

Maine's Energy Future and Climate Economy

EDCM

AMANDA RECTOR, MAINE STATE ECONOMIST

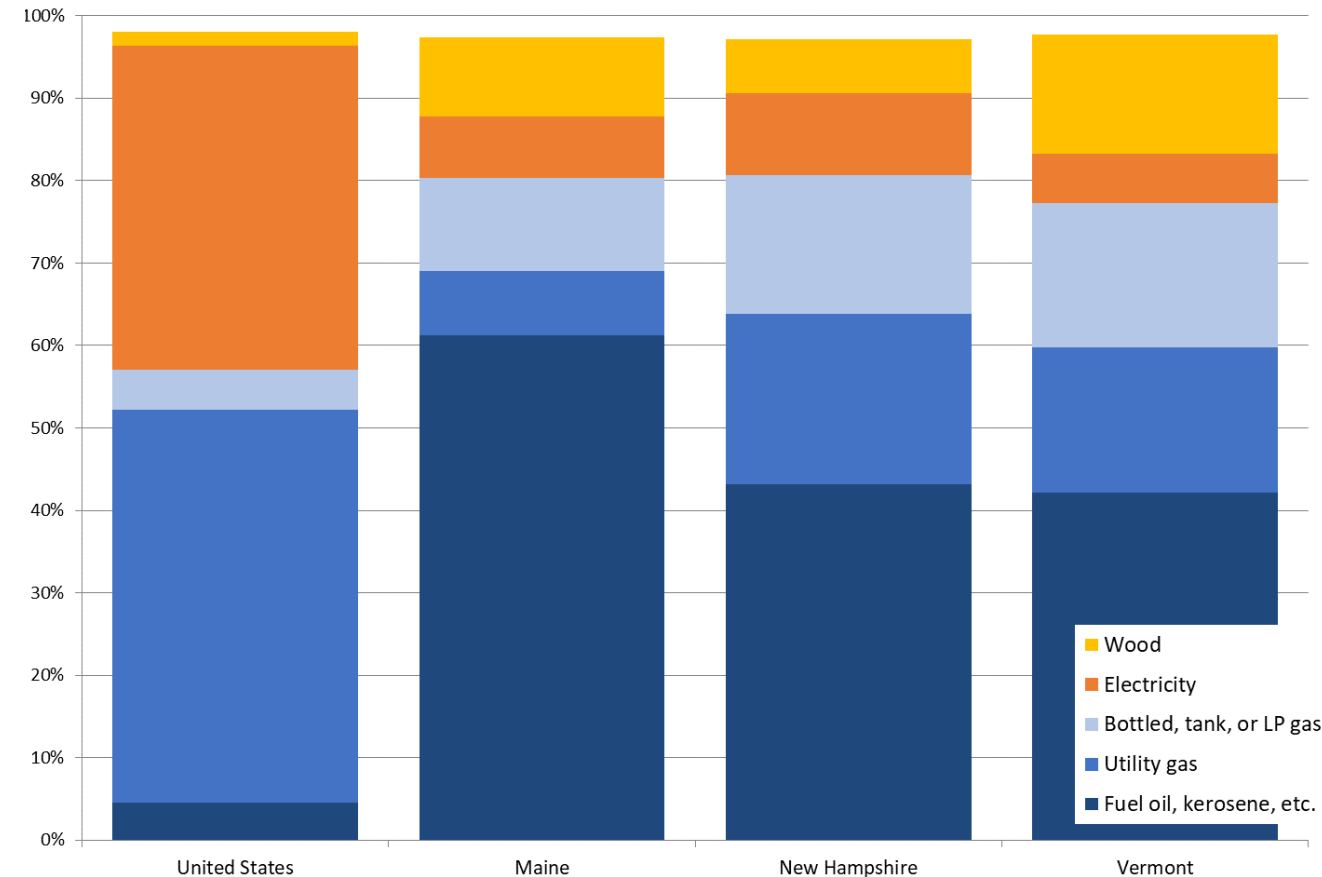
JUNE 2, 2022

Maine's heavy reliance on fossil fuels exposes us to price spikes and volatility – access to alternative energy sources needs to expand

Daily Europe Brent Spot Price (\$ per barrel)

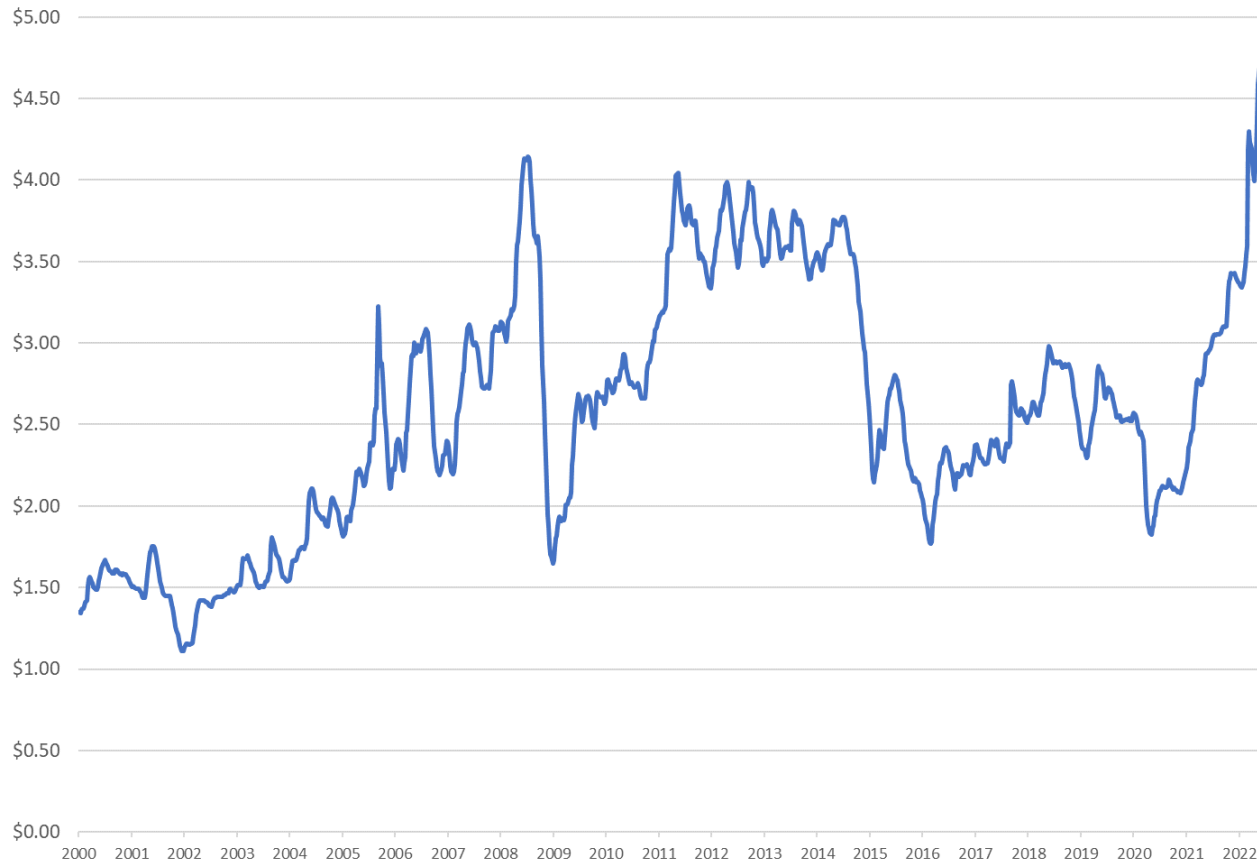


Percent of Housing Units by Type of Primary Heating Fuel

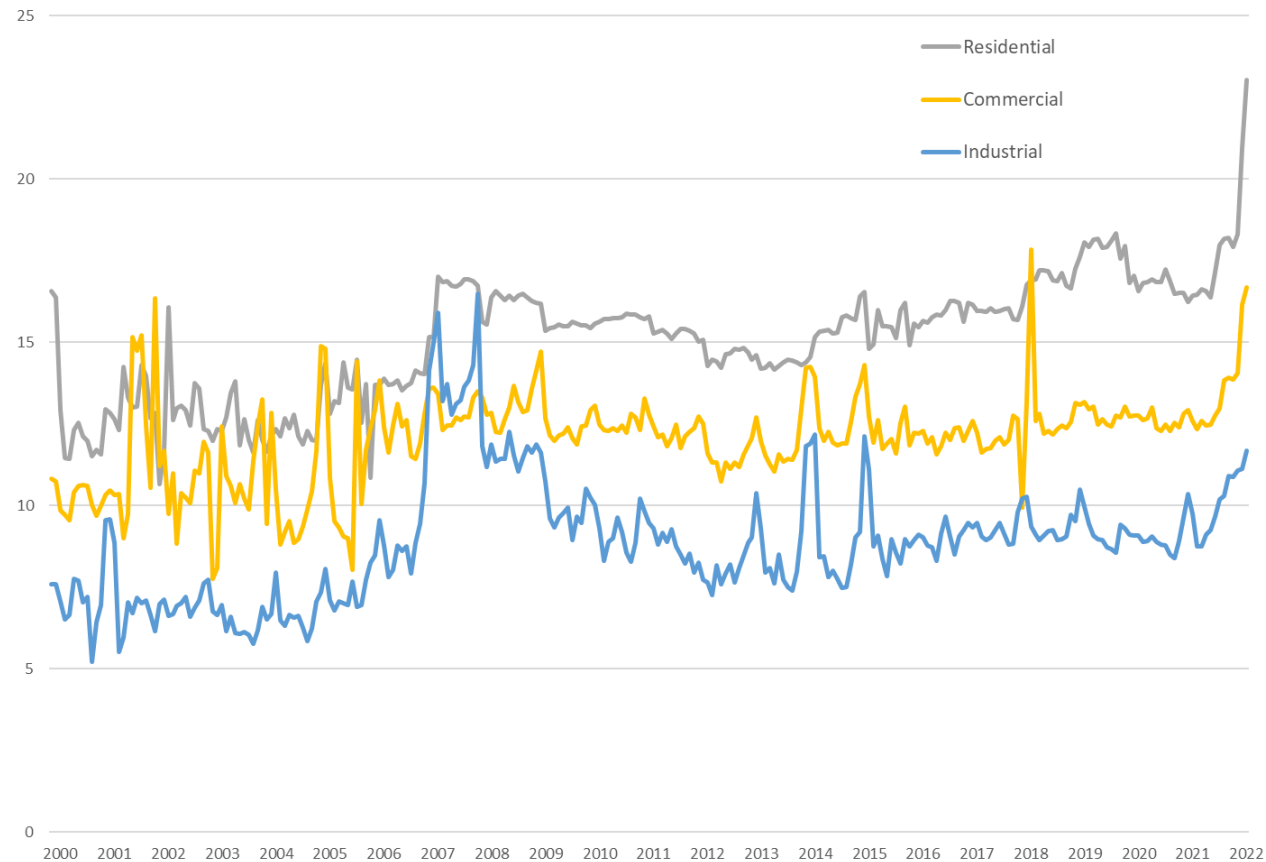


And energy costs are more than just home heating oil...

New England - Regular All Formulations Retail Gasoline Price Per Gallon



Retail Electricity Price, Maine (Cents/kWh)



Climate change has many implications for Maine's economy

- Forestry, fishing, and agriculture may contend with warming waters, more extreme weather, new invasive species, but may also see longer growing seasons
- Winter tourism may see less snow for outdoor recreation; summer tourism, especially along the coast, may be impacted by rising sea levels

But there are opportunities for new jobs in clean energy and climate change mitigation

We already have clean energy jobs in Maine, but workforce needs are extensive

There were around 13,800 clean energy jobs in Maine in 2020 spread across five sectors:

- energy efficiency
- renewable electric power generation
- grid modernization and energy storage
- renewable fuels
- alternative transportation

The goal is 30,000 clean energy jobs by 2030 (*Maine Won't Wait*)

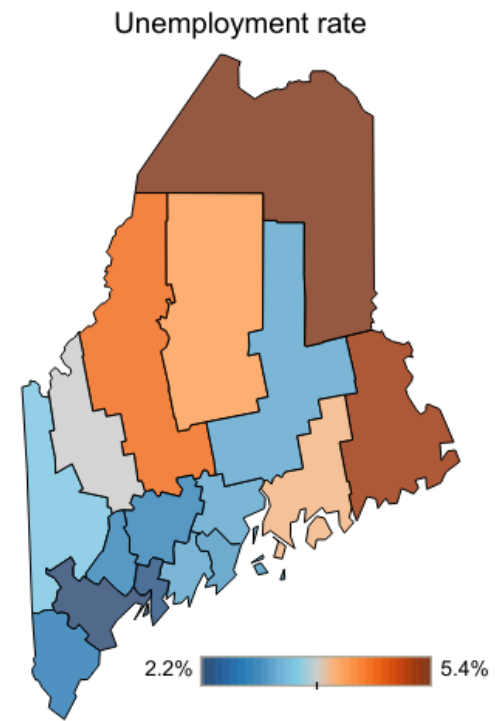
Caveat: we need to figure out how to provide the workforce without poaching from other sectors in the state that are also looking for workers

Opportunities exist across a range of occupations, skills, and geographies

Jobs related to clean energy encompass everything from:

- research and development
- engineering
- installation and maintenance
- management
- advertising
- legal
- transportation
- and many more

There are opportunities for economic benefits in different regions of the state, including those with higher unemployment rates



	Percent of Population Age 25-64 (2019)	Labor Force (2021)	Unemployment rate (2021)	Percent of employment in Construction, Manufacturing, Transportation, and Utilities (2020)	Share of Total State GDP (2020)
Southern Coastal	54%	293,838	4.2%	19%	49%
Midcoast	50%	56,837	4.5%	19%	7%
Downeast	50%	41,828	5.5%	16%	6%
Northern	50%	36,496	5.5%	22%	5%
Central	52%	190,434	4.6%	16%	26%
Western	52%	62,455	5.8%	24%	7%

Not just a part of Maine's Climate Strategy, but also aligns with Maine's 10-year Economic Development Strategy

Intersection between **global trend (green energy solutions to address climate change)** and **existing strengths (including expertise in key sectors, workforce in key occupations, and research and development capabilities)**

Result: opportunities for high-wage, high productivity jobs

Supply chain needs are wide-spread and could open new markets

Developing the supply chains for clean energy provides exporting opportunities for a variety of businesses beyond those immediately involved in the sector

As new technologies are developed, our historical strengths in related sectors (e.g. marine activities, forestry, environmental science) could allow Maine to export knowledge and skills throughout the world