Federal Lessons and Opportunities from State Climate Actions

NCSL Climate Policy Briefing
July 21, 2009

The Center for Climate Strategies

1899 L Street, NW, Washington, DC 20036

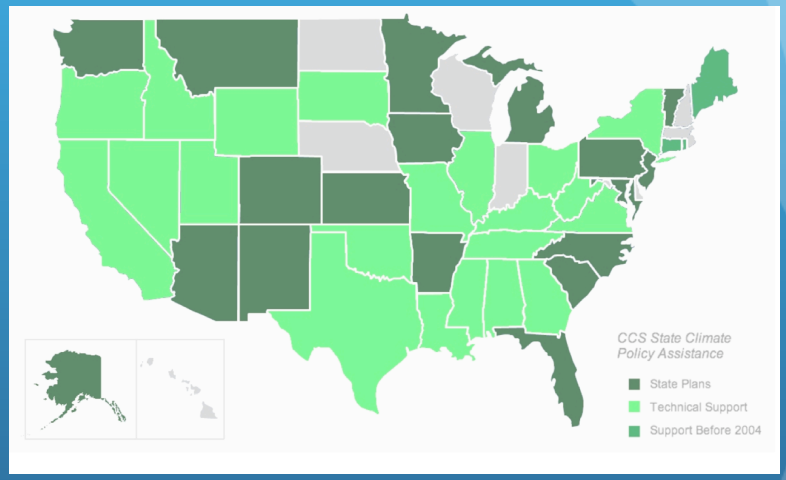
www.climatestrategies.us, (202) 540-9121

Center for Climate Strategies

Leading Catalyst

- Non-partisan, Non-advocacy, Non-profit, Partnership Group Since 2004
- National leader on policy development, analysis and consensus building
- 20 state climate plans, 4 regions, assistance to 42 states
- HQs in Washington, DC, team across U.S., Mexico, Canada

Policy Advancement



Importance of State Initiatives

Value Added

- Inform federal and state policy
- Prepare for federal, international action
- Mobilize and target investment
- Integrate multiple policy objectives
- Identify best actions and instruments
- Build capacity, fact base, stakeholder support

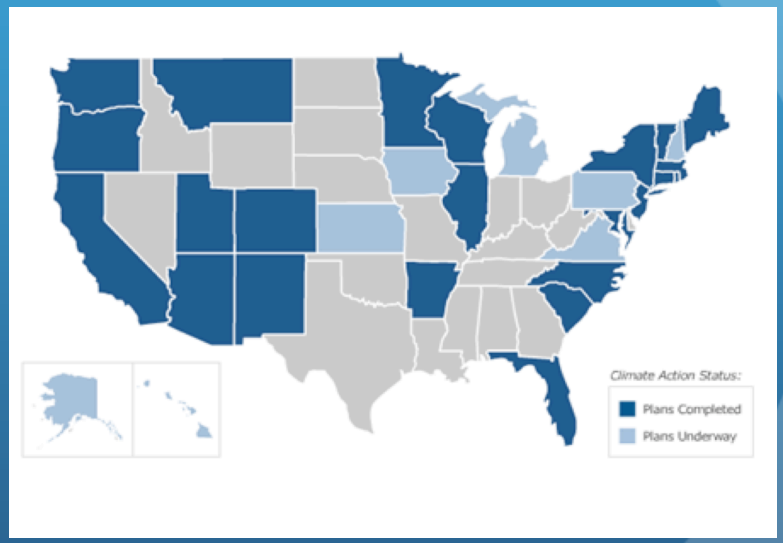
Global Significance

State Climate Actions

Full Roundup

- 31 climate action plans completed or in progress
  - Cover 2/3 of US economy and population
  - Cover ½ of US GHG emissions
- Three regional cap and trade initiatives (RGGI, WCI, MGA)
- 40 states in the Climate Registry, most with goals and reporting systems
- Many sector specific programs and reduction commitments underway

State Plans



Federal Policy Inputs

Key Questions

- Goals and outcomes
- Policy architecture
- Policy design
- Tools
- Metrics
- Public support

Responses

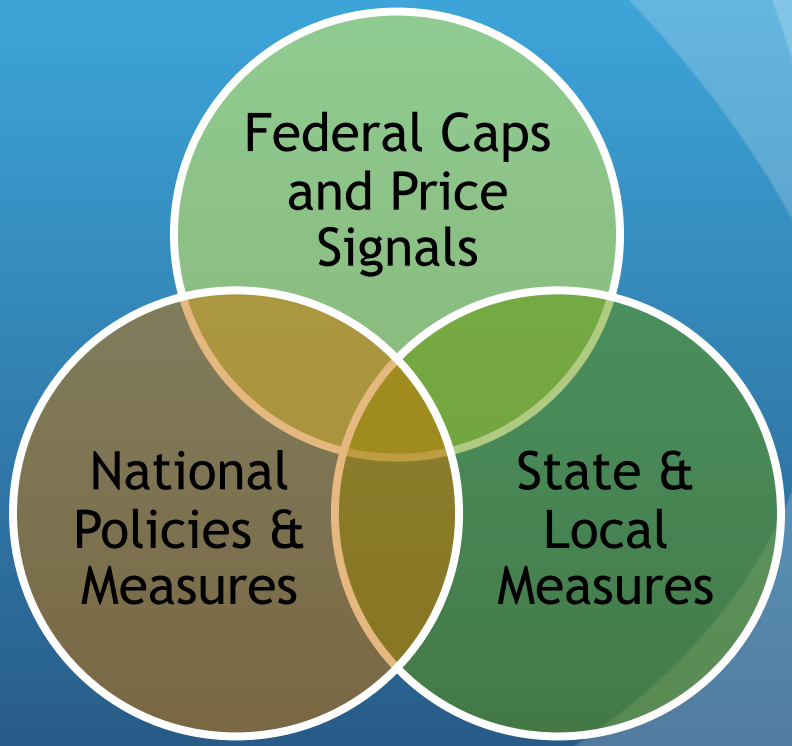
- Emissions targets, leadership
- Combination of sectors, instruments, levels of government
- Regional targeting, timing, level of effort, coverage, distribution
- Price and non price instruments
- GHG reductions, economic impacts, co-benefits, distribution
- Stakeholder consensus

Comprehensive Climate Policy

Needs

- Achieve GHG Targets
- Minimize costs
- Maximize savings
- Maximize co-benefits
- Maximize consensus
- Address governance
- Maximize implementation

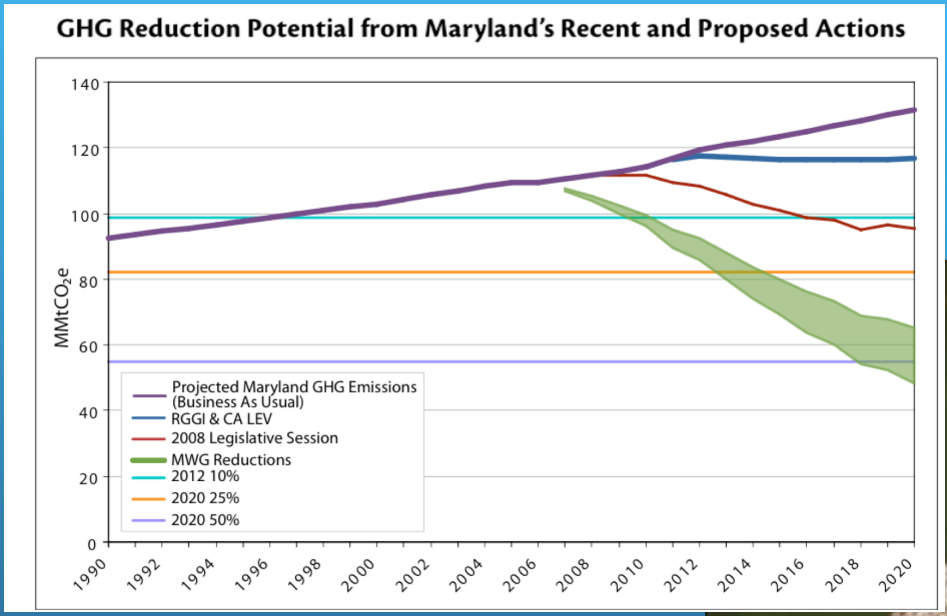
Solutions



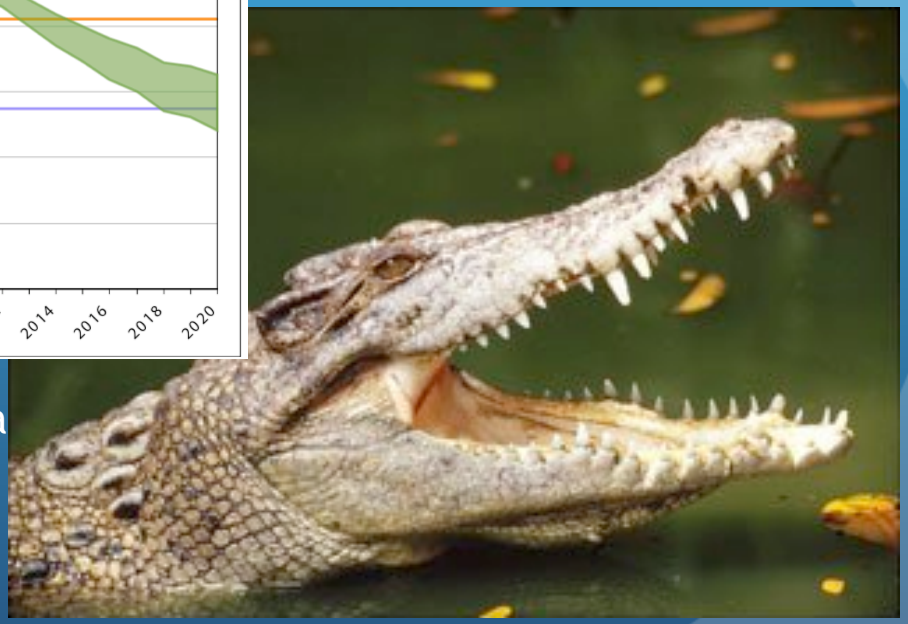
Coverage of Climate Action Plans

- All GHG's
- All Economic Sectors
- All Implementation Mechanisms
- Local, State, Federal Levels
- Short- and Long-Term Actions
- Sources and Sinks
- Co-benefits
- Decisions made by Stakeholders

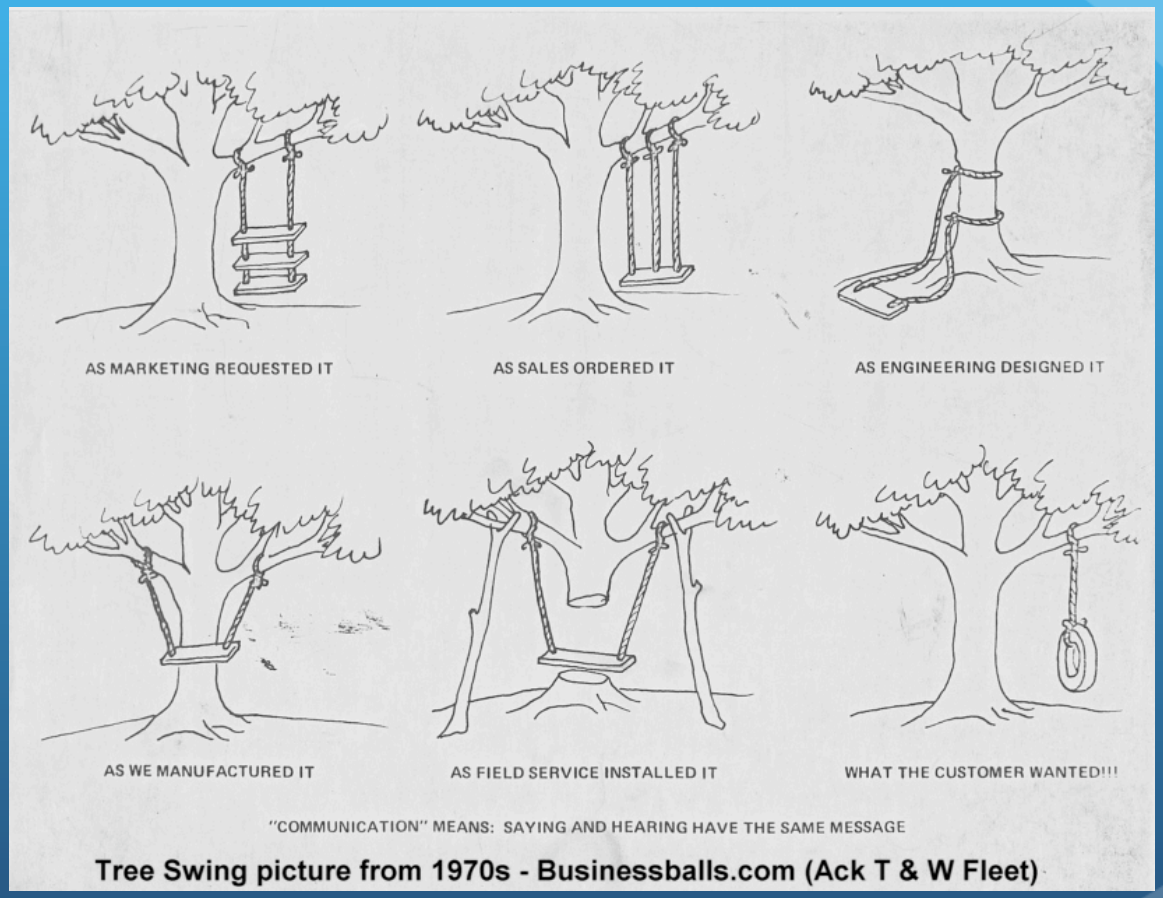
Solutions Through Action



1. Emissions baseline and foreca
2. Recent and planned actions
3. New policy actions, goals



The Role of Collaboration



Tree Swing picture from 1970s - Businessballs.com (Ack T & W Fleet)

Comprehensive Planning

1. Identify full range of existing policy actions and choices
2. Conduct gap analysis, innovate and expand range of choices
3. Narrow list for further analysis and development
4. Formulate draft policy specifications and tools
5. Formulate draft analytical approaches for analysis of GHG reductions and costs (best data, assumptions, methods)
6. Conduct preliminary analysis, iterate to final agreements for individual policies
7. Conduct analysis of co-benefits, feasibility as needed
8. Conduct aggregate impact analysis of full set of policies
9. Iterate to final agreement on policy recommendations and overall goals
10. Issue final report and recommendations

Validation of Policy Options

Stakeholders

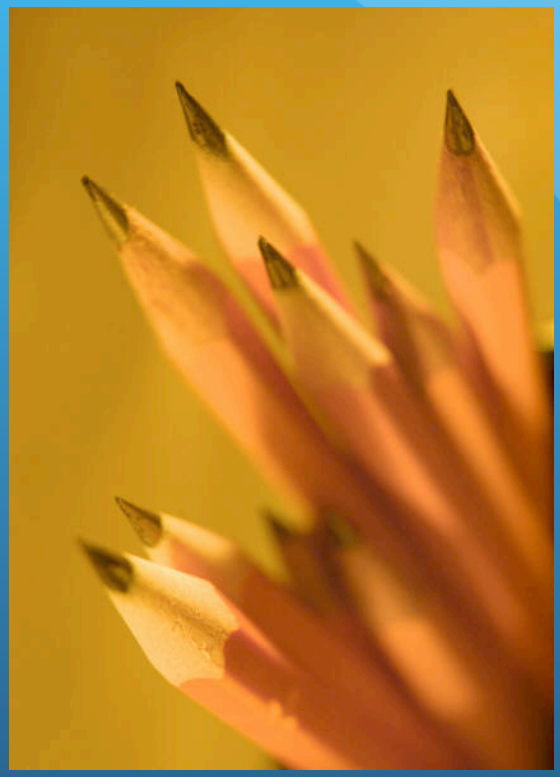
- 1,500 involved in 20 quantified plans
- Formal consensus determination
- Diverse, covering all points of views and interests
- All U.S. regions
- Governor and legislator appointed
- High level as well as average citizen

Analysis

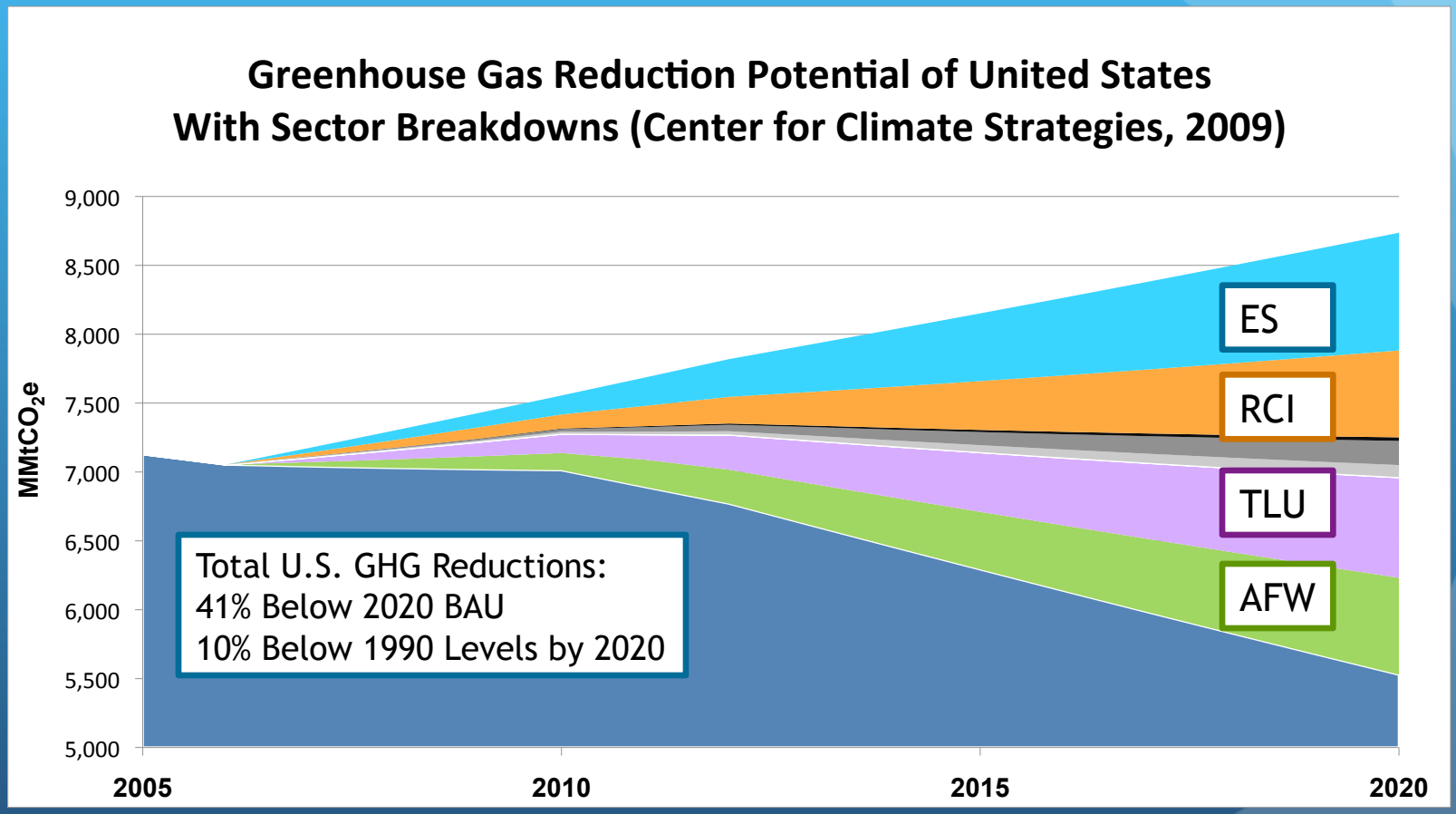
- Over 40 GHG inventories and forecasts
- Economic analysis of 900 specific sector based policy agreements
  - Cost effectiveness
  - GHG reduction potential
  - Aggregate impacts
  - Advanced and heavily reviewed techniques
- Numerous macro economic assessments
- Numerous co-benefits and feasibility assessments
- Three regional cap and trade system analyses

Planning Standards - Mitigation

- Inventory and forecast of GHG's
- Inventory and results of recent and planned actions
- Numerical GHG targets, timetables
- Quantified portfolio of specific actions
  - GHG reductions, cost effectiveness, macro economic impacts
  - Co-benefits assessments
  - Feasibility analysis
  - Public participation and consensus
- Implementation programs and instruments
- Monitoring and reporting



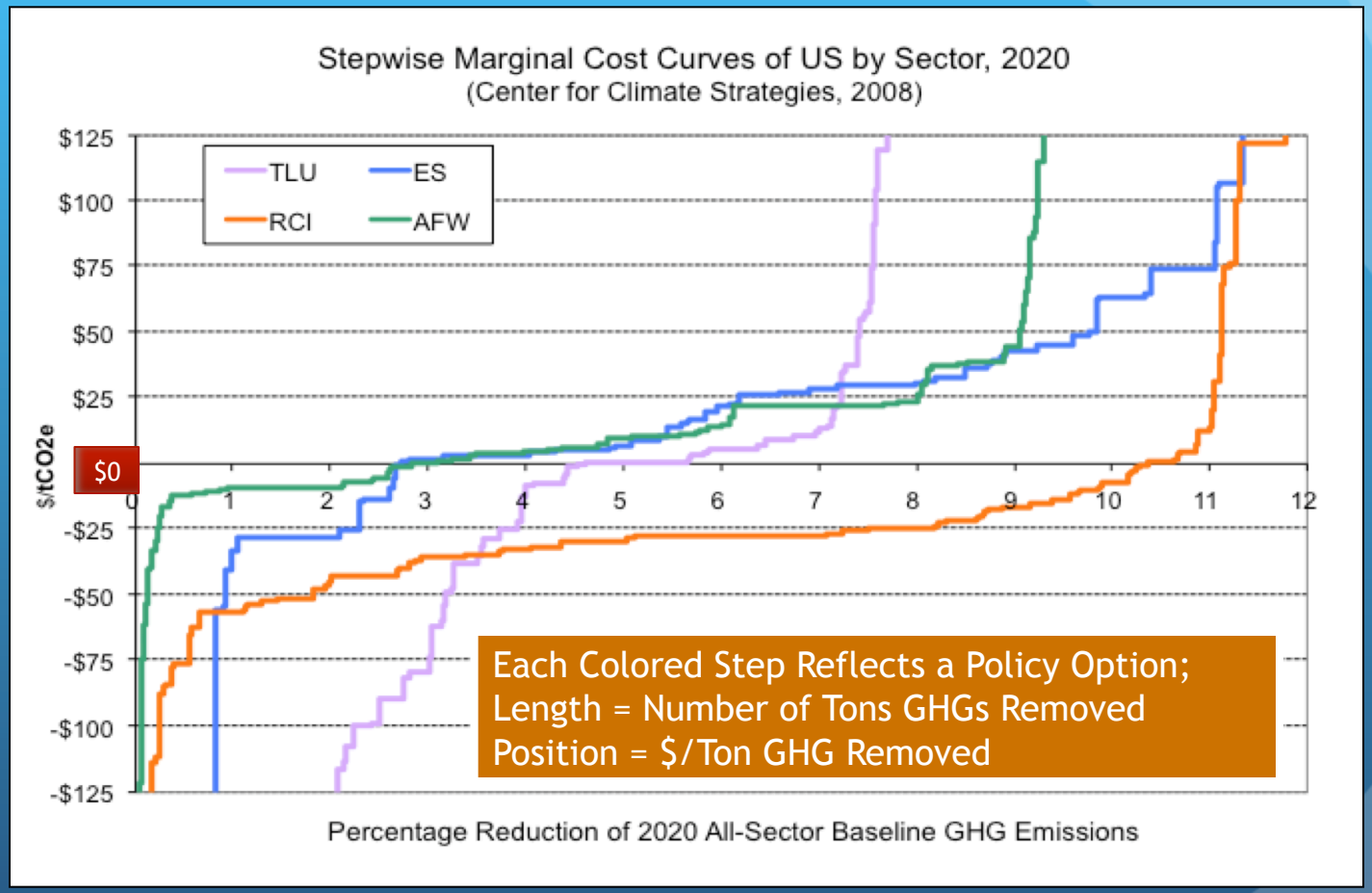
Sector Based Climate Actions



U.S. GHG Reduction Potential

Potential US 2020	% National GHG Plan Reductions	$MMTCO_2e$	$/Ton GHG Removed	Total below BAU 2020
Energy Efficiency and Conservation (RCI)	29%	1035	**-$13/ton**	12%
Clean and Renewable Energy (ES)	29%	1020	$6/ton	12%
Transportation and Land Use Efficiency (TLU)	16%	575	$13/ton	6%
Agriculture and Forestry Conservation, Waste Management (AFW)	26%	933	$8/ton	11%
Total/Average	100%	3563	$3/ton	41%

Differences in Sectors



Analysis by CCS, 2009

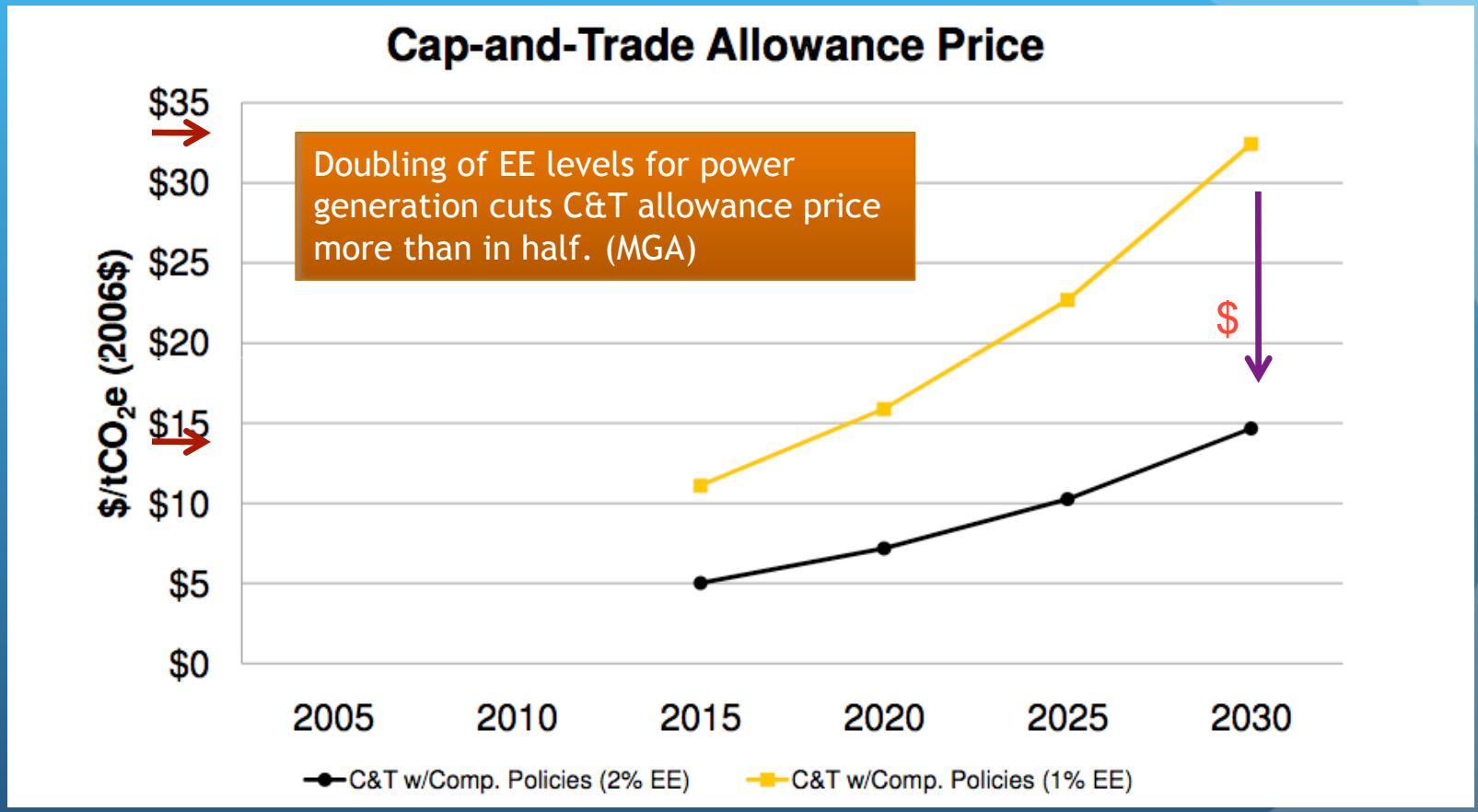
Policy Instruments

- Voluntary Agreements
- Technical Assistance
- Financial Incentives
- Targeted Spending
- Codes and Standards
- Market Based Approaches
- Pilots and Demos
- Information and Education
- Research and Development
- Reporting and Disclosure

Policy Portfolio and Governance

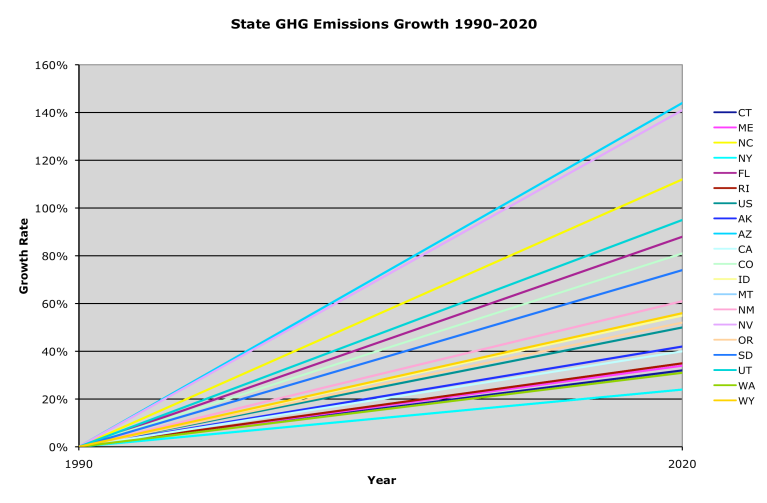
Residential, Commercial, Industrial Energy Use	Cap & Trade	Policies & Measures	Local	State	Federal
Price Incentives	Price Signals, Revenues				X
Non Price & Price Instruments		Barrier Removal, Program Support			
Utility Demand Side Management			X	X	X
High- Performance Buildings			X	X	X
Appliance Standards				X	X
Improved Building Codes			X	X	X
Combined Heat & Power			X	X	X
Distributed Renewable Generation			X	X	X

Integration of Caps and Measures

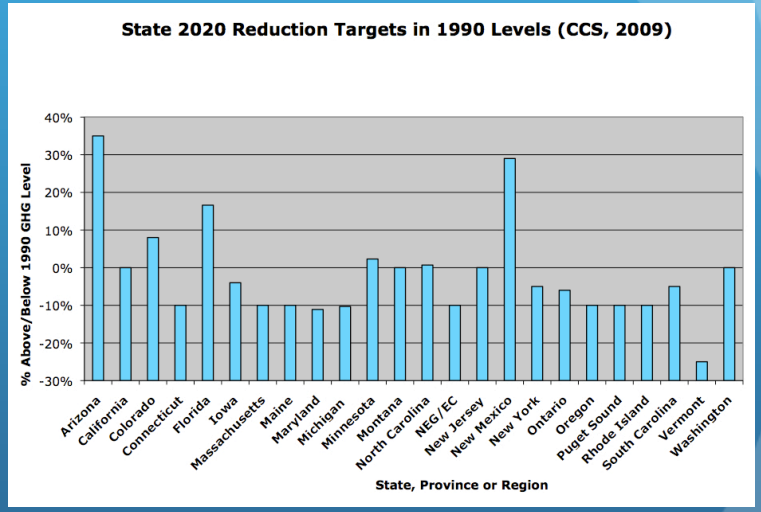


Differences in States and Regions

State Growth Rates



State GHG Targets

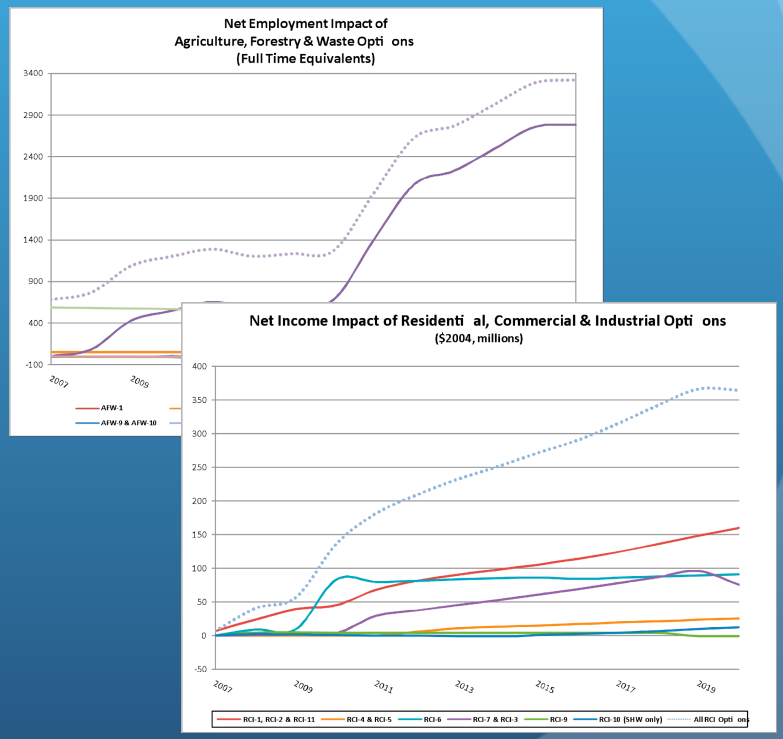


Climate & Economic Recovery

Jobs and Income

- Save energy, money
  - Boost disposable income
  - Boost investment
- Create jobs
  - New, home grown energy
  - New technology and products
- Value added investment
  - New energy future
  - Local actions

Response Curves



Analysis by CCS, 2008

U.S. State Plan Results (Sample)

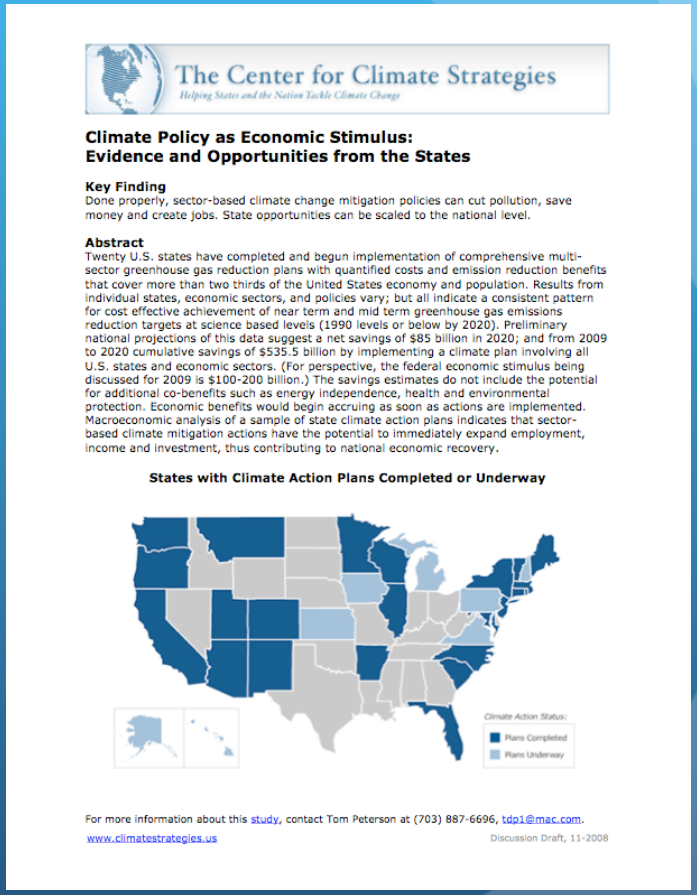
State	Policy Options	Degree of Unanimity	Amount of GHG Reductions	Overall NPV Cost or Savings	Jobs Impact
AZ	49	92%	• 2000 level by 2020 • Half 2000 level by 2040	$5.5 billion savings 2007-2020	289,000
CA	n/a	n/a	• AB-32: 1990 level by 2020	AB-32 $4 billion savings	AB-32 83,000
CO	70	87%	• 37% below projected emissions by 2020	~$3 billion savings 2007-2020	Not assessed
FL	50	High	• 33% below 1990 level by 2025	$28 billion savings 2009-2025	148,000
MD	42	100%	• 25% below 2006 level by 2020	$2 billion savings 2008-2020	Not assessed
MN	46	83%	• 15% below 2005 level by 2015 • 30% below 2005 level by 2050	~$1.3 billion energy savings 2009-2025; $725 million cost	Not assessed
MT	54	98%	• 1990 level by 2020	$78 million savings 2007-2020	Not assessed
NC	56	85%	• 47% below projected emissions by 2020	$7.5 billion savings 2007-2020	15,000
NM	69	97%	• 2000 level by 2012 • 10% below 2000 level by 2020	$2.2 billion savings 2007-2020	Not assessed

Federal Legislative Issues

- House Bill
  - Integrates four titles: EE, RE, C&T, Economic Support
  - Identifies integrative needs with other statutes
  - Addresses governance issues between state/local and federal government
  - Covers mitigation and adaptation
  - Allocates allowances
- Senate is deliberating

Federal Administration Issues

- Existing Agency Authorities Broad and Flexible
- Investment Levels for EE/ RE High Due to Stimulus
- Key Issues:
  - Investment targeting
  - Capacity Building
  - State and Local Relations
  - Policy Integration
  - Program Development
  - Interagency coordination



The Center for Climate Strategies
Helping States and the Nation Tackle Climate Change

Climate Policy as Economic Stimulus: Evidence and Opportunities from the States

Key Finding
Done properly, sector-based climate change mitigation policies can cut pollution, save money and create jobs. State opportunities can be scaled to the national level.

Abstract
Twenty U.S. states have completed and begun implementation of comprehensive multi-sector greenhouse gas reduction plans with quantified costs and emission reduction benefits that cover more than two thirds of the United States economy and population. Results from individual states, economic sectors, and policies vary; but all indicate a consistent pattern for cost effective achievement of near term and mid term greenhouse gas emissions reduction targets at science based levels (1990 levels or below by 2020). Preliminary national projections of this data suggest a net savings of $85 billion in 2020; and from 2009 to 2020 cumulative savings of $535.5 billion by implementing a climate plan involving all U.S. states and economic sectors. (For perspective, the federal economic stimulus being discussed for 2009 is $100-200 billion.) The savings estimates do not include the potential for additional co-benefits such as energy independence, health and environmental protection. Economic benefits would begin accruing as soon as actions are implemented. Macroeconomic analysis of a sample of state climate action plans indicates that sector-based climate mitigation actions have the potential to immediately expand employment, income and investment, thus contributing to national economic recovery.

States with Climate Action Plans Completed or Underway

For more information about this study, contact Tom Peterson at (703) 887-6696, tdp1@mac.com.
www.climatestrategies.us
Discussion Draft, 11-2008

Thank you for your time and attention!