Short Circuiting Policy
Book Talk
+ Clean Energy Reports

Leah Stokes
Assistant Professor
UC Santa Barbara

February 11, 2020
The Challenge: Narwhal Curves

- **Y-axis**: Percentage of US Electricity Generation
- **X-axis**: Year
- **Legend**:
  - **renewables**
  - **hydro**
  - **nuclear**
How quickly do we need to ramp up renewables? Look to the narwhal.

the NARWHAL CURVE

grist

PARTNER VIDEO
Federal Policy Failures

• Throughout the 1990s, advocates tried to pass an Renewable Portfolio Standard (RPS). They failed. (Chapter 3)

• The Waxman-Markey Bill included a federal RPS – 20% by 2020, with 8% allowed to be meet with efficiency.
  – It did not pass the Senate

• Biden-Harris campaign and admin endorsed a 100% CES by 2035.
State Laws Fueling Decarbonization

### RPS Policies Passed by Year

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Interest Group Backlash

• Fossil fuel companies and electric utilities are resisting the clean energy transition.
• They use a variety of tactics to undermine policy feedback:
  – lobbying
  – implementation resistance
  – primaries, elections
  – astroturfing, outside lobbying
  – court cases
Interest Groups influence policy both directly and indirectly by influencing the public.

Implemented policies redistribute resources between advocates and opponents.

Public

Bureaucrats

Political Control
Astroturfing - Kansas

KANSAS SENIORS ARE ALREADY FINANCIALLY STRESSED
HIGHER UTILITY BILLS AREN’T HELPING.

Rising costs of gasoline, groceries, and health care have put seniors and those on fixed incomes in a tough financial position. To make matters worse, our utility bills are going up.

Since the Renewable Portfolio Standard passed in 2009, our state legislature has forced energy companies to use more expensive energy sources rather than the proven, abundant, and affordable resources that have kept our bills low.

The result has been some Kansans have seen 15 rate hikes since this law went into effect. Kansans aren’t alone. In other states with these laws, rates have gone up an average of 27%.

Call Rep. Don Hineman at 785-296-7636 and tell him to repeal the RPS Mandate.
Astroturfing – New Orleans
Interest Groups

Implemented policies redistribute resources between advocates and opponents

Bureaucrats

Public

Political Control

Interest groups support politicians that share their views in primaries + general election.
Elite Polarization

• Interest groups have undermined Republican support for climate action, driving asymmetric polarization.
Mass Public Polarization

Support for Federal Funding for Renewable Energy

The public listens to co-partisan elites
Cases

- Texas: successful wind energy and transmission laws
- Texas: unsuccessful solar laws
- Kansas: Rollback of Renewable Energy Laws
- Arizona: Rollback of Net Metering Laws
- Ohio: Rollback of Renewable Energy and Energy Efficiency Laws, Bailouts for Coal Plants
Climate Denial & Climate Delay

• Electric utilities, like fossil fuel companies, have played a key role in delaying the clean energy transition (Chapter 3).
  – Promoted a wasteful energy system.
  – Promoted climate denial.
  – Worked to rollback clean energy laws.

• You can read a summary of this part of the book on Drilled News.
How to get a copy


• Discount code: ASFLYQ6 – 30% off.

• You can also buy a kindle ebook: bit.ly/scp-kindle

• There is an audiobook!
THE DIRTY TRUTH
About Utility Climate Pledges
January 2021

A Roadmap to 100% Clean Electricity by 2035
Power Sector Decarbonization through a Federal Clean Electricity Standard and Robust Clean Energy Investments and Justice-Centered Policies

University of California Santa Barbara
Leah C. Stokes and Olivia Quinn

Everygreen Action
Sam Ricketts and Bracken Hendricks
February 2021
Without a CES, (most) utilities won’t move fast enough! Sierra Club report
Planned New Clean Energy

Figure 4: Planned Clean Energy Vs. Existing Fossil Generation Across All Utilities Studied

SOURCE: SIERRA CLUB ANALYSIS, DETAILED DATA AVAILABLE HERE.
Coal retirements

Figure 6: Coal Committed to Retire by 2030 by Letter Grade

- **A**: 100% of coal committed to retire by 2030 (50 MWh)
- **B**: 82% (70 MWh)
- **C**: 57% (90 MWh)
- **D**: 35% (120 MWh)
- **F**: 7% (150 MWh)

Legend:
- **Coal not committed to retire**
- **Coal committed to retire**
Select Company
Alabama Power

Planned clean energy vs. existing fossil generation

Score (out of 100)
0
Grade F

Company coal and gas metrics

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<tr>
<th>Metric</th>
<th>Value</th>
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<td>2019 coal generation (million MWh)</td>
<td>26.9</td>
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<tr>
<td>2019 gas generation (million MWh)</td>
<td>16.3</td>
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<tr>
<td>2019 coal and gas capacity (MW)</td>
<td>10,179</td>
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<tr>
<td>Coal committed to retire by 2030 (million MWh)</td>
<td>1.8</td>
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<td>Coal not committed to retire by 2030 (million MWh)</td>
<td>25.1</td>
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<tr>
<td>Percentage of coal committed to retire by 2030 (%)</td>
<td>7%</td>
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<tr>
<td>Planned new gas capacity by 2030 (MW)</td>
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Company clean energy metrics

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<td>2020-2030 planned clean energy additions (million MWh)</td>
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<td>Solar capacity planned (MW)</td>
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<td>Wind capacity planned (MW)</td>
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<td>Residential efficiency - 2019</td>
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<td>Commercial efficiency - 2019</td>
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<tr>
<td>Total efficiency - 2019</td>
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Note: efficiency data not available for G&I co-ops or utilities with state aggregated EE programs

Score rank by operating company

Duke Energy

Highlight a company
Highlight Company Name

Letter Grade
A
B
C
D
F
Federal Policy Opportunity

• We have an opportunity to scale up state and local action in 2021 with comprehensive climate legislation.
  – Standards: 100% CES by 2035; auto standards; energy efficiency and home retrofits. Just released a report with Evergreen Action and Data for Progress.
  – Investments: $2 trillion over 4 years.
  – Justice: Centering income inequality and racial justice; 40% of federal investments to disadvantaged communities.
Can we clean up our electricity system fast? Yes.
A Roadmap to 100% Clean Electricity by 2035
Why should Congress pass a 100% CES?

- **The next two years are critical for 100% clean electricity.**
  President Biden and Vice President Kamala Harris campaigned and won on a 100% clean energy standard for electricity by 2035. We must increase the pace of clean energy deployment through policy.

- **Congress must act on these commitments, and pass a federal Clean Electricity Standard (CES).**
  This approach is proven in states—already more than 1 in 3 Americans live in a place targeting 100% clean, carbon-free power. It is popular, with a majority of voters supporting this policy. It is also a practical approach, which can ensure job creation and justice.
Can we do this through budget reconciliation? Yes!

- Federal CES Option 1: “On the Books” ZEC System
- Federal CES Option 2: Reverse-Auction for ZECs
- Federal CES Option 3: Mass-Based Standard
- Three Alternative options that approximate a CES
Additional federal policies for 100% clean power:

- Federal Clean Energy Investments & Financing
- Federal Support for Fossil Fuel Transition
- Push for Electrification
- Streamlining Clean Energy Permitting & Siting
- Promoting Competition
- Promoting Intervenor Compensation Programs
- Addressing the Technology Innovation Gap
Popular approach

A Majority of Voters Support a 2035 Clean Electricity Standard

Would you support or oppose the government moving the country to a 100% clean energy electricity grid by 2035 to address climate change and reduce pollution?

**Topline**
- Strongly support: 32%
- Somewhat support: 31%
- Don't know: 8%
- Somewhat oppose: 13%
- Strongly oppose: 17%

**Partisanship**

- **Democrat**
  - Strongly support: 52%
  - Somewhat support: 34%
  - Don't know: 5%
  - Somewhat oppose: 7%
  - Strongly oppose: 3%

- **Independent / Third Party**
  - Strongly support: 30%
  - Somewhat support: 30%
  - Don't know: 8%
  - Somewhat oppose: 14%
  - Strongly oppose: 19%

- **Republican**
  - Strongly support: 12%
  - Somewhat support: 28%
  - Don't know: 11%
  - Somewhat oppose: 20%
  - Strongly oppose: 29%

Jan 8 to Jan 11, 2021 survey of 1233 likely voters

DATA FOR PROGRESS
Corporate Leadership: Google

• 100% Clean Electricity by 2030, 24/7 in real time.
Utility leadership emerging

• Essentially all utilities in Colorado are committed to 80% clean power by 2030, putting them on the path to 100% clean by 2035.
Climate Advocacy

A Matter of Degrees

All We Can Save
Truth, Courage, and Solutions for the Climate Crisis
Edited by Ayana Elizabeth Johnson & Katharine K. Wilkinson
THANK YOU!

Questions?

lstokes@ucsb.edu

@leahstokes
Climate Justice is Racial Justice

- Black, brown and indigenous people breathe in more dirty air (Tessum et al, 2019).
- This also makes them more likely to die from coronavirus.
- Income inequality and racial inequality are linked to carbon pollution.
- The Green New Deal makes this clear.
Combining climate, economic, and social policy builds public support for climate action in the US

Parrish Bergquist\textsuperscript{1,3,4}, Matto Mildenberger\textsuperscript{2} and Leah C Stokes\textsuperscript{2}

1 School of Forestry and Environmental Studies, Yale University, 195 Prospect Street, New Haven, CT 06511, United States of America
2 Department of Political Science, University of California Santa Barbara, Santa Barbara, CA 93106-9420, United States of America
3 Authors contributed equally and are listed in alphabetical order.
4 Author to whom any correspondence should be addressed.

E-mail: parrish.bergquist@yale.edu

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Supplementary material for this article is available online
Social
- no social policy
- affordable housing
- health insurance
- $15 minimum wage
- free college

Economic
- no economic policy
- job guarantee
- retrain fossil fuel workers
- unionized clean energy jobs

Carbon
- no carbon tax
- tax and invest
- tax and dividend
- revenue neutral tax

Size
- $100 billion per year
- $250 billion per year
- $500 billion per year

Cost
- $10 per month
- $35 per month
- $55 per month

Sponsor
- Democrats
- bipartisan
Climate Fact Sheets

enventlab.com/climatefactsheets
climatesignals.org
sciline.org/quick-facts