



**PIMA COUNTY ENVIRONMENTAL QUALITY ADVISORY COUNCIL**  
**150 W. Congress Street, Suite 109**  
**Tucson, AZ 85701**

Summary Minutes – May 20, 2009  
Bank of America Building, Conference Room, 7<sup>th</sup> floor  
33 N. Stone, Tucson, AZ  
1:30 p.m.

Members Present:

Dr. Roger Caldwell  
Mr. Daniel G. Rowe  
Mr. Allan MacDonald  
Dr. Eric Betterton  
Mr. Curt Lueck  
Dr. Mark Witten

Members Absent:

Mr. Warren Thompson  
Mr. Jeff Yockey  
Mr. Ben Dorris  
Mr. Peter Livingston

Others Present:

Ursula Kramer, Director, PDEQ  
Richard Grimaldi, Deputy Director, PDEQ  
Vicki Bennie, Council Secretary, PDEQ  
Tedra Fox, Sustainability Manager for Pima County  
Arlan Colton, Planning Official for Pima County  
Lon Huber, AzRise Project, U of A  
Lee Comrie, Pima Association of Government  
Steven Vaughn, URS

**I. CALL TO ORDER AND INTRODUCTIONS**

Dr. Caldwell called the meeting to order and introductions were made.

Handouts:

AzRise A Bright Future for Solar Energy brochure  
Pima County Recycling Poster, "How Green Can You Go?"

**II. APPROVAL OF THE FEBRUARY 18, 2009, MINUTES**

Mr. MacDonald recommended several minor changes to the minutes. The motion passed with a unanimous vote to approve the February 18, 2009, minutes as amended.

**III. ARIZONA RAPID GROWTH AND ITS IMPLICATION**

Mr. Arlan Colton, Planning Official for Pima County, was co-chair of the Governor's Growing Smarter Council, until it dissolved. Mr. Colton's presentation included the housing boom, housing bust and prediction to return to normalcy. Mr. Colton showed the EQAC a page on the Arizona Chamber of Commerce's website ([www.azcommerce.com/smartgrowth/scorecard](http://www.azcommerce.com/smartgrowth/scorecard)) that listed every Arizona County and its scorecard. Agencies self evaluate themselves based on a series of values. Locally, all counties have completed a scorecard. Pima County staff reviewed responses with Mr. Huckelberry for our scorecard. The scorecard will be updated approximately every two years. According to a comparison of Arizona Counties, Coconino County is listed as the least stressed while Yuma County is listed as the most stressed due to very high unemployment.

**III. ARIZONA RAPID GROWTH AND ITS IMPLICATION (CONTINUED)**

Pima County might have less political clout within the state because we are not growing as fast as Maricopa and Pinal Counties. Recommendations are that we rebuild Tucson's downtown area and add a light rail.

The Town Hall completed two good reports in 2006: one dealing with Arizona's rapid growth and the other regarding people and the demand for more human services.

One of the EQAC members asked if the cost of energy for this area was considered. Mr. Colton stated that our ability to build solar in Pima County is more expensive because energy costs less here than other areas such as New Jersey. Mr. Colton felt that growth will come whether solar is developed or not. The "new normal" will not be like the "old normal". Large growth was not normal growth and water availability will be the ultimate growth leveling factor.

**IV. AzRISE – SOLAR CONSORTIUM AT U OF A**

Mr. Lon Huber of the University of Arizona, is currently an energy policy associate for the Arizona Research Institute for Solar Energy (AzRISE), a global organization engaged in research and economic and policy analysis.

Mr. Huber's presentation covered the AzRISE project and the outcome of analysis he performed on solar investment. AzRise is an institute that is involved in cutting-edge technical research, policy, economic analysis, education and outreach. Based at the University of Arizona, they are currently funded for 23 projects through various departments. They have approximately 60 college students working for them with ties to University of Phoenix, Arizona State University, Northern Arizona University, private industry and all of the utility companies.

AzRise was formed to combat global instability, unpredictable climate changes, increased temperature and economic decline as a result of those issues. The best science tells us we need to limit global emissions to 450 parts per million. Anything above that, we are at risk of reaching climatic tipping points where the tundra is thawed and releasing methane. Most of the greenhouse gases, about 65%, come from energy. The United States needs 600 new power plants that do not release any carbon at all. Another question is do we have the water to run all of these power plants? Electricity production takes about 39% of our fresh water withdrawals, irrigation is a little more. The power grid is over-congested which will lead to liability issues, rising costs and will only get worse because of old infrastructure. In Germany, solar use is at 47 percent. In Arizona, solar use is at 2 percent. Arizona gets most of its energy from coal.

The United States has a huge challenge that needs to be met and we will need to meet it with clean, renewable energy from an abundant source that is easy on transmission lines, light on water usage and rapidly deployable in order to meet the 450 parts per million emission goal. Solar is the most dynamic and flexible technology and most abundant energy resource. Currently, there is an over abundance of solar panels at this time. You can put solar on the roof of your car, on your backpack, in the shingles of your house or in a solar power tower. For some forms of solar, you do not need transmission lines. Solar energy does not require water and the technology is getting better and more diverse.

**V. AzRISE – SOLAR CONSORTIUM AT U OF A (CONTINUED)**

AzRise researched the challenges facing solar. Mr. Huber said some of the fallacies regarding solar:

Misconception	Truth
Solar takes up too much land	Compared to hydro power, solar uses less land
Not enough silica for solar	Not all types of solar panels use silica
Too expensive	Depends on the type and location of technology, when comparing with other energy sources, solar is a long term investment but comes out ahead

AzRise offers educational training courses for those with different backgrounds, demonstration sites with public information displays and a visitors' center.

Solar efficiency needs to improve. Solar power is intermittent as it does not work at night. In order to have high concentration in the Arizona and the rest of the U.S., you need to increase efficiency or have a back-up system. The answer is storage and that is what AzRise is addressing. AzRise formed a storage consortium with all of their partners that are looking at various methods of storage, such as compressed air, batteries, super compressors, etc. AzRise is going working on feasibility studies, economic analyses and coordination.

**VI. SUSTAINABILITY**

When Ms. Tedra Fox made her last EQAC presentation in September 2007, she had only been in the position of Pima County Sustainability Manager for about a month. This was shortly after the Board of Supervisors adopted the Sustainability Resolution in May, 2007.

Ms. Tedra Fox reported that Pima County has completed the first sphere of sustainability, the County operational sphere. She stated that the County's Sustainability Action Plan is available online. The plan was adopted by the Board in August, 2008 and is the product of 22 departments. The purpose of this plan is to implement the Board of Supervisors Resolution that established a variety of sustainability goals and actual implementation targets. The report includes the following areas: Alternative Fuel Vehicles, Renewable Energy and Energy Efficiency, Green Building, Waste Reduction, Water Conservation and Management, Green Purchasing, Land Conservation and Management, and Reducing the County's Carbon Footprint.

A Sustainability Report on the progress of the action items and 29 success indicators for the first fiscal year (ending June 30, 2009), will go to the BOS for approval on August 4, 2009. This report card will be available on the County website for the public's review.

Ms. Fox stated that Pima County had very small solar applications prior to the Sustainability Plan. Solar was used on some of the pumping stations at the wastewater treatment plant and at the Department of Transportation. In the past year, Pima County has executed two agreements for up to 6 megawatts of solar energy to be produced for county facilities over a three year period. One specific project targeted for solar energy is the Roger Road Treatment Plant. The Board goal for renewable energy is that county facilities will use 15% of renewable energy sources.

**SUSTAINABILITY (CONTINUED)**

Several organizations talked about creating a multi-county consortium to develop a Southern Arizona Solar portfolio. Pima County developed a proto-type brochure and it is being reviewed by several agencies such as PAG, TEP and TREO. An idea was for each jurisdiction to have a solar concierge and identified Pima County's as Yves Khawam, the Chief Building Official. Any solar company that is interested in the Southern Arizona market will have a personal contact person to help guide them through the process.

Pima County has identified 3,000 acres that are suitable for solar use. These parcels are all over one acre in size and are not located in the Sonoran Desert Conservation Land System. These parcels are mapped and available to give companies that are interested in citing in the area.

Ms. Fox gave an overview of the County's Green Pueblo online map of the area. The public can nominate social and economic attributes to an area such as community centers, food banks, thrift stores and recycling centers. These areas are then mapped and are at: <http://www.greenpueblomap.org>.

**VII. PDEQ STAFF REPORT**

Ms. Kramer reported that fee packages were approved by the Board of Supervisors for the water program and the RCRA program. These programs have not had a rate increase in years and were not covering the cost to administer them. PDEQ requested that the Board give these programs back to the State or raise the fees. The Board directed PDEQ to prepare fee packages for approval.

The Board approved a residential solid waste tipping fee increase. All tipping fees were raised to \$10 per entry except for Ryan Field Transfer Station and the Ajo Landfill. Ryan Field went from being free to \$5 per entry, and; the Ajo Landfill is still free.

PDEQ has increased surveillance for wildcat dumping on the weekends. Mr. Custer, PDEQ's wildcat dump inspector knows the popular spots for illegal dumping and monitors those areas for activity. The Board requested a report after one year on this issue to determine if there is an increase in illegal dumping after the increase in tipping fees.

**VIII. CALL TO THE PUBLIC**

Ms. Comrie of PAG reported the greenhouse gas emission inventory data is being updated. This is a joint effort with PDEQ, City of Tucson and representatives from several other agencies.

PAG's website has been revised to reflect EPA's tightened National Ambient Air Quality Standards for ozone to be more protective of public health. PAG is promoting the tag line, "Live Breath Clean Air" to get the word out to the public.

**IX. NEXT MEETING**

The next EQAC meeting will be on Wednesday, September 16, 2008, at 1:30 p.m. The meeting location will be announced.

**X. ADJOURNMENT**

Having completed all meeting agenda items, the Council adjourned.