# Wind Energy Policy: A View From Political Science

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# Preview

- Policy history
- National policy
- State/regional policy

# Why Support Wind?

Meets several political goals:

1. Domestic energy production
2. Environmental concerns
3. Economic development

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But it involves government intervention into the market.

# Policy History

Motivated by energy prices, but not cost competitive.
Focuses on 4 keys areas:

1. Tax Policy
2. Renewable Energy Standards (RES)
3. Transmission
4. Siting

# Policy History

- Energy Policy and Conservation Act of 1975
- Public Utility Regulatory Policies Act of 1978
- Renewable Energy and Energy Efficiency Technology Competitiveness Act of 1989
- Energy Policy Act (EPACT) of 1992
  - Renewable Electricity Production Tax Credit
  - Renewable Energy Production Incentive
- Energy Policy Act of 2005
- American Reinvestment and Recovery Act of 2009

# Mechanisms

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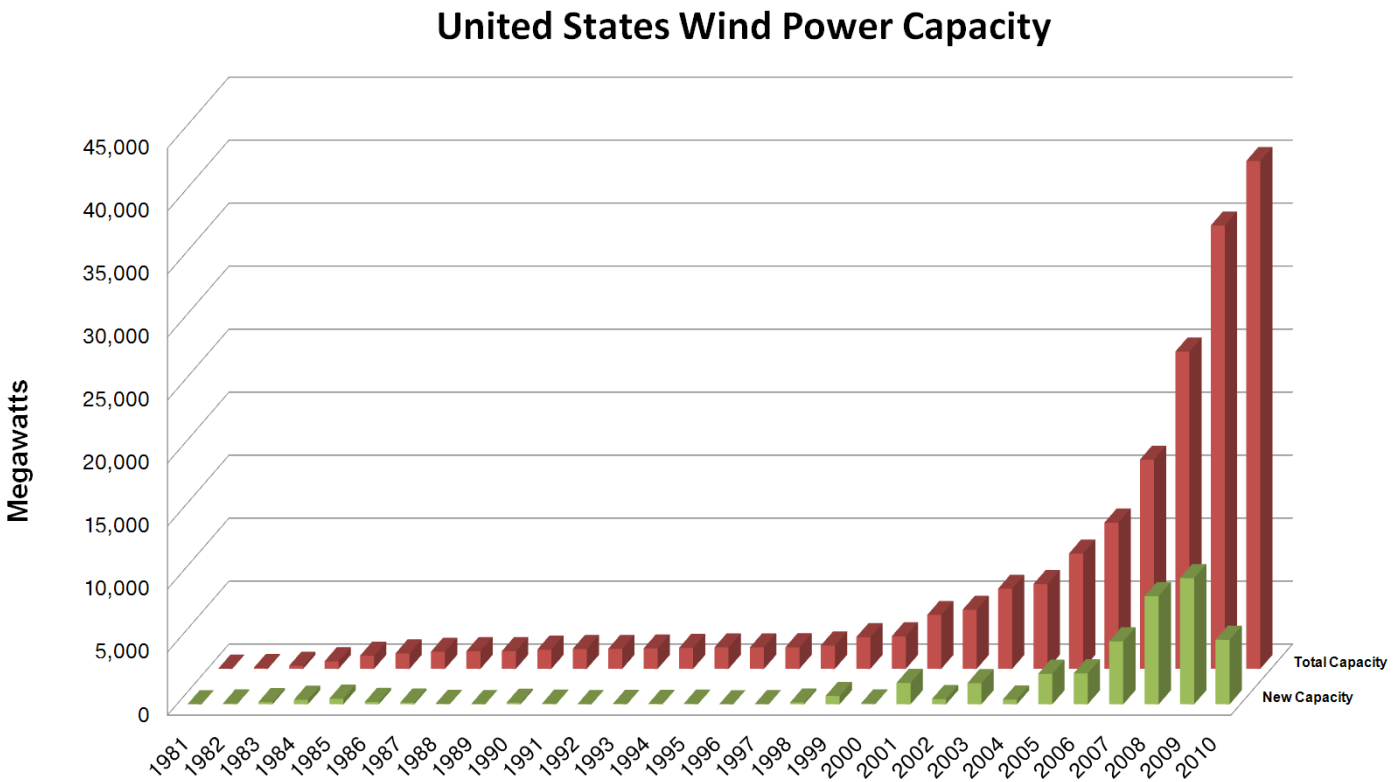
Two solutions: mandates or lower costs

- Tax incentives for development
- Tax credits for production

# Success of PTC



# Success of PTC

Creates strong incentives for development of wind power

- Makes wind cost competitive
- Lead to massive increases
- Capacity increased 45 percent in 2007

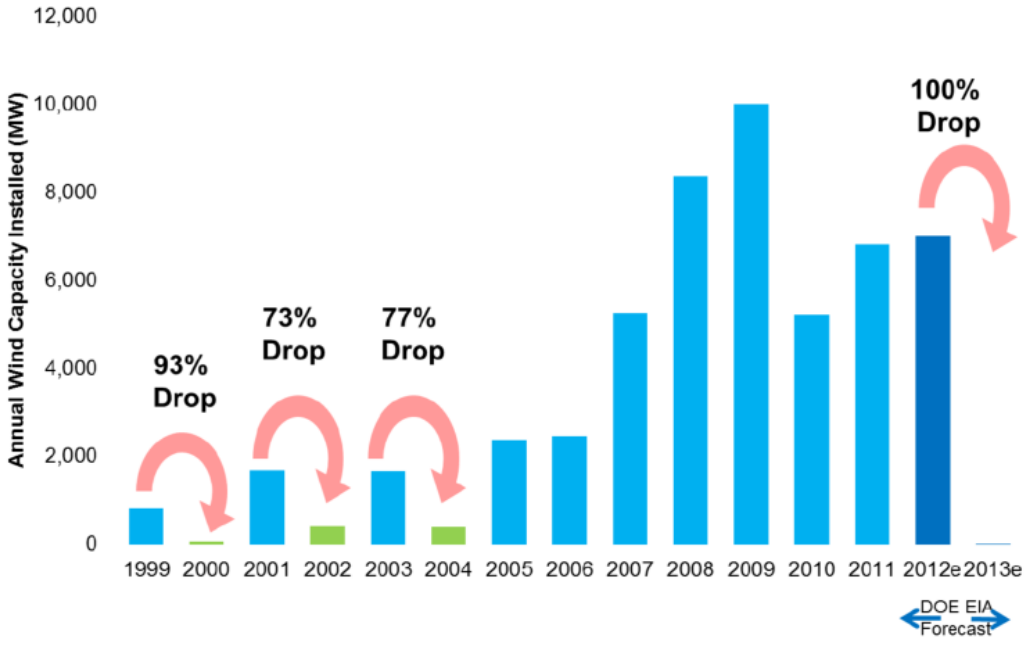
# Problems

Predictability of PTC:

- Created in 1992
- Lapsed from June to December 1999
- Lapsed from December 2001 to March 2002
- Lapsed from December 2003 to October 2004
- Expires December 2012

Wind energy has doubled during this time

# Result of uncertainty



# PTC will expire

- Set to expire at end of year
- Will make wind competitive only in the best locations
- Already developed

# Why is it unpredictable?

Public opinion matters

- Members of Congress fear for reelection
- Public opinion matters for voting (sometimes)
- MC's pay attention to opinion when it matters for elections

# Why is it unpredictable?

Opinion about wind energy:

- Popular: 87 percent support

# Why is it unpredictable?

Opinion about wind energy:

- Popular: 87 percent support
- Shallow support
- 18 percent know that it costs more
- Information matters for opinion

MC's aren't afraid of opposing wind energy

# Why is it unpredictable?

The nature of our political institutions.

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- Unitary president
- Majoritarian House
- Supermajoritarian Senate

# Why is it unpredictable?

- Each player get a veto
- Policy is gridlocked if any prefers the status quo

# Spatial model of Congress

Think of policy along a single left right dimension. Everyone has a preferred location on this dimension.

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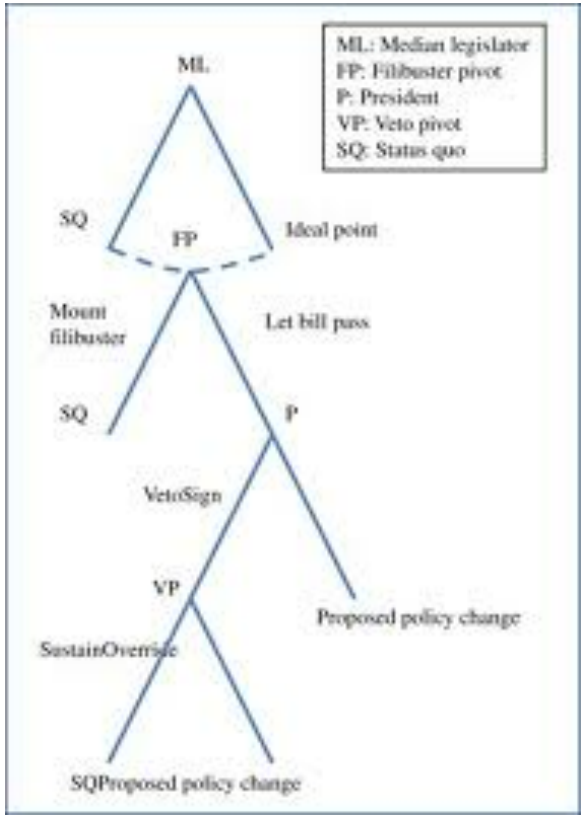
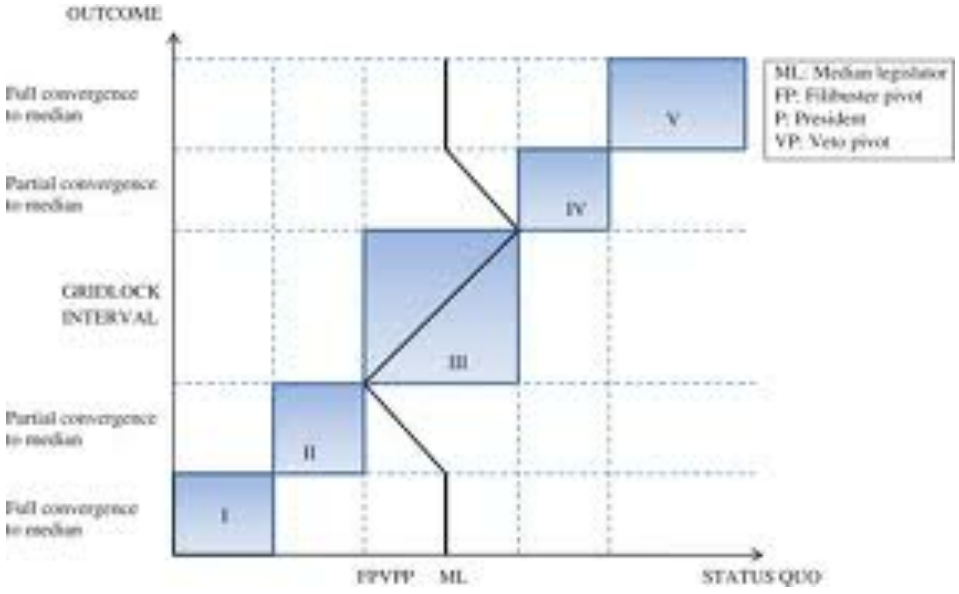
Institution passes if veto player approves.

# Spatial model of Congress



# Spatial model of Congress

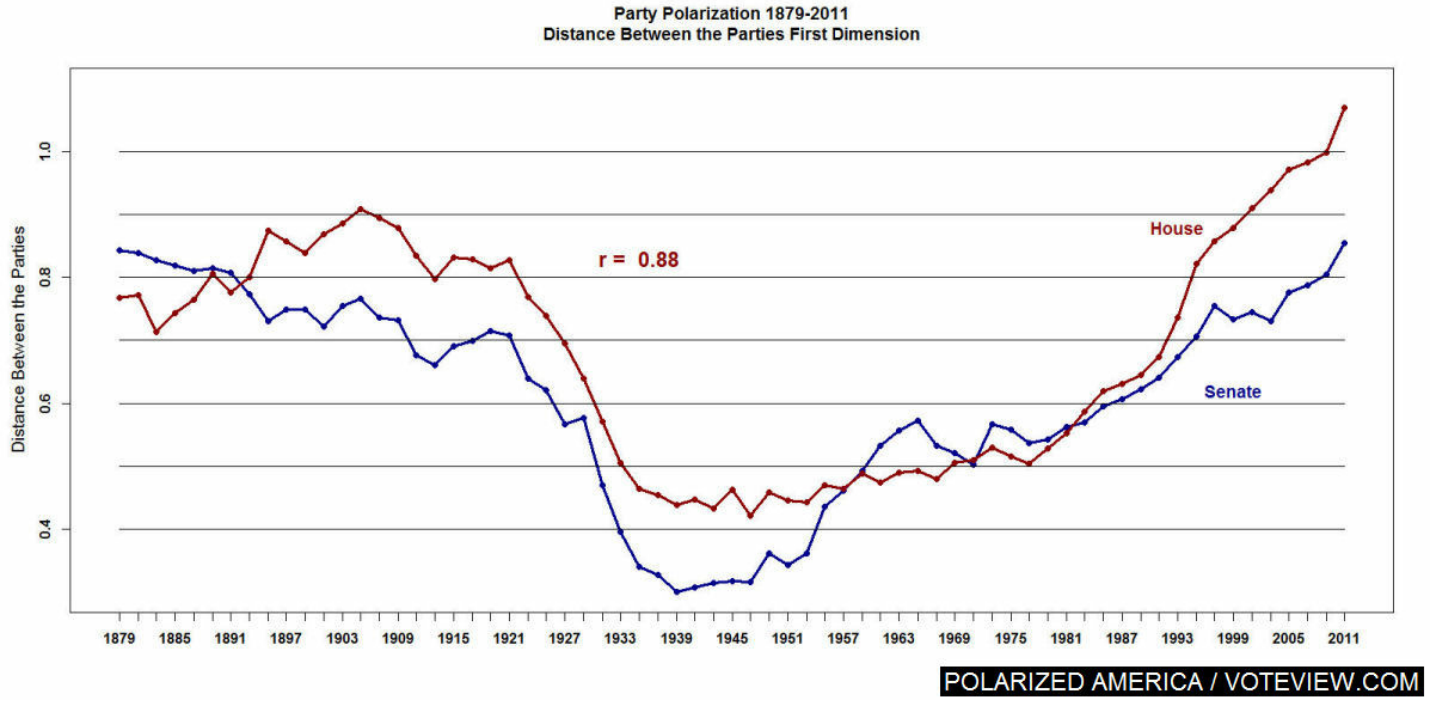


# When have we seen policy activity?

- 1975: Ford and post Watergate
- 1978: Carter and Democratic Congress
- 1989: Bush I and Democratic Congress
- 1992: Bush I and Democratic Congress
- 2005: Bush II and Republican Congress
- 2009: Obama and Democratic supermajority.

# Why not now?

Congress is more polarized than ever:



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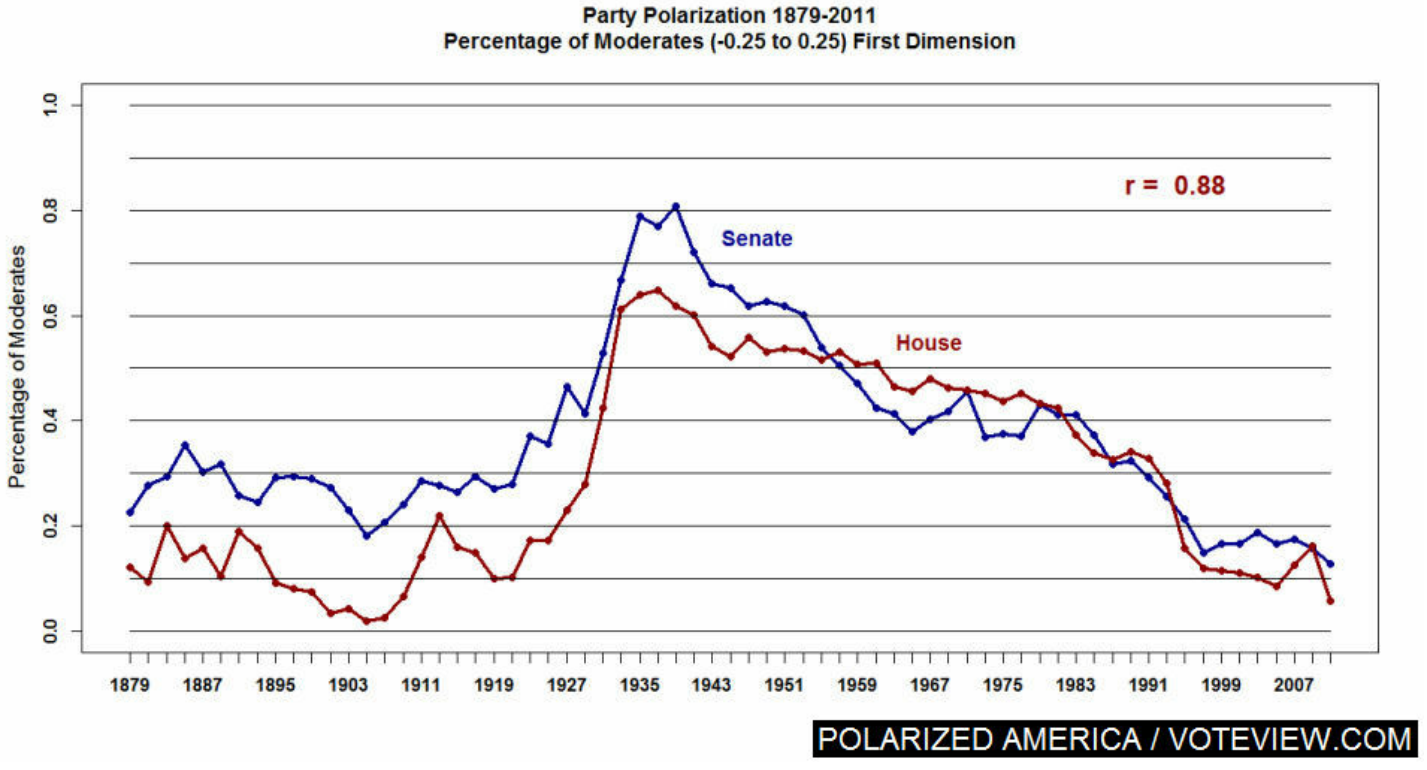


# Why not now?

Opposition:

- Heritage Foundation action
- Wind is now competing
- Gas and coal
- Less support for all "subsidies"

Action often linked to external events (oil embargo, Exxon Valdez)

# Not just national policy

Energy policy is federal–state, local, and regional matter too

1. Tax Policy
2. Renewable Energy Standards (RES)
3. Transmission
4. Siting

# Key State Policies

- Greenhouse gas emission targets (22 states)
- Tax policy
- Regional initiatives
- Renewable Portfolio Standards

# Tax Credits

DSIRE™
Database of State Incentives for Renewables & Efficiency

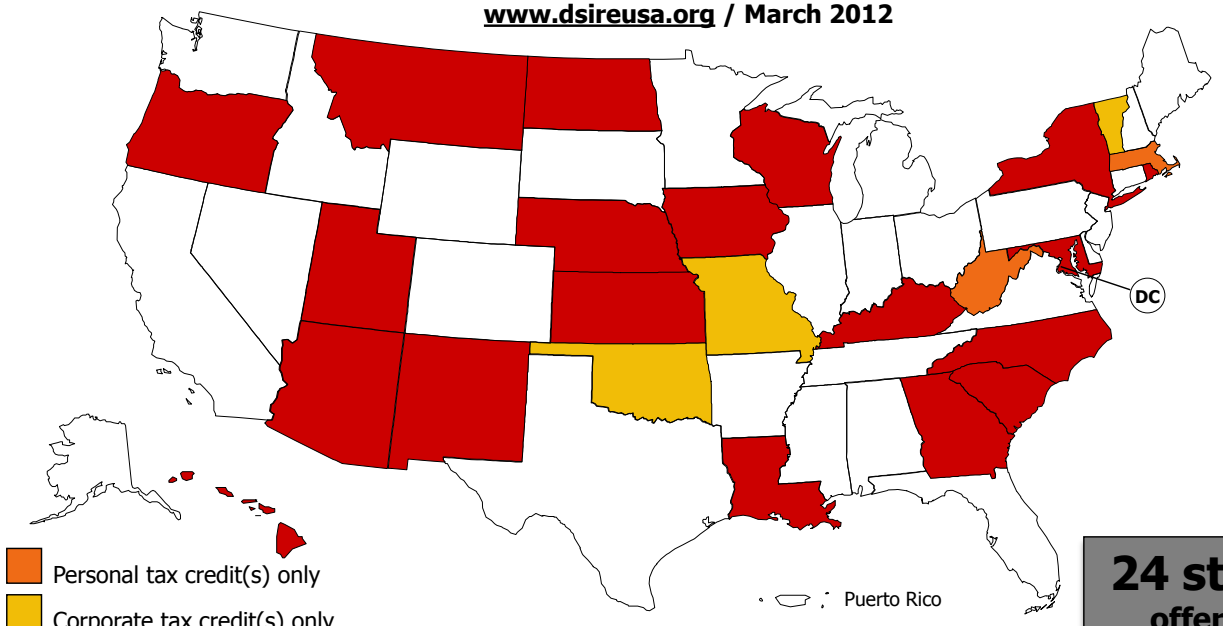
U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

IREC Interstate Renewable Energy Council

North Carolina Solar Center

## Tax Credits for Renewables

www.dsireusa.org / March 2012




Personal tax credit(s) only

Corporate tax credit(s) only

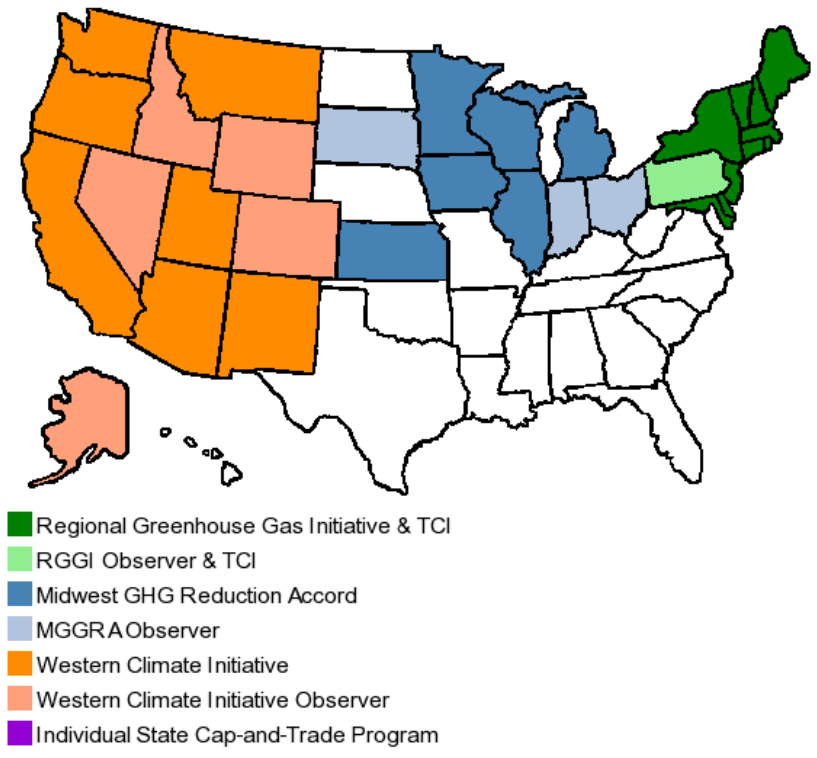
Personal + corporate tax credit(s)

*Notes: This map does not include corporate or personal tax deductions or exemptions; or tax incentives for geothermal heat pumps.*

**24 states** offer tax credits for renewables

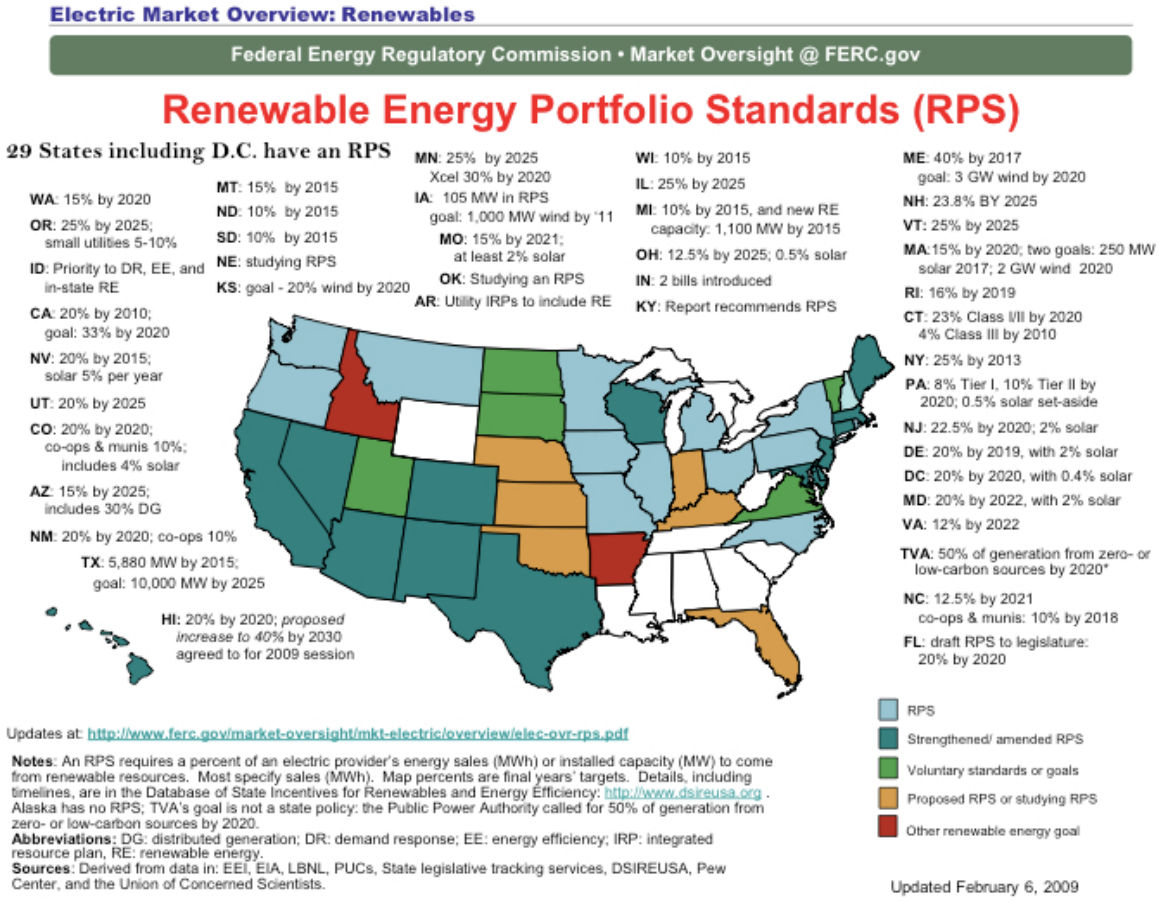
# Regional initiatives

- Cap and trade based
- Politically unstable



# Renewable Portfolio Standards

Mandate a minimum of renewable energy from utilities



# Renewable Portfolio Standards

- Rapidly expanding (Iowa first)
- Vary on what "counts"
- Encouraging federal action
- Several need to be updated

# What explains state policy?

- Problem severity
- Capacity
- Politics

# Capacity

- Fiscal status
- Institutional
  1. Legislative
  2. Gubernatorial
  3. Bureaucratic

# Politics

- Citizenry
- Interest groups (on both sides)
- Political control over institutions
- Diffusion
  1. Learning
  2. Competition
  3. Internal pressures
  4. Federal involvement