

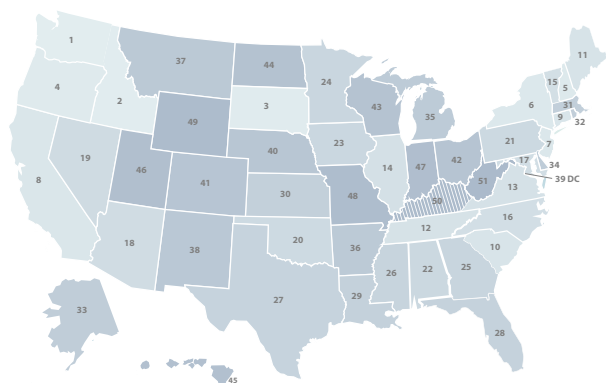
# HOW DOES KENTUCKY STACK UP ON CLEAN ENERGY?



DATA AS OF 2021

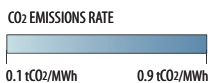


## LOWEST CO<sub>2</sub> EMISSIONS RATE

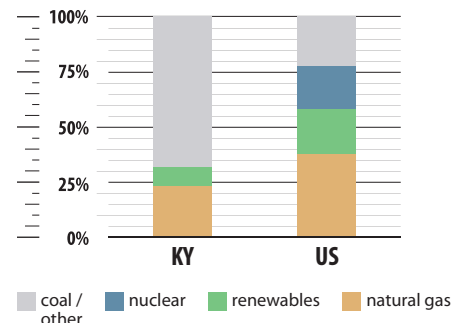


# #50

0.80 tCO<sub>2</sub>/MWh



## ELECTRICITY SOURCES



## CLEAN ENERGY JOBS

# #30

38,177 (2021)



Growth/recovery since 2020 totaled 2,230 jobs (6.2%).



## CLEAN ENERGY RANKINGS

# #33

ENERGY EFFICIENCY SCORE = 14



# #34

23% GENERATION FROM NATURAL GAS



# #39

8% GENERATION FROM RENEWABLES



## RENEWABLE ELECTRICITY CAPACITY

# #43

3 MW (2021)

NEW BUILD



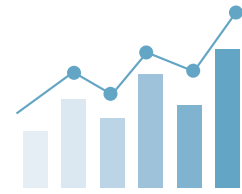
# #41

1,276 MW

CUMULATIVE



# ENERGY INNOVATION IN A 21<sup>ST</sup> CENTURY ECONOMY



## WHAT ENERGY INNOVATION MEANS FOR KENTUCKY



**\$14.6 MILLION** Total Department of Energy funding in FY21

**\$6.6 MILLION** Office of Energy Efficiency and Renewable Energy Grants in FY21

**\$4.1 MILLION** Office of Science grants in FY21

**\$10.4 MILLION** Advanced Research Projects Agency-Energy grants since FY2009

**48 AWARDS** DOE Small Business Innovation Research (SBIR) since 2012

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

**#25** (470) JOBS SUPPORTED

**#27** (\$40) MILLION CONTRIBUTED TO GDP

## BUSINESS SPOTLIGHT

ADVANCED ENERGY MATERIALS, LLC (LOUISVILLE, KY) | [AdvancedEnergyMat.com](http://AdvancedEnergyMat.com)



Advanced Energy Materials, LLC (ADEM) was founded in 2009 with a vision to commercialize nanowire materials for lithium-ion batteries and energy storage applications. The company found its niche application in the catalysis market and started to develop catalyst products for hydrodesulfurization (HDS) and refinery applications. Since its inception, ADEM has received \$3.2 million in federal and state research and development funding and continues to develop advanced nanomaterials for a wide range of applications.