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**CITY OF PHOENIX CITY COUNCIL  
SUSTAINABILITY SUBCOMMITTEE  
SUMMARY MINUTES  
APRIL 18, 2007**

City Hall, 12<sup>th</sup> floor  
200 West Washington Street  
Phoenix, AZ 85003

**Council Members Present**

Councilman Doug Lingner, Chair  
Councilman Claude Mattox  
Councilman Greg Stanton

**City Staff Present**

Brian Suggs	Mark Leonard	Inger Erickson
PJ Jasso	Jeff Dewitt	Terrence Gellenbeck
Amber Cole	Eric Kropp	Al Shiya
Karen O'Regan	Eric Gudino	Reed Caldwell
Stacy Kolegas	Blaine Akine	Dimitrios Laloudakis
Cynthia Parker	Stacy Kolegas	John Trujillo
Gaye Knight	Melissa Sweinhagen	Dimitrios Laloudakis

**Public Present**

Cassius McChesney, APS	Herjinder Hawkins, SRP
Kendra Cea, APS	Kate Widland, SRP
Jim Mulloy, Arizona Energy Office	Barbara Lockwood, APS
Vicki Sandler, APS Energy Services	Corinne Purtill, Arizona Republic

**1. Call to Order**

Chairman Lingner called the meeting to order at 10:12 a.m. with Councilmen Mattox and Stanton present.

**2. Approval of the April 4, 2007 Sustainability Subcommittee Minutes**

Councilman Stanton moved approval of the minutes, seconded by Councilman Mattox. The motion passed 3:0.

### **3. City of Phoenix Climate Change Action**

Ms. Karen O'Regan, Environmental Program Manager, introduced Ms. Gaye Knight, Environmental Program Specialist, who presented information regarding the City of Phoenix commitment to reducing green house gases (GHG).

Ms. Knight stated GHG's include the emission of carbon dioxide from fossil fuels, nitrous oxide, chlorofluorocarbons (CFC's) and methane.

Chairman Lingner asked for an example of nitrous oxide and CFC's. Ms. Knight stated CFC's result from the use of aerosol cans and air conditioners and nitrous oxide emissions come from power plants and fertilizers. Chairman Lingner asked if there were any power plants that did not emit nitrous oxide. Ms. Knight said she was not sure.

Ms. Knight stated the Inter-Governmental Panel on Climate Change report found the warming of air and sea to be unequivocal and it is likely that human activity caused most of the global warming measured since 1850. She stated the reason is the variation of the earth's surface temperature over the past 1,000 years indicates higher temperatures in the last 140 years.

Councilman Mattox asked what evidence exists to explain the increase in temperatures between 1940 and 2000. Ms. Knight stated she was not sure. Councilman Mattox stated this was a controversial topic and some believe the earth to go through heat cycles and the increase in temperatures in recent years may be part of this cycle theory. She stated scientists are claiming the recent variations are not part of the trend due to the continual increase in temperatures. Councilman Mattox stated he would like to hear other schools of thought on this topic.

Ms. Knight discussed predicted impacts in temperatures, water supply and the Colorado River basin. She stated the Governor created the Arizona Climate Change Advisory Group (ACCAG) in 2005-2006 and it included 35 members. She stated further this group found that 77% of GHG's in Arizona come from utility companies and transportation and that Arizona was predicted to have increasingly high levels of GHG emissions compared to other states. Councilman Mattox asked if this was due to our population. Ms. Knight stated that was true.

Ms. Knight stated the ACCAG created an action plan that involved going back to 2000 year levels of GHG emissions by the year 2020. She stated the Kyoto Protocol had been adopted by other countries but was believed to be too aggressive to be actually realized

Chairman Lingner asked Ms. Knight to clarify if based on the treaty language, it would be impossible for Phoenix to adopt the Kyoto Protocol requirements and this is why the Law Department advised the City not to sign it. Ms. Knight stated yes and that the City had adopted the State goal.

Councilman Greg Stanton asked which governments had adopted the Kyoto Protocol in the United States. Ms. Knight stated the U.S. itself had not but the U.S. Conference of Mayor's Agreement was signed by 400 cities and each had developed their own goals and were having problems meeting those goals. She stated Chicago was a lead city but noted that they had stated recently they did not expect to meet their emissions goals.

Councilman Stanton asked what Chicago had done to improve their emissions. Ms. Knight stated they are doing similar things as Phoenix. Councilman Stanton asked if all participating cities agree to the same goals or if they develop their own specific goals. Ms. Knight stated all cities agree to the same goals which include energy conservation, renewable energy, alternative fuels, infill and brown fields, water conservation and water supply planning.

Ms. Knight stated the International Council for Local Environmental Initiatives (ICLEI) helps cities develop global warming policies and provides technical assistance. She stated in order for a city to join they are required to do an emissions inventory and to develop an action plan. She stated further the agenda packet included a draft resolution to endorse statewide GHG reduction goals and to become a member of the "City for Climate Protection" which would require a complete GHG inventory:

Councilman Mattox asked the cost of the inventory. Ms. Knight stated between \$75,000 and \$100,000.

Councilman Stanton asked if the 200 member cities of ICLEI have set goals. Ms. Knight stated approximately 100 are working on inventories and she was not sure if goals have been created but believed most had not.

Councilman Mattox stated the City had been very active in sustainability and he wanted to know what the \$75,000 to \$100,000 would accomplish. Ms. O'Regan affirmed the accomplishments thus far of the City and stated a GHG inventory had not been done and staff did not have the required experience to conduct the inventory.

Councilman Stanton asked if there is a federal policy regarding the percentage of GHG emissions. Ms. Knight stated there is not.

Councilman Mattox asked what was being done in European and Asian countries regarding this issue and what countries were part of the Kyoto Protocol. Chairman Lingner asked what are other countries doing that we are not. He stated we need to analyze the efforts of others and would hope a consultant could provide insight. Ms. Knight stated her office had not assessed what other countries which are signatories of the Kyoto Protocol are doing compared to US cities. She stated staff could research this question and come back at a later date to the subcommittee.

Ms. Knight stated further the inventory would include the efforts by the City and it would develop a baseline. Councilman Stanton stated we must develop aggressive goals and he would like representatives from ICLEI to speak to the committee to assist with developing policy. Councilman Mattox stated he is not ready to pass the resolution. He stated he wanted more information to determine if the resolution will result in a reduction of GHG emissions. Chairman Lingner stated he wants to make informed decisions and would like to continue this item at the second meeting in May. Councilman Stanton recommended scheduling representatives from ICLE and Chairman Lingner concurred and stated he believed Phoenix should be part of the Kyoto Protocol. Councilman Stanton stated we have a sister city in China and it would be a good idea to find out their efforts. Chairman Lingner stated staff should look at other sister cities as well.

Councilman Mattox stated he did not agree with the recommendation to be part of the Kyoto Protocol but he was supportive of the Governor's goals. He stated the City is setting a standard for the rest of the state and is doing a good job. He stated further he would like more information before adopting the resolution.

Ms. O'Regan stated there is an expert with ASU who is part of the Governor's Advisory Group and she could ask that person to come and speak to the committee. Councilman Mattox stated this would be a good idea.

Chairman Lingner asked if the committee members wanted to move forward with the resolution to hire a consultant. Councilman Mattox stated no.

#### **4. Renewable Energy and Resources Update**

Mr. Mark Leonard, Public Works Director, introduced Ms. Barbara Lockwood with Arizona Public Service (APS), Ms. Herjinder Hawkins with Salt River Project (SRP) and Ms. Vicki Sandler with APS Energy Services.

Mr. Leonard discussed renewable energy projects and stated the Arizona Corporation Commission approved a measure in 2005 requiring 15% of the State's total energy production to come from renewable resources by 2020. He discussed the South Mountain Park solar panels and stated the Pecos Park-n-Ride was a joint project with SRP.

Councilman Mattox asked how much energy was created using the solar panels. Ms. Herjinder Hawkins with SRP stated 100 kilowatts and all lighting at this location is supplied by the panels.

Chairman Lingner asked how many days a year the solar panels provided the energy and inquired about a backup. Ms. Hawkins stated energy from the solar panels was used most days of the year and the backup was not used often. Chairman Lingner asked if excess energy was created by the panels. Ms. Hawkins said she was not sure. Mr. Dimitrious Laboudakis, Public Works Energy

Management Superintendent, stated the panels are owned by SRP and do not produce extra electricity for the facility.

Councilman Mattox asked the cost of the panels. Ms. Hawkins stated the total installation cost was approximately \$1.0 million. Councilman Mattox asked what the cost/benefit was of the project. Ms. Hawkins stated solar projects are not net investment return related and the return on investment was long term. She stated further these projects display the commitment of the organization to renewable energy. Councilman Mattox stated he agreed, but that analyzing the cost/benefit may create opportunities to do more.

Councilman Stanton stated when this project was built he thought it would create enough power for 100 homes. Mr. Laloudakis stated the energy supplied is equivalent to 35-40 homes. Councilman Stanton asked if the energy produced was above the needs of the project. Ms. Hawkins stated the energy produced supported the project and the additional energy created was connected to a grid owned by SRP and was not available for on-site consumption. Councilman Mattox asked if this was the extent of this project and the intent was to only provide energy for this site. Ms. Hawkins stated yes.

Mr. Leonard continued the presentation and discussed the roof at the Pecos Community Center and stated SRP installed the panels and the power is used on-site. Councilman Stanton asked if SRP received credit and if there was a certain percentage adopted. Ms. Hawkins stated yes.

Mr. Leonard discussed future efforts regarding solar energy. Councilman Stanton asked if the new hotel downtown was included. Mr. Leonard stated no.

Mr. Leonard concluded his presentation and introduced Ms. Lockwood.

Ms. Lockwood discussed the Solar Partners Incentive Program offered by APS. Councilman Mattox asked if there was commercial use. She stated yes. Councilman Mattox asked how the energy was converted. She stated thermal energy from the sun was used to provide both heating and cooling.

Ms. Lockwood stated the last year was very successful with more than 1,200 customers installing new systems and over \$8.0 million paid out. Councilman Mattox asked her to explain the pay outs. She stated they pay cash to customers who install systems to make it more affordable.

Ms. Lockwood discussed the Green Power Programs. Councilman Mattox asked what the average kilowatt use was for each home. She stated 12,000 -14,000 kilowatts per year per home.

Ms. Lockwood discussed new technologies including algae, hydrogasification and CNG. Chairman Lingner asked if those algae were similar to the algae found in fish tanks. She stated yes and concluded her portion of the presentation.

Ms. Hawkins discussed SRP's renewable resources, customer programs and provided ways the City could promote sustainability, including reviewing the City's solar permitting process and fees and the use of energy efficiency measures.

Ms. Sandler discussed sustainability, renewables and green credits. Councilman Stanton asked her to describe the tax credits and if they were finite. Ms. Sandler stated the credits are associated with green projects and are finite. Councilman Stanton asked what entity approves the credits. Ms. Sandler stated the credits work similar to the public education tax credits.

Ms. Sandler discussed the downtown district energy plant map and stated 21 buildings are participating. Councilman Mattox asked if residential buildings were included. Ms. Sandler stated yes.

Councilman Lingner asked if there was a maximum capacity. Ms. Sandler stated yes and there is the potential of adding a third plant to increase capacity.

Mr. Leonard concluded the presentations and asked for questions. Councilman Stanton stated he was aware there had been tension between homeowner's associations (HOA's) and residents regarding the installation of solar panels on homes. Ms. Lockwood stated solar access laws prohibit HOA's from not allowing panels and the debate was over appearance.

(Councilman Mattox left the room at 11:54 a.m.)

Councilman Stanton asked if the law states HOA's may not ban the use of panels but would permit regulation. Chairman Lingner stated there were rules about the height of other objects and the legislation will make it difficult for them to regulate the solar panels. Ms. Lockwood stated they are looking at products that are more architecturally appealing. Councilman Stanton stated he would like an update on this issue and more information regarding the tax credits at the next meeting.

Chairman Lingner stated it is important for the subcommittee to understand the use of the credits but the full City Council will also need to understand.

Councilman Stanton stated he is aware that the City promotes LEEDS standards but there is no incentive program for green residential building. He stated he would like more information regarding any programs offered through the Development Services Department.

Chairman Lingner stated he was concerned about the requirement in the 2006 bond program relating to buildings conforming to LEEDS standards, but when the actual

construction begins the standards are not incorporated. He stated it is an issue of credibility and there are a number of items to discuss relating to City processes.

Chairman Lingner asked if a study had been done regarding light transmission efficiency. He asked if it is more efficient to run the lines above or in ground. Ms. Kendra Cea with APS stated there is efficiency with the type of cabling used, not necessarily above or in ground transmission. Chairman Lingner stated it is important to consider these ideas and he appreciated all the information.

#### **5. Film Plastic Bag Recycling**

Chairman Lingner stated the City Council Report included in the agenda packet was informative. He stated he would like to have experts from the industry come to a future meeting to work with the City as a partner to develop policies to eliminate the use of plastic bags.

Councilman Stanton stated he agreed something needed to be done on this issue and the City should be promoting the use of other types of bags throughout the community.

Chairman Lingner stated he would like to revisit this topic before the summer break. Mr. Leonard stated there are leaders who can come and speak to the subcommittee. He stated the bags cause problems with the recycling sorting equipment. He stated further that Public Works is providing a way for residents to drop off the bags at transfer stations. Councilman Stanton asked if a third container would be used. He stated no and residents would need to separate the bags at home first then take them to a transfer station.

#### **6. Public Transit Department Sustainability Efforts: Bus Shelter Maintenance and Solar Energy**

Chairman Lingner stated this item will be tabled until the next meeting. He stated he would like further discussions regarding item three to be on the next agenda.

#### **7. Call to the Public**

There was no response to the call.

#### **8. Request for Future Agenda Items**

Councilman Stanton requested solar energy fees to be a separate item.

#### **9. Adjournment**

Chairman Lingner adjourned the meeting at 12:15 p.m.

Respectfully Submitted,

Amber Cole  
Management Assistant II