

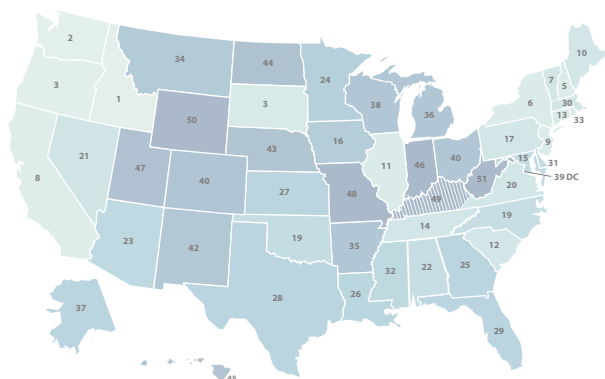
# HOW DOES KENTUCKY STACK UP ON CLEAN ENERGY?



DATA AS OF 2020



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

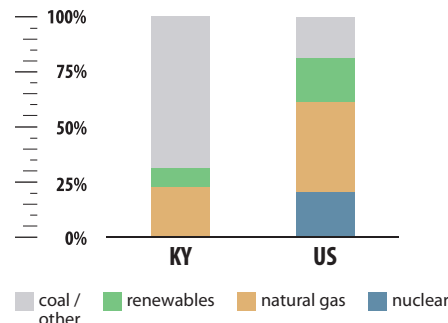


# #49

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



## ELECTRICITY SOURCES



## CLEAN ENERGY JOBS

# #30

35,947 (2020)



COVID-19 job losses totaled at least 10,730 March-December 2020 (cumulative).



## CLEAN ENERGY RANKINGS

# #33

ENERGY EFFICIENCY SCORE = 14



# #33

23% GENERATION FROM NATURAL GAS



# #40

8% GENERATION FROM RENEWABLES



## RENEWABLE ELECTRICITY CAPACITY

# #45

3 MW (2020)

NEW BUILD



# #41

1,273 MW

CUMULATIVE



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



## WHAT ENERGY INNOVATION MEANS FOR KENTUCKY



**\$14.3 MILLION** Office of Energy Efficiency and Renewable Energy Grants in FY20

**\$7.2 MILLION** Office of Science grants in FY20

**\$333.8 MILLION** State and Indian energy programs, environmental cleanup, and other routine activities in FY20

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

**7 GRANTS** By ARPA-E since 2009

**#25** (470) JOBS SUPPORTED

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

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

### 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.