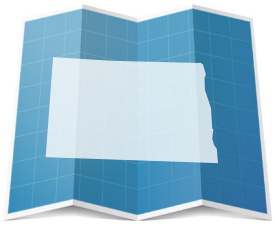
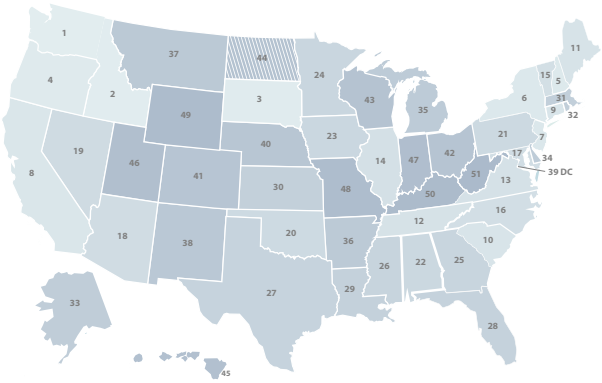
HOW DOES NORTH DAKOTA STACK UP ON CLEAN ENERGY?



DATA AS OF 2021

LOWEST CO_2 EMISSIONS RATE



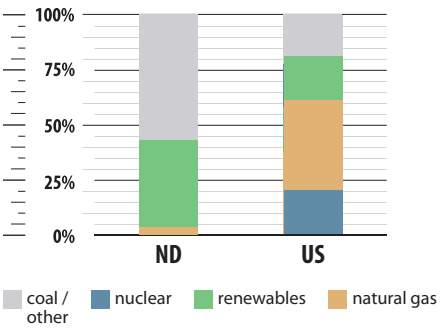
#44

0.63 tCO_2/MWh

CO_2 EMISSIONS RATE

0.1 tCO_2/MWh — 0.9 tCO_2/MWh

ELECTRICITY SOURCES



CLEAN ENERGY JOBS

#38

20,206 (2021)

Growth/recovery since 2020 totaled 2,716 jobs (15.5%).

CLEAN ENERGY RANKINGS

#48

ENERGY EFFICIENCY SCORE = 6

#47

4% GENERATION FROM NATURAL GAS

#11

39% GENERATION FROM RENEWABLES

RENEWABLE ELECTRICITY CAPACITY

#26

299 MW (2021)

NEW BUILD

#20

4,988 MW

CUMULATIVE

CLEAN ENERGY BUSINESS NETWORK

The Business Council for Sustainable Energy®

DATA: COLOR SHADING ON ALL INFOGRAPHICS INDICATES PERCENTILE AMONG 50 U.S. STATES AND THE DISTRICT OF COLUMBIA. CLEAN ENERGY INDUSTRIES INCLUDED ARE ENERGY EFFICIENCY, RENEWABLE ENERGY, NATURAL GAS, STORAGE, AND ADVANCED GRID TECHNOLOGIES. SOURCES: BLOOMBERG NEW ENERGY FINANCE, BW RESEARCH, ENERGY INFORMATION ADMINISTRATION (2021), AND AMERICAN COUNCIL FOR AN ENERGY-EFFICIENT ECONOMY (2020).

ENERGY INNOVATION IN A 21ST CENTURY ECONOMY

WHAT ENERGY INNOVATION MEANS FOR NORTH DAKOTA

- $27.7 MILLION Total Department of Energy funding in FY21
- $4.9 MILLION Office of Energy Efficiency and Renewable Energy Grants in FY21
- $630 THOUSAND Office of Science grants in FY21
- $971 THOUSAND Advanced Research Projects Agency-Energy grants since FY2009
- 4 AWARDS DOE Small Business Innovation Research (SBIR) since 2012

IMPACTS OF FEDERAL R&D IN ENERGY SECTOR (TOTAL, 2018)

#34 190 JOBS SUPPORTED

#35 $18 MILLION CONTRIBUTED TO GDP

BUSINESS SPOTLIGHT

MICROBEAM TECHNOLOGIES INC (GRAND FORKS, ND) | http://Microbeam.com

MICROBEAM TECHNOLOGIES, INC.

Microbeam Technologies Incorporated is a leader in advanced fuel quality analysis and determining the impacts of fuel on power-system performance. The firm serves clients in the power sector and other industries by providing advanced analysis and testing services to diagnose challenges and identify solutions that improve power plant operations. The company has received Department of Energy funding to help support its research.

SOURCES: BIPARTISAN POLICY CENTER, USASPENDING.GOV, ARPA-E, BREAKTHROUGH ENERGY