



**Arizona
Climate Change Action Plan**

**WESTCARB Annual Meeting
November 8, 2006**

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Executive Order 2005-02

- Signed by Governor Napolitano on February 2, 2005
- “Arizona and Western States have particular concerns about the impacts of climate change and climate variability on our environment, including the potential for prolonged drought, severe forest fires, warmer temperatures, increased snowmelt, reduced snow pack and other effects.”
- “Actions to reduce greenhouse gas emissions, including energy efficiency, conserving natural resources and developing renewable energy sources, may have multiple benefits, including economic development, job creation, cost savings, and improved air quality.”

Arizona Climate Change Advisory Group

www.azclimatechange.us

- Executive Order 2005-02 created the Arizona Climate Change Advisory Group (CCAG)
- CCAG Charge:
 - Establish a baseline inventory and forecast of greenhouse gas emissions in Arizona by June 30, 2005
 - Produce an action plan with recommendations for reducing greenhouse gas emissions by June 30, 2006

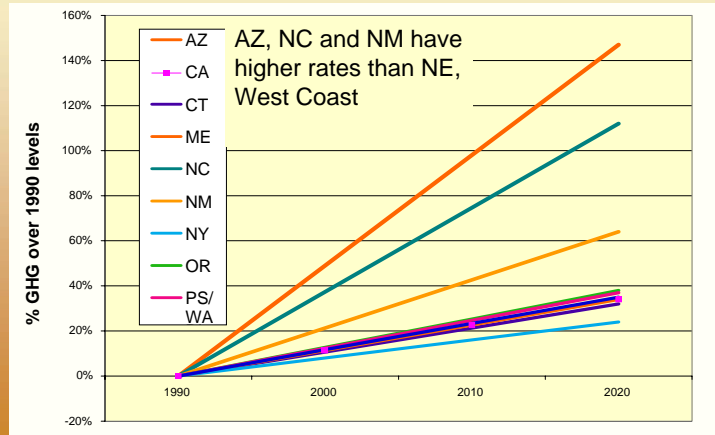
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Arizona GHG Emissions & Inventory

- Arizona presently accounts for approximately 92.6 million metric tons (MMt) annually of GHG emissions – roughly 1% of the nation's total
- Arizona's GHG emissions have increased more than the nation as a whole, due to rapid population growth, although per capita emissions are lower than national average (14 t vs. 22 t)
- Arizona's GHG emissions are projected to increase by 148% over 1990 levels by 2020 (to 147 MMt) and over 200% by 2040 (to 179 MMt)

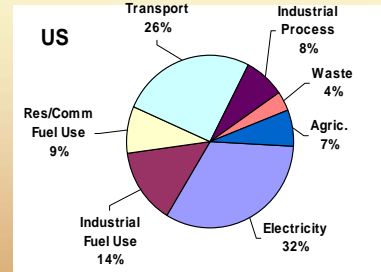
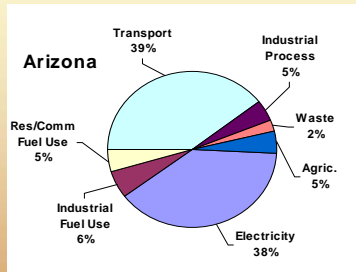
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State GHG Growth Forecasts



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Arizona GHG Emissions, by sector



- **Electricity Use/Production and Transportation together account for roughly 77% of Arizona's total**

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Arizona CCAG Process

- **The CCAG established five sector-based Technical Work Groups (TWGs) to develop GHG reduction options:**
 - **Energy Supply**
 - **Residential-Commercial-Industrial Use**
 - **Transportation and Land Use**
 - **Agriculture and Forestry**
 - **Cross-Cutting Issues**

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Arizona CCAG Process

- **Facilitated, consensus-building approach**
- **Consensus sought but not mandated**
- **Two levels of screening**
 - **Priority for analysis – supermajority**
 - **Inclusion in final report – majority support**

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Climate Change Action Plan

- **Comprehensive set of 49 policy options**
- **Early and aggressive action**
- **Implement as a set, to extent practicable, to achieve maximum GHG emissions reductions possible**



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CCAG Recommendations

- **Increased Environmental Portfolio Standard & increased incentives/applications for renewable energy**
- **Metering & pricing strategies and integrated resource planning**
- **Demand-side efficiency goals, funds, incentives and programs**
- **Enhanced appliance standards, building standards/codes and building design incentives and programs**
- **Smart growth and multimodal transit**
- **Increased use/production of alternative fuels and technologies for vehicles**

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CCAG Recommendations

- **National or Regional Cap & Trade Program**
- **GHG Emissions Reporting & Registry**
- **Clean Car Vehicle Emission Standards**
- **Goals & Timelines:**
 - **Reduce Arizona's GHG Emissions to 2000 Levels by 2020**
 - **Reduce Emissions to 50% Below 2000 Levels by 2040**

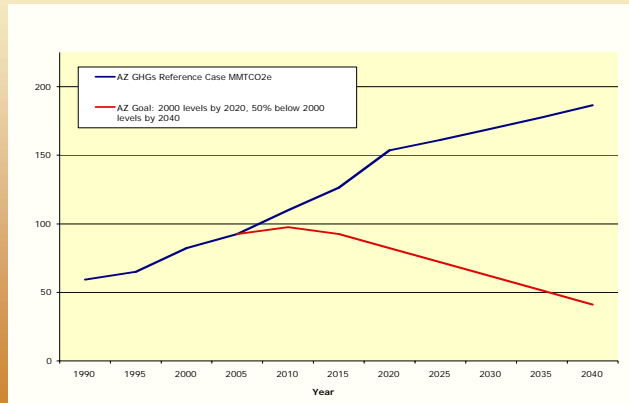
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Executive Order 2006-13

- **Establishes Climate Change Executive Committee**
- **Contains specific directives, including:**
 - **ADEQ to develop a GHG emissions reporting mechanism and work with other Western States to establish a regional registry**
 - **ADEQ to adopt and implement the Clean Car Program**
 - **Convert state vehicle fleet to low-GHG-emissions vehicles**
- **Sets goal to reduce state's GHG emissions to 2000 levels by 2020 and to 50% below 2000 levels by 2040**

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Reduce GHG Emissions to 2000 Levels by 2020, 50% Below 2000 levels by 2040



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State Climate Goals

State	GHG Emissions Reduction Goals and Timelines
AZ	2000 levels by 2020; 50% below 2000 levels by 2040
CA	2000 by 2010; 1990 by 2020; 80% below 1990 by 2050
CT	1990 by 2010; 10% below 1990 by 2020; 75% by 2100
MA	1990 by 2010; 10% below 1990 by 2020; 75% by 2100
ME	1990 by 2010; 10% below 1990 by 2020; 75% by 2100
NC	TBD
NJ	3.5% below 1990 by 2005
NM	2000 by 2012; 10% below by 2020; 75% by 2050
NY	5% below 1990 by 2010
OR	1990 by 2010; 10% below 1990 by 2020; 75% by 2100
PS/WA	1990 by 2020; 70-80% below 1990 by 2050
RI	1990 by 2010; 10% below 1990 by 2020; 75% by 2100

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Anticipated Outcomes

- **Reduce GHG emissions in Arizona by more than 69 MMtCO₂e in 2020 – several million metric tons more than the amounts called for in the recommended goal**
- **Reduce cumulative GHG emissions (2007-2020) by more than 485 MMtCO₂e**
- **Result in overall net economic cost savings of more than \$5.5 billion between 2007-2020, with additional significant cost savings expected between 2020-2040**

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For More Information

www.azclimatechange.us

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Multi-State Climate Registry

- Developmental/exploratory process underway
 - Representatives of 30 states and Indian Nations
 - Regional air quality organizations
 - Existing climate registries
 - World Resources Institute

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Multi-State Climate Registry

- Intended to provide accurate, consistent, transparent, and verified data and robust accounting infrastructure
- Will support state and tribal programs, not supplant or compete with any federal efforts
- Proposed registry benefits:
 - Provide common currency for state and tribal programs
 - Minimize the burden on reporting entities
 - Provide an opportunity for entities to establish a baseline and document early action

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Multi-State Climate Registry

- Steering Committee
- Work Groups
 - Options Committee
 - Technical Committee
- States and tribes meeting regularly to work out details
- Goal is to launch some time in 2007

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