

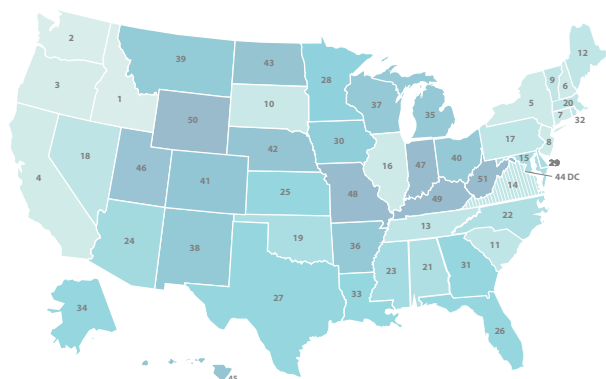
# HOW DOES VIRGINIA STACK UP ON CLEAN ENERGY?



DATA AS OF 2019

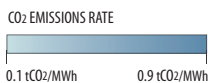


## LOWEST CO<sub>2</sub> EMISSIONS RATE

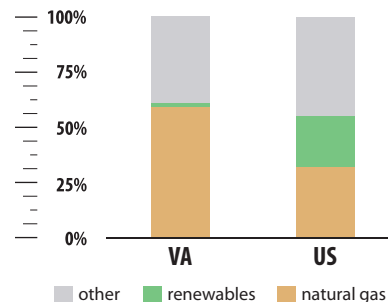


# #14

0.33 tCO<sub>2</sub>/MWh



## ELECTRICITY SOURCES



## CLEAN ENERGY JOBS

# #11

103,580 (2019)



COVID-19 job losses totaled at least 11,472 March-August 2020 (cumulative).



## CLEAN ENERGY RANKINGS

# #29

ENERGY EFFICIENCY SCORE = 15



# #8

61% GENERATION FROM NATURAL GAS



# #40

6% GENERATION FROM RENEWABLES



## RENEWABLE ELECTRICITY CAPACITY

# #19

218 MW (2019)

NEW BUILD



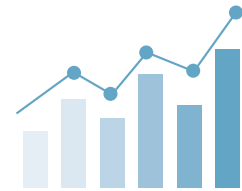
# #31

2,624 MW

CUMULATIVE



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



## WHAT ENERGY INNOVATION MEANS FOR VIRGINIA



**\$14.7 MILLION** Office of Energy Efficiency and Renewable Energy Grants in FY19

**\$25.4 MILLION** Office of Science grants in FY19

**\$195.4 MILLION** State and Indian energy programs, environmental cleanup, and other routine activities in FY19

**\$25.8 MILLION** Advanced Research Projects Agency-Energy grants since FY2009

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

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

**#26** **460** JOBS SUPPORTED

**#24** **\$53** MILLION CONTRIBUTED TO GDP

## BUSINESS SPOTLIGHT

FEND INCORPORATED (ARLINGTON, VA) | [www.Fend.tech](http://www.Fend.tech)



Fend protects energy infrastructure and industrial control systems from cyberattack using hardware that provides real-time information to operators while providing no physical way for hackers to breach a system. Fend has received funding from the Department of Energy's Solar Energy Technologies Office on a project to transition this technology into the energy market.