

NDCC 54-63.1 Overview



NORTH DAKOTA ENERGY PRODUCTION RANKINGS

- #3 Producer of Crude Oil (2021)
- #5 Wind Generated Electricity (2020)
- #10 Ethanol Production (2020)
- #1 Lignite Production (2020)
- #5 Producer of Coal (2020)
- #11 Natural Gas Production (2020)



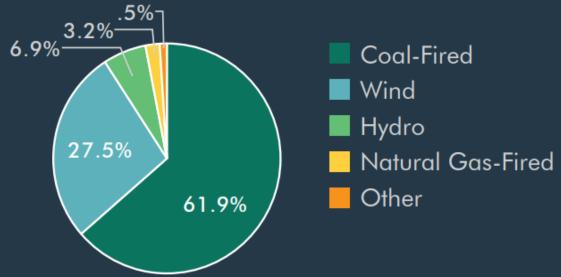
POLICY GOAL: NORTH DAKOTA CARBON NEUTRAL BY 2030



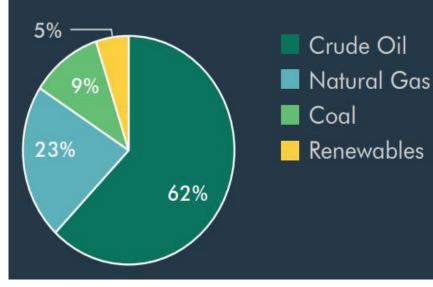
07 June 2021 Christine Chow

NORTH DAKOTA'S ALL-OF-THE-ABOVE ENERGY POLICY SUPPORTS A RESILIENT, DIVERSE PORTFOLIO

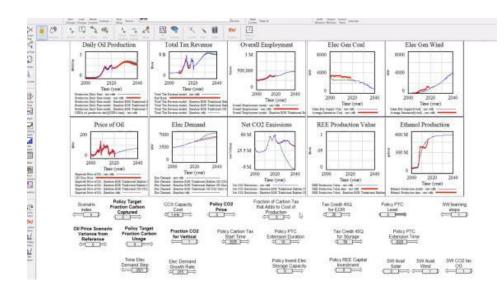
North Dakota Electricity Production

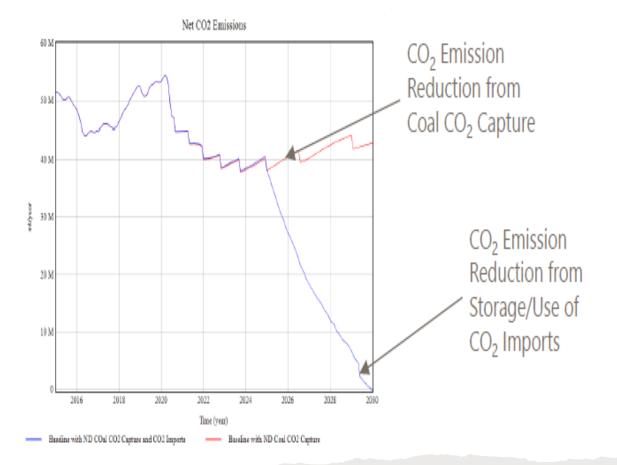


North Dakota Total Energy Production



PATH TO CARBON NEUTRALITY THROUGH INNOVATION, NOT REGULATION





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- Reinvesting production and extraction taxes:
 - Lignite Research Fund (\$0.10/ton up to \$7.5m)
 - Oil and Gas Research Fund (2% up to \$10m)
 - Renewable Energy Fund (20.5% up to \$3m)

Clean Sustainable Energy Fund

- Develop and commercialize low emissions technologies
- \$25 million in grants
- \$250 million Line-of-Credit

CCUS sales and use tax exemption

Allow utility rate recovery for CCUS costs



There is created the clean sustainable energy authority to support research, development, and technological advancements through partnerships and financial support for the largescale development and commercialization of projects, processes, activities, and technologies that reduce environmental impacts and increase sustainability of energy production and delivery.

PURPOSE

 To enhance the production of clean sustainable energy, to make the state a world leader in the production of clean sustainable energy, and to diversify and grow the state's economy.





MEMBERS OF CSEA



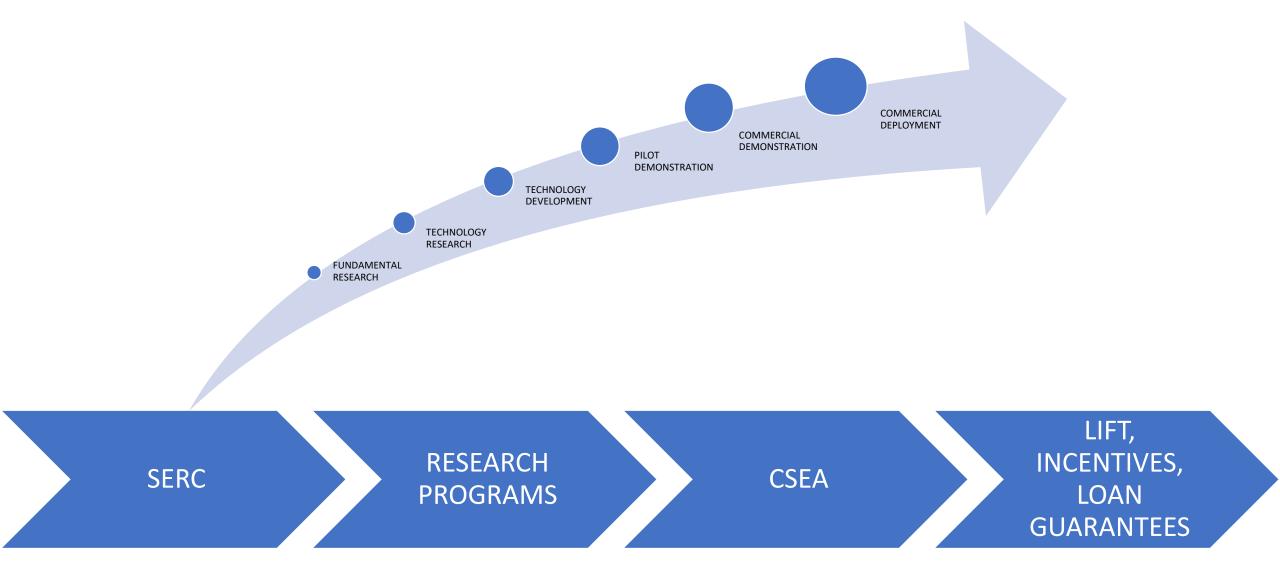
| INDUSTRIAL COMMISSION | | | | | |
|--|--|--|--|--|--|
| VOTING MEMBERS | NONVOTING TECHNICAL ADVISORS | | | | |
| LT. GOV. SANFORD (CHAIR) LEGISLATIVE MANAGEMENT) | TOM ERICKSON (STATE ENERGY RESEARCH CENTER) | | | | |
| JIM ARTHAUD (OIL & GAS RESEARCH COUNCIL) | DAVE GLATT (DEPARTMENT OF ENVIRONMENTAL QUALITY-DEQ) | | | | |
| JOEL BROWN (WESTERN DAKOTA ENERGY ASSOCIATION) | LYNN HELMS (DEPARTMENT OF MINERAL RESOURCES-DMR) | | | | |
| AL CHRISTIANSON (RENEWABLE ENERGY COUNCIL) | JUSTIN KRINGSTAD (PIPELINE AUTHORITY) | | | | |
| CHRISTOPHER FRIEZ (LIGNITE RESEARCH COUNCIL) | JAMES LEIMAN (COMMERCE) | | | | |
| TERRY GOERGER (RENEWABLE ENERGY COUNCIL) | RACHEL RETTERATH (OUTDOOR HERITAGE FUND) | | | | |
| MAC MCLENNAN (LIGNITE RESEARCH COUNCIL) | TODD STEINWAND (BANK OF NORTH DAKOTA) | | | | |
| KATHY NESET (OIL & GAS RESEARCH COUNCIL) | JOHN WEEDA (TRANSMISSION AUTHORITY) | | | | |

CSEA PROGRAM FUNDING

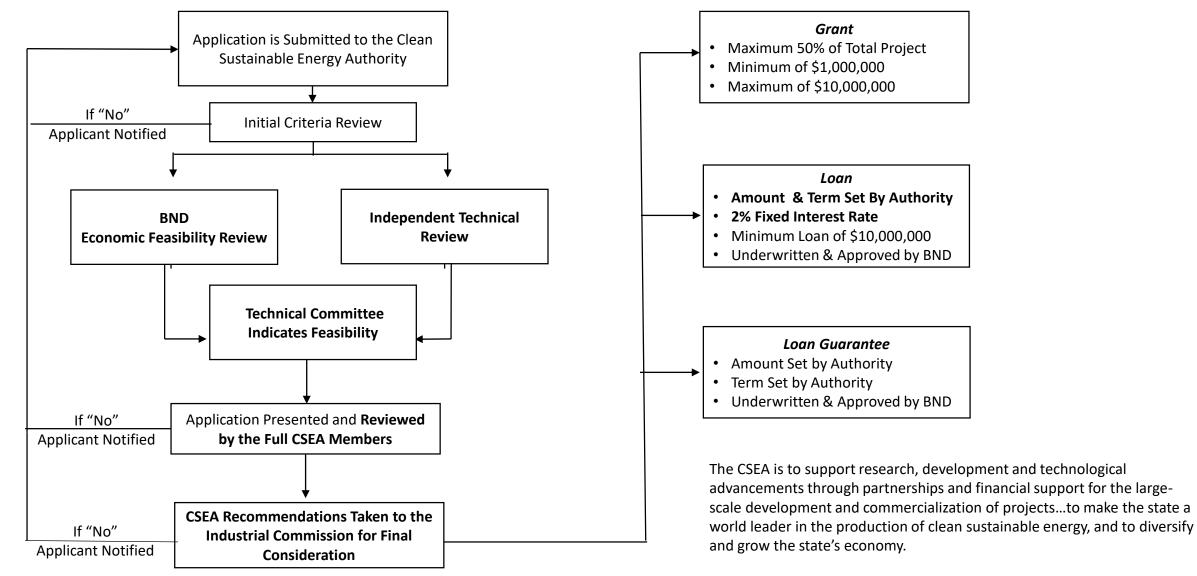


| CURRENT | HB 1452 \$25 million for Clean Sustainable Energy Research and Development (General Fund) | HB 1452/HB 1015 Authority to borrow up to \$250 million from Bank of North Dakota |
|---------|--|---|
| | SB 2345 Appropriated \$20 million for hydrogen development grants via Clean Sustainable Energy Authority | |
| FUTURE | HB 1380 Stream of \$30 million for Clean Sustainable Energy Research and Development | |

RESEARCH & DEVELOPMENT PATHWAY & FUNDING



CSEA Process Flow For Project Review and Approval



*Bold items outlined in statute.

LEGISLATIVE GUIDANCE

PRIORITIZE BASED ON:

- 1. Transformative
- 2. Industry Impact
- 3. Timeliness
- 4. Partnerships



The Six Projects And Their Funding Awards Are As Follows:

| APPLICATION | APPLICANT | GRANT AWARD | LOAN AWARD |
|---|---|--------------|---------------|
| 1. Production of Blue Hydrogen-Dakota H2 Hub | BakkenEnergy LLC | \$10 Million | \$80 Million |
| 2. Converting Gas to Value-Added Projects-Cerilon GTL | Cerilon GTL ND Inc. | \$7 Million | \$40 Million |
| 3. Unlocking the Full Potential of Producted Water as a Key Component of Clean Sustainable Energy | Wellspring Hydro | \$1 Million | |
| 4. Commercial Deployment of Carbon Dioxide Capture & Geological Sequestration in McLean County | Midwest AgEnergy Group | \$3 Million | |
| 5. Front-End Engineering and Design for CO2 Capture at Coal Creek Station | Energy & Environmental Research Center | \$7 Million | |
| 6. Solving North Dakota Flaring: Mobile Flare Gas Capture & Fueling Platform Expansion | Valence Natural Gas Solutions | | \$15 Million |
| Total | | \$28 Million | \$135 Million |

ROADMAP TO CARBON NEUTRALITY

Subsurface Sequestration

Markets for Reuse

Diversify Generation



CSEA GRANT ROUND 1 LEARNINGS

Application Forms:

Expectations with regards to confidentiality

Technical Committee Review:

Differentiation based on Legislative intent

Use of Executive Session:

Balance with public and confidential information

Participant Fairness:

Presentation times versus questioning responses

CSEA PROGRAM DEMANDS



| | APPLICATION | | | AWARD | | |
|-------------------------------------|-------------|-------------|------------|-----------|-------------|------------|
| | Project # | Grant (\$M) | Loan (\$M) | Project # | Grant (\$M) | Loan (\$M) |
| Grant Round 1 (November 1, 2021) | 10 | 62 | 165 | 6 | 28 | 135 |
| Grant Round 2 (March 1, 2022) | 10 | 47 | 225* | | | |
| Total | 20 | 109 | 390 | | | |

* One applicant indicated a need for an additional \$150 million



THANK YOU

WEBSITE: http://www.nd.gov/ndic/CSEA-infopage.htm