

Fall 2022

BASIN BITS

The Official Publication of the Western Dakota Energy Association

Developing the Energy Workforce of the Future



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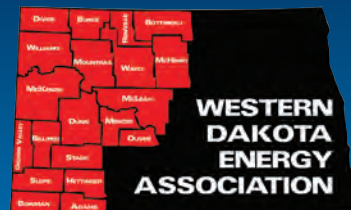
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The proposed future home of the Minot Area Workforce Academy.

Photo Credit: Ackerman Estvold and LSE Architects

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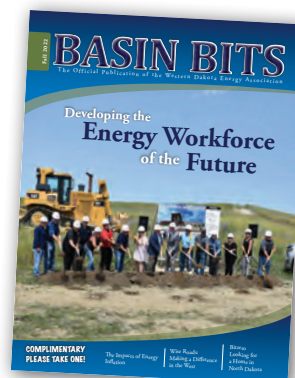
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On the cover: Breaking ground on the new Bakken Area Skills Center (BASC) in Watford City. Photo Credit: BASC



From the Desk of the Western Dakota Energy Association's President



Trudy Ruland
President
Western Dakota Energy Association

What a difference a month can make! When we last visited in March, calving was going well but the extreme drought was still with us. As we were sorting off pairs to relocate in another yard, we were noting older mamas that would be the first to go if it didn't rain and wondering how long our hay would last if the pastures had no grass.

Then April happened and the extreme drought was broken by several extreme spring blizzards. For those of us who make a living outside, these storms created dangerous conditions with long, hard days of work. We were fortunate as we lost only a few calves and only went without electricity for a little over a day. Then, in the summer, the moisture from the storms set us up with greener pastures and decent crops.

Moisture and hard work are only part of the inputs we need to produce commodities like cattle and crops on the prairie. It has been said before that ranching / farming is a lifestyle, as it's difficult to make a living by it.

To illustrate, let's look at one acre of cropland put into spring wheat on our ranch this season.

This is the cost of investment per acre before any sale of wheat: rent \$45, burn down chemical \$25, seed \$20, seed treatment \$2, fuel \$15, fertilizer \$120, in-crop weed control \$45, crop insurance \$5, all added up for a total of \$277. This doesn't even factor in the more difficult numbers to calculate, such as the cost of equipment, maintenance, repairs, and grain storage. Have you priced a tractor lately? Ouch!

We seeded about 300 acres of wheat this year and our average production for spring wheat is approximately 40 bushels

Howdy from the Ruland Ranch!



Even the cattle at Ruland Ranch don't know what to make of the weather. Photo Credit: Trudy Ruland

per acre. At the current price of about \$8.00 per bushel, the revenue for that acre is \$320 or \$96,000 for all the wheat. If we add barley, peas, soybeans, hay, and calves – WOW! – it looks like a windfall for the year.

But you also need to remember that we've already spent more than \$83,000 to get that crop of wheat, which leaves just \$13,000 for two annual salaries! And there are no guarantees because prices change.

Today the price of crude oil is about \$100 per barrel and an average Bakken well produces about 70 barrels of oil per day, equalling up to \$7,000 per day. That's nearly \$2.6 million a year for one well! That's definitely a windfall, right?

But what is a 'windfall' exactly? According to Investopedia, 'windfall profits are large, unexpected gains resulting from lucky circumstances. Such profits are generally well above historical norms.'

Are you still thinking that oil is seeing a windfall? After all, the oil doesn't just jump out of the ground. In 2022, the average Bakken well cost more than \$7.7 million just to get into production and the average operating cost is \$13,000 per month.

Someone once told me that when you farm or ranch, you need to plan to lose money for three years, break even for three, make a little for three, and having one really good year to make up for all the others. This is also true for the oil industry in North Dakota, where several Bakken producers filed for bankruptcy during COVID-19 due to the low oil prices. In many ways, the industry needs high oil

prices to pay down the record debt from the last five years of poor oil prices.

Ultimately, the ag industry needs the oil industry. Diesel technology is still the most efficient provider of the horsepower and long working hours needed by our tractors and combines. And the rest of y'all need us both. Hamburger on a bun, anyone? 🍔

ABOUT THE WDEA

The Western Dakota Energy Association (WDEA) is the trusted and unified voice for the betterment of the citizens of North Dakota and WDEA membership.

WDEA'S 2022 EXECUTIVE COMMITTEE SERVES WESTERN NORTH DAKOTA

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From the Desk of the Western Dakota Energy Association's Executive Director



Geoff Simon
Executive Director
Western Dakota Energy Association

Climate Crusaders Need a Dose of Common Sense

The 'green' energy movement is driving inflation, crushing the economy, and is not improving the environment.

I am just going to say it – I'm sick and tired of these climate crusaders and the ridiculous energy policies they advocate. Most people accept that higher atmospheric carbon dioxide concentrations have an effect on the climate, but to suggest this is somehow an 'emergency' or a 'crisis' that requires radical transformation of our energy sector is really over the top. Unfortunately, however, this ideological contagion embraced by the Biden administration has spread throughout the federal government. As such, the 'green' energy movement is driving inflation, crushing the economy, and is not improving the environment.

When people in North Dakota hear the term 'clean energy,' they probably think of wind turbines or solar panels. No emissions, right? Think again. These technologies both require equipment and machines to mine the raw materials needed to produce them, and you can bet those mechanized monsters are powered by either diesel fuel or gasoline. The same goes for the manufacturing process, which requires copious amounts of heat most likely provided by natural gas. Then the completed wind turbines or solar panels will need to be shipped to their desired location by fossil-fuel powered vehicles and installed using fossil-fuel powered equipment.

But once they're in place, surely, they're green, right? Not exactly. Consider the beauty of an unspoiled prairie landscape suddenly dotted with dozens of towering wind machines. So much for the beautiful scenery. Wind turbines also destroy wildlife habitat. Prairie birds refuse to nest around them

because of the noise and the shadow flicker from the rotating blades, and the turbine blades swat birds and bats right out of the sky. And then, when the wind turbine blades wear out, are they recyclable? Nope – they're cut into smaller pieces and disposed of in a landfill. So much for clean energy.

Wind and solar are also heavily subsidized and cost American taxpayers billions of dollars each year. Because wind and solar rely on subsidies that require they produce energy to collect, their owners sell their power at very cheap prices (even negative at times) and still make money. The downside of this market distortion is that the electricity generated by intermittent sources will displace the electricity that would otherwise have been generated by coal-fired power plants, which means the owners of coal plants don't make money and we see premature retirements of these baseload facilities. Without adequate sources of baseload generation that can deliver power 24/7, the electric grid is becoming increasingly unreliable.

So, maybe you can understand why I'm sick and tired of climate crusaders because what I've just described is their so-called 'solution' to the alleged climate crisis. The

energy policies they advocate are based on an anti-fossil fuel ideology, but wishful thinking is no substitute for affordable, reliable energy. Unfortunately, the Biden administration has bought into this harmful ideology, imposing costs on American businesses and consumers with climate-related rules and regulations from multiple federal agencies.

The White House has set a goal of decarbonizing the grid and eliminating all coal, oil, and natural gas generation by 2035. But unless Biden and his environmental extremist backers are prepared to embrace nuclear energy – and they're not – the goal of an emissions-free electric grid is unachievable. Natural gas and coal-fired generation at times supplies up to 85 percent of the electricity in our region, so promoting a complete transition to wind and solar won't do anything but increase the risk of power blackouts.

We all want a clean environment, but those in the climate movement need a dose of reality. We simply can't afford to put ideology ahead of the technology required to actually achieve results. The federal government must reverse this imposition of green energy ideology, return the United States to energy independence, and allow cleaner technology the time it needs to develop.

Developing the Energy Workforce of the Future



By Paul Adair, Staff Writer

The ground-breaking ceremony for the new Bakken Area Skills Center in Watford City took place in July 2022. Photo Credit: BASC

In March 2022, the North Dakota State Board for Career and Technical Education awarded approximately \$88 million in funding from the Career and Technical Education Capital Projects Fund, propelling 13 separate projects forward in the State of North Dakota.

The funding handed out aims to increase access to career and technical education (CTE) by building new, or expanding upon existing, CTE Centers across the state. The source of this funding was a combination of \$20 million of America Recovery Plan Act (ARPA) funds and another \$68,276,228 of the Coronavirus Capital Projects Fund.

WILLISTON BASIN CAREER AND TECHNICAL EDUCATION CENTER – WILLISTON

Williston Basin School District was one of the 13 school districts receiving funds and was awarded the amount of \$10 million. This funding brings the district one step closer to fully realizing its plans for the Williston Basin Career and Technical Education Center.

This project will take approximately three years to finish and, once complete, the two-story building will add much-needed additional space for a variety of CTE courses at Williston High School that are currently

housed in the high school's main building. This allows the district to increase its slate of programs, as well as provide more valuable CTE opportunities for schools in the surrounding area.

Williston High School Principal, Jason Germundson said after the funding was first announced, "This truly is a wonderful opportunity to put Williston on the map when it comes to innovative and practical education that will serve students well into their futures."

SOUTHWEST AREA CAREER AND TECHNICAL EDUCATION ACADEMY – DICKINSON

Southwest Area CTE Academy in Dickinson also received approximately \$3.3 million to achieve its future goals. This goes along with a previously awarded \$6.6 million coming through the *American Rescue Plan Act* in February 2022.

"Without this funding, this project would not be possible," says Aaron Anderson, Director at the Southwest Area Career and Technical Education Academy. "Districts across southwest North Dakota contend with tight budgets and lack the resources needed for additional CTE training. But with the grant dollars we can now potentially access, a project like the

Southwest Area Career and Technical Education Academy is closer today to becoming a reality."

The planned Southwest Area Career and Technical Education Academy started with Dickinson Public Schools' 2020 purchase of the former Halliburton Campus, which proposes to transform the industrial space into a state-of-the-art educational facility for CTE training. When complete in 2023, this new facility will encompass five buildings situated on 40 acres of land, and will see the renovation of approximately 84,000 square feet of space.

In addition to providing high-quality technical education programming at the Dickinson facility, the academy will also feature a mobile component that can be sent out to surrounding schools, further enhancing the CTE training that is already happening in the area.

"The programs we will offer through the new academy will help us tell the story of our local employers, as well as educate young people about the diverse, technically advanced, and readily available opportunities in the energy sector that are right here in North Dakota," says Anderson. "This will ultimately help keep more of the talented young people we have in the region closer to home, which is why excitement is starting to grow surrounding this project."

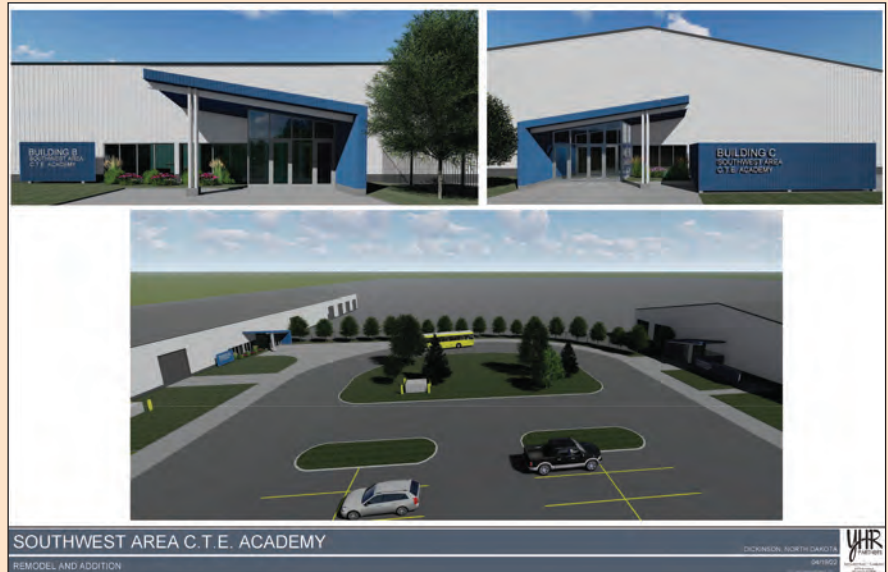
MINOT AREA WORKFORCE ACADEMY – MINOT

Although outside the Bakken Play itself, the Minot area is no stranger to the challenges of finding trained workers. Because of this, Minot Public Schools has partnered with local organizations to increase access to CTE opportunities with the shared goal of ‘training local to retain local’ – a goal that is now closer within reach because of the funding provided by the Career and Technical Education Capital Projects Fund.

This funding enables the district to advance plans that will help meet the demand for more workers in the area, such as the opening of a new grade 9 to 12 high school, the renovation of its Magic City Campus into a grade 9 to 12 high school, and the remodeling of Minot’s Central Campus into a third middle school in the town to provide more opportunities for students and the community.

The funding also helps Minot Public Schools start work on the Minot Area Workforce Academy, which is a new center aiming to provide students the CTE training they need today to find in-demand jobs tomorrow.

When complete, the Minot Area Workforce Academy will house an Early Childhood Learning Lab, a Skills Training/Multipurpose Room, work-based learning coordination, and a Commercial Driver’s License (CDL) simulation lab. The CDL training program will help to address the additional training requirements for in demand jobs in transportation across North Dakota, including within the oil and natural gas industry.



The Southwest Area CTE Academy includes renovating about 84,000 square feet of space of the former Halliburton Campus in Dickinson. Photo Credit: YHR Partners / GT Architecture

“We envision the Minot Area Workforce Academy becoming the hub of our community’s CTE programming,” says Pam Stroklund, Career & Technical Education Director at Minot Public Schools. “We are excited about the opportunity this will give our high school students to train before they graduate high school, giving them a head start into their careers, as well as for the access the new center will provide community members for local skills training.”

BAKKEN AREA SKILLS CENTER – WATFORD CITY

McKenzie County is currently the only county in North Dakota that has a Class A school but no established post-secondary institution, something that puts local employers at a significant disadvantage when looking to recruit trained workers. Located in Watford City, the Bakken Area Skills Center (BASC) looks to flip the script by connecting high school students with hands-on technical classes and offering post-secondary



The proposed Minot Area Workforce Academy location (bottom left) and the New High School Design (above) in Minot. Photo Credit: Ackerman Estvold and LSE Architects



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training and education opportunities for in-demand trades in the region.

The total cost of the construction and outfitting of this facility will be approximately \$20 million, which was helped immensely by the \$10 million grant from the ND Career and Technical Education Capital Projects Fund, with remaining financial contributions coming from local jurisdictions, companies, and organizations.

"This funding was absolutely needed to give us the financial capacity to construct the BASC, which is a 38,000 square foot building that has multiple uses in terms of K-12 education, and provides post secondary collaborations with Williston State College, Train ND, and other institutions in the use of the facility," says McKenzie County Superintendent, Steve Holen. "The new BASC likely will end up being one of the most impactful buildings in the community just because it's going to be so multifaceted. And because we are the largest community in North Dakota that doesn't have any kind of post-secondary, BASC will help to meet the growing demand for workers in the region by providing much-needed critical workforce and skills training."

Construction of the BASC is expected to take place beginning in summer 2022 and is projected to be ready for student use by fall / winter 2023.

OTHER PROJECTS RECEIVING FUNDING FROM THE CAREER AND TECHNICAL EDUCATION CAPITAL PROJECTS FUND INCLUDED:

- Career Impact Academy, Grand Forks – \$10,000,000
- Cass County Career & Technical Education Center, Fargo – \$10,000,000
- Heart River Career and Technical Education Center, Mandan – \$10,000,000
- Bismarck Public Schools, Bismarck – \$5,372,203
- North Valley Area Career & Technology Center, Grafton – \$4,752,290
- Sheyenne Valley Area Career and Technology Center – \$3,131,986
- Southeast Region Career and Technology Center, Wahpeton – \$2,979,975
- Lake Area Career and Technology Center, Devils Lake – \$1,241,074
- James Valley Area Career and Technology Center – \$798,700

Teaching the Teachers About North Dakota Energy

By Paul Adair, Staff Writer

North Dakota's energy sector is much maligned by those who know little about how the industry works. Two organizations in North Dakota look to challenge misinformation by providing seminars that teach the teachers about the reality of North Dakota energy.

NORTH DAKOTA PETROLEUM FOUNDATION TEACHER EDUCATION SEMINAR

The North Dakota Petroleum Foundation Teacher Education Seminar is a career awareness initiative aiming to inform educators about the value of North Dakota's oil and gas industry. Over the last three decades, this 30-hour course has kept up with the times to focus on advances in technology and address topical issues.

"We've tailored some of our panels to include more information on economics, global markets, supply and demand, investments and access to capital, and regulations, and how that all plays a role on the price of energy at home," says North Dakota Petroleum Foundation Executive Director, Tessa Sandstrom. "There are many misconceptions circulating about these kinds of complex issues, so we hope we can impart a better understanding of why we're facing the economic challenges we see today."

The program provides teachers two continuing education credits, as well as offers ideas for activities / lessons in the classroom. Participants also tour an operating oil rig and production facility, the Mandan Refinery, and, when possible, a natural gas plant or hydraulic fracturing operation. The North Dakota Petroleum Foundation also likes to visit a reclamation site and meet with local leadership about the positive regional impacts of oil production.

"We want teachers to have accurate information about how the industry operates and the importance companies place on safety and training," says Sandstrom. "We want to give teachers all the tools and information they need to help their students make informed career decisions about their future."

Participants of the North Dakota Petroleum Foundation Teacher Education Seminar have the opportunity to tour a hydraulic fracturing operation. Photo Credit: North Dakota Petroleum Council





Teachers receive ND Energy Education on the making of frac fluid from Kent Ellis. Photo Credit: North Dakota Petroleum Council

“We want to give teachers all the tools and information they need to help their students make informed career decisions about their future.” – Tessa Sandstrom, North Dakota Petroleum Foundation



ABOVE: Teachers tour a dragline at BNT's Center Mine. Photo Credit: Lignite Energy Council

TOP RIGHT: Teachers get a sense of the magnitude of the industry posing in the bucket of a front-end loader. Photo Credit: Lignite Energy Council

BOTTOM RIGHT: Teachers 'mine' cookies to learn more about mining, reclamation, and economics. Photo Credit: Lignite Energy Council



LIGNITE ENERGY COUNCIL TEACHERS SEMINAR

For almost 40 years, the Lignite Energy Council has hosted a four-day education seminar geared toward elementary and secondary teachers from Minnesota, Montana, South Dakota, and North Dakota. Participants in the program receive two graduate professional development credits after attending all portions of the seminar and prepare lesson plans that demonstrate how they will use the seminar information and materials in their classrooms.


Held at Bismarck State College, the seminar provides teachers with the information and educational materials they need to teach

their students about how lignite is mined and used to produce electricity for homes, farms, and businesses throughout the Upper Midwest. The information also covers lignite's economic impact on the region, as well as important environmental issues affecting the lignite industry.

“Teachers get the chance to see how all the pieces of the energy puzzle fit together, as well as how the North Dakota lignite industry impacts everything that goes on in the region, from economics and jobs all the way down to education,” says Kay LaCoe, Vice President of Marketing and Communications at Lignite Energy Council. “We like to say that the seminar connects the dots ‘from the mine to

the light switch’ in their classrooms so they know where their energy comes from.”

The response from those attending the seminars has been resoundingly positive, with exit surveys demonstrating a more than 70 percent improvement in the level of teachers' understanding of the industry from before they participated.

“Teachers get hit with a lot of misinformation through the media, and that's why seminars like these are so important to get the complete picture,” says LaCoe. “We want teachers to leave with a greater understanding that we're not just about energy – this industry is about the people, and people are what make us successful. The teachers get to see that and then pass that message along to their students.” 

The Impacts of Energy Inflation



By Paul Adair, Staff Writer

What a wild ride it has been.

Just over two years ago, the price of West Texas Intermediate crude oil fell more than \$50 to close at negative \$37.63 US. Now – at the time of this writing – it has skyrocketed to hover at approximately \$100 US per barrel, significantly impacting those living and working in North Dakota.

So far in 2022, the investment capital that once would have been expected with \$100-plus oil has not returned. The market is reacting differently than it has in the past and Wall Street seems hesitant to invest in an industry

that appears to be at odds with the policymakers in Washington.

“It used to be that when the rest of the economy wasn’t doing well, there were few places as lucrative as oil to put your money into,” says North Dakota Petroleum Council President, Ron Ness. “Now we’re competing for every dollar, we’re competing for every well, and we’re competing for every worker, and it’s all part of the evolution of the Bakken oil play.”

Oil is a global commodity and there are many factors for the rise in the oil prices. Everything from rising high demand following the pandemic to ineffective domestic energy policy to the hostilities between Russia and Ukraine plays a role in impacting the price Americans pay at the pumps. While these

high prices do somewhat benefit states like North Dakota, they are not always ideal.

“I don’t like seeing oil over \$100 because it drives up inflationary costs, increases the cost of production, and influences bad political decisions,” says Ness. “We’re all better off with oil price being in that \$75 to \$90 range. That’s the sweet spot for everyone in North Dakota where the state fills its coffers, the economy and the consumer does well, and everybody just grows and flourishes, instead of just paying more for everything.”

A TAX INCREASE

When the oil extraction tax was legislated to 5.0 percent from 6.5 percent in 2015, there was a provision written in the bill at the

At a press conference with his Senate Republican colleagues in April, Senator John Hoeven said that, in 2020, the U.S. was producing just under 13 million barrels per day of oil, a number that has fallen to approximately 11.5 million barrels per day in 2022 because of Biden administration policies, such as:

- Placing a moratorium on new oil and gas leases on federal land and water, potentially costing North Dakota hundreds of millions of dollars in lost revenue.
- Continuing the policy of the Obama administration, the Biden administration today is hampering industry's ability to move oil across the country and internationally by blocking pipelines.
- Stranding natural gas in North Dakota by not issuing the federal permits needed for gathering systems and pipelines needed to get to market.

"To the Biden administration – until you change your energy policy, don't tell Americans you're trying to help," said Hoeven. "Your policy is the problem."

time that the tax would rise to 6.0 percent should the price of oil go over \$90/barrel for more than three consecutive months, which is exactly what has occurred through 2022.

"This is a windfalls profits tax and, at a time when our country needs more oil production and the Bakken is competing for investment, it is not good policy and will result in less oil production," says Ness. "North Dakota needs a stable and competitive business environment, and I hope that policy-makers will look at eliminating that last oil tax trigger as they decide how to spend all the surplus oil tax revenues next year."



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The Wise Roads project provides real-time weather data to county road managers to improve the efficiency of truck movements across the Bakken. Photo Credit: NDAWN

Wise Roads: Making a Difference in the West

NDAWN -- Big Bend 5NE

2022-07-02 09:50:54 PM

By Geoff Simon,
Western Dakota Energy Association

Oil producers and service companies depend on county and township gravel roads to move commodities, supplies, and equipment to and from well pads, disposal wells, and other facilities. But when inclement weather strikes, local governments impose weight restrictions that prohibit the movement of truck traffic until conditions improve. These restrictions protect the integrity of roads and the safety of the traveling public, but industry truckers justifiably complain that – at times – the restrictions are imposed more broadly than necessary.

To address the problem, the Western Dakota Energy Association (WDEA) has partnered with the North Dakota Agricultural Weather Network (NDAWN) to develop the Wise Roads (Weather Information System to Effectively Reduce Oilfield Delays and Disruptions) project. Its goal was to provide real-time weather data to county road managers to improve the efficiency of truck movements associated with the oil and gas industry.

Launched in 2019, the project will have wrapped up over the summer with a total of 50 research-grade weather stations, all equipped with a high-resolution camera that also measure temperature, wind speed and direction, and soil temperature and moisture.

The full-service weather stations are installed throughout the oilpatch, focusing on



The oil industry relies on accurate weather information impacting county and township gravel roads in order to move commodities, supplies, and equipment to and from well pads, disposal wells, and other facilities. Photo Credit: NDAWN

the top oil-producing counties (Dunn, McKenzie, Mountrail and Williams) but with stations also installed in counties around the periphery of the Bakken core. These stations provide real-time weather information to allow road managers to more precisely identify roads that require weight restrictions and – most importantly – exclude those that do not.

This network has allowed counties to reduce restricted areas to smaller parts of a county, or place restrictions on just a few roads, such as breaking the 2,861 square miles of McKenzie County into five sections.

“McKenzie County covers an area so large that the weather conditions can be very different from one region to the next,” says County Engineer Curt Huus. “The Wise Roads system of weather stations allows us to monitor county weather in several regions, so we’re able to make weather-related decisions in smaller affected regions rather than county wide.”

Oil industry leaders have been pleased with the results. Guy Aman, Construction Foreman for Continental Resources in North Dakota, is one of the industry reps who called attention to unnecessary road restrictions during a roundtable discussion with county

road managers in December 2018. He pointed out that road restrictions can force companies to shut in wells, which potentially costs millions of dollars in lost production and tax revenue. Aman says that communicating industry's concerns to county road managers has made their operations more predictable.


"Wise Roads provides real-time, accurate weather data to our county leaders," says Aman. "This reduces uncertainty and provides flexibility in decision making, which is always good for business."

Jonathan Rosencrans is a meteorologist contracted by WDEA to manage the project.

Now a full-time employee of NDAWN, Rosencrans says completion of Phase III of the installation has saturated the oilpatch in terms of covering temperature and wind data, but there is still more to do.

The 15 Phase IV weather stations, which will wrap up the installation work this year, are focused on filling in the gaps for rainfall data and will be less expensive to install because they will not have thermometers or anemometers – only a rain gauge and camera.

Wise Roads research is also aimed at improving 'frost law' policy, the period every spring when weight restrictions are imposed to prevent damage as frost and moisture move out of the roadbed. To better determine when frost restrictions can be lifted, the data from probes installed in gravel roadbeds is being collected by WDEA's other partner in the project, the Upper Great Plains Transportation Institute.

The project is funded by a surcharge on revenue counties receive through WDEA's LoadPass Permits system for oversized trucks. The Oil & Gas Research Council has also provided a matching grant of \$250,000 for the weather stations, and an additional \$60,000 to support a meteorologist. 

Geoff Simon is the Executive Director of the Western Dakota Energy Association.



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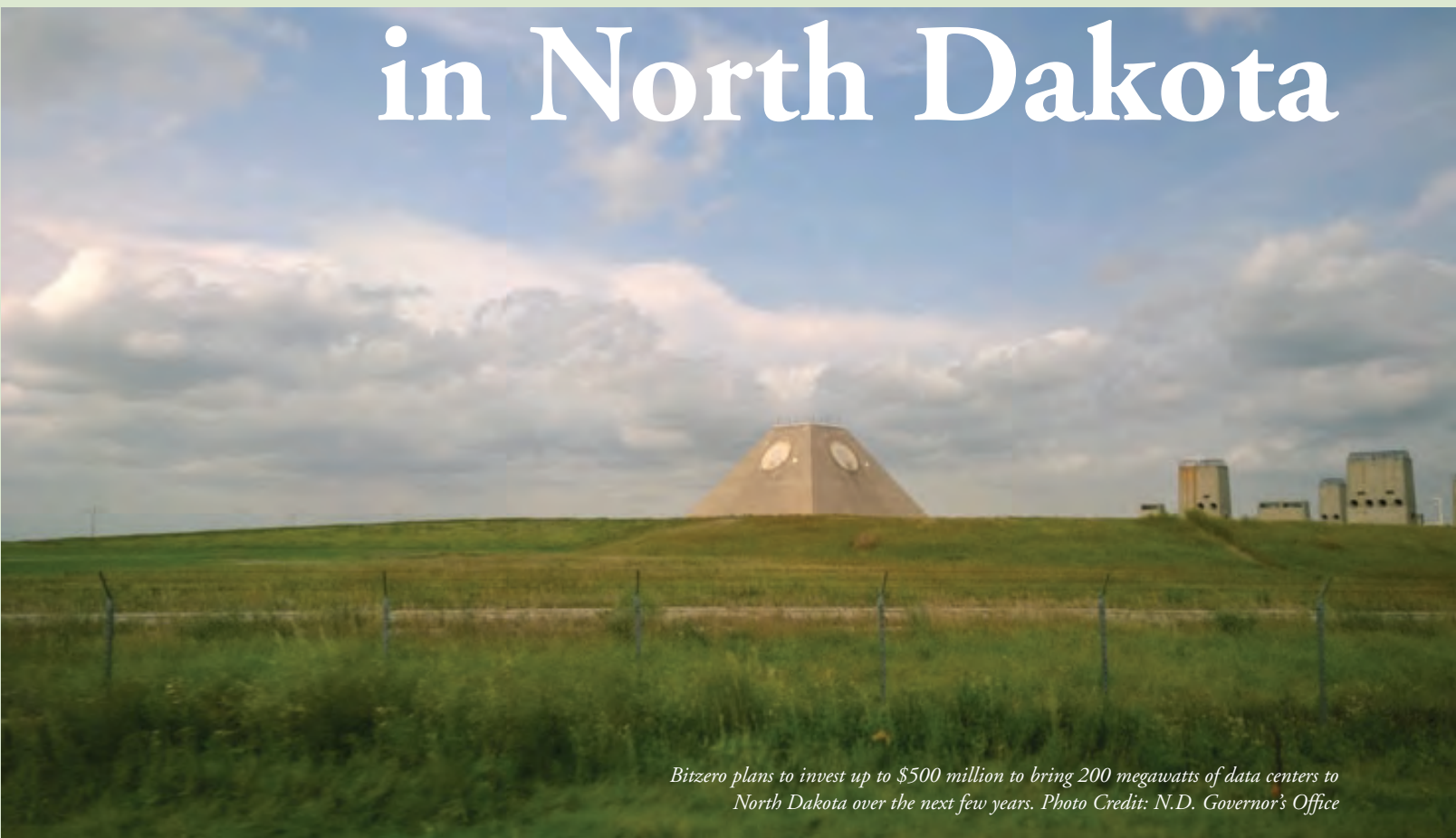
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Bitzero Looking for a Home in North Dakota



Bitzero plans to invest up to \$500 million to bring 200 megawatts of data centers to North Dakota over the next few years. Photo Credit: N.D. Governor's Office

By Paul Adair, Staff Writer

In early June 2022, Bitzero Blockchain Inc. CEO, Akbar Shamji, alongside Gov. Doug Burgum, investor and television personality Kevin O'Leary, and Mandan, Hidatsa and Arikara (MHA) Nation Chairman Mark Fox formally announced that Bitzero was zeroing in on a couple communities in North Dakota as the company's headquarters and hub for all its North American bitcoin mining operations.

Bitzero plans to bring 200 megawatts of data centers to North Dakota over the next few years, with a specific purpose of servicing the state's data requirements. These data centers will represent a total investment of between \$400 million and \$500 million.

"Many have said that data is the new oil and there is a lot of truth to that, and there is an insatiable demand for data storage and processing right now," says Josh Teigen, Director of Economic Development & Finance, North Dakota Department of Commerce. "Whether it is to fly drones, drive autonomously, stream videos, or



Bitzero announces its future plans for North Dakota. (L-R) Gov. Burgum; Bitzero CEO, Akbar Shamji; Josh Teigen, North Dakota Department of Commerce; MHA Chairman, Mark Fox; and Bitzero Strategic Investor, Kevin O'Leary. Photo Credit: N.D. Governor's Office

*“The need for robust data infrastructure is only going to grow, and North Dakota is fortunate to be positioned at the epicenter of that development.” – Josh Teigen,
North Dakota Department of Commerce*



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“In January of 2022, the Biden administration announced that it would make \$1.15B available to states to clean up abandoned oil and gas wells. Those monies are part of an overall funding commitment of \$4.7B.”

- Reuters January 31st, 2022

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process complex algorithms, the need for robust data infrastructure is only going to grow, and North Dakota is fortunate to be positioned at the epicenter of that development.”

North Dakota emerged as the logical destination for Bitzero's operations because of the state's declared goal of being carbon neutral by 2030, a strong energy industry, access to a top-tier engineering and software talent pool, and North Dakota's reputation for having regulations and policies considered very supportive to business.


“North Dakota is ideal for this type of development because we have progressive leadership in both the Governor's Office and our legislature that makes this the best place on earth to invest and do business, offering business-friendly policy and a stable tax and regulatory environment,” says Teigen. “Our robust energy and agriculture industries also contribute to the benefits we have to offer but, ultimately, it is the people in leadership positions both in the public and private sector that have made North Dakota the ideal place to invest in a variety of industries.”

Bitzero's crypto currency mining operations are designed to recapture heat displaced by its mining operations to benefit local green initiatives. Because of this, the company has partnered with MHA Nation for the purchase of power from Bitzero's proposed data center for the MHA Nation's greenhouse project, which broke ground last year near Parshall, Native Green Grow (NG2).

“The heat captured from the data center into greenhouse applications will allow North Dakota to grow crops year-round and continue to feed the world,” says Teigen. “This is a great example of the collaborations between our energy and agriculture sectors.”

Pulling off a project like this is very complex and there is a great deal of work that still needs to be done, both from a design standpoint and in terms of power generation and transmission. That said, Bitzero has been busy in the months since its announcement was first made.

The company has signed leases for office space in both Fargo and Bismarck, signed letters of intent with MHA Nation for a collaborative project, and has purchased the Stanley R. Mickelson Safeguard Complex in Nekoma, which will inject tens of millions of dollars of capital expenditure into retrofitting the site through the investment into zero carbon power generation and data processing capability.

“The benefits of this will be a more diversified and resilient energy grid, additional markets for our power generation, bringing idle assets back online, job creation, and economic activity, as well as tax revenues for state and local economies,” says Teigen. “Bitzero's unique approach to developing and partnering, and / or owning their power generation, means that other users will not be impacted or compromised negatively in any way. This will be a win for everyone involved.” 

Regional Roundup

FOSSIL FUELS STILL POWER MOST OF U.S.

On July 1, 2022, the Energy Information Administration's (EIA) Monthly Energy Review, which provides data on annual U.S. energy consumption, announced that fossil fuels like petroleum, natural gas, and coal still accounted for the vast majority (79 percent) of the 97 quadrillion British thermal units (quads) of primary energy consumption in the United States last year, with the remaining energy consumption (21 percent) coming from sources other than fossil fuels, such as nuclear power and renewable forms of energy.

Petroleum continues to be the most-consumed primary energy source in the United States, totaling 35 quads in 2021. U.S. natural gas consumption totaled 31.3 quads in last year, a slight decline from 2020. Interestingly, coal consumption went up to 10.5 quads in 2021, marking the first annual increase in coal consumption since 2013, although it still remains about half of its peak in 2005.

The four-quad increase in U.S. energy consumption last year was the largest annual increase on record and was mostly attributable to a return to pre-pandemic levels of activity.

WHITING AND OASIS FORM CHORD ENERGY

On July 1, 2022, Whiting Petroleum Corporation and Oasis Petroleum Inc. successfully merged to create Chord Energy Corporation, a scaled, unconventional oil producer and independent exploration company in the Williston Basin, boasting 972,000 net acres, a combined first quarter production of 171,000 barrels of oil per day, and an increased borrowing base of \$2 billion.

"We are excited to establish Chord Energy, which will build on the proud legacies and extraordinary talent and capabilities of Whiting and Oasis," said Chord President and CEO, Danny Brown. "With a premier Williston Basin position, a peer-leading balance sheet, significant scale and enhanced free cash flow generation, Chord is positioned to succeed."

The new company is essentially debt free, which officials says positions it to drive shareholder value. A statement announcing completion of the merger said Chord expects to return 60 percent of its free cash flow to shareholders in the second half of 2022 through its base dividends, variable dividends, share buy-backs, and a \$150 million share repurchase program.

Headquartered in Houston, Chord trades on NASDAQ under the ticker symbol "CHRD."



SUPREME COURT REJECTS EPA OVER-REGULATION

In late June, the Supreme Court ruled that the Environmental Protection Agency cannot enforce state-level caps on carbon emissions under the 1970 Clean Air Act. This 89-page ruling blocks an attempt by the Obama-era Environmental Protection Agency to impose expansive regulations on the electric sector that would have effectively banned coal-fired power generation.

The court's 6-3 majority opinion, written by Chief Justice John Roberts, did not prohibit the regulation of CO2 emissions, but said the EPA's sweeping regulation went beyond the authority it was granted by the Clean Air Act.

State and industry leaders have cheered the court's ruling, with Gov. Doug Burgum saying the decision affirms the state's role as an equal partner to the federal government in regulating emissions.

"The ruling is a tremendously significant decision for states' rights and for consumers," Burgum said. "The ruling puts a halt to federal overreach, including far-reaching EPA proposed rules that infringed not just on states', but congressional authority."

NESS RECEIVES ENERGY CHAMPION AWARD

In July, ND Petroleum Council President Ron Ness was named the 12th recipient of the *Energy Champion Award* presented by the University of North Dakota Energy & Environmental Research Center (EERC) at its annual Energizing North Dakota's Future conference. Ness has served as NDPC president since 1999, over which time North Dakota has seen the Bakken lead economic growth throughout the state.

EERC credited Ness' work in government relations, public education, and outreach for helping shape the positive relationship between the industry and state and national interests. Served on the EERC Foundation board of directors for 13 years, Ness has participated in the EERC's Plains CO2 Reduction Partnership Program, the Bakken Production Optimization Program, and iPIPE (Intelligent Pipeline Integrity) since their inception.

Congressman Kelly Armstrong was on hand to present the award, saying, "He (Ness) doesn't support energy for energy's sake. He supports energy because it is what's going to drive North Dakota throughout the 21st century."

BAKKEN ROCKS COOKFEST

The North Dakota Petroleum Foundation and dozens of oil industry participants played host to *Bakken Rocks CookFest* on July 19 (Trenton) and July 21 (White Shield). The Bakken Rocks CookFests were started in 2009 and has rotated to two different communities each year ever since.

The Cookfests gave residents the opportunity to learn more about the oil and gas industry, hear from industry experts, meet the employees of companies working in their area, and – best of all – eat some of the best BBQ in western North Dakota. There were also games and activities for kids, swag and giveaways, and live music, which made this free event fun for the whole family.

PSC GIVES GREEN LIGHT TO CONTINENTAL PIPELINE

On July 7, 2022, the ND Public Service Commission (PSC) granted a permit to Continental Resources to build 3.1 miles of pipeline to move natural gas to an existing oil well for an enhanced oil recovery pilot project in Williams County.

As part of this project, Continental will purchase processed natural gas from WBI Energy and move it in an eight-inch pipeline to the company's Buddy Dommgo well pad. There are two wells on the site and the plans call for alternately injecting compressed gas into one well, and then bringing it back into production, an industry practice commonly referred to as 'huff and puff.' The company expects to perform up to three cycles over an 18 to 24-month period.

The company estimates it will invest approximately \$3.55 million in the pipeline.


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