

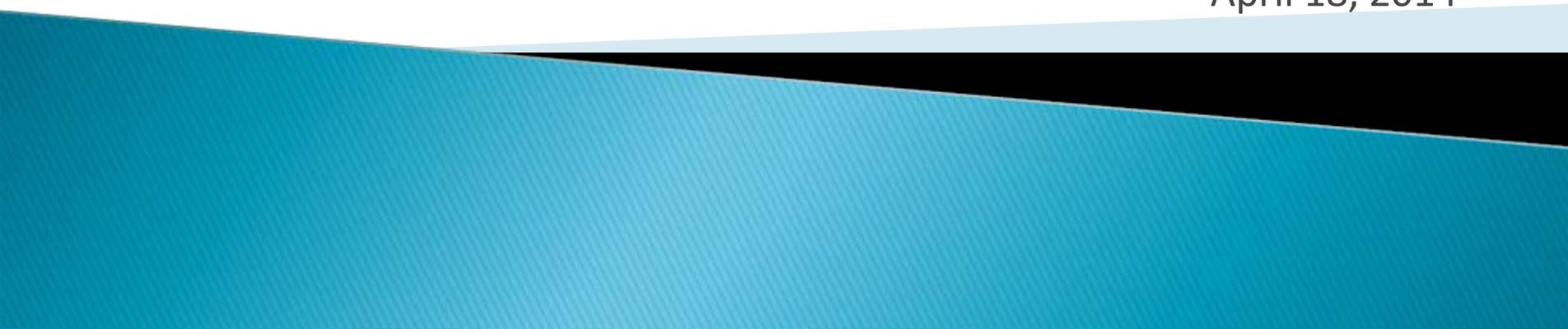
# Climate Protection

## Positive News from the States

State of Rhode Island  
Executive Climate Change Council

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Even though there are challenges and realities, 29 states have adopted state GHG reduction targets or limits and have policies and programs to meet them.

16 states are similarly involved in adaptation or resiliency work

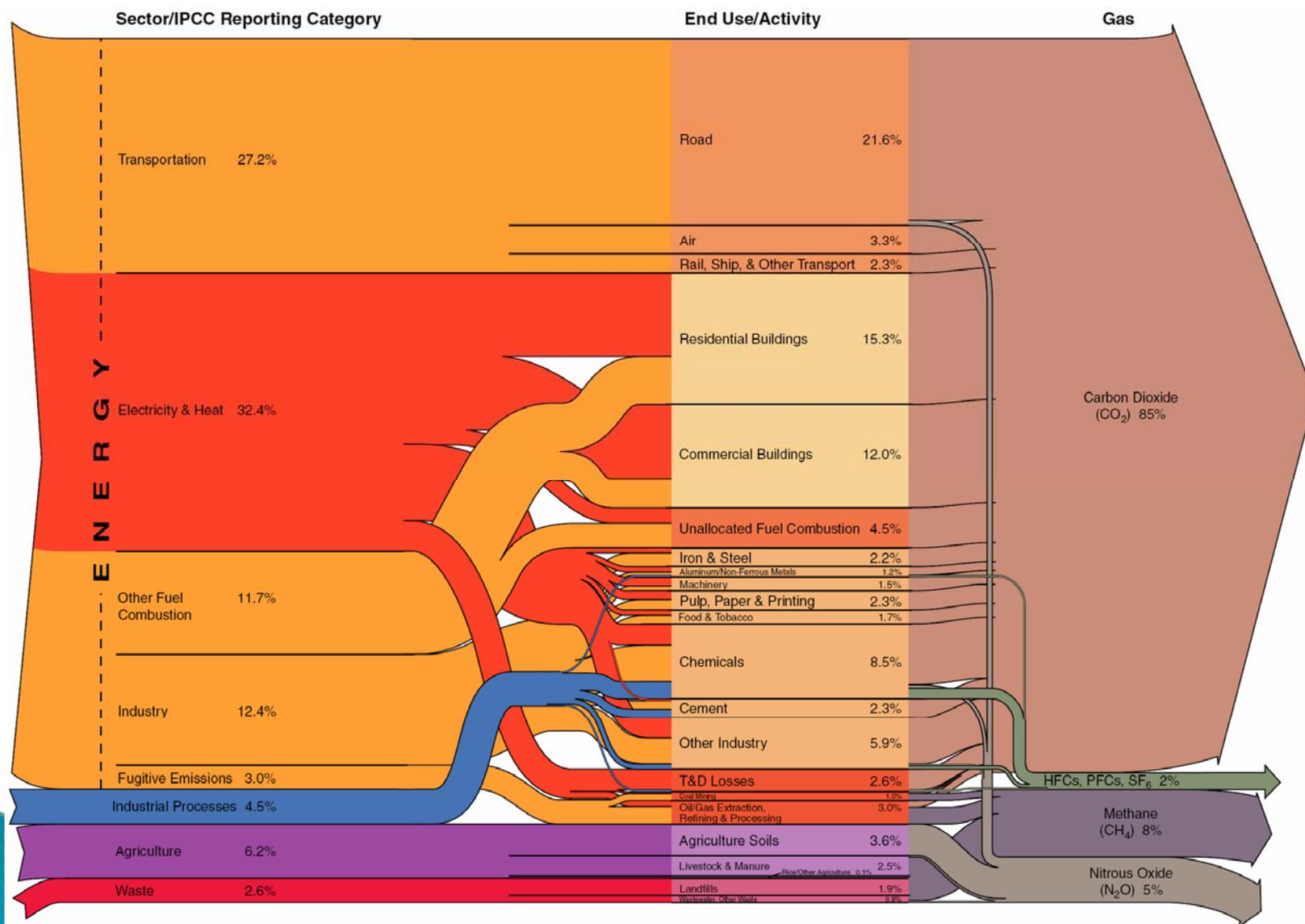
# I want to offer you

- A sense of the experiences that states have had in working with networks of engaged stakeholders to maintain the political will and ensure implementation at all levels of government.
- Assurance that most states are managing within existing budgets, without new bureaucratic layers, although there are new requirements and programs. Innovation and very good management is central to successful programs.

# Key Observations about RI

- Rhode Island has lots of expertise, especially on coastal issues.
- Draft energy plan update is state-of-the-art and contains many of the most cost-effective energy strategies available.
- I will focus on some other areas, as a result.
- A comprehensive planning approach and a binding greenhouse gas emissions target would greatly enhance the process.

# Willie Sutton and GHG Emissions



Source: WRI, Submission to US Senate, April 2006

# The Role of the States

34 out of the 75 largest greenhouse gas emitters in the world are U.S. states.

States can implement many of the same programs as the federal government so when there is a lack of action, they can step up:

- 10 states with cap and trade programs
- 29 states with an RPS
- 20 states with Energy Efficiency standards and targets

# What are the successful states doing?

- ▶ Not one state is yet on track to meet its 2050 target but a few are on track for 2020 or close.
  - ▶ States are now integrating resiliency into their plans
  - ▶ The states doing best on 2020 targets have new management systems and outcome-driven, transparent metrics.
  - ▶ New emphasis on cross-agency governance structures.
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# Which measures and strategies offer the greatest potential for emissions reductions?

- ▶ Energy Efficiency
- ▶ Renewable Portfolio Standards

Are the two biggest along with federal car standards.

Takes large and smaller measures to reach the 2020 targets. Most states have about 85 measures in their plans and cities about 120 measures.

# All levels of government are essential, especially for resiliency

- ▶ Municipal outreach effort – coordinated among agencies and with one delivery point of services.
  - ▶ Successful states including New York, Massachusetts and California have large community outreach programs all with different models for delivery.
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# New York's Climate Smart Communities

- Pledge to tackle climate change by becoming a Climate Smart Community
  - Set goals, inventory community emissions and move to action
  - Encourage renewable energy for government operations
  - Realize the benefits of recycling and other sustainable waste management practices
  - Promote climate protection through community land use tools
  - Inform/inspire public commitment to an evolving process
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# Overall Plan Success

- Effective / transparent process for tracking and monitoring commitments
- A clear work plan
- Management structure accountability for actions
- Building a public network
- Broad staff knowledge of climate change plan
- Coordination between agencies especially in engaging the municipalities and public
- Incorporate energy impact in all state spending & policy decisions
- Sufficient revenue to achieve goals

# Buildings & Energy Efficiency

- All cost-effective energy efficiency
- Utility plans boosted and fully implemented
- Advanced building energy codes revised frequently
- Building rating & labeling (consumer protection and an incentive)
- Solar thermal/ hot water

# Electricity Generation & Distribution

- Clean energy imports strategy
- Photovoltaic incentives
- Clean Energy Performance Standard
- RPS implementation and strengthening
- RGGI implementation continues

# Non-Energy Emissions

- SF<sub>6</sub> reduction
- Plastics combustion reduction
- Stationary equipment refrigerant management
- Aggressively ending natural gas leaks

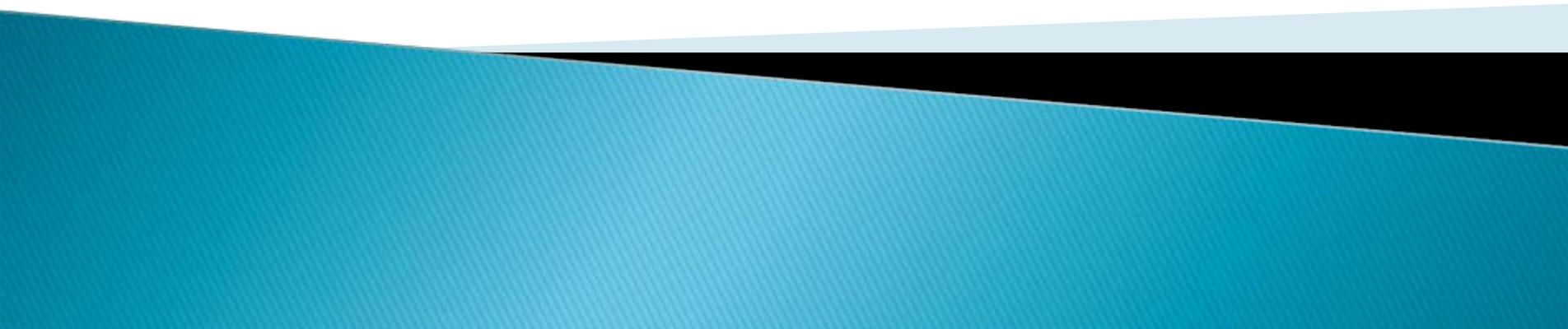
# State-based Vehicle Miles Traveled Reduction Goals

STATE	VMT GOAL
CT	3% reduction from 2020 business-as-usual (BAU) level
DE	20.4% reduction from 2010 BAU
MA	Triple non-vehicle trips: biking, walking and transit and a total <b>7.6%</b> reducing in GHGs from the transportation sector
MD	18% per capita reduction from 2020 BAU (in order to return to 2000 levels); 30% of 2020 BAU by 2035, 50% of 2020 BAU by 2050
NH	A number of VMT-reduction strategies are recommended, but there is no specific % reduction goal.
NJ	VMT growth limited to no more than 1% per year, and will stabilize thereafter.
NY	Reduce VMT 10% from BAU in 2020 (identified in <i>2009 State Energy Plan</i> )
VA	A number of VMT-reduction strategies are recommended, but there is no specific % reduction goal.
VT	Reduce VMT to 2000 levels by 2012 and to 1990 levels by 2025

# Policies for Improving VMT Efficiency ( $E^2$ for transport)

- ▶ Land use planning and development so we don't need the car
  - ▶ Transit improvements: new technology and more dedicated funding streams
  - ▶ Roadway efficiency and pricing
  - ▶ Car sharing
  - ▶ Boosting knowledge of road conditions in real time
  - ▶ New telecommuting options, better IT
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# Transportation & Climate Initiative

- Northeast 62.5 million people, >UK or Italy
  - \$108B/year across the Northeast goes to transportation fuel, most of which leaves the region
  - Minimize reliance on high-carbon fuels
  - Promote sustainable growth
  - Improve transportation system efficiency
  - Enhance travel choices
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# Transportation & Climate Initiative

RI could play an outsized role:

- regional goal on transportation sector
- economic benefits could be large
- regional approach makes it easier to accomplish

# Additional Transportation Measures

- EV Incentives and state wide EV charging network
- No back sliding provision on carbon content of gasoline
- Smart growth work with municipalities
- Energy evaluations in transportation and development project evaluation
- Clean Car/EV incentives/ ZEV MOU

# Additional Areas to Consider

1. Water Sector (energy use reduction there)
  2. Recycling and waste management
  3. Forestry and tree maintenance
  4. Agriculture: maintaining locally grown crops and sustainable agricultural practices
  5. Highly global warming gases
  6. Community-based energy
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# State Adaptation Planning

## **Massachusetts Climate Change Adaptation Advisory Committee**

Has developed a set of observed and predicted changes, guiding principles and key adaptation strategies, and an assessment of vulnerabilities and strategies to help increase resilience and preparedness. This includes:

- 1.establishing redundant supply routes and sources;
- 2.developing local and renewable sources of energy;
- 3.examining insurance market changes to better capture future climate-related risks;
- 4.assessing and protecting facilities and cultural sites that are particularly vulnerable to flooding and sea level rise;
- 5.revising bank finance formulas to reflect risk over the duration of mortgages
- 6.Working with Emergency Management to a much greater extent than before.

# Maryland Climate Change Adaptation Work

In December 2012, Governor O'Malley signed the **Climate Change and CoastSmart Construction** EO, directing all new and reconstructed state structures/infrastructure be planned/constructed to avoid or minimize future flood damage.

All agencies must consider the risk of coastal flooding and sea level rise when designing any capital budget projects.

Department of General Services must update the architecture and engineering guidelines to require new and rebuilt structures to be elevated above the 100-year base flood level.

100+ experts (government, nonprofit, and private) participated in meetings interpreting the most recent literature, evaluating adaptation options, and recommending strategies to reduce Maryland's overall climate change in the areas of changing precipitation and flooding.

# Managing with Climate in Mind

In New York State, all staff is directed to:

1. Make GHG reductions a fundamental goal and to integrate specific **mitigation** objectives into all agency programs, actions and activities, as appropriate.
2. Incorporate climate change **adaptation** strategies into all programs, actions and activities, as appropriate.
3. Consider climate change implications as they perform their daily work activities.

In addition, each Department is directed to:

4. Designate an individual to act as a coordinator for climate change integration. An internal workgroup consisting of these coordinators will assist with climate change **adaptation and mitigation** integration and address data, information and training needs.
5. As part of its annual planning process, identify the specific actions that will be taken to further climate change goals and objectives for both **mitigation and adaptation**.

# General Observations

- ▶ All plans and programs could quantify and disclose GHG emissions.
  - ▶ Today's policy decisions affect ability to reach long-term goal, such as the regional GHG emissions reduction target of 80% by 2050
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