



PEW CENTER
on
Global CLIMATE
CHANGE

Update on U.S. State and Regional Action on Climate Change

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North Carolina Legislative Commission on Climate Change

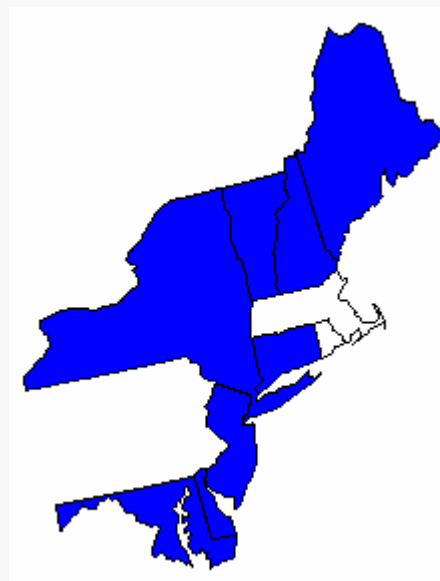
October 3, 2006

- Update since Judi Greenwald's February 3 presentation
- Highlights of recent state action
- Background on state-level target setting

- Concern about climate impacts
 - Economic development
 - Energy price volatility
 - Energy independence
 - Air quality concerns
 - Traffic congestion
- Getting ahead of the regulatory curve

- Direct and Indirect GHG Emission Reductions
- Governors and legislators are acting
- Almost Every State is Doing Something

- Regional cap-and-trade program initially covering power plant CO₂ emissions
- Stabilize emissions at current levels 2009-2015, 10% reduction by 2019
- Adoption through legislation or regulation
- What's new:
 - Model rule finalized in August 2006
 - Maryland joined in April 2006



- September 27th, Governor Schwarzenegger signed AB 32: Global Warming Solutions Act of 2006
 - “Nunez/Pavley” bill
 - Set California’s targets at 1990 levels by 2020 (25% reduction compared to business as usual)
 - First enforceable state-wide program to cap industrial GHG emissions and include penalties
 - Authorizes market-based mechanisms (cap-and-trade); allows one-year extension on target

What's new:

- GHG Electricity Performance Standard
- Renewable Portfolio Standard (20% by 2010)

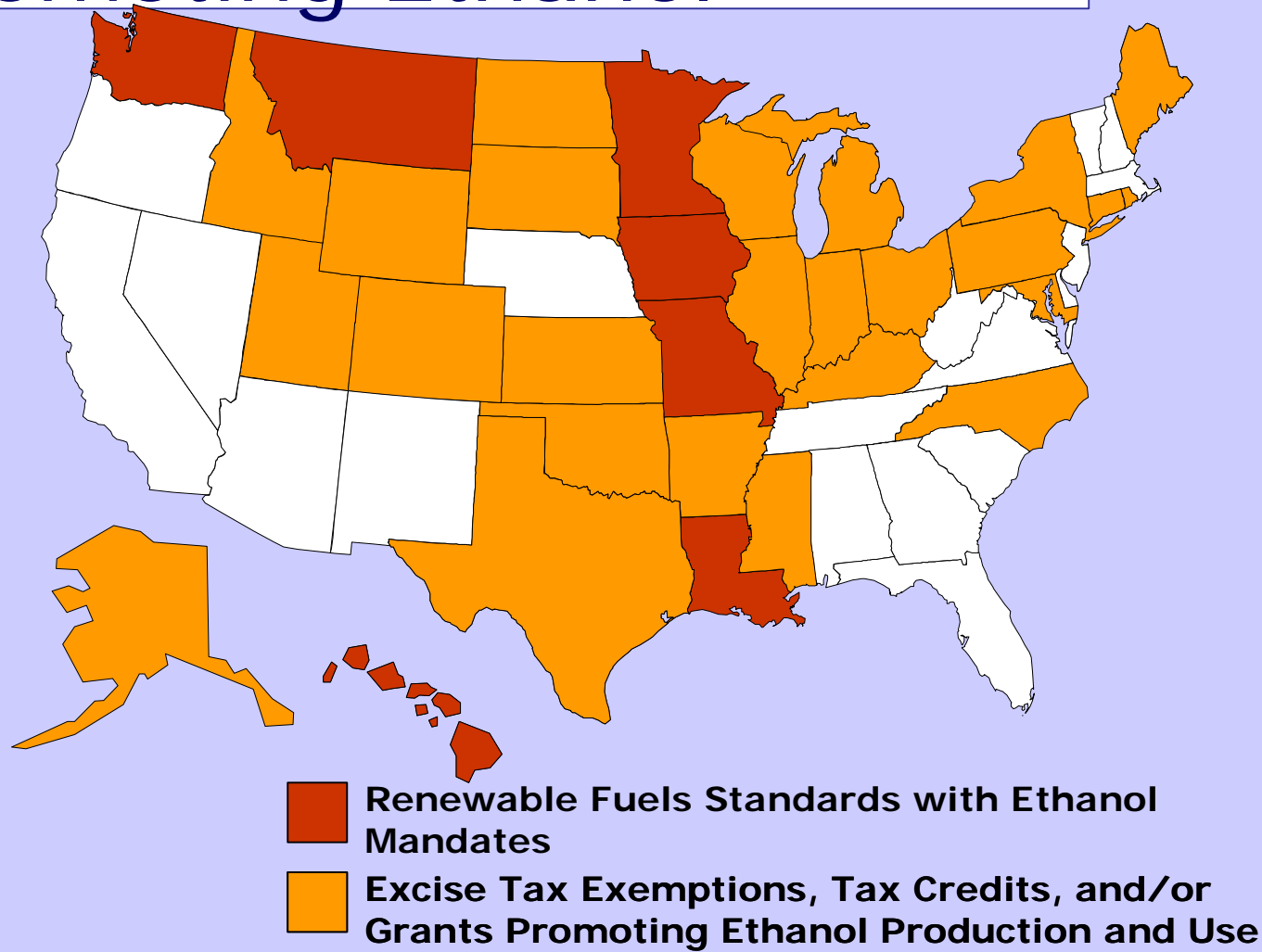
Continuing:

- Governor's Climate Action Team
- Vehicle GHG standards: 22% reduction by 2012; 30% by 2016
- CPUC carbon adder
- CPUC emissions cap under development

States recently adopting Renewable Fuel Standards and incentives

- Indiana: August 11, 2006
- Michigan: July 7, 2006
- Missouri: July 5, 2006
- Hawaii: June 26, 2006
- Florida: June 15, 2006
- California: June 15, 2006
- Louisiana: June 12, 2006
- Washington: June 11, 2006
- South Carolina: June 1, 2006
- Iowa: May 30th, 2006

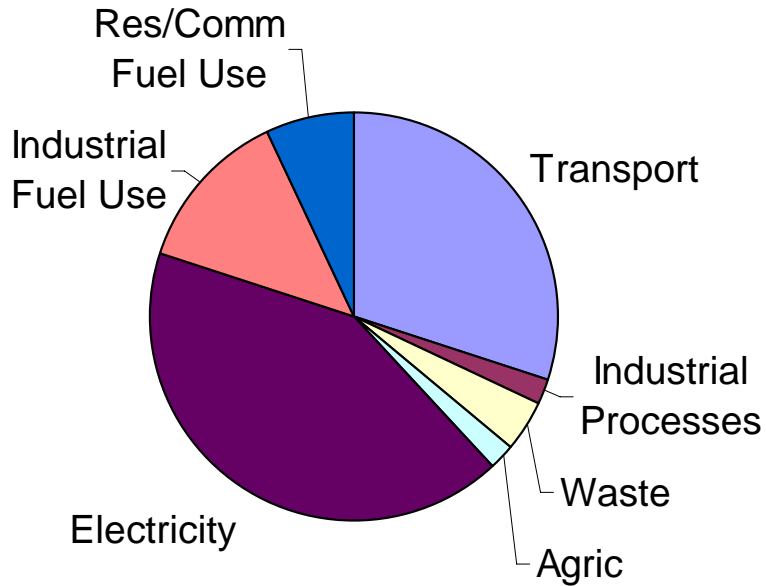
Mandates and Incentives Promoting Ethanol



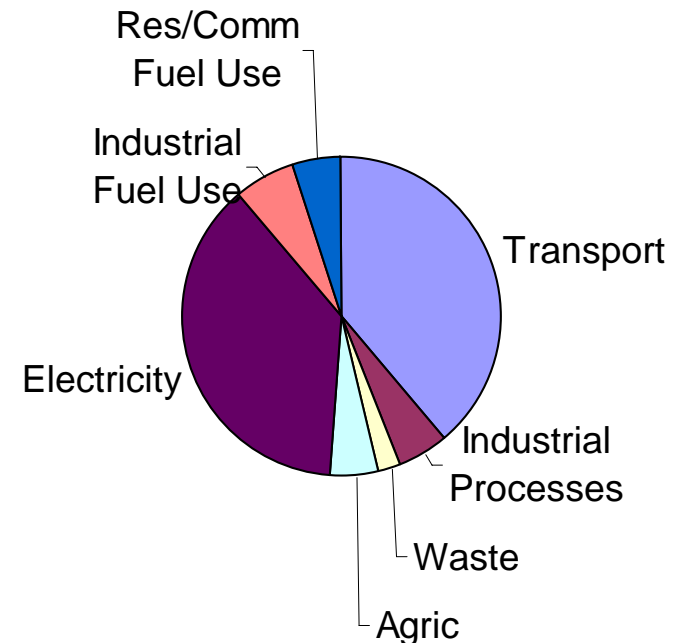
- Florida
 - Legislative Commission (June 2006)
- Alaska
 - Legislative Commission (May 2006)
- New Mexico
 - Governor's advisory council (June 2005)
- Montana
 - Governor's advisory council (April 2006)
- Arizona
 - Governor's advisory council (Feb. 2005)

Arizona: A Recent and Relevant Example

North Carolina

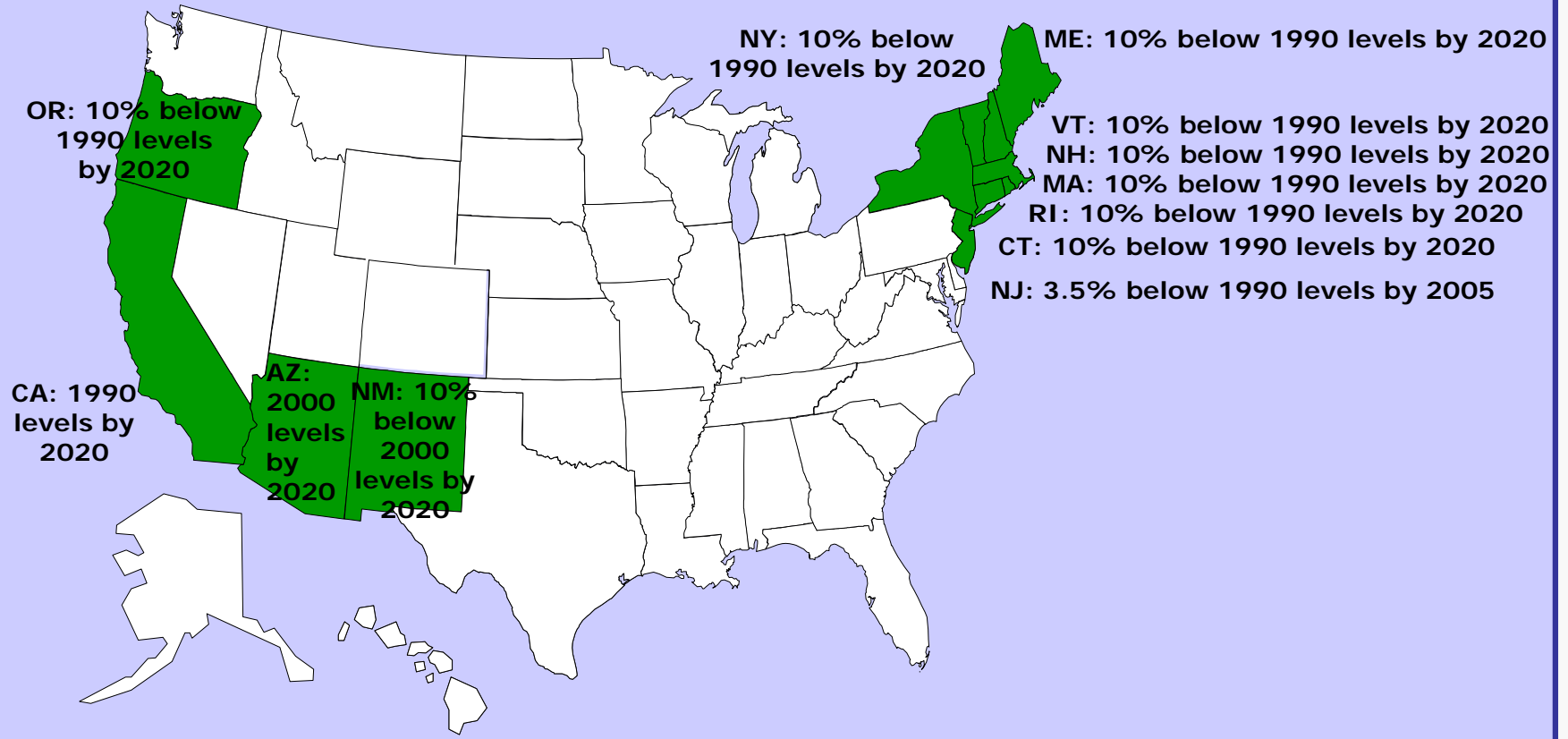


Arizona



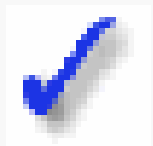
- September 8, Governor Napolitano issued an Executive Order:
 - Goal to reduce GHG emissions to 2000 levels by 2020
 - 50% below 2000 by 2040
- Climate action plan elements
 - Transportation
 - Energy Supply
 - Waste Management
 - Agriculture and Forestry

State GHG Emission Targets

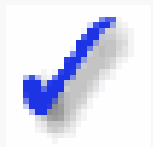


- States tend to have short, medium, and long-term targets (e.g., CA, AZ, NM, etc.)
- Long-term (~ 2050) reduction targets of 50-80%
 - What scientists say is necessary to stabilize the climate and avoid dangerous climatic change
- Short and medium (2010-2020) targets come from both top-down and bottom-up analysis
- Companies set targets similarly

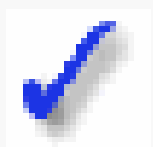
Company Emission Targets



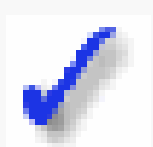
BP: Reduce GHG emissions by 10 percent from 1990 levels by 2010.



DuPont: Reduce GHG emissions by 65 percent from 1990 levels by 2010.



Entergy: Stabilize CO₂ emissions from U.S. generation at 2000 levels by 2006



IBM: 10 percent reduction in PFC emissions from semiconductor manufacturing processes by 2005

Weyerhaeuser: Reduce GHG emissions 40 % by 2020

- If North Carolina chooses to set a target, it may help to look at what other states, companies, and countries are doing
 - Examine options for GHG reductions
 - Costs, co-benefits, achieve other policy goals
 - Define a baseline – has big impact on stringency
- Comparing to a historic year is different than comparing to base case forecast.
- Numerous examples of both targets and actions

- RGGI
- California
- Renewable Energy Credit Market
 - Green Tags and White Tags
- Oregon offset standard
- Voluntary efforts: Chicago Climate Exchange
- Motivate entrepreneurs and innovators
- Achieve lowest-cost emission reductions

- Pace of state action on climate increasing
- Multiple drivers, multiple benefits for state action
- Tailor strategies to North Carolina
- Targets provide certainty and a metric for success

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