The Changing Politics OF Renewable Energy Technologies

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Department of Political Science, UCSB

Feb. 1, 2016
Support for Federal Funding for Renewable Energy

Year

Percent Supporting Policy

pid3
Democrat
Independent
Republican
Policies Enabling Deployment

Renewable Portfolio Standards (RPS): quantity targets for specific technologies, by a certain year.

Net Energy Metering (NEM): Allowing citizens, corporations and communities to put energy from distributed projects onto the grid and be paid the retail price.
### RPS Policies Passed by Year

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- NV
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- AZ
- IL
- NM
- CA
- CO
- HI
- MD
- NY
- PA
- RI
- DE
- DC
- MT
- VT
- WA
- MO
- MI
- KS
- OK
- IN

### NEM Policies Passed by Year

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- NC
- WV
- IL
- AZ
- KS
- AK

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- 2006
- 2007
- 2008
- 2009
- 2010
- 2011
## PUZZLE

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<tr>
<td><strong>2008/2009</strong></td>
<td>Enacts RPS Restructuring bill Republican sponsored</td>
<td>Enacts RPS Coal plant expansion bill Republican sponsored</td>
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<td>Passes: 94-0 on Earth Day</td>
<td>Passes: 118-6</td>
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<td><strong>2014</strong></td>
<td>Bill to Freeze RPS Republican sponsored</td>
<td>Bill to Repeal RPS Republican sponsored</td>
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<td>Passes: 55-42</td>
<td>Fails: 44-77</td>
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INTEREST GROUPS & POLICY FEEDBACK

Figure 6.1: Kansas and Ohio’s Electricity Mix, Pre and Post RPS Enactment
COSTS & TECHNOLOGY

• Typically, renewable energy policy is explained by cost and technology.

• But, policy constructs costs:
  • Setbacks
  • Net metering payment rate

• Consequently, policy constructs how quickly technology will be built.
DEPLOYMENT GAP

Investment Needed to Minimize Climate Change

Source: Bloomberg New Energy Finance
POLITICAL HYPOTHESES

1. **Shifts in political control:** as the party in power shifts, or the preferences of the party shift, the policy shifts.

2. **Public opinion and representation:** as public opinion shifts, the policy shifts.

3. **Bureaucratic learning:** states respond to one another and federal policies, primarily through bureaucratic networks.

4. **Policy feedback through interest group shifts:** policies create new actors who influence politicians to shift the policy over time.
POLITICAL CONTROL?

Endorsements

(Partial List)
The Biltmore Bank of Arizona
Barry Goldwater Jr.
Former United States Representative
Bob Littlefield
Scottsdale City Councilman
Carol Wicks
Scottsdale Resident/Real Estate Broker
Crystal Deen
Retired Manager for Hewlett Packard Mesa
David Dickinson
Scottsdale Resident

Help us stand up to utility monopolies to ensure solar energy remains strong in Arizona.

CLICK HERE TO CHECK OUT THE OFFICIAL TUSK BLOG!

Arizonans Are Against APS' Solar Tax

Marion Mosley
Vice President of the Rec Centers of Sun City West

Barry Goldwater, Jr.
TUSK Chairman and Former Congressman
BUREAUCRATIC LEARNING?

• Bureaucrats influenced policy enactment.

• Bureaucrats lost influence as issue became politicized, post-implementation.
PUBLIC OPINION?

Estimated % of adults who support requiring utilities to produce 20% electricity from renewable sources, 2014

Display model output: Require utilities to produce 20% electricity from renewable sources

66% 61% 60% 58%

60%

60%

63%

60%

58%

61%

66%
PUBLIC OPINION?
Political Control

Implemented policies redistribute resources between advocates and opponents

Interest Groups

Bureaucrats

Public

Interest groups influence policy both directly and indirectly by influencing the public
ENACTMENT + IMPLEMENTATION

• Policy enactment through multidimensional reform bills (‘Christmas trees’)
  electricity crisis (CA)
  electricity restructuring (TX, OH, AZ)
  coal plant permit (KS)

• The fog of implementation
  Texas - goal versus target
  Arizona - net metering enactment not controversial
POLICY EXPANSION

• California successfully expanded RPS + NEM.

• Texas failed to expand RPS + NEM.

• **Advocates empowered in California:** Advocates were well organized and utilities had lost regulator’s trust.

• **Opponents empowered in Texas:** Solar RPS never implemented due to opposition from energy companies.
POLICY RETRENCHMENT: OHIO VS KANSAS

• In both states, RPS repeal attempts look like ALEC model bill ‘Electricity Freedom Act’ (2012-2014).

• **Ohio**: utilities and industrial energy users united against RPS; poorly coordinated RPS support from renewables industry or environmental groups.

• **Kansas**: utilities neutral on RPS, only chamber of Commerce and Koch Industries opposed; wind energy industry well organized with PAC and funding for grassroots mobilization.
POLICY RETRENCHMENT: ARIZONA NEM

• Net metering policy passed with little opposition in 2008.

• Significant growth in installations led to resistance from all utilities.

• Arizona Public Service (APS) interfered in elections and regulatory process and spent millions running ads attacking net metering.

• Solar companies, both in Arizona and California solar leasing companies, had less political influence and resources.

• Net metering fees ranging from $5-50/month.

• Dramatic decrease in solar installations, post-fee.
NET METERING IN ARIZONA
Nevada’s Solar Bait-and-Switch

By JACQUES LESLIE  FEB. 1, 2016

WHEN President Obama proclaimed in his State of the Union address last month that “solar is saving Americans tens of millions of dollars a year on their energy bills,” he clearly wasn’t talking about Nevada.

In late December, the state’s Public Utilities Commission, which regulates Nevada’s energy market, announced a rate change drastic enough to kill Nevada’s booming rooftop solar market and drive providers out of the state. Effective
CONCLUSIONS

1. Utilities have become increasingly hostile to renewables, particularly residential solar.

2. Policy reflects balance of power between advocate and opponent interests groups.

3. Interest groups construct public preferences.

4. Both advocates and opponents can cross state lines.
POLICY IMPLICATIONS

• Raise issue salience with the public: Policy domain may be captured due to lower public attention.

• Advocates must engage in political action + maintain cohesion.

• Concentrate opponents geographically.
Why, we have just begun to commence to get ready to find out about electricity. This scheme of combustion to get power makes me sick to think of—it is so wasteful....

You see, we should utilize natural forces and thus get all of our power. Sunshine is a form of energy, and the winds and the tides are manifestations of energy. Do we use them? Oh no! We burn up wood and coal, as renters burn up the front fence for fuel. We live like squatters, not as if we owned the property.

- Thomas A. Edison, 1916
Thank you + questions

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## POLITICAL CONTROL

### Expansion

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<td>Successful Expansion</td>
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<td>Brown (Democrat)</td>
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<td>Failed Expansion</td>
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<td>Perry (Republican)</td>
<td>49%</td>
<td>39%</td>
<td>Dem/Rep</td>
</tr>
</tbody>
</table>

### Retrenchment

<table>
<thead>
<tr>
<th>Case</th>
<th>State</th>
<th>Year</th>
<th>Governor</th>
<th>House (Dems)</th>
<th>Senate (Dems)</th>
<th>Bill Sponsor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enactment</td>
<td>Kansas</td>
<td>2009</td>
<td>Parkinson (Democrat)</td>
<td>39%</td>
<td>23%</td>
<td>Republican</td>
</tr>
<tr>
<td>Failed Retrenchment</td>
<td>Kansas</td>
<td>2013</td>
<td>Brownback (Republican)</td>
<td>26%</td>
<td>20%</td>
<td>Republican</td>
</tr>
<tr>
<td>Enactment</td>
<td>Ohio</td>
<td>2008</td>
<td>Strickland (Democrat)</td>
<td>46%</td>
<td>36%</td>
<td>Republican</td>
</tr>
<tr>
<td>Successful Retrenchment</td>
<td>Ohio</td>
<td>2013</td>
<td>Kasich (Republican)</td>
<td>38%</td>
<td>30%</td>
<td>Republican</td>
</tr>
</tbody>
</table>
DEFINING POLICY CHANGE

Expansion - changes to policy that:
1) increase policy targets or funding;
2) restructure policies in a way that increases their efficacy in addressing the problem;
3) change the policy’s context and thereby increase the potential for policy expansion.

Retrenchment - changes to policy that:
1) repeal or weaken policy targets or funding;
2) restructure policies in a way that reduces their efficacy in addressing the problem;
3) change the policy’s context and thereby increase the potential for retrenchment.