

Protecting Air Quality, with a Co-Benefit of Reducing CO₂ Emissions

Antioch University
Local Solutions: Eastern Climate Preparedness Conference
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Clean Air Act 1970

Amended 1977 & 1990

EPA sets standards and we have to comply

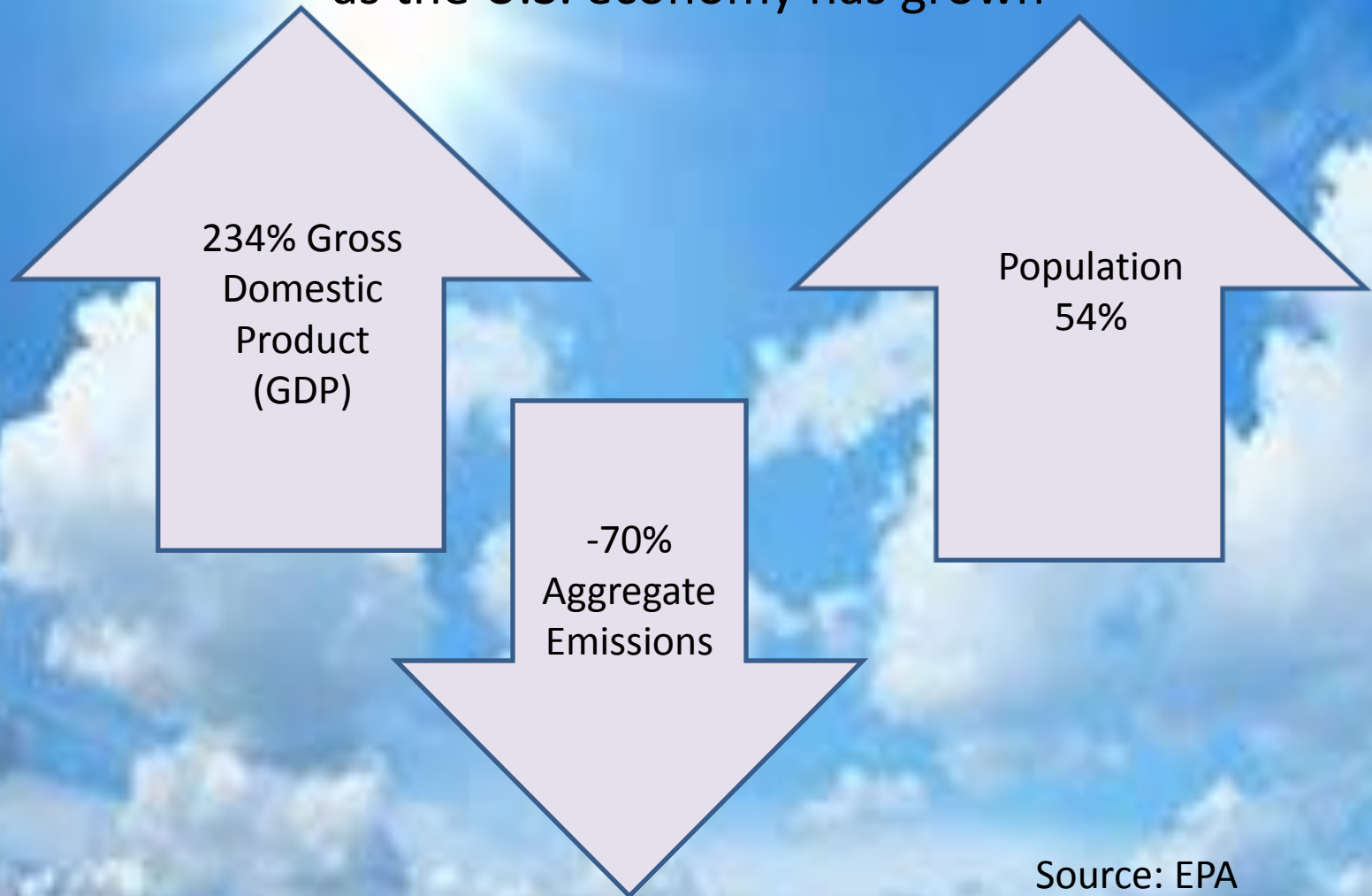
- based on latest science and technology
- Set enforceable emission limits on large pollutant-emitting facilities
- Set emission standards for motor vehicles and fuels

Our job is to ensure that air quality standards are met!



National Progress Toward Clean Air

For more than forty years, the Clean Air Act has cut pollution as the U.S. economy has grown



Source: EPA

Meeting the Clean Air Act Standards Protecting Public Health



Air Resources Division



Air Resources Programs to Keep the Air Clean

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graph TD; A[Air Resources Programs to Keep the Air Clean] --> B[Monitoring]; A --> C[Toxics]; A --> D[Permitting]; A --> E[Risk Assessment]; A --> F[Modeling]; A --> G[Inspections]; A --> H[Compliance]; A --> I[Emissions Inventories]; A --> J[Complaint Investigations]; A --> K[Air Quality Action Days]; A --> L[Energy Programs]; A --> M[Mobile Sources Programs];
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Monitoring

Toxics

Permitting

Risk Assessment

Modeling

Inspections

Compliance

Emissions Inventories

Complaint Investigations

Air Quality Action Days

Energy Programs

Mobile Sources Programs

“The Dirty Half-Dozen”

(Criteria Air Pollutants)

Ozone

Nitrogen Oxides



Fine Particle Pollution (PM)



Sulfur Dioxide

Carbon Monoxide

Lead

EPA has set Outdoor Air Standards for each Criteria Pollutant (National Ambient Air Quality Standards – NAAQS)

Primary Standards: Health-based standards to protect public health with adequate margin of safety (for example parts per million)



Secondary Standards: Welfare-based standards to protect environment (e.g., crops, vegetation, wildlife, buildings and visibility)



NHDES' Mobil Source Program

Clean Diesel Program

EPA supported: retrofits & replacements



Transportation Conformity

A review process to ensure federally funded projects do not impact the NAAQS

Granite State Clean Cities

Reduce petroleum use in transportation by promoting alternative fuels & fuel reduction strategies



Drive Electric Event



Durham's EV
Charging Station

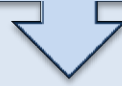
Annual “pump it up” events – check air pressure of employee vehicles



Carpooling incentives



Work with DOT & Regional Planning Commissions



Walkable Communities

Park & Rides; Transit

Commute Green Events

Supporting Local Food!



Co-benefits of Our Programming



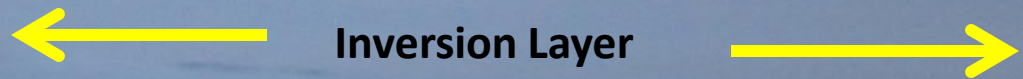
- Ski Areas
- School pick up areas
- School busses
- Municipalities
- Hospitality Industry

Burning of **fossil fuels** for **transportation** is the largest source of greenhouse gas emissions. Second is **electricity generation** (2016)

Wintertime Air Pollution

Keene NH at dawn on 12/2/2012

Cleaner air at higher elevations



Pollution trapped in valley by temperature inversion

Wood Stove Change - Out Programs

Problem with wood smoke build up in valley areas

Funding to replace old inefficient wood stoves

Education about burning & storing wood the right way



Outreach Campaign Message

Burn the right wood – burn only dry seasoned hardwood

Use the right stove – it is best to use an EPA certified stove.
If you can't buy a new woodstove keep yours cleaned at least yearly

Burn the right way – maintain a hot bright fire. Smoldering wood is inefficient and makes more smoke!

Haven't gone over the standard since 2013!

Emission reductions, more efficiency in wood burning, more sustainable fuel use & less pollution!



Not Just Air Resources

Other Initiatives with Co-Benefits



More, More, More
Tell us more

NHSaves Button Up Workshops

NH Saves - Collaboration of New Hampshire's electric and natural gas utilities

Provide customers with information, incentives, and support designed to save energy, reduce costs, and protect our environment statewide

Cover basic building science principles and examples of whole house weatherization measures that will button up homes for the heating and cooling seasons

Include energy efficiency programs offered by NH utilities, availability of energy audits and weatherization, rebates on electric and gas appliances as well as for new construction



Other Ideas and Programs with Co-Benefits of Reducing CO₂ Emissions

Partner with Utilities to Help
Businesses Reduce Energy Use +
SAVE MONEY

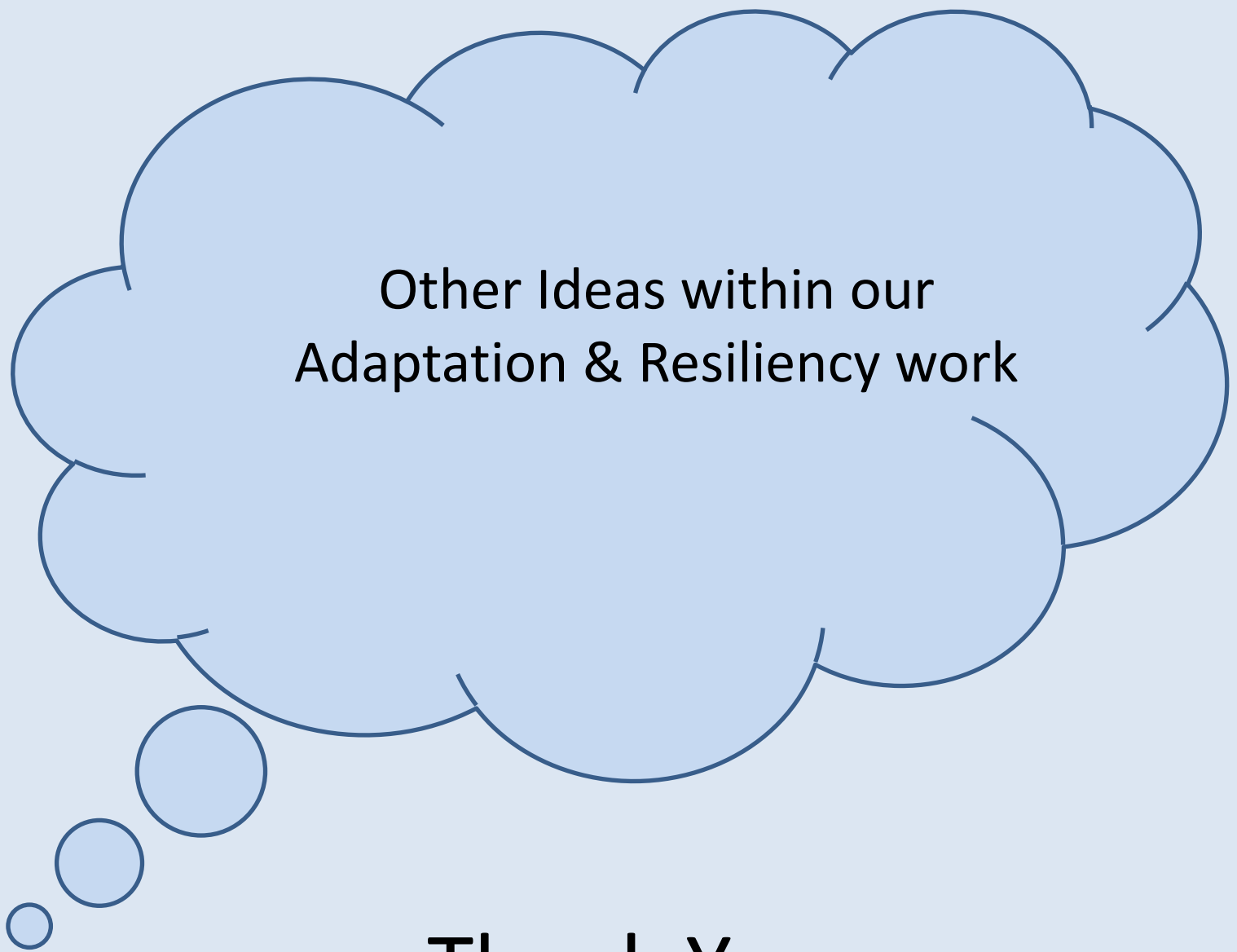
Water Conservation

Keeping Land in Open Space
Forestry + Agriculture
Wetlands + Salt Marshes + Buffers
CO₂ sink

Any Waste Reductions Initiatives

Any Energy Efficiency Initiatives





Other Ideas within our
Adaptation & Resiliency work

Thank You