



CENTER FOR CLIMATE STRATEGIES

Climate Mitigation Policy Development

Ken Colburn

Center for Climate Strategies

CAPCA, Myrtle Beach, SC

October 20, 2005

Global Warming: The Emerging Regulatory Environment

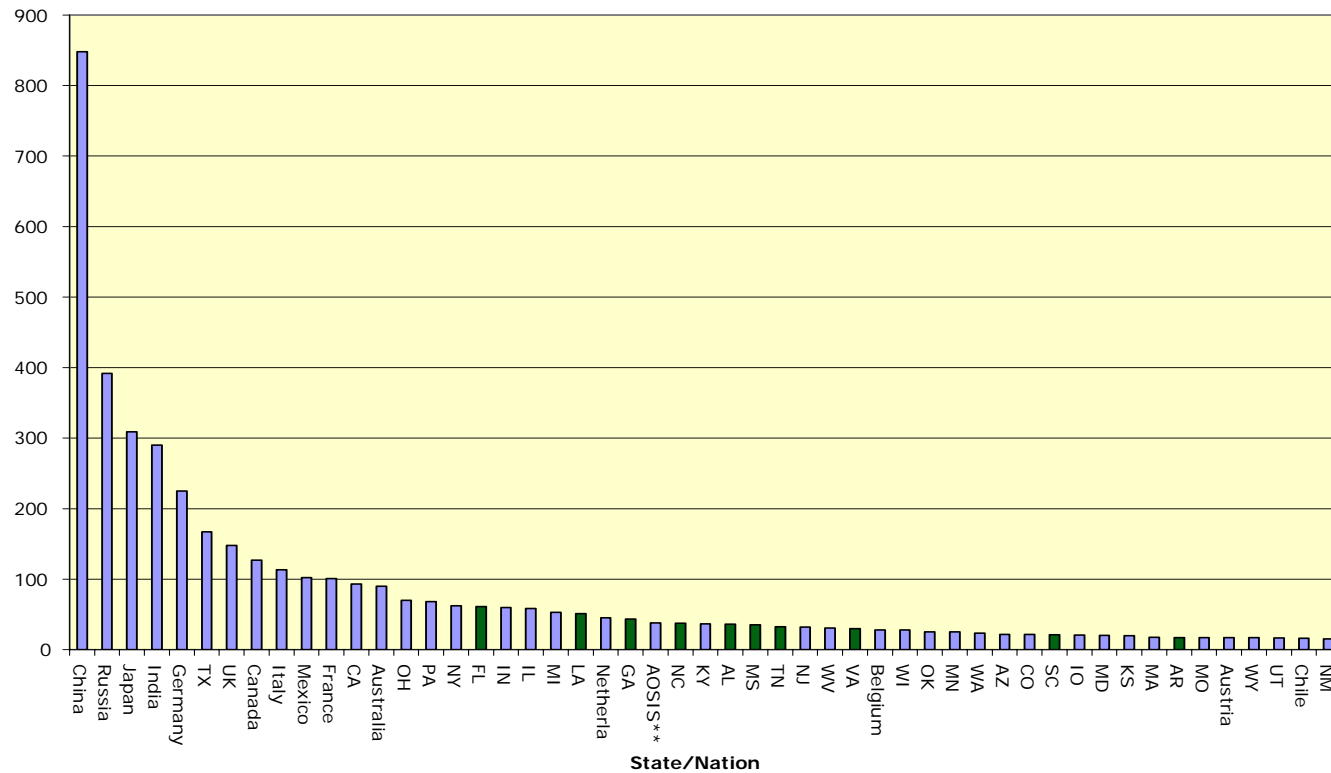
■ **H.R.6, Energy Policy Act of 2005, July 29, 2005**

SEC. 1612. SENSE OF THE SENATE ON CLIMATE CHANGE.

(b) ... Congress should enact a comprehensive and effective national program of mandatory, market-based limits and incentives on emissions of greenhouse gases ...

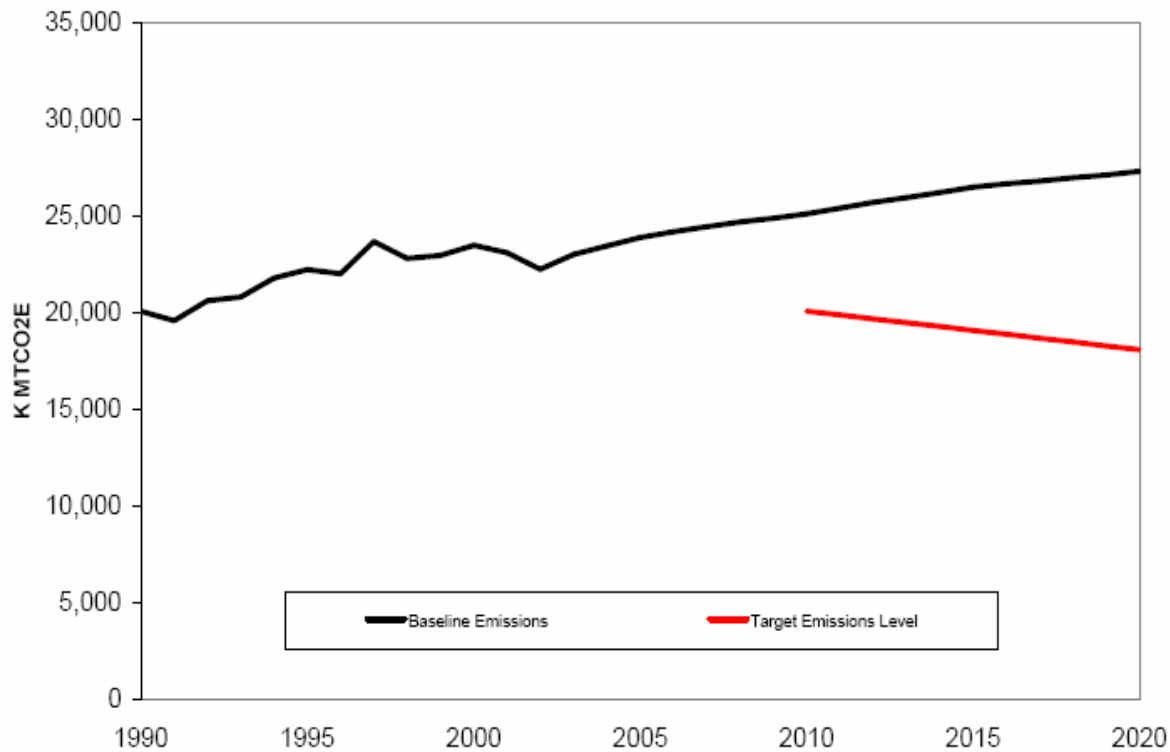
States = 34 of top 50 Emitters

Global GHG Emissions



Challenge: Close the Gap

Figure 1: Emissions Baseline and Target



State Climate Actions

- Inventories and Forecasts (38 total, 11 recent)
- Policies and Mechanisms (200+ types)
- Comprehensive Plans (32 total, 11 recent)
- Statewide Goals & Targets (9)
- Reporting Systems (11)
- Regional Agreements (3)

Reasons for State Action

■ Cause for concern

- Water supply issues; storm events

■ Serendipity

- Co-benefits and coincidence

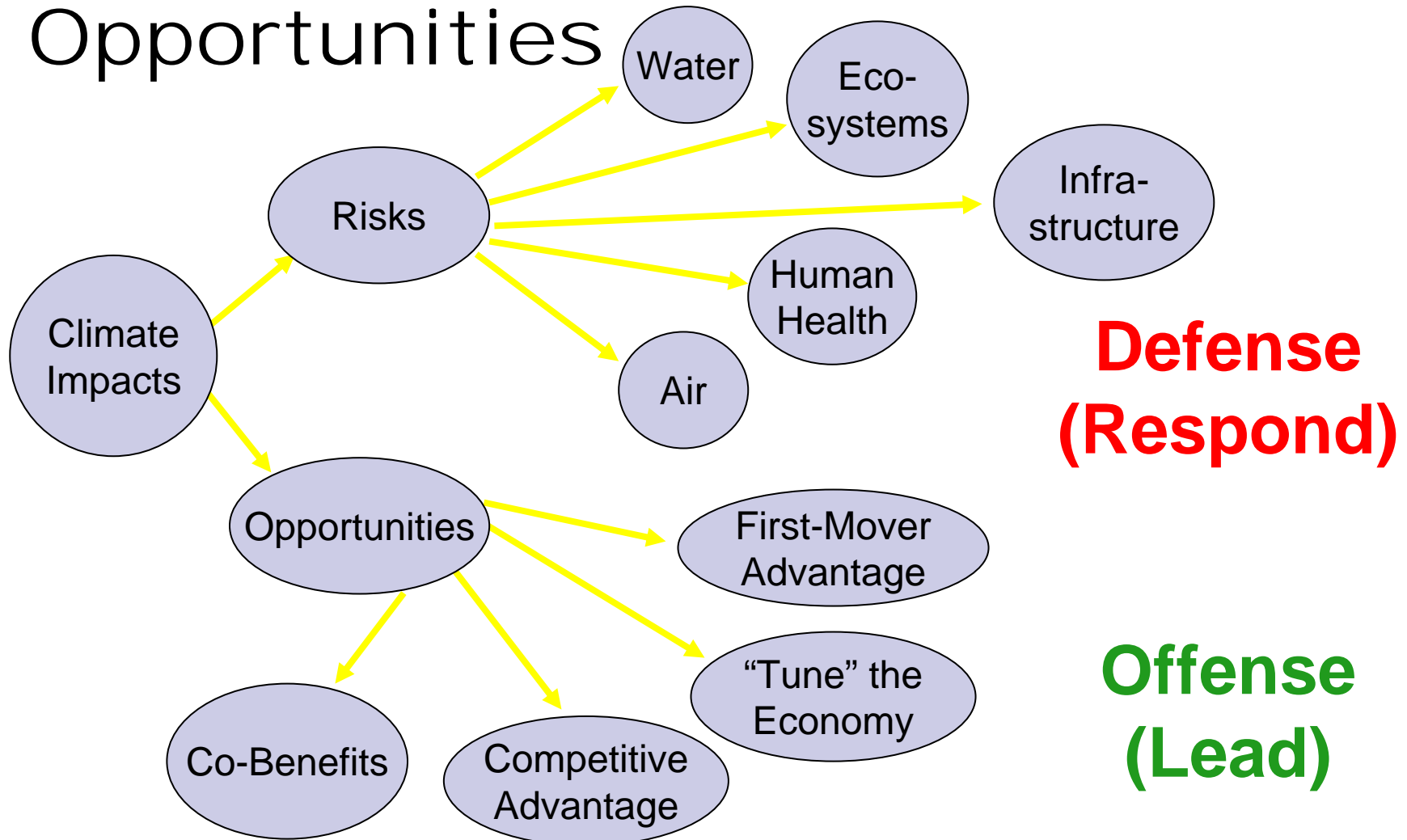
■ Leadership

- Policies, plans and goals
- Sharing and cooperation

■ “Business Planning for States”

- “SWOT” analysis; learning curve
- Competitive advantage, economic/tech opportunity

Climate Risks... and Opportunities



The Decision to Act

- Understanding the problem and potential solutions
- Understanding potential costs of inaction
 - Expanded risk of climate impacts
 - Loss of opportunity to shape future policy
 - Loss of opportunity to capture co-benefits
 - Loss of competitive advantage
- Understanding the process for responding
- Understanding present or future mandates
- Assessing opportunities for success
- *“If you’re not at the table, you’re on the menu.”*

Current CCS state projects

■ North Carolina

- http://daq.state.nc.us/news/leg/co2_final_09022005.pdf

■ Arizona

- www.azclimatechange.us

■ New Mexico

- www.nmclimatechange.us

■ Oregon

- <http://egov.oregon.gov/ENERGY/GBLWRM/CATF.shtml>

■ Pennsylvania

- www.eesi21.org

Reduction Methods

- Voluntary Agreements
- Technical Assistance
- Information and Education
- Financial Incentives
- Codes and Standards
- Market Approaches
- Reporting and Registries
- Others

Reduction Sectors

- Agriculture
- Forestry
- Energy Supply
- Residential, Commercial, Industrial
- Transportation and Land Use
- Waste Management
- Cross Cutting Issues

Integration: Policy Portfolios

	Codes & Standards	Market Mechanisms	Funding Mechanisms	Voluntary Agreements	Technical & Financial Assistance	Information & Education	Pilots & Demos	Reporting & Disclosure
Agriculture								
Commercial, Residential And Industrial								
Energy Supply								
Forestry								
Transportation and Land Use								
Waste Management								
Cross Cutting Issues								

Getting Started

■ Planning

- Consultations / advisory assistance with senior officials (~ 3-6 months)
- Process design, organization, stakeholder participants, facilitation, analysis & modeling, coordination, funding

■ Preparation

- Preliminary fact finding: Inventories and forecasts, existing and potential actions, existing assessments, and results of other efforts

■ Convening

- Executive orders; laws

Conducting the Process: Climate Change Advisory Group

- Stakeholder-Based; Evaluative Facilitation
- Joint Fact Finding
 - Improve inventories and forecasts, determine reference case, identify policy options, etc.
- Screening and Analysis of Options
 - Criteria: GHG reduction potential, cost effectiveness, co-benefits & ancillary impacts, feasibility
- Stepwise evaluations, conflict resolution, iteration to consensus on recommended options (~ 1 year)
- Key: ***The Stakeholders make the decisions...***

Toward Policy Adoption

- **Concluding the CCAG process**
 - Finalize policy recommendations
 - Determine consensus levels
 - Final report and recommendations to convening authority

- **Post-CCAG: Responding to and adopting recommendations**
 - Follow up evaluations, screening
 - Plans for adoption or further development of policy
 - Interagency coordination
 - Opportunities for cross-boundary cooperation

State Policy Trends

- Expanded state action
- Appreciation of existing actions
- Successful conflict resolution
- Standardization and improvement of process
- Consistency and improvement of evaluation techniques
- Standardization of overall structure of plans
- Customization of specific plans and policies
- Focus on greenhouse gases
- Focus on economic levers
- Integration of co-benefits

Results: Successful Planning

State	1990-2020 Forecast	Goal	2010-2020 Plan Result
AZ	118-147%	TBD	TBD
CA	34%	2000 by 2010; 10% below by 2020; 75% by 2050	TBD
CT	32%	1990 by 2010; 10% below by 2020; 75% by 2100	100%
MA	?	1990 by 2010; 10% below by 2020; 75% by 2100	?
ME	34%	1990 by 2010; 10% below by 2020; 75% by 2100	100%
NC	122%	TBD	TBD
NE Govs.	?	1990 by 2010; 10% below by 2020; 75% by 2100	TBD
NJ	?	5% -1990 by 2005	100%
NM	48-64%	2000 by 2012; 10% below by 2020; 75% by 2050	TBD
NY	24%	5% below 1990 by 2010	?
OR	38%	1990 by 2010; 10% below by 2020; 75% by 2100	85%
Puget Sound	37%	1990 by 2010; 10% below by 2020; 75% by 2100	100%
RI	35%	1990 by 2010; 10% below by 2020; 75% by 2100	100%

Key Actions ... Agriculture

- Expand soil carbon storage
- Expand energy production and recovery
- Reduce process/waste emissions, increase recapture and reuse
- Improve feed efficiency
- Reduce food product delivery/transportation emissions

... Forestry

- Protect existing forest carbon stocks
- Recover, restore and expand forests
- Densify existing forest carbon stocks and regeneration
- Expand harvested wood product based carbon stocks
- Expand renewable energy (biomass) production
- Reduce wood products industry process emissions, increase reuse and energy recapture
- Expand low-embedded-energy wood products for building materials

... Transportation

- Reduce vehicle emissions
- Remove particulates (black carbon)
- Reduce emissions from service equipment
- Expand use of low emitting fuels
- Reduce travel demand

... Energy Production

- Expand low emitting sources
- Reduce fuel extraction and process related emissions
- Reduce delivery-related emissions
- Capture and store carbon (sequestration)
- Remove particulates (black carbon)

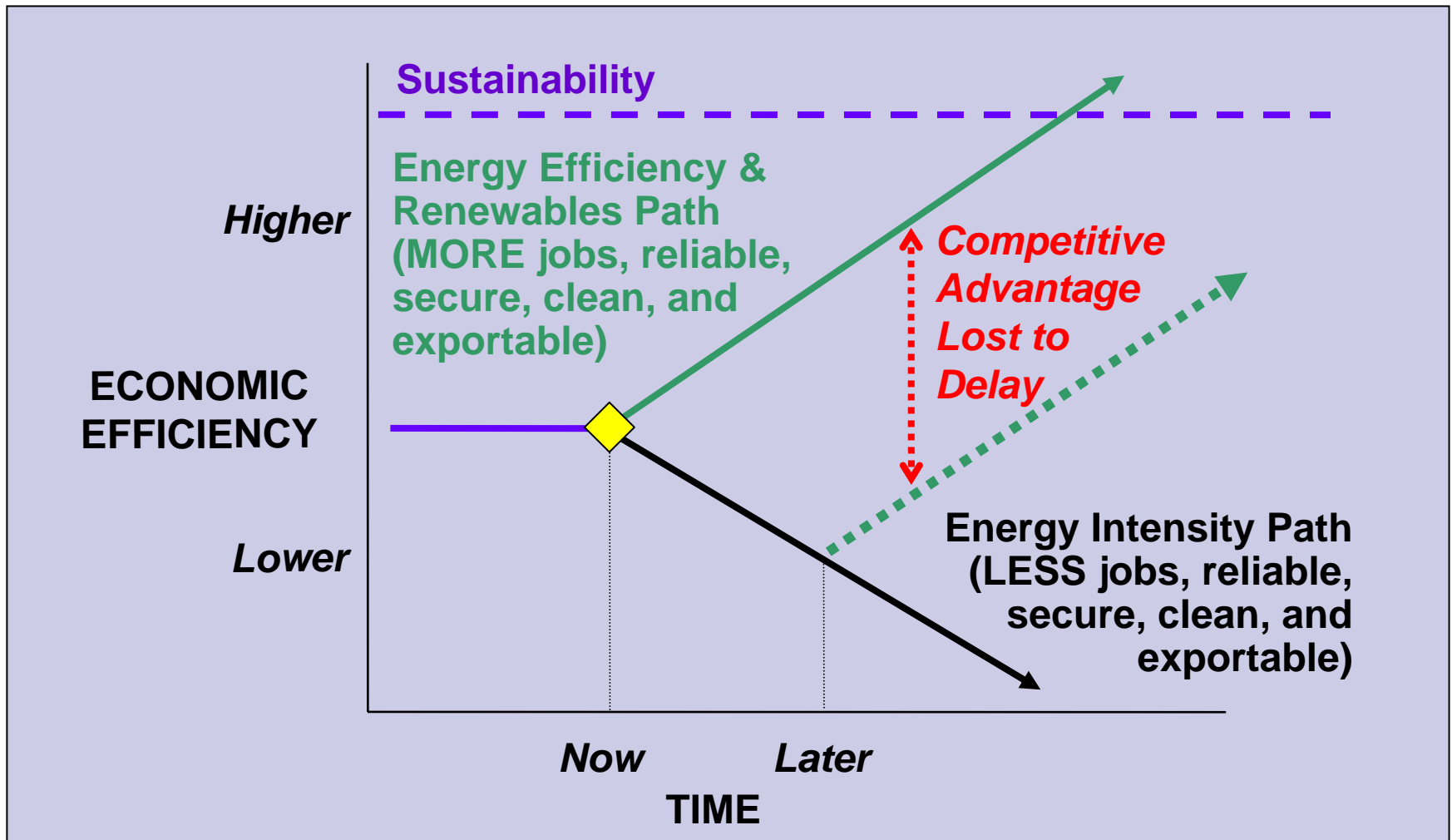
... Residential, Commercial, and Industrial

- Increase energy efficiency and conservation
- Reduce process related emissions
- Expand waste recovery and recycling
- Expand low-embedded-energy products
- Shift to low emitting product inputs

... Waste Management

- Expand solid and liquid waste energy recovery
- Expand low emitting waste storage
- Expand source reduction, reuse, recycling
- Expand energy efficient processing of waste

Example: Energy Opportunities



Center for Climate Strategies



- Nonprofit policy development group
- Advisory assistance to senior officials
- Process formation, management, decision support, consensus building, capacity building
- Advanced conflict resolution for climate and energy issues
- Multiple areas of technical and policy expertise
- Multiple skills and tools for evaluation of policy options
- Tom Peterson, Executive Director 703-691-2199, tdp1@mac.com
- Ken Colburn, 617-784-6975, kcolburn@symbioticstrategies.com