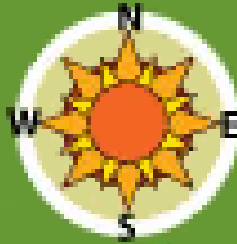




Preparing for Climate Change in Tucson

David Schaller, Administrator
Office of Conservation and
Sustainable Development



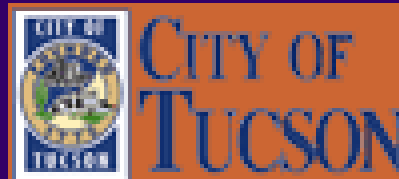


City of Tucson Office of
**CONSERVATION AND
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community, identity, prosperity, stewardship



**Mayor's Climate Protection Agreement
Updated Greenhouse Gas Inventory
Framework for Advancing Sustainability
Climate Change Advisory Committee
Climate Change Mitigation and Adaptation Plan**

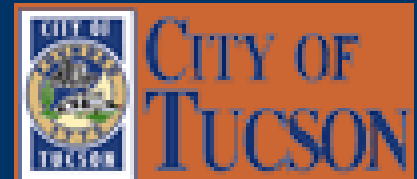


The MCPA Agreement

- **Meet or exceed Kyoto target in City operations and the community**
- **Inventory GHG emissions**
- **Set GHG reduction targets**
- **Create an Climate Action Plan**
- **Eleven other action items, from reducing sprawl to increasing the pump efficiency in water systems**

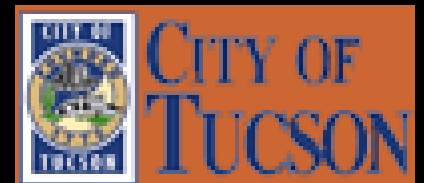
Mayor and Council Decisions

- **Framework Document - Created the concept of a Climate Change Committee**
- **Ordinance Creating the Committee**
- **Approval of Committee Membership**



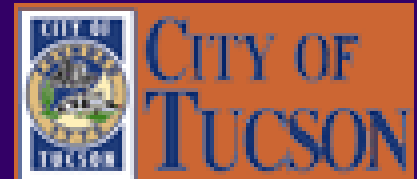
Climate Change Advisory Committee

- **Brings high-level skill sets, vision, expertise**
- **Addresses multiple dimensions of climate change in a strategic manner**
- **Represents key stakeholder groups**
- **Develops a Climate Change Mitigation and Adaptation Plan**



Climate Change Advisory Committee

- **Climate Change**
- **Sustainable Land Use and Transportation**
- **Architecture and Sustainable Design**
- **Community, Grassroots Climate Change Efforts**
- **Urban Green Space/Urban Heat Island**
- **Low-income Representation**
- **Local Economy**
- **Small Business**
- **Workforce Advocacy/Training**
- **Neighborhood Advocacy**
- **Social Services**
- **Human Health**
- **Food Security**



Actions to Date

- **Began Monthly Meetings in April 2009**
- **Committee Education (Climate Science, GHG Inventory, TEP/SWG Programs, Pima County's Program, Adaptation)**
- **Yet to Come (Buildings, Transportation, Resource Depletion)**
- **Climate Adaptation Subcommittee Formed**
- **Mitigation Measure Matrix Under Development/UA Support Enlisted**

Developing Mitigation Measures

- **Examine Other Governments' Climate Action Plans**
- **Compile Mitigation Measures**
- **Select Evaluation Criteria**
- **Calculate Costs and Benefits**
- **Screen Measures (Committee/Staff)**
- **Outreach and Education**
- **Draft Plan With Selected Measures Submitted to Mayor and Council**




Mitigation Evaluation Criteria

- **GHG Reduced as % of City's Overall Goal**
- **Costs - Initial/Total per MT/CO₂e**
- **Participation Rate Expected**
- **Technological Readiness**
- **Consistency with Adaptation Strategy**
- **Community Support**
- **Political Support**
- **Legal Considerations**



Climate Change Adaptation

- Adaptation reduces the impact of climate stresses on human and natural systems



Adaptation: the ability of society to accommodate changes in climate with minimal potential social damage or economic cost

Behavioral changes

Technological solutions

Institutional adjustments

Climate Change Adaptation

- **The rise in greenhouse gases is unlikely to slow or reverse in the near term**
- **Additional Climate Change is already in the pipeline**
- **Climate Change will continue long after greenhouse gases are stabilized**

Why Local Government Leadership in Climate Change Adaptation?

- **Localities are on the front line of Climate Change; inaction is not an option**
- **Adaptation is good governance and good risk management**
- **Early actions avoid the high economic and social costs of delayed adaptation**
- **Climate Change preparedness is similar to local emergency preparedness but over a much longer time frame**

Why Local Government Leadership in Climate Change Adaptation?

- **Adaptation can secure multiple community benefits (i.e. rapid solar energy deployment) creates local jobs, keeps money locally, and positions communities securely in a regional and global economy**

Climate Change Synergies Mitigation and Adaptation

Heat wave plans, “buddy systems”	Improved social capital/resilience
Reduced vehicular travel	Fewer accidents, reduced air pollution, healthier populace
Fuel efficiency	Reduced air pollution, healthier populace
Locally grown food	Reduced pesticide loading, healthier populace
Energy-efficient buildings	Lower operating costs, economic security
Alternative energy sources	Business opportunities, economic security

Climate Change Adaptation planning will affect those with responsibilities for:

- **Ensuring safe and reliable public services**
- **Ensuring environmental quality**
- **Economic development**
- **Land use planning and zoning**
- **Fiscal responsibility and risk management**

**: Climate Change Adaptation
planning will affect those with
responsibilities for:**

- **Capital investments**
- **Emergency response**
- **Water resources management**
- **Public health**
- **Ecosystem management**
- **Transportation infrastructure**

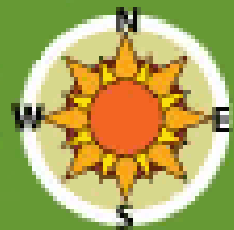
Climate Adaptation Planning

- **Review approaches, strategies, and plans from other communities**
- **Develop additional information needs**
- **Identify community resources and stakeholders**
- **Conduct vulnerability and risk assessments**
- **Set preparedness goals and develop a preparedness/adaptation plan**
- **Integrate with mitigation plan throughout**

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<http://www.tucsonaz.gov/ocsd/climatechangecommittee>



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