HOW DOES VIRGINIA STACK UP ON CLEAN ENERGY?
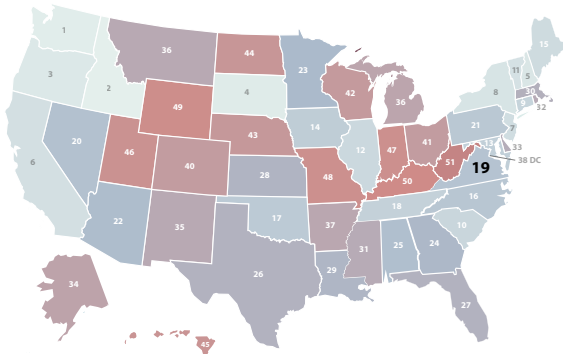
DATA AS OF 2022
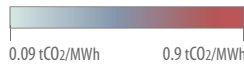
LOWEST CO_2 EMISSIONS RATE
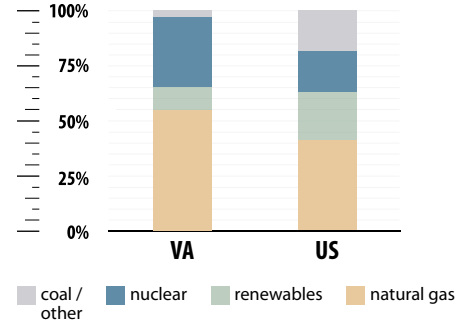
#19

0.31 tCO₂/MWh

0.09 tCO₂/MWh — 0.9 tCO₂/MWh

ELECTRICITY SOURCES

coal / other ▪ nuclear ▪ renewables ▪ natural gas
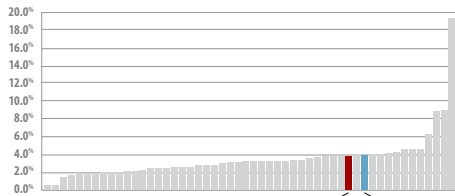
CLEAN ENERGY JOBS

#11

113,565 (2022)

563 JOBS ANNOUNCED THROUGH NEW CLEAN ENERGY PROJECTS SINCE THE INFLATION REDUCTION ACT

Clean Energy Job Growth (2021-2022)

U.S. **3.9%**   VA **4.0%**

All states and U.S. total ranked from lowest to highest % job growth

CLEAN ENERGY RANKINGS

#20
ENERGY EFFICIENCY
SCORE = 19.5

#9
55% GENERATION
FROM NATURAL GAS

#36
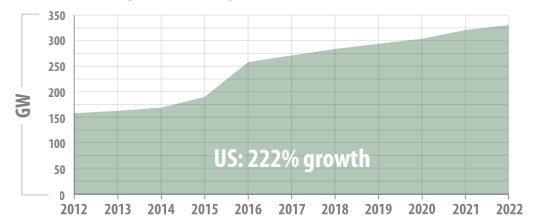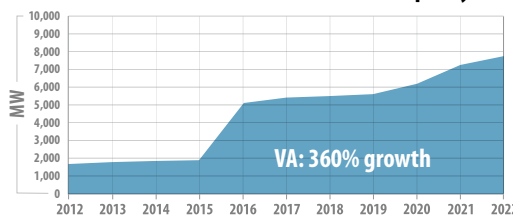10% GENERATION
FROM RENEWABLES

RENEWABLE ELECTRICITY CAPACITY

#12
CUMULATIVE BUILD
7,712 MW

#6
NEW BUILD (2022)
646 MW

### Growth in Capacity Over the Past Decade (2012-2022)

VA: 360% growth

US: 222% growth

SOURCES: BloombergNEF, U.S. Energy & Employment Report (Department of Energy), Energy Information Administration, American Council for an Energy-Efficiency Economy (ACEEE), Climate Power. All data are as of 2022, except jobs since passage of Inflation Reduction Act (8.15.22-9.30.23). Clean energy jobs include renewable, grid, storage, transmission and distribution, nuclear, and advanced vehicle technologies. Renewable energy capacity data include solar, wind, biomass/waste, geothermal, hydropower. See complete methodology at CEBN.org/State-of-Clean-Energy.

CLEAN ENERGY BUSINESS NETWORK®

The Business Council for Sustainable Energy®

INVESTING IN CLEAN ENERGY INNOVATION AND DEPLOYMENT
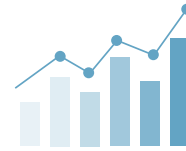
WHAT ENERGY INNOVATION MEANS FOR VIRGINIA

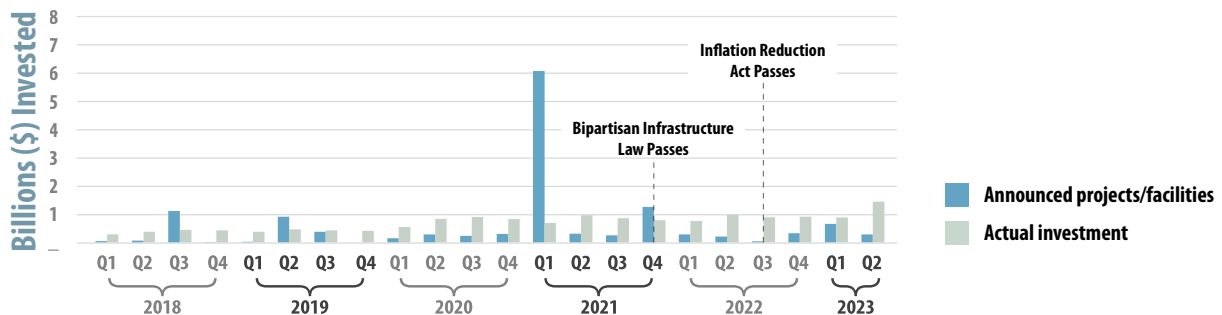**$523.2 MILLION** Total Department of Energy funding in FY22

$120.6 MILLION Office of Energy Efficiency and Renewable Energy grants in FY22

$66.5 MILLION Advanced Research Projects Agency-Energy grants in FY22

$192.5 MILLION Office of Science grants in FY22

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

CLEAN ENERGY INVESTMENT

Billions ($) Invested

Inflation Reduction Act Passes

Bipartisan Infrastructure Law Passes

Q1 Q2 Q3 Q4 | Q1 Q2 Q3 Q4 | Q1 Q2 Q3 Q4 | Q1 Q2 Q3 Q4 | Q1 Q2 Q3 Q4 | Q1 Q2
2018 | 2019 | 2020 | 2021 | 2022 | 2023

■ Announced projects/facilities
■ Actual investment

BUSINESS SPOTLIGHT

FEND INCORPORATED (ARLINGTON, VA) | 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.