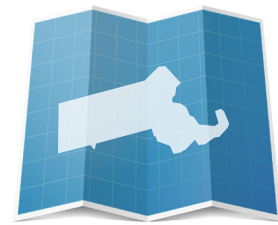


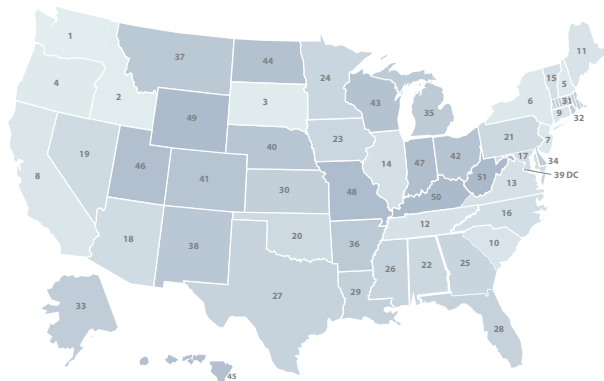
HOW DOES MASSACHUSETTS STACK UP ON CLEAN ENERGY?



DATA AS OF 2021



LOWEST CO₂ EMISSIONS RATE



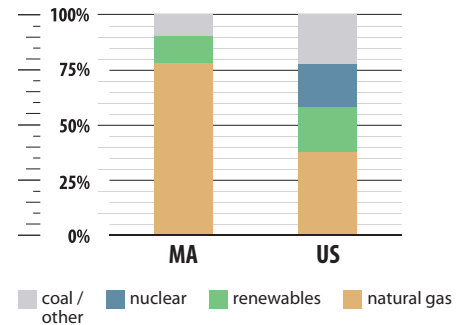
#31

0.41 tCO₂/MWh

CO₂ EMISSIONS RATE
0.1 tCO₂/MWh 0.9 tCO₂/MWh



ELECTRICITY SOURCES



CLEAN ENERGY JOBS

#6

116,063
(2021)



Growth/recovery since 2020 totaled
3,429 jobs (3%).



CLEAN ENERGY RANKINGS

#2

ENERGY EFFICIENCY
SCORE = 43



#4

78% GENERATION FROM
NATURAL GAS



#27

13% GENERATION FROM
RENEWABLES



RENEWABLE ELECTRICITY CAPACITY

#28

217 MW
(2021)

NEW BUILD



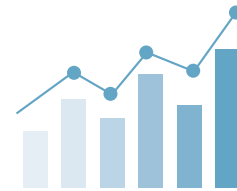
#27

3,670 MW

CUMULATIVE



ENERGY INNOVATION IN A 21ST CENTURY ECONOMY



WHAT ENERGY INNOVATION MEANS FOR MASSACHUSETTS



\$189.7 MILLION Total Department of Energy funding in FY21

\$43.1 MILLION Office of Energy Efficiency and Renewable Energy Grants in FY21

\$109.8 MILLION Office of Science grants in FY21

\$264.4 MILLION Advanced Research Projects Agency-Energy grants since FY2009

556 AWARDS DOE Small Business Innovation Research (SBIR) since 2012

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

#16 990 JOBS SUPPORTED

#14 \$144 MILLION CONTRIBUTED TO GDP

BUSINESS SPOTLIGHT

MEDLEY THERMAL (SOMERVILLE, MA) | MedleyThermal.com



Medley Thermal provides intelligent control system software for dynamic electrification, which is the process of switching between fossil fuels and electricity to power steam generation from a boiler. In a dynamically electrified system, an electric boiler is installed in parallel with an existing boiler system, creating a hybrid system. Medley Thermal's software enables switching between the energy sources optimally without disruption to the supply of steam. This allows a building to take advantage of electricity at times when it is inexpensive and clean, reducing energy costs and emissions associated with steam generation. The company has received \$200k in Department of Energy grants to support development of its technology.