

HB 301 - Presentation to Alaska House Committee

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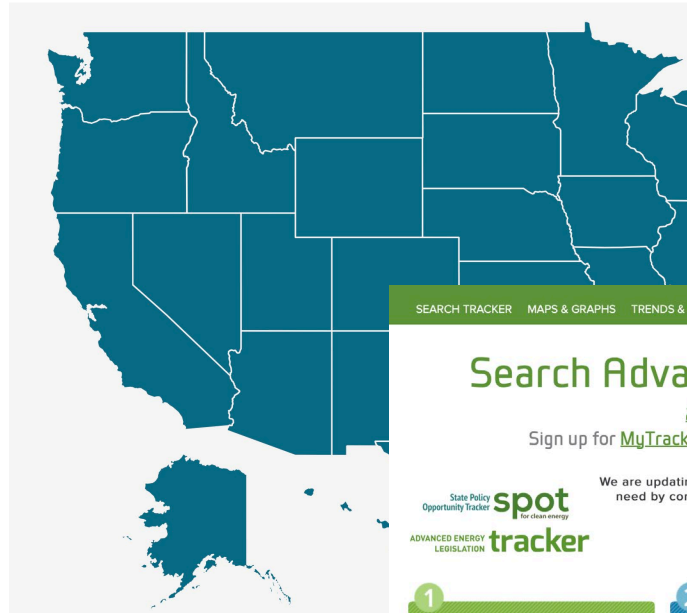


Center for the New Energy Economy

State Policy
Opportunity Tracker **spot**
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1 STATES

SELECT ONE OR MORE STATES BELOW:

Alabama	Kentucky	North Dakota
Alaska	Louisiana	Ohio
Arizona	Maine	Oklahoma
Arkansas	Maryland	Oregon
California	Massachusetts	Pennsylvania
Colorado	Michigan	Rhode Island
Connecticut	Minnesota	South Carolina
Delaware	Mississippi	South Dakota
District of Columbia	Missouri	Tennessee
Florida	Montana	Texas
Georgia	Nebraska	Utah
Hawaii	Nevada	Vermont
Idaho	New Hampshire	Virginia
Illinois	New Jersey	Washington
Indiana	New Mexico	West Virginia
Iowa	New York	Wisconsin
Kansas	North Carolina	Wyoming

SELECT ALL STATES

2 POLICIES

SELECT ONE OR MORE POLICIES BELOW:

Economic Development	Infrastructure
Electricity Generation	Natural Gas Development
Emissions	Other Energy
Energy Efficiency	Regulatory
Financing and Financial Incentives	Transportation

SELECT ALL POLICIES

3 YEAR INTRODUCED

SELECT ONE OR MORE YEARS:

1 selected

4 BILL STATUS

SELECT ONE OR MORE BILL STATUSES BELOW:

Introduced	Passed One Chamber	Passed Both Chambers
Enacted	Failed	Vetoed

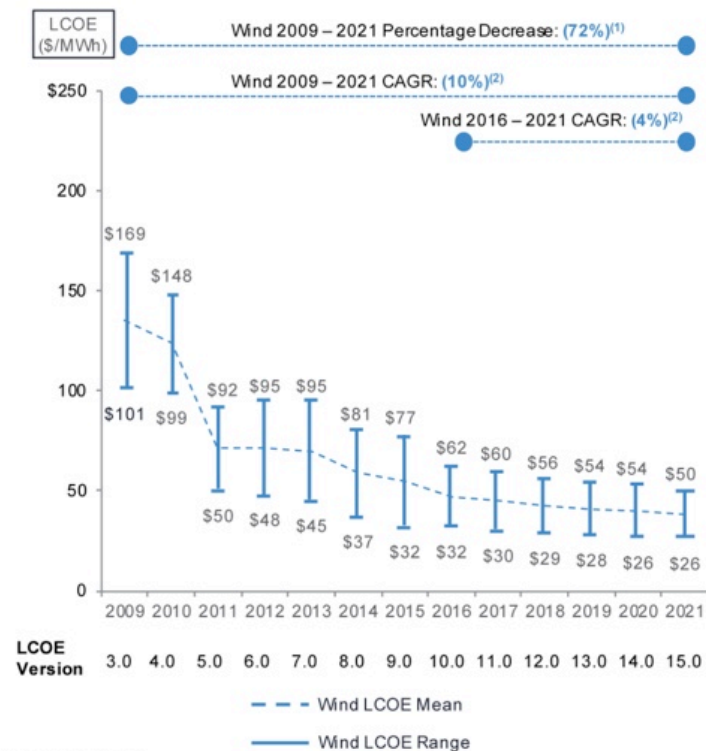
SELECT ALL STATUSES

The costs of both wind and solar have declined dramatically over the past 12 years

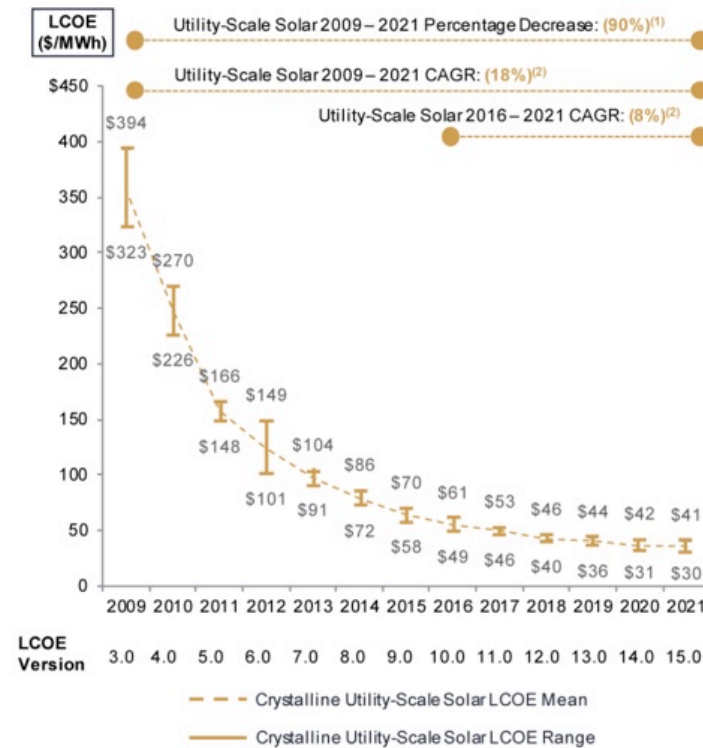
Levelized Cost of Energy Comparison—Historical Renewable Energy LCOE Declines

In light of material declines in the pricing of system components and improvements in efficiency, among other factors, wind and utility-scale solar PV have exhibited dramatic LCOE declines; however, as these industries have matured, the rates of decline have diminished

Unsubsidized Wind LCOE

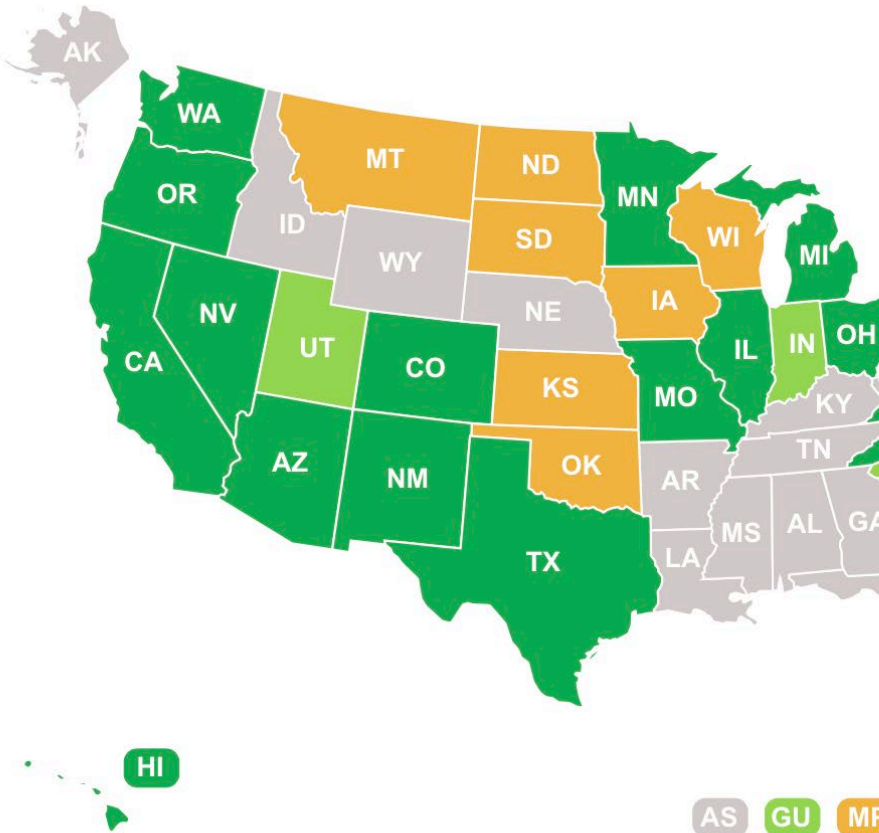


Unsubsidized Solar PV LCOE



Renewable Portfolio Standards

States and territories with Renewable Portfolio Standards	States and territories with a voluntary renewable energy standard or target	States and territories with expired RPS/CES requirements	States and territories with no standard or target
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State Amendments to RPS/CES Legislation Since 2018

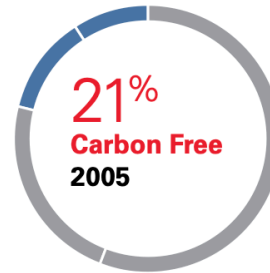
State	New RPS/CES Target	By Years
California	100%	2045
Colorado	100%	2050
Connecticut	44%	2030
Delaware	40%	2035
Maine	100%	2050
Maryland	50%	2030
Massachusetts	35%	2030
Minnesota	26.5%	2025
Nevada	100%	2050
New Jersey	50%	2030
New Mexico	100%	2045
New York	70%	2030
Oregon	100%	2040
Virginia	100%	2045/2050
Washington	100%	2045
Washington D.C.	100%	2032

Colorado's RPS

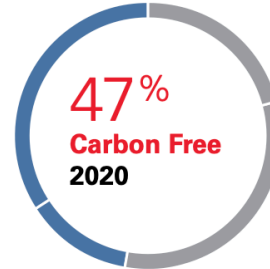
- ▶ Citizen's ballot initiative in 2004
 - ▶ Opposed by Xcel Energy
- ▶ Set in 2005 to achieve 10% by 2015
 - ▶ In 2007, Xcel Energy was going to achieve the 10% goal 8 years early
- ▶ In 2007 was updated to achieve 20% by 2020
 - ▶ Xcel learned how to manage wind resources more effectively with predictive weather modeling
 - ▶ Costs of wind and solar continued to decrease
 - ▶ Xcel supported the increase to 20%
- ▶ In 2010 was updated to achieve 30% by 2020
 - ▶ Xcel supported the increase to 30%
- ▶ In Dec 2020, Xcel produced 33% of their electricity from renewable sources

In 2020 Xcel committed
to greater levels of
Renewables **without** a
Legislative Requirement

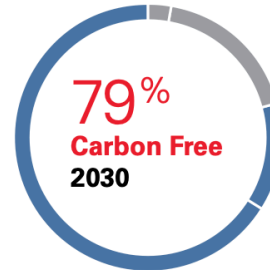
Delivering Increasingly Cleaner Electricity



Coal	56%
Natural Gas	23%
Nuclear	12%
Renewables	9%



Coal	21%
Natural Gas	32%
Nuclear	13%
Renewables	34%

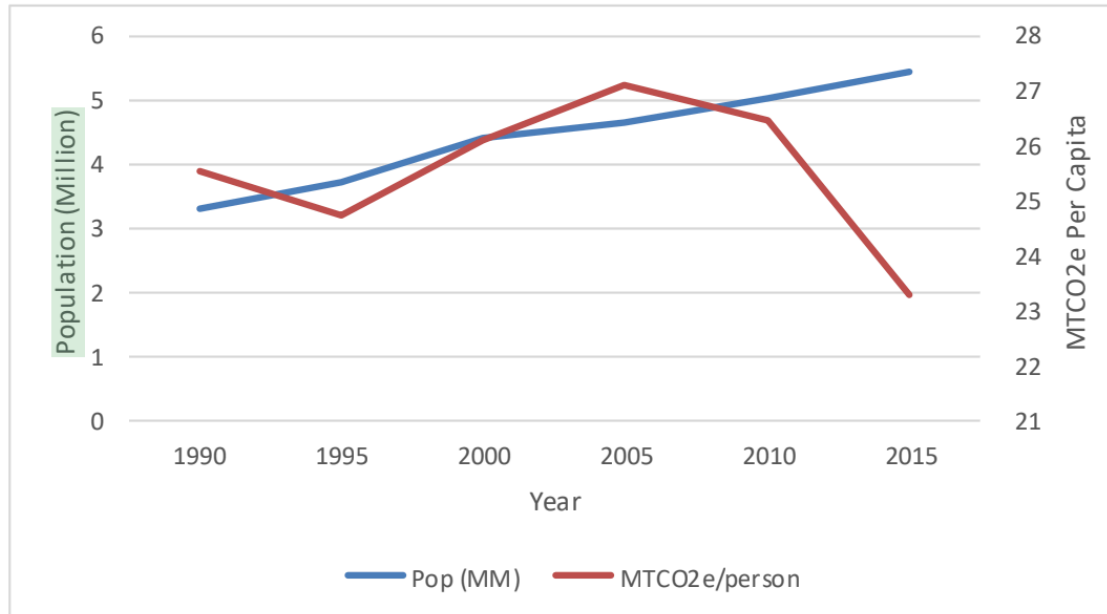


Coal	3%
Natural Gas	18%
Nuclear	13%
Renewables	66%

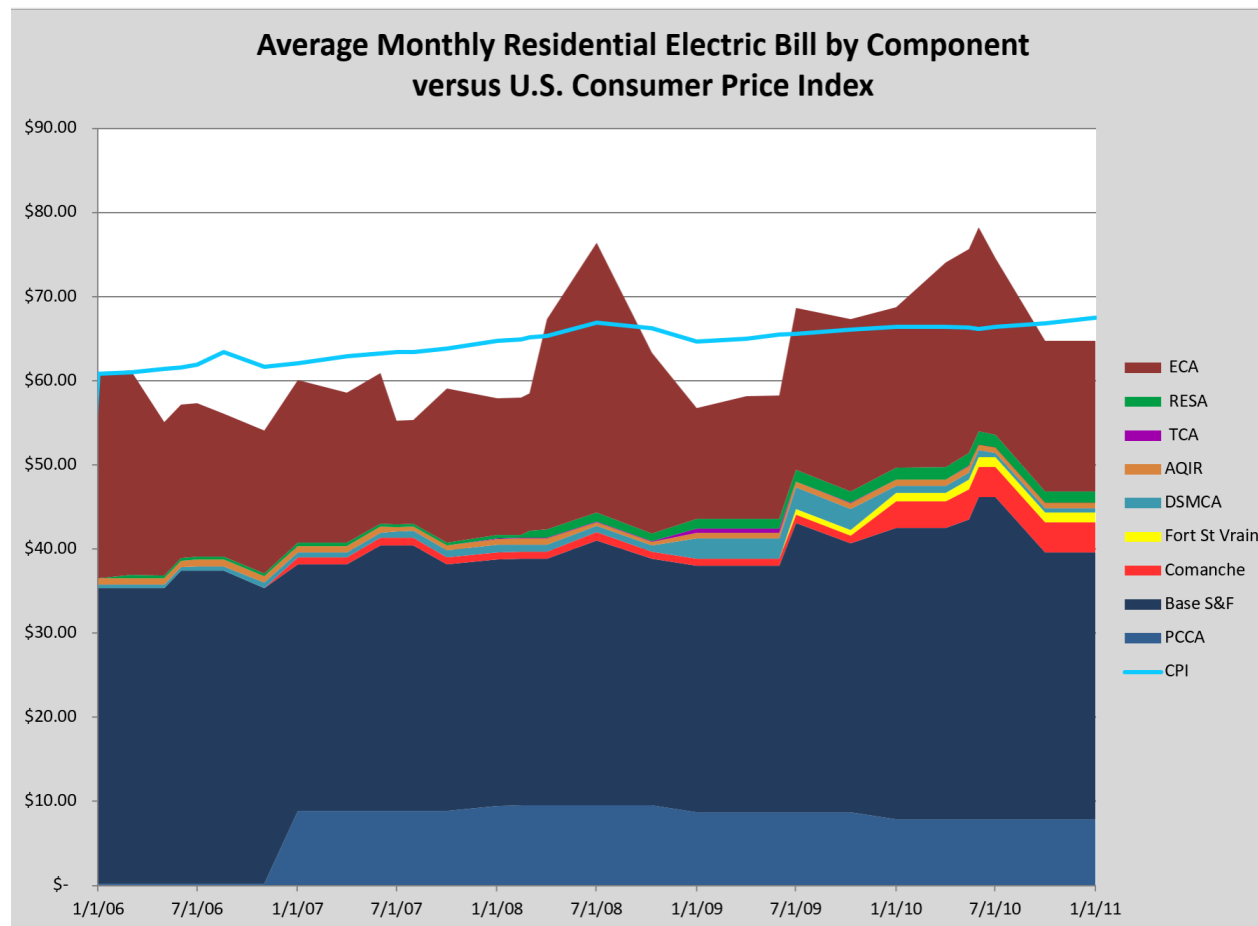
0%
Coal by
2040

HISTORIC EMISSIONS OVERVIEW

Exhibit 1-8: Population vs. Estimated Gross GHG Emissions per Capita



Since 2005, emissions in Colorado have dropped while population has increased



Colorado's RPS Costs - looking
at an Xcel bill 2006-2010

Rural Electric Cooperatives Supplied by Tristate G&T



Increase clean energy

- ▶ Retiring their Coal Assets and investing in Renewable Energy
- ▶ Lowering wholesale costs by 8%
- ▶ Cost of new renewables are less than the marginal (operating) costs of existing coal assets

By 2024, 50% of the electricity our members use will come from clean energy

By 2024, we will bring over 1,000MW of utility-scale wind and solar projects online, doubling our system to over 2,000MW. By 2030, our goal is that 70% of the energy supplied to members system-wide will be clean energy.

2020 PROGRESS

- We began receiving power from the first of our 1,000MW of new wind and solar projects, which will double our renewable resources by 2024.
- We set a goal that 70% of energy supplied to members system-wide will be clean energy by 2030.
- In our 2020 ERP preferred scenario, we identified an additional 1,850MW of renewables and 200MW of energy storage to increase our clean energy to roughly 4,000MW by 2030.*

Thank you



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