

US Green Economy Report Series

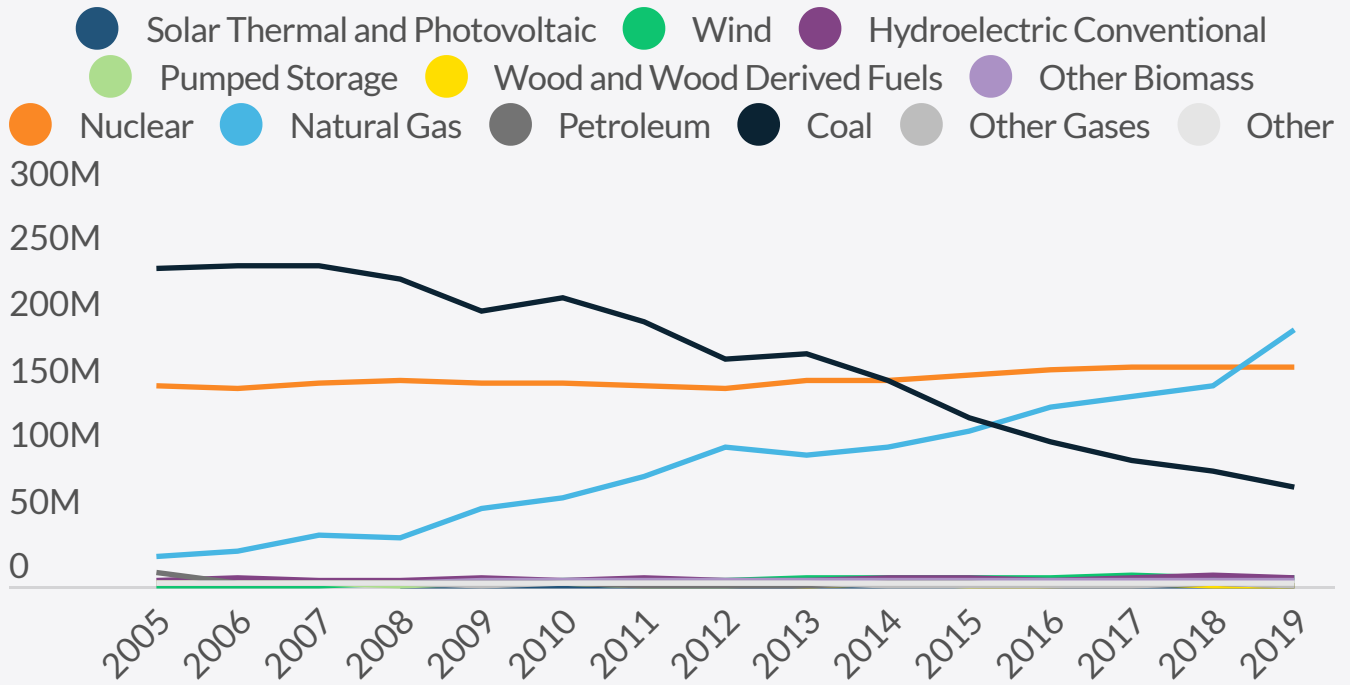
Case Study - Pennsylvania

In 2019, Pennsylvania Governor Tim Wolf's Executive Order set a GHG reduction target of 26-28 percent of 2005 levels by 2025 and 80 percent by 2050. Under Wolf's leadership, Pennsylvania joined both the US Climate Alliance and the Regional Greenhouse Gas Initiative. His actions build on previous climate initiatives, such as the establishment of the 2004 Alternative Energy Portfolio Standard, which required that 18 percent of electricity come from alternative energy sources, such as solar, waste coal and hydropower. However, the fossil fuel industry constitutes a large part of Pennsylvania's economy; the Marcellus Shale formation helps make the state the second-largest natural gas producer in the country. Also, Pennsylvania ranks second in coal production and third in coal exports. Renewables, including hydroelectric power, account for approximately 6 percent of electricity generation because nuclear, natural gas and coal remain dominant. While Governor Wolf has prioritised addressing climate change, the state's legislature, controlled by Republicans, has instead focused on supporting the state's fossil fuel sector.

NEAR-TERM OPPORTUNITIES: STATE OUTLOOK BY TECHNOLOGY

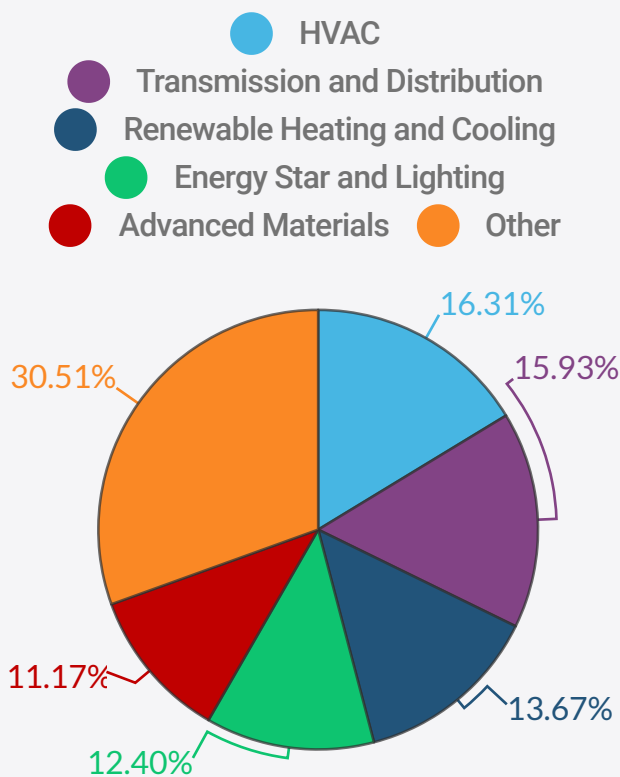
Technology	Overview	Outlook
Offshore Wind	Lack of state action and technical difficulties with offshore wind on the Great Lakes holds this sector back.	
Green Consultancy	Pennsylvania has 2,190 environmental consultants and a moderate outlook for renewable energy growth.	
Electric Vehicles	Pennsylvania ranks 17th nationally according to the ACEEE EV Scorecard and offers alternative fuel vehicle rebates.	
Energy Efficiency	Pennsylvania ranks 19th nationally on ACEEE's 2020 State Energy Efficiency Scorecard and offers 44 financial incentives.	
Grid Modernisation	Pennsylvania ranks 17th nationally in the 2018 Grid Modernization Index and utilities have pledged investment.	
Energy Storage	Pennsylvania has demonstrated limited efforts to stimulate energy storage growth.	
Waste To Energy	Pennsylvania is ranked 9th for biogas production potential and targets to increase biofuel blends.	
Hydrogen	Pennsylvania has several incentives for the purchase or lease of hydrogen-fueled vehicles, but no infrastructure.	
CCUS	There are no policies in place to encourage the development of carbon capture.	

ELECTRICITY GENERATION BY SOURCE IN MW (EIA)



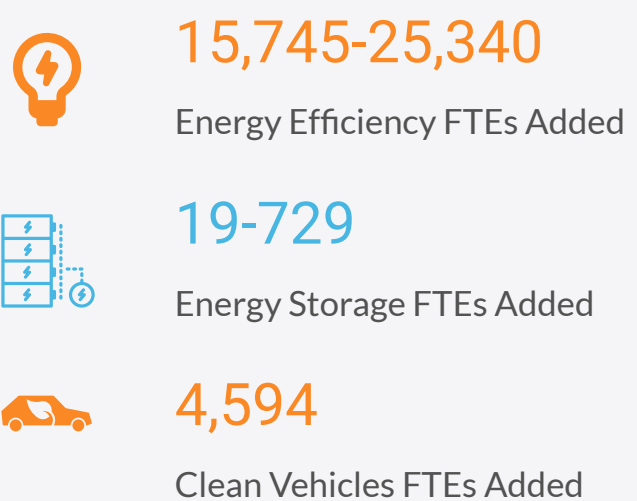
CLEAN ENERGY JOBS

Top Five Sectors (2019)



2021 - 2025 JOBS PROJECTIONS

Full-Time Employee (FTE) Adds



120,771 clean energy jobs (2019), **2.02%** of total state jobs