

**CITY OF PHOENIX  
ELECTRIC VEHICLE AD HOC COMMITTEE**



**Summary Minutes from Friday, December 3, 2021**

Virtual Meeting – Via WebEx

**Committee Member Present**

Concilwoman Ansari  
Catherine O'Brien  
Omar Gonzales  
Autumn Johnson  
Jason Smith  
Court Rich  
Delbert Hawk  
Lisa Perez  
Katherine Stainken  
Tim Sprague

**Committee Members (Absent)**

Kathy Knoop  
Caryn Potter

**City Staff Present**

Mark Hartman, Sustainability  
Karen Peters, City Manager's Office  
Karen Apple, Sustainability  
Michelle Litwin, City Manager's Office  
Alan Stephenson, Planning & Dev.  
Albert Crespo, Public Transit  
April Truncellito, PCC  
Cristine Mackay, Community Econ Dev.  
Gabriel Nevarez, Aviation  
Gary Lovgren, Aviation  
Jesús Sapien, Public Transit  
Joe Bowar, Public Transit

Joe Giudice, Public Works  
Karl Kaseoru, ITS  
Kimberly Brown, Aviation  
Sandra Hoffman, Planning & Dev.  
Sarah Demory, Aviation  
Scott Coughlin, Parks  
Stephanie Bracken, City Council Staff  
Stephen Dudley, Planning & Dev.  
Willa Altman-Kaough, Office of the Mayor  
David Benton, City Attorney's Office

**1. Call to Order/Roll Call**

Councilwoman Ansari called the meeting to order at 10:04am. Karen Apple, the City's Electric Vehicle Program manager performed the roll call.

Councilwoman Ansari reported that this is the fourth meeting for the full committee.

**2. Approval of Minutes – Nov 5, 2021 Electric Vehicle Ad Hoc Committee Meeting**

Councilwoman Ansari requested a motion to adopt the minutes, Committee Member Hawk called for a first motion and Committee Member Rich called for a second, unanimous pass, motion carried.

### 3. News and Announcements

Councilwoman Ansari introduced Karen Apple, EV Program Manager, to discuss recent news in the EV world.

Ms. Apple reported on the Hyundai Ioniq 5 and stated that EVs are becoming more prevalent in movies and television shows. Committee Member O'Brien also commented that she is seeing a lot more EVs in commercials. Committee Member Miller stated that Bloomberg highlights new EV stories every day and commented that there is a lot happening in the EV world.

Ms. Apple continued to present on Nissans \$18B investment into EVs and their commitment to EVs. Additionally, Ms. Apple reported that the October 2021 Coltura Study showed that voters in the US support requiring all new cars sold in their state to be electric by 2030, the age was 18-34. Ms. Apple mentioned that the study only surveyed 13 states and Arizona was not one of them. Additionally, Ms. Apple asked the committee if this would be reflective of data in Arizona.

Committee Member O'Brien stated every region is different and this information may provide a good baseline but would not be reflective this region. Additionally, a NASEO meeting highlighted that every region will have different data, and one assessment in one area does not always translate for another area. Committee Member O'Brien recommended that Phoenix should conduct its own assessment.

Ms. Apple agreed and stated that they survey polled about 3,500 applicants, but lack of education and outreach may have impacted peoples' responses.

Committee Member Miller stated that he would be surprised if Arizona's numbers looked that good. However, he anticipated that Arizona numbers may be close to those numbers, with Arizona voters being close to 50% in support of transitioning to electric vehicles. Committee Member Miller stated that Arizona is in favor of strong climate action plans and for other climate change items. Furthermore, young people of Arizona have shown strong support for EV adoption and provided tremendous support on the Arizona State University campus for strong climate action movement.

Mark Hartman, Chief Sustainability Office stated that education and awareness are vital and mentioned how quickly people will change when they see people driving EVs. Additionally, he mentioned that it is important to remove false perceptions that people might have and highlighted the incentives like fuel savings from switching from gas to electric.

Ms. Apple continued to report on the UK government proposing to require EV chargers in new homes, supermarkets, and workplaces, as well as major renovations and adding new charging ports.

Committee Member Stainken commented on the COP26 Convention including a highlight of transportation day and commitment to zero emissions by 2035 and some by 2040. Committee Member Stainken stated that this commitment was signed by over 40 nations including Germany, India, UK, Poland, and some US states. Additionally, Germany is looking to get to 0% emissions and stated that this will drive this mission and provide global support to make this change.

Committee Member Miller commented that automakers realize they can make better cars and customers will buy them. Committee Member Miller highlighted the new capabilities and technologies with many opportunities to innovate. Furthermore, automakers are worried about not staying up to date and with the ever-growing competition coming into this industry. Committee Member Miller remarked that he is seeing a lot of competitiveness which will help drive this movement. Likewise, he stated that the committee shouldn't underestimate the push from the oil industry creating negative stigma. Committee Member Miller stated that the auto industry should continue to support commitment to the change and not link or connect themselves to the oil industry.

Ms. Apple continued to present on the Hyundai Home ecosystem which covers solar, charging, and energy storage creating a one stop shop opportunity. Ms. Apple asked the Committee if they saw this coming from OEMs, and noted that it is interesting having this model of a one stop shop opportunity?

Committee Member O'Brien stated that Ford will be offering something similar, the Ford Lightening. Committee Member O'Brien continued to mention that these whole home packages bring up a concern from the utilities side, wherein, if something were to happen and that solar was not available, that these homes are going to need a 400amp service section which means an increase in the cost. Additionally, Committee Member O'Brien cautioned building for the "what if" scenario, which raises concerns for new homes/retrofitting to help accommodate these whole home packages. Committee Member O'Brien stated that utilities will continue to monitor as more OEMs create and implement these packages.

Committee Member Miller commented that this is helpful, and this may be an expensive solution when you move more facilities from solar to the Powerwall and then at night move from the Powerwall to the vehicle. Committee Member Miller stipulated that this is a huge investment in terms of total dollars now and suspects that these will be more high scale options and there will most likely be more adoption in new home versus retrofit. Furthermore, Committee Member Miller suggested that this is not a huge sales point in the short term.

Ms. Apple continued to report on the Rolls-Royce "Spirit of Innovation" an electric airplane which set an electric airplane record. Ms. Apple stated that this brings electric transportation closer for commercial flights and there are other electric modes of transportation coming forward.

Committee Member Hawk highlighted the Tesla ATVs for kids.

Committee Member Miller commented that Bloomberg reported new sales of electronic bikes increased at 2.5x the rate of electric vehicle sales last year, stating that there has been a real explosion rate of sales for EVs. Committee Member Miller asked if there is there anything happening locally in regard to electric bike sales?

Ms. Apple stated that there is a supply shortage and electric bikes have been limited in supply. Ms. Apples stated that Arizona has been seeing a similar increase to the national rate for electric bike sales.

Mr. Hartman commented that it will be interesting to see what the electric bike becomes, if it stays the same or transforms as technology and options are developed.

#### **4. Infrastructure Investment and Jobs Act, and Build Back Better Federal Bills Overview**

Councilwoman Ansari introduced Committee Member Katherine Stainken to provide an overview of the Infrastructure and Build Back Better federal bills and how they related to the EV and EVSE program funding.

Committee Member Stainken reported on the Electrification Coalition (EC) which is a nonpartisan, not-for-profit organization committed to promoting policies and actions that facilitate the deployment of EV on a mass scale. The presentation included information on coordination between agencies, partnership opportunities, business council, growth of infrastructure, funding, gaps in current national infrastructure, U.S. DOT guidance, Infrastructure Investment and Jobs Act (IIJAA) overview, opportunities in all sectors, Build Back Better Act (BBB) (H.R. 5376) overview, next steps and items that will go to Senate.

Councilwoman Ansari asked for comments or questions.

Committee Member O'Brien asked about BBB outline for 30C tax credit and asked for a clarification of the amount and percentages.

Committee Member Stainken clarified that it depends on if you are a commercial or consumer entity and stated there is a bonus credit up to \$30K and 20% thereafter and if you want to qualify for anything more than \$100K then the property must be intended for public use and have certain payment options available.

Ms. Apple stated that Telsa and GM have hit their 2,000 unit cap and asked if the cap was going to be removed and if that was a part of the BBB.

Committee Member Stainken clarified that that is the 30D credit, which will account for this, and therefore remove the cap and be in place for 10 years. Committee Member Stainken suggested that this could mean 1M/manufacturer vehicles

depending on adoption rates. Likewise, provisions in the BBB bill would remove restrictions on automakers. However, there are MSRP caps stating that there will only be one credit per taxpayer per tax year.

## **5. Deliverables Timeline Overview**

Councilwoman Ansari provided an overview of the timeline for Committee work and the key milestones and activities through June 2022. The timeline is color coded to organize dates, meetings, highlights, and outreach. Councilwoman Ansari suggests that the first draft of the EV Roadmap would be ready by early spring so that it would be included in the budget and other grant applications for the Infrastructure bill. Additionally, it would give the City the opportunity to take the draft to the community and hold public sessions which would include Spanish translations. Councilwoman Ansari stated that it gives two months to work on those pieces and highlighted the final EV Roadmap would go to City Council in June for review and approval. Councilwoman Ansari asked for input for other sessions that may be needed and stated that the homebuilder's roundtable was useful in understanding barriers and solutions that can go into the EV Roadmap. Councilwoman Ansari suggested creating expert roundtables to bring groups together including stakeholder roundtables with valley leadership, employers, and workplaces. Likewise, Councilwoman Ansari suggested obtaining public input via listening sessions before the draft is submitted. Councilwoman Ansari reminded the committee that the main focus of the deliverables is to ensure a draft be completed by February so that it can be reviewed for budget considerations.

Committee Member Johnson asked that the deliverables timeline be shared to the committee members.

Mr. Hartman agreed to share the deliverables timeline and that it would be posted on the EV Ad Hoc webpage.

## **6. Deliverables – Update**

Mr. Hartman provided an update on the deliverables process. Mr. Hartman commented that it is interesting the different comments that were occurring and asked for direct questions about deliverables. Mr. Hartman opened the discussion by asking the question, should the city provide free EV charging to employees?

Committee Member Johnson stated that it depends on the cost and what is the offset, Committee Member Johnson asked if the city budgets for EV infrastructure and if so, would that mean that there is something else that won't be done because of that opportunity?

Committee Member Perez said yes, the City needs to provide more incentives as a part of their employment package.

Committee Member Miller suggested that this will invite more innovative and young staff. Furthermore, the electric cost is low even if there is cost that might come from infrastructure it would be a great benefit

Committee Member O'Brien agreed and stated that SRP provides free workplace charging leading to more EV adoption by the employees. Committee Member O'Brien said that SRP saw 2% of their employees' transition to EV and projected 7% to have EVs over the next 5 years. Additionally, Committee Member O'Brien stated that the cost is minimal, maybe 50 cents to a dollar depending on the infrastructure and suggested that this is a low-cost perk to employees.

Committee Member Rich stated that understanding the full cost before making that decision but sounds like a good idea.

Committee Member Miller suggested for equity purposes that it includes EV bikes, scooters, and other items. Committee Member Miller stated his concern because there are all kind of reasons to not have people charging in the middle of the night for systems reasons. Committee Member Miller suggested creating a culture by leading in workplace charging and highlights the need and opportunity to charge at work in the middle of the day.

Committee Member Rich suggested that making it readily available to employees might be enough.

Mr. Hartman agreed that we want to encourage daytime charging as a solution to the grid as a culture, to assist the load on the grid. Additionally, from a program point of view, the city can examine how incentives change behaviors and examine how it impacts us.

Mr. Hartman asked should public charging be free in many cases?

Committee Member Sprague said that the big question is the capitol cost to bring in that infrastructure, and agreed that the daily charge is not the big number but asked how do you balance that?

Committee Member Olivarria agreed, but was concerned about the cost. Committee Member Olivarria suggested no cost charging be installed in certain areas like low-income areas versus wealthier areas to start.

Committee Member Johnson highlighted that anything to incentivize off peak charging is positive. She asked for clarification on if the question is talking about all charging on city property as public? Furthermore, not everyone can charge during the day and how can we be realistic about nighttime charging ensuring the equity component.

Mr. Hartman asked if the capitol cost is covered, how would we prioritize the rate of implementation in disadvantages communities?

Committee Member Miller suggested that this is worth a study, stating that the committee needs thought from a systems perspective about how much value is in transitioning daytime charging. Likewise, what will the grid look like in 2035, and is there enough value in having the grid available in certain time slots. Committee Member Miller asked if there is a way to arrange it so that it's paid for not by the city and stated that there are various scenarios but there is potential for a lot of value to the grid which could potentially pay for that charging.

Mr. Hartman asked would spending significant dollars for an EV Program Brand for Phoenix be a worthwhile investment?

Committee Member Perez suggested that this could be a small symbol that recognizes EV or EV charging. She does not think there needs to be a lot of money spent on branding, but simply something that identifies the topic and is recognizable.

Committee Member Gonzales suggested developing icon imagery, with images of charging stations and locations that are like bus stops and could cement the idea to the public.

Committee Member Olivarria agreed that there should be something to familiarize the community with EVs. Additionally, Committee Member Olivarria suggested marketing it to make it more known and understood which allows people to know and understand EVs and identify where charging is available.

Committee Member Johnson agreed for funds for signage and messaging and suggested there may be ways to partner with EV companies to offset this cost.

Committee Member O'Brien said that there could be potential for Phoenix to create branding program that other businesses could add to. Committee Member O'Brien suggested if there is public charging near local business maybe they could help to brand that station, which would offset cost and bring customers more information on those businesses. She suggested that there are opportunities to create EV program branding, however, it doesn't just have to be the City but could also include the local businesses.

Committee Member Miller asked what the ROI is and suggested there is potentially very big return. He highlighted the data that 71% of young people think we should be all electric by 2030. Committee Member Miller said he would be inclined to say we should be thinking about how to attract new young people to Phoenix, can ROI attract more EV manufacturers to the Phoenix metro area and Arizona at large, and build the interdependent innovation stage.

Mr. Hartman asked which of the deliverables should the city prioritize to 2025, and do we want to focus our efforts?

Committee Member Perez suggested education and outreach, that there are a lot of people not involved and asked how to change that since it is not on people's radar. Committee Member Perez suggests that this should be a priority action.

Committee Member O'Brien stated that SRP sees ROI in education outreach and marketing is significant. Committee Member O'Brien said that SRP continues to receive questions and comments from customers saying that they don't know and are hearing bad information or incorrect information, therefore, making uninformed decisions. Committee Member O'Brien suggests that education outreach can help increase the rate of EV adoption, ensure the public understand why the city is pushing EVs, and why they are electrifying their fleet.

Committee Member Rich said that permitting and installation should be easy as possible.

Committee Member Smith suggested that education, outreach, and marketing be the focus, to address misinformation and provide foundational education.

Committee Member Johnson said she was hesitant to answer, there is a catch22. Committee Member Johnson asked whether the city is the best messenger of the information. Furthermore, she suggested investment into transitioning the fleet as a priority and building codes as her second priority choice.

Committee Member Miller agreed about education and would love to see it included as an engagement campaign, discussing where the city is at on electrification, value, and benefits. Committee Member Miller highlighted Denver and its electric shuttle, which got people to public transportation. Committee Member Miller suggested that there is a need to discover the challenges and that talking to the people is an essential component to that. Additionally, he agreed that the electrification of the fleet must be a piece of the puzzle, if every department was asked to electrify their fleet what would that take. Furthermore, Committee Member Miller suggested this would catalyze and facilitate a dialogue with big businesses to create electrification for their workforces, highlighting the benefit for them, attracting workers, and assist them in meeting their scope three emission targets. Committee Member Miller asked how we as the city and big business are going to work together to get to electrification.

Mr. Hartman suggested reviewing individual departments and asking what it would take to transition to electric—similar to what was done in the Climate Action Plan. Reports showed that many businesses and departments were in favor of transitioning their light duty vehicles when it was time to replace them.

Committee Member Rich supported prioritizing education spending, and asked what are we spending money on that the auto isn't already doing?

Committee Member Smith stated that a lot of other players are adding money. He suggested that maybe the City could focus on charging rates, times, and how to save money and other educational components.

Committee Member Miller stated that it is shifting and said there is rapid growth of advertising. However, it is still the case that there are conflicts of interest within the manufacturers and retailers of dealerships around EV and combustion vehicles. Committee Member Miller said we can't expect the private sector will address education properly and objectively.

Committee Member Johnson said that utilities will do outreach about rates and when to charge.

Committee Member Smith stated that APS will be including outreach and education components.

Mr. Hartman stated the Committee should look at partnerships for marketing opportunities, valley specific items, regional marketing, and how to create a cohesive message.

Mr. Hartman provided a summary on the deliverables, the template, how to use the examples provided, and action items to have completed by June 2022. He offered to be available to have discussions to complete the deliverables.

#### **7. Public Comment**

Councilwoman Ansari asked for public comment. No public comment.

#### **8. Future Agenda Items**

Councilwoman Ansari asked for items that should be included in future meetings.

#### **9. Adjournment**

Councilwoman Ansari adjourned the meeting at 11:38am. Next meeting is Friday January 7, 2022.