

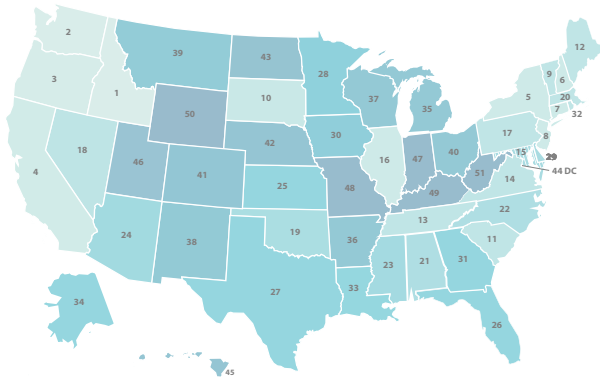
HOW DOES MARYLAND STACK UP ON CLEAN ENERGY?



DATA AS OF 2019



LOWEST CO₂ EMISSIONS RATE



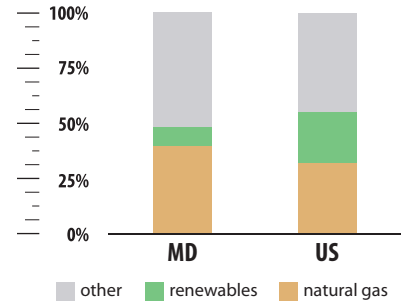
#15

0.33 tCO₂/MWh

CO₂ EMISSIONS RATE



ELECTRICITY SOURCES



CLEAN ENERGY JOBS

#13

87,093 (2019)



COVID-19 job losses totaled at least 10,071 March-August 2020 (cumulative).



CLEAN ENERGY RANKINGS

#7

ENERGY EFFICIENCY SCORE = 34.5



#20

38% GENERATION FROM NATURAL GAS



#30

10% GENERATION FROM RENEWABLES



RENEWABLE ELECTRICITY CAPACITY

#34

41 MW (2019)

NEW BUILD



#34

2,054 MW

CUMULATIVE



ENERGY INNOVATION IN A 21ST CENTURY ECONOMY



WHAT ENERGY INNOVATION MEANS FOR MARYLAND



\$16 MILLION Office of Energy Efficiency and Renewable Energy Grants in FY19

\$33 MILLION Office of Science grants in FY19

\$168 MILLION State and Indian energy programs, environmental cleanup, and other routine activities in FY19

\$50 MILLION Advanced Research Projects Agency-Energy grants since FY2009

22 GRANTS By ARPA-E since 2009

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

#28 **400** JOBS SUPPORTED

#25 **\$52** MILLION CONTRIBUTED TO GDP

BUSINESS SPOTLIGHT

OPTIMIZED THERMAL SYSTEMS (BELTSVILLE, MD) | www.OptimizedThermalSystems.com

Optimized Thermal Systems is a University of Maryland spinoff company providing technical expertise and equipment to help energy companies test and refine technologies to get ready for market. One of OTS' projects is supported by a Department of Energy grant and seeks to develop a more efficient model of a heat exchanger (technology that moves heat from one medium to another, such as from the air to a refrigerant). The new design OTS is developing will significantly reduce refrigerant leakage, waste, energy use, costs, and emissions. It has received almost \$200k in Department of Energy grant support.