



Letter from the President

The Lignite Energy Council is a not-for-profit association representing approximately 300 companies in 35 states, two Canadian provinces and 150 cities who are involved in commerce with seven power plants and five coal mines in North Dakota.

If we were a for-profit business, it would be easy to tell if we were successful because we would simply look at our profit-and-loss ledger and determine our profitability. However, as an association, we have to look at the goals set for us by the executive committee of the board of directors.

That's the purpose of this annual report. We want to prove to our members that their annual investment in the Lignite Energy Council results in superior value for three reasons:

- The mines and plants continue to operate efficiently and cleanly;
- Customers at the end of the line continue to receive 24/7 lignite-based energy from North Dakota's homegrown energy source; and
- A vibrant lignite industry benefits the regional economy in multiple ways.

In broad terms, let me just make some overarching comments regarding this past year and the work of the Lignite Energy Council.

The North Dakota Legislature met in 2017 and because of the price slump in the oil and gas industry, state revenues fell dramatically. The Legislature had to make tough decisions to ensure a balanced budget. In spite of this challenging economy, the Lignite Energy Council actually received \$3 million for research and development, demonstrating the state's commitment to the next generation of lignite-based power plants that will be cleaner and more efficient than the current fleet.

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On the national level, our efforts were helped by the election of President Donald Trump and the rollback of many regulations that were hitting the coal industry including the Stream Protection Rule and the Clean Power Plan. North Dakota was one of 27 states to sue the EPA over the Clean Power Plan as it had the potential to shutdown half of our industry, and the lignite industry hosted a meeting in May of 2016 explaining that the Stream Protection Rule had the potential to neutralize half of the coal reserves in North Dakota. Obviously, rolling back regulations brought a new optimism to the mines and plants.

The state's partnership with the industry also manifested itself through four rounds of research and development projects approved by the North Dakota Industrial Commission. These projects are primarily focused on the capture and utilization of carbon dioxide but also involved specialty

studies on using waste products from power plant production for agriculture production in greenhouses and identifying the potential for rare-earth elements associated with mining lignite.

Our presence and our messages on social media, along with a new website for the Lignite Energy Council, were well received as witnessed by a broader audience and social media metrics. In addition, we returned to TV advertising in North Dakota to remind the public that more than 70 percent of our electricity comes from homegrown lignite-based power plants.

Our members were also invited to attend both our annual meeting and the fall conference where they are given information from the mines and plants regarding upcoming purchases and outages. We again hosted two golf tournaments, a motorcycle ride and a sporting clays event that acted as opportunities to network along with raising necessary funds for our political action committee.

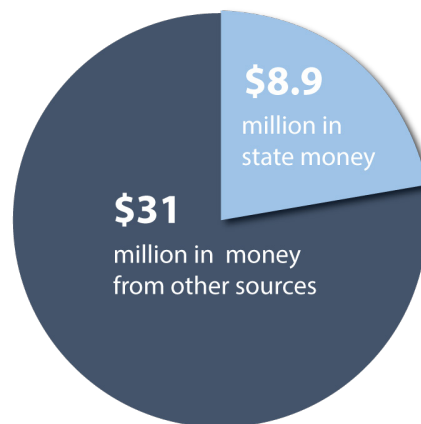
From a strictly monetary perspective, the members of the Lignite Energy Council invested \$2.5 million in 2017. The state of North Dakota likewise contributed \$2.5 million through its partnership in managed programs including education, marketing and research and development (R&D).

Another example of how the lignite industry leverages R&D dollars can be seen in the Lignite Research Council (LRC). In 2017, the LRC hosted four grant rounds. \$8.9 million in state funds -- raised from a portion of the severance and conversion taxes -- was leveraged with another \$31 million from other sources as the lignite industry continues to be a leader in developing and implementing technology solutions.

Historically, the Lignite Research Program has paid major dividends both for the industry and for the state's economy. The cost-effective mercury-capture technology employed at all seven power plants resulted from North Dakota R&D. Today, we are applying that same R&D focus on ways to enhance existing plants and build new ones that capture and use carbon dioxide for enhanced oil recovery.

In the future, we are proposing to repurpose the Lignite Vision 21 Program to an Advanced Energy Technology Fund, so state dollars can be leveraged to help fund large-scale demonstration projects that bridge the gap between the laboratory and full-scale retrofits or building entirely new plants. The commercial R&D projects are a niche that we need to fill as we work together with technology developers and energy companies to reduce emissions for an even cleaner future.

Leveraging R&D Dollars



Jason Bohrer
President & CEO
Lignite Energy Council

