation

Deuel County is a small county in east central South Dakota with a giant wind energy portfolio. This rural county of 4,365 people is now experiencing a major economic boom in wind development that is generating millions of dollars in new tax revenue and creating hundreds of new jobs.

In spite of the global pandemic, the county experienced a 616% increase in taxable sales, according to the South Dakota Department of Revenue. April of 2020 brought a windfall of nearly \$32 million in taxable sales, whereas those same sales totaled roughly \$4.5 million just a year ago.

With the influx of construction jobs and the development of dozens of permanent jobs in the county that pay good salaries, the local real estate market has turned around as most properties have been purchased, the local motel has been full, and the campgrounds are in full swing due to the presence of wind energy workers. This has had a domino effect at the local grocery stores and restaurants that have also benefited from increased sales.

Wind energy is a long-term business that benefits farmers and landowners in rural areas, too, by providing lease payments to landowners.

There is no shortage of wind farms in Deuel County. Avangrid developed the Buffalo Ridge II Wind Farm in 2010 with 24 turbines and generates of 210 MW of energy, and last Fall, Avangrid's Tatanka Ridge wind farm was approved, adding 56 more turbines to the county. NextEra Energy just began construction of the Crowned Ridge II wind farm that will consist of 29 turbines that will



Left and Below: Deuel County South Dakota.



generate 300 MW of power. And finally, Invenergy is in the process of developing the Deuel Harvest Wind Farm that will consist of approximately 120 wind turbines for a total capacity of 300 MW that will produce enough energy to power 90,000 homes annually.

Deuel County has benefited tremendously as a result of wind energy development and is excited for the many benefits that will continue to permeate throughout the community for years to come.