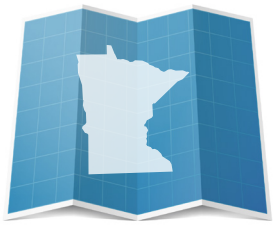
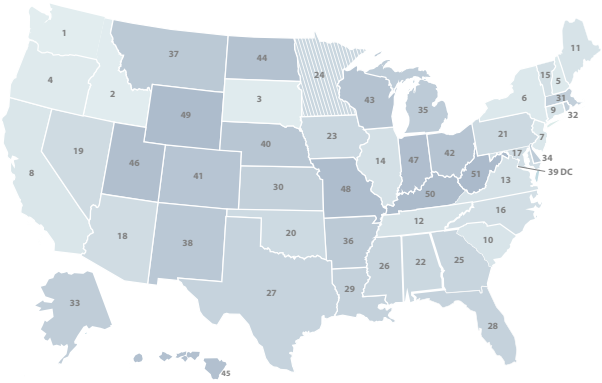
HOW DOES MINNESOTA STACK UP ON CLEAN ENERGY?



DATA AS OF 2021

LOWEST CO_2 EMISSIONS RATE



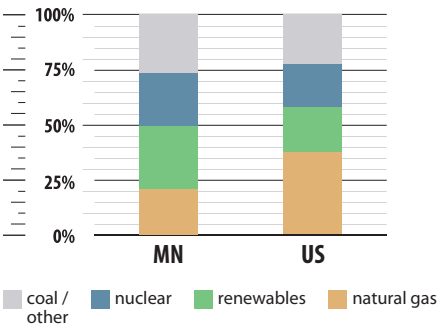
#24

0.36 tCO_2/MWh

CO_2 EMISSIONS RATE

0.1 tCO_2/MWh — 0.9 tCO_2/MWh

ELECTRICITY SOURCES



CLEAN ENERGY JOBS

#21

58,954 (2021)

Growth/recovery since 2020 totaled 1,949 jobs (3.4%).

CLEAN ENERGY RANKINGS

#9

ENERGY EFFICIENCY SCORE =32

#36

21% GENERATION FROM NATURAL GAS

#17

28% GENERATION FROM RENEWABLES

RENEWABLE ELECTRICITY CAPACITY

#19

505 MW (2021)

NEW BUILD

#15

6,853 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 MINNESOTA

- $41.9 MILLION Total Department of Energy funding in FY21
- $26.3 MILLION Office of Energy Efficiency and Renewable Energy Grants in FY21
- $13.2 MILLION Office of Science grants in FY21
- $33 MILLION Advanced Research Projects Agency-Energy grants since FY2009
- 44 AWARDS DOE Small Business Innovation Research (SBIR) since 2012

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

#22 560 JOBS SUPPORTED

#22 $58 MILLION CONTRIBUTED TO GDP

BUSINESS SPOTLIGHT

TERRACOH (MINNEAPOLIS, MN) | Terracoh-Age.com

TERRACOH

Supported by over $1.75MM in Department of Energy grants, TERRACOH is introducing into the market its proprietary Carbon Dioxide (CO2) Plume Geothermal - CPG™ technology. TERRACOH's novel use of CO2 as its geologic working fluid, allows TERRACOH to permanently sequester millions of tonnes of CO2 safely belowground in deep saline formations, while incorporating power systems aboveground enabling dispatchable, scalable, baseload, negative-emission power production. As well as high efficiency, affordable, small to grid-scale energy storage with TERRACOH's Earth Battery® technology. TERRACOH suite of technologies are particularly well-suited to transition/leverage the oil and gas workforce to a renewable future.

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