ENERGY CAREERS IN NORTH DAKOTA

Biofuel production has grown in North Dakota with corn-based ethanol and canola-based biodiesel.

Geothermal Energy is an area of great potential in North Dakota. As developers and drillers figure out ways to recover more oil from our reserves, researchers are working to find ways to create enhanced geothermal systems to generate electric power.

Hydroelectric power (hydropower) • Garrison Dam and Power Plant utilizes five turbines and generates between 1.8 and 2.6 billion kilowatt-hours of electricity each year.

Lignite Coal • North Dakota has the second-largest known reserves of lignite in the world and is also home to the only commercial-scale coal gasification plant in the United States.

Natural Gas • Natural gas in North Dakota is co-produced with oil wells, which means that when an oil well is drilled, natural gas rises to the surface along with the oil. Natural gas is used as a resource for producing electricity.

Solar Energy technology is based on two main types – photovoltaics (PV) and concentrated solar power (CSP). Verendrye Electric Cooperative in Velva, N.D., has the largest solar program in the state with more than 240 solar-powered water pumps.

Recovered Energy Generation, also known as heat-recovery generation or waste heat energy, is a process of capturing hot exhaust to drive a turbine and create electricity. There are three recovered energy generation sites in North Dakota using exhaust from the Northern Border Pipeline.

Petroleum • North Dakota is a significant oil producing state. North Dakota is also a point of entry for Canadian crude oil traveling by pipeline to markets in the Midwest.

Wind Energy • North Dakota has more than 1,050 wind turbines. The state may soon have nearly 2,770 megawatts of wind energy installed.

- Biofuels Processing Technicians
- Drilling and Boring Machine Tool Setters
- Environmental Engineers
- Environmental Restoration Planners
- Environmental Science and Protection Technicians
- Fuel Cell Technicians
- Geological and Petroleum Technicians
- Geothermal Technicians
- Hydroelectric Plant Technician
- Hydrologists
- Industrial Safety and Health Engineers
- Mining and Geological Engineers
- Petroleum Pump and Refinery Operators
- Power Distributors and Dispatchers
- Recycling and Reclamation Workers
- Water Resource Specialists
- Wind Turbine Service Technicians

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- What education do I need for this occupation?
- Where can I get the necessary education?
- What are the future employment opportunities?
- What wages are typical?

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North Dakota cte Career and Technical Education

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