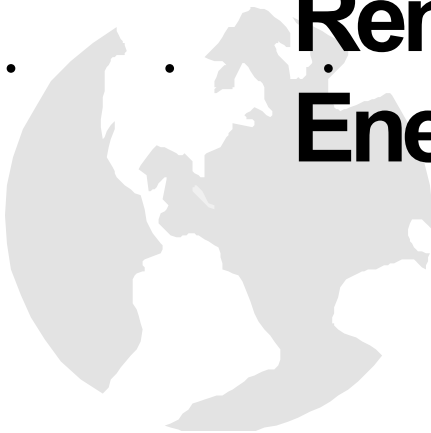




Report of the Governor's Working Group on Renewable Energy & Energy Efficiency



*Submitted to Governor Janet Napolitano
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Renewable Energy and Energy Efficiency Working Group Members

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Jeff Schlegel, Southwest Energy Efficiency Project (Vice-Chairman)

David Berry, Western Resource Advocates

Dave Castillo, Inter Tribal Council of Arizona

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Ray Williamson, Arizona Corporation Commission

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Introduction

The Governor's Working Group on Renewable Energy and Energy Efficiency ("Group") was established and its members appointed in early summer 2004. Its challenge was to rapidly assemble, debate and vote on whether to forward recommendations on the subject matter for the Governor's consideration. The group established its mission as follows:

The mission of the Governor's Renewable Energy and Energy Efficiency Working Group is to: identify strategies to achieve a more diverse, cleaner energy generation mix within Arizona by increasing the use of renewable energy and energy efficiency in the overall energy portfolio; identify the governmental or non-governmental entities with the responsibility and authority for achieving that objective; and develop action recommendations for the Governor to consider.

The Group's recommendations to the Governor are presented in the following section. The remainder of this section describes how the Group developed its recommendations.

The Group met at monthly intervals from July 2004 through December 2004 and again in February 2005.

At the beginning of the process, the Group established a baseline of information on renewable energy and energy efficiency topics. The Group was also given presentations from private sector representatives of the solar, wind and biomass industries.

Throughout the process, proposals and recommendations were solicited both from the Group members themselves and from the public at large. The result was about 135 recommendations, some of which were duplicates of one another, and many of which fell outside the expressed mission of the Group. Of the 135 proposals and recommendations, the Group chairman identified about 40 that directly pertained to the Group's mission.

At its December 2004 meeting, the Group discussed the proposed recommendations. The results of that meeting constitute the main body of this report, "Recommendations." In particular, the Group discussed and, as necessary, amended each proposed recommendation. Recommendations to the Governor were included in this report by majority vote. Those recommendations not receiving an affirmative vote of the majority of the Group are not included in the list of recommended actions. Most recommendations that were adopted by the Group were approved unanimously either as originally written or as amended. However, a few recommendations received one or two "no" votes, and fewer still met with sharp division among the members. Group members disagreeing with the majority position on controversial items were invited to express their disagreement in the form of a minority position.

As noted above, some proposals were determined not to meet the criteria set out in the mission. For example, some proposals may be best addressed by the Legislature, the Arizona Corporation Commission, or municipal governments. To keep track of proposals not adopted by this Group, the report incorporates them in the Appendix for future reference.

The Group explicitly recognizes the work of other entities paralleling its mission, particularly the Arizona Corporation Commission and its existing Environmental Portfolio Standard (see Appendix) and ongoing renewable energy and energy efficiency workshop processes. A new legislative committee has been formed to look at renewable energy and energy efficiency

issues. The Western Governor's Association adopted a Policy Resolution on June 22, 2004 (see Appendix), entitled A Clean and Diversified Energy Initiative for the West.

The Governor's Office may also benefit from reviewing actions taken by governors in other states. A short description of task forces or councils with missions similar to that of the Arizona Group is incorporated in the Appendix for reference.

Several important concepts underpinned the Group's consideration of individual recommendations. Economic development and local job creation were two principal themes guiding our efforts. While deliberating the recommendations, the concept of cost-effectiveness was a consistently important factor. The members of the Group agreed that there are natural financial limitations to a rapid switch from one energy system to another, although individual members likely differ on the actual definition of what defines "cost-effectiveness." Consequently, several recommendations are limited to cost effective actions or propose to obtain additional information before establishing a policy. The idea of sustainability in actions and results also permeated our discussions.

The Group emphasizes the importance of establishing a follow-up Task Force with a mission to increase the use of renewable energy and energy efficiency in Arizona, and strongly urges that Task Force to:

- Further consider and develop the group's recommendations in order to achieve the recommended mission of the Task Force
- Consider other renewable energy and energy efficiency strategies
- Clearly define renewable resources and renewable technologies
- Assess the availability of renewable energy and energy efficiency resources in Arizona
- Assess the cost-effectiveness, costs and benefits of renewable energy and energy efficiency strategies
- Explore appropriate goals and metrics to achieve the recommended mission of the Task Force
- Further examine the public comment received by the Group

Finally, the Group expresses its gratitude to the Department of Commerce Energy Office for excellent staff work in support of our efforts.

Recommendations

This section presents the Group's recommendations for the Governor's consideration. Each of the recommendations could be implemented by the Executive branch of State government. Recommendations are presented by topic: strategic policies; leadership by examples set by the State government; State-Tribal coordination; economic development and Department of Commerce actions; development of building codes, green buildings and appliance efficiency standards; energy efficiency and the environment; and other actions. The categorization of recommendations into groups is principally for organizational purposes; they are not necessarily listed in order of importance.

Except where noted, the recommendations listed below were passed unanimously.

Strategic policies

- The Governor should help create a Renewable Energy and Energy Efficiency ethic for the state. The recommendations set forth below are intended to promote development of this ethic.
- The universities should create a mechanism that will combine and coordinate energy research efforts of the three major universities in Arizona (Vote: 12-1).
- The working group endorses the activities of WGA and supports Arizona's involvement in that regional initiative.¹
- The Governor's staff and the Energy Office should be directed to coordinate and conduct studies to examine methods by which the State can contribute to the proposed WGA goals, determine a preferred method or methods, identify the actions necessary to make the contributions and identify the economic effects thereof.
- The Governor should name one or more Task Forces to follow up this working group with a mission to increase the use of renewable energy and energy efficiency in Arizona.

Leadership-by-example

- The Governor should increase the use of renewable energy in state and public buildings through the efforts described below.
- Cost effective energy-efficiency and renewable energy systems should be installed in government buildings and green power should be purchased for government buildings.
- The Governor and the Department of Administration should establish a program to install renewable energy systems as additional backup services in emergency services buildings (police stations, fire stations, National Guard facilities).

¹ The WGA Resolution reads in part:

“...Western Governors will examine the feasibility of and actions that would be needed to:

- Achieve a goal to develop 30,000 Mw of clean energy in the West by 2015 from resources such as energy efficiency, solar, wind, geothermal, biomass, clean coal technologies and advanced natural gas technologies.
- Increase the efficiency of energy use by 20% by 2020. While energy efficiency does not eliminate the need for new generation, it is critical that Western states pursue an energy efficient system.”

- The Governor should require state buildings – including schools – to purchase, install and operate cost-effective renewable energy equipment or purchase green power to meet 5% of their building energy needs over a phased-in period by 2012.
- The Governor should issue an Executive Order to encourage and highlight State efforts to lead by example.
- The Governor should use public events, such as installing energy efficiency products in the Governor's residence, or openings of new energy efficient projects, or public awards (energy efficiency or renewable energy awards) to draw attention to the State's renewable energy and energy efficiency ethic.
- Public messages encouraging energy efficiency should be used generally (e.g., "enough to use, not enough to waste"), seasonally (reduce the summer peak), and during emergencies (e.g., similar to those during the substation outage).
- The Governor's or Energy Office's "tag" should be put on Energy Star public service announcements (PSA's) as part of national Energy Star campaign.
- The Governor should issue proclamations to support the State's renewable energy and energy efficiency ethic, such as the Energy Star month proclamation (August 2004).
- The Governor and state agencies should promote the use of State and other public facilities as demonstrations of energy efficiency and renewable energy.
- The Governor and State agencies should require State offices to buy a percentage of their electricity from renewable resources, if cost-effective.

State-Tribal coordination

- The Governor should direct relevant state agencies and offices to document how each would coordinate with Tribes to increase access by Tribes to programs and funding for energy services and energy projects on or off the reservation.. (Vote: 12-1).
- The Governor should direct the State Revenue Department to explore Tribal-State taxation approaches that encourage renewable energy and economic development opportunities on Tribal lands.

Economic Development and the Department of Commerce

- The Arizona Department of Commerce should promote Arizona renewable energy and energy efficiency products through "Arizona Built" publications, promotions in international trade activities, and support of the Environmental Technology Industry Cluster efforts.
- The Department of Commerce should increase state efforts to leverage federal programs such as Building America and Rebuilding America to benefit the state.
- The state should explore ways of ensuring the longevity of, adequate funding for, and influence of, the state Energy Office.
- The Department of Commerce Energy Office should increase its work with municipalities.

Building Codes, Green Buildings and Appliance Efficiency Standards

- Energy codes should be encouraged by the Energy Office that will make effective use of energy efficient devices and construction methods.
- The Governor and the Energy office should support energy efficiency in building codes, code upgrades, and training.

- The Governor and the Energy Office should support federal efficiency standards (communicated directly to US DOE).
- The Governor and the Energy Office should support green buildings and green building standards (e.g. LEED standards, Scottsdale Green Building program, ADEQ building). (Vote: 12-1).
- The State should investigate the feasibility of requiring all new State-funded or State-controlled building projects being required to certify to green building standards (e.g. LEED-NC Silver or higher level for new construction).
- The State should investigate the feasibility of requiring over the next five years all existing State-funded or State-controlled buildings to certify to green building standards (e.g. LEED-EB Silver or higher level for existing buildings).
- With respect to the LEED green building standards, the State should investigate the feasibility of requiring each State-funded or State-controlled building project to achieve a minimum of four (4) energy efficiency points and at least two (2) additional points through a combination of on-site renewable energy and off-site green power.
- With respect to the LEED green building standards, the State should investigate the feasibility of requiring additional commissioning and measurement & verification efforts to ensure that they are meeting energy targets.

Renewable Energy, Energy Efficiency and the Environment

- The Governor should consider cost-effective energy efficiency and renewable energy as strategies for reducing air pollution and carbon dioxide emissions. (Vote: 9-4. A minority position is offered to this recommendation, as follows: “Air quality management is a complex and serious issue with numerous considerations and diverse stakeholders. Recommendations on air quality management must be carefully crafted in a broader context than this Working Group represents and recommendations regarding air quality management are beyond the scope of this Working Group”).

Other State Action

- The Governor should encourage expansion of tax credits or other tax incentives, if appropriate, for on-site renewable energy and energy efficiency projects.
- The Governor should encourage the Schools Facilities Board (with Energy Office support) to increase energy efficiency in schools (new and existing).
- The Energy Office should study the feasibility of serving all thermal loads using renewable energy by 2020. (Vote: 7-6).
- The Department of Administration should study the feasibility of serving all thermal loads in state facilities with renewable resources by 2020. (Vote: 7-6).
- The State Land Department should review the state land leasing and bidding process to encourage development of renewable energy on state land.
- For State-funded or State-controlled buildings, payback requirements should be replaced with life-cycle costing for analysis of energy efficiency and renewable projects.
- Solar Access laws should be further clarified to encourage solar installation on private residences.