CONSERVATION ADVISORY COMMISSION MINUTES

September 14, 2021

MEETING CONVENED: 7:05 p.m. GoToMeeting

MEMBERS PRESENT: Chair Sheila Smith, Beth Chajes, Helga Huntley, Andrew O'Donnell, John Mateyko,

MaryClare Matsumoto

ABSENT: Jean Hedrich

STAFF: Tom Coleman, City Manager

Michael Fortner, Planner II

Jeff Martindale, Chief Purchasing & Personnel Officer

Nichol Scheld, Administrative Professional I

Ms. Smith called the meeting to order at 7:05 p.m.

1. APPROVAL OF MINUTES FROM JUNE 8, 2021 AND AUGUST 10, 2021:

Mr. O'Donnell suggested an edit for the June 8th minutes and asked that "electric" be added to the bottom of page 9.

MOTION BY MR. MATEYKO, SECONDED BY DR. HUNTLEY: TO APPROVE THE JUNE 8, 2021 MINUTES AS AMENDED.

MOTION PASSED. VOTE 6 TO 0.

AYE: HUNTLEY, CHAJES, MATEYKO, O'DONNELL, SMITH, MATSUMOTO.

NAY: 0.

ABSENT: HEDRICH.

Ms. Smith reminded that the August meeting was an unofficial meeting involving herself and Ms. Chajes to discuss plans for Community Day. Ms. Chajes had no suggested changes for the submitted minutes.

MOTION BY MS. CHAJES, SECONDED BY MS. SMITH: TO APPROVE THE AUGUST 10, 2021 MINUTES.

MOTION PASSED. VOTE 6 TO 0.

AYE: HUNTLEY, CHAJES, MATEYKO, O'DONNELL, SMITH, MATSUMOTO.

NAY: 0.

ABSENT: HEDRICH.

2. **PUBLIC COMMENT:**

There was no public comment.

3. COMMUNITY DAY UPDATE

Ms. Smith stated that she collected all of the materials from previous Community Days from Mr. Wessells and Dr. Irvine and was surprised at the number of items that could be used for the next Community Day: more than 100 bags, some metal straws, and around seven large anti-idling banners that could be displayed around town.

Ms. Chajes shared that she recently learned how to use a QR code in order to save the Commission from printing off hard copies of the Conservation Corner articles. Visitors would be able to scan the QR code to bring up the website to read the articles. Dr. Huntley believed that Ms. Smith and Ms. Chajes had made great strides towards planning and suggested the discussion be considered as planning for Community Day 2022 and Ms. Smith agreed. Ms. Chajes noted that many upcoming events were centered around energy, renewable energy, and promoting solar and electric vehicles (EVs), and shared that the previous Commission Chair, Dr. Irvine, suggested that the Commission try to create coordinating events. She continued that the Commission could focus on energy articles and were hoping to have a new City EV on display but learned from DRNEC that Drive Electric Week was the week following Community Day that would include an EV display at the Methodist Church parking lot. Ms. Smith noted that Clean Energy Week was approaching and asked Ms. Chajes if any of the measures would move forward in the City where the EVs would be displayed. Ms. Chajes informed DNREC employees was organizing the event and it would not be held on UD property. She asked Mr. Martindale for an update and he replied he was unaware of the event. Ms. Chajes stated that Breanne Preisen, Delaware Division of Climate, Coastal and Energy, was organizing the event.

Ms. Smith asked if there were any events in the Clean Energy Week of which the CAC should be aware. Mr. Martindale did not believe the City had anything slated but pointed out that there were photos of the EVs and, at a minimum, the City could share information on its social media platforms.

4. <u>EV PRESENTATION AND ARPA FUND RECOMMENDATIONS – ANDREW O'DONNELL</u>

Mr. O'Donnell's original intent was to update his slides and explained he had previously introduced two presentations. One presentation was to persuade the City to switch to EVs and had a good measure of success. He and Ms. Smith had discussed providing an update on the current numbers of the cost of transitioning to EVs and the breakdown of the carbon footprint. He was unable to get around to the updates but did want to discuss the recent Tesla news. He reported that on May 27th, there was an Engage Tesla article that requested Delaware to support Tesla direct sales. He explained that Tesla was able to sell directly to customers in many states, but it was illegal in Delaware because of some dealership franchise laws which were intended to protect the dealerships. He clarified that the previous dealership model was constructed so that manufacturers filled dealership lots, the dealer marked the vehicles up by 12% to 20%, and the customers had various choices accompanied by the services from the dealership. With EVs, the dealership model was obsolete and in other states, customers could go online, order a Tesla, and it would be delivered. Because Telsas required low maintenance and the dealerships were unnecessary, Tesla requested to be allowed to sell directly to customers in Delaware. However, DelDOT required Tesla to obtain a dealership license as direct sales were illegal under current law.

Mr. O'Donnell disclosed that while he was a fan of Tesla, he did not own a Tesla vehicle but did own stocks. He became involved in advocacy over the summer and wanted to spread the word, so he came in contact with the Tesla Club that serviced southeast Pennsylvania and Delaware who introduced him with Tesla's legal team who had begun to get involved with DelDOT. He was asked to be a prospective

customer witness because he had to go out of state for a purchase and testified in Dover at the DelDOT hearing with other advocates from the area. The witnesses were brought in individually to testify for five minutes and met afterwards without having gained any insight into what action was being taken. The attorneys assumed the case would go to court afterwards and change would not occur any time soon.

Mr. O'Donnell informed that in the Delaware Senate, there was a separate motion to amend the same law to make a specific exception for electric vehicle manufacturers to sell directly to customers. He had not learned of the result and assumed it stalled. He explained how Newark was impacted because Dave Vispi was the Senior Mechanic and agreed that it would be easier for the City to purchase Tesla EVs if the City could make direct purchases.

Mr. O'Donnell stated that the City had solicited ways to responsibly spend ARPA funding and reminded that the CAC had an account set aside that refreshed every year but it was use it or lose it. He considered cost effectiveness, largest carbon footprint reduction, and what was the most ethically fair action. He informed the members that the Energize Delaware Program was heavily involved in home insulation, especially in lower income housing, which he believed qualified as a fair project, and also produced a low carbon impact and provided a great economical impact. He acknowledged the Commission had spent most of its yearly budget on the carbon audit and recommended using the rest for the Energize Delaware Program for Newark use only.

Mr. Mateyko asked why Tesla was opposed to leasing a storefront. Mr. O'Donnell agreed that was the most common question and repeated that dealerships added markups on vehicle costs and internet purchases rendered dealership models obsolete; as such, having a physical dealership would increase the cost of the vehicle and make them less competitive. He noted that there were no Tesla dealerships in existence and to start one would wreck their model.

Dr. Huntley referred to the suggestion that Teslas did not require mechanics and noted that one of the reasons customers liked having a Tesla location near them was because if the vehicle required a warranty replacement, they needed to be returned to a Tesla location. Currently, Delaware Tesla owners had to leave the state for service. Mr. O'Donnell agreed and informed there was a Tesla service center locally in Stanton and a Tesla store at the Christiana Mall with one or two display models and a console to order the car; neither locations were dealerships. Dr. Huntley thanked him for the clarification.

Mr. O'Donnell asked the Commission about their thoughts on how to spend the remainder of the budget responsibly. Mr. Martindale mentioned that the CAC had about \$22,000 remaining after the emissions inventory was encumbered.

Ms. Matsumoto asked if the CAC should write to their Representatives or Senators to support and help rectify the situation and Mr. O'Donnell confirmed that the members could write to Jana Simpler, Director of DMV and Toll Operations. He last heard that it was Ms. Simpler's responsibility on how to disposition the DMV. He agreed that members could also write to their Senators.

Dr. Huntley revealed that she was skeptical of carving out the exception for manufacturers of EVs because it would be outdated in the next five to ten years as all manufacturers began to concentrate on EVs. She wanted to consider whether the protection for the dealers made sense in the current environment and why it would be different for EVs versus internal combustions engines. She suggested that as long as the commissioners were advocating for EVs in the City, it was worthwhile to take the broader view. She thought the announcements from other manufacturers about investing heavily into

EVs had been promising in offering the City more choices. She recalled that ARPA funding was restricted and separate from the CAC budget. She did not recall discussions on how ARPA funding could be given a conservation spin and hesitated to endorse supplementing the Energize Delaware program because she thought it was sufficiently funded and she wanted to know what the extra funding could buy the CAC.

Mr. O'Donnell fully supported adding more EVs and believed the language in the proposed changes to the law was that manufacturers that solely produced EVs would receive the exemption to the dealership and manufacturers that produced both would not receive the same break because it would cause a conflict. He assumed that those who were opposed on the grounds of dealerships being unfairly affected would not have an opposing argument; it was a matter of competition, not of affecting their own dealership. He agreed that he combined the issues of ARPA funding and the CAC's funds and explained that he thought giving the remaining CAC funds to Energize Delaware would be better served than letting it return to the City. He thought ARPA funding was a discussion for everyone and if there were grandiose ideas that could benefit the City, then the CAC could come up with the numbers to justify the spending.

Mr. Martindale reiterated one of Dr. Huntley's points that the ARPA funds were more restrictive than initially thought and the City had a small bucket of money in the form of revenue replacement from the pandemic with which staff had more discretion. The rest of the fund was heavily related to infrastructure and utilities and the bulk would go towards water, wastewater, and stormwater. He admitted there was an opportunity for some of the washed funds to be used for other initiatives and reiterated that the funds were accompanied by restrictions. He noted that the infrastructure bill in Congress should include many of the CAC's desires in the form of EV infrastructure. He shared that he had been considering purchasing additional charging infrastructure as a potential project for the remaining CAC funding because there was enough for two dual port charging stations.

Ms. Smith noted there were two proposals for how to spend the remaining \$22,000: Energize Delaware and additional EV infrastructure. She wanted the opportunity to consider the choices and asked members to offer more ideas before the deadline passed to spend the funds. Mr. Martindale reminded that while the City ran on the calendar year for spending, there was a moratorium on purchase orders at the end of November unless there was an emergency, in order to complete end of year bookkeeping. Ms. Smith pointed that all of the CAC's money would go towards the energy sector. Dr. Huntley suggested that the discussion be addressed on the October agenda and a vote be taken then. Ms. Smith agreed.

Mr. Mateyko would consider options and forward them to the Commissioners prior to the meeting. He noted the decision on funding from Washington would arrive in the next ten days and if the money came through, he would want to consider other options because he assumed the money that came to the City would be earmarked for either of the aforementioned types of options. He wanted to use the CAC's funds to address overlooked initiatives. Dr. Huntley asked Mr. Mateyko if he had something specific in mind and he replied there was a whole range of proposals.

Ms. Smith wondered if any of the infrastructure would be used for green infrastructure and revealed that she was interested in changing the City's model of how it managed its parkland by mowing less, growing more, and maintaining the present parklands better in regard to the dying oak and ash trees, and also removing invasive species. She pointed out that the City did not employ an ecologist, but the parks were degrading daily. She believed City staff lacked the expertise for certain considerations and emphasized that the City only had an arborist on staff and thought the Commissioners could considering using the CAC or federal funds as such.

Ms. Matsumoto noted there was an extensive amount of open space in some of the parks and wanted any park with sun to have a pollinator garden with milkweed to help support the monarch butterfly population. She agreed that some space should be reserved for outdoor activities, but she wanted more plantings.

Mr. O'Donnell supported the topic as an October agenda discussion and hoped that the members considered the best way to spend the remaining \$22,000. He wanted to make the biggest impact possible for the City and reducing carbon emissions and what would be fair and equitable for the population. He would rather assist an underprivileged resident with home insulation versus solar installation for a wealthier resident. He referred to Mr. Martindale's direction on qualifying projects for ARPA funding and asked if purchasing electric versions of heavy equipment replacement vehicles would be defined as infrastructure under the ARPA umbrella. Mr. Martindale said that he had the list completed as of August 30th and revealed that the foremost discussed topic during the budget presentation was ARPA funding followed by EVs versus ICEs (internal combustion engines). He admitted staff had not done the best with long-term planning for EVs and dealt with each purchased on a case by case basis but were now reviewing the five-year capital budget to determine if electric options were feasible for vehicles due for replacement. He confirmed that staff were trying to inflate the budget accordingly to account for more upfront costs for EVs but whether ARPA funding would be used was another discussion. The purchases were being built into the general budget because after ARPA was depleted, the City would still pursue EVs. He added that the State may also be able to redirect some of its ARPA funding to the municipalities and allow the City to put more of the funding towards infrastructure-related projects, thereby freeing up additional funding for other projects. He reiterated that there were many unknowns for ARPA. Mr. O'Donnell asked if it would be worthwhile to present a list of vehicles due for replacement with EV-equivalent costs and Mr. Martindale agreed that it would be useful and encouraged the members to review previous individual department budget presentations to learn what vehicles were coming up for replacement in 2022. The review would show members upcoming replacements and the tentative purchase projections. He displayed 23 items that staff put together based on Council feedback and individual department discussions and reminded that they were built into the ongoing budget hearings.

Dr. Huntley asked Mr. Martindale for the status on the backup electric facility. Mr. Martindale believed the substation was in the Electric Department's capital budget but could not recall the year. Dr. Huntley asked if the substation would be eligible for ARPA funding. Mr. Martindale could not remember if electric utility was targeted as ARPA eligible and thought it pertained more to public works for the City. Dr. Huntley felt that the additional substation would make the City's electric grid more reliable and more sustainable as the City continued to grow. Mr. Martindale agreed and thought additional federal funding was a possibility.

Ms. Smith thanked Mr. O'Donnell for making great points about prioritizing how the CAC spent its funds, considering how it was used in terms of energy use and greenhouse gases production, and reducing carbon. She often thought how much pollution single-stroke lawnmowers produced given that the City mowed 700 acres regularly. She suggested mowing less and planting more trees to fight against greenhouse gases. Mr. O'Donnell interjected that he recently read an article where two-stroke motors, such as weedwhackers and leaf blowers, emitted as much green house gas as driving an F150 Raptor from Miami to Maine and suggested electric options as replacements for the equipment used by the Parks Department.

5. LIGHTS OUT RECOMMENDATION TO CITY COUNCIL UPDATE – SHEILA SMITH

Ms. Smith informed that fall migration had been underway for a month and she was in communication with The Newark Partnership (TNP) who included an information page on their website. She understood that UD Police were working towards reducing lighting, but she did not know to what degree they had reduced lighting and admitted there was a huge learning curve regarding education. She believed it would take years before much would be done to reduce light pollution but emphasized that the reduction was only from midnight to 6 am. She created a flyer to hand out at community day and noted that Dr. Jeff Buehler, Wildlife Conservation, ran one of the BirdCast stations that used radar to track bird migration and was able to make predictions. She encouraged members to visit birdcast.info and informed that visitors could learn the predicted number of birds passing over an area in migration that evening. Dr. Buehler intended to set up a display for graduate students to educate visitors on how BirdCast worked and how it could be used. She reminded that Council passed the CAC's resolution with a unanimous vote to support the idea that the City would commit to reduce lighting to the greatest amount possible without impeding safety. She acknowledged that police responded with concerns but ended up simply saying that lighting was important, and they would ensure that nothing would happen that would make City streets any less safe. She asked Mr. Martindale if the City had reached the point of capability to dim City lights. Mr. Martindale replied no but said staff was close. Ms. Smith reiterated that the recommendation was passed, and she was pleased with the discussion and because Council was receptive to protecting wildlife. She informed that the CAC could have a table at Ag Day and said that Dr. Buehler wanted to use some of the CAC's Community Day ideas for public education in April during the spring migration.

Ms. Smith asked if any members had walked the reservoir trail after dark and noticed the City's light pollution, much of which came from the auto dealerships on Cleveland Avenue. She wanted to see the car dealerships reduce their light output and wanted to know why dealerships thought it was so important to use intense light at night. Ms. Matsumoto said that she used to run around the reservoir at night and was able to see the entire paved trail just from the light pollution. She agreed with Ms. Smith's concerns. Ms. Smith pointed to Mr. O'Donnell's comment in chat and agreed that vandalism was a concern but doubted there was significant justification for the current level of lighting. She suggested motion detection lighting and reminded that migration was underway and would be until the middle of October. She informed that she was leading a bird walk with a Delaware Audubon Society member on Saturday at Curtis Mill Park at 8 o'clock.

6. SIERRA CLUB SOLAR TOUR AT MCKEES – BETH CHAJES

Ms. Chajes thought the members would be interested in visiting the Solar Park at McKees and speak with Mr. Martindale, Mike Fortner, and Steve Hegedus, a solar researcher from UD who also had the first solar roof panels on his home in Newark. The Delaware Sierra Club had planned a socially distanced outing but decided to postpone in deference to weather and better planning. In planning a new date, the Club realized the National Solar Tour was sponsored by the American Solar Energy Society (ASES). ASES had a website where people with solar facilities could register their sites and visitors could use search filters to find open houses nearby and learn more about solar energy. The Club decided to participate and the rain date for the tour was scheduled for 10am to 11 am, October 16th, and would be limited to 30 participants with the original panelists. She informed that the solar field was wide open but had no seating so visitors would be standing for 30 or 40 minutes during the presentation and could bring their own seating. Because the Club was able to join the national event, there would be other events throughout Delaware and the Delaware Interface Power and Light was now co-sponsoring the event and would be showcasing 27 churches and other houses of worship that utilized solar power. She hoped that individual houses, schools, businesses, and farms would also participate and noted that the information

would be aggregated on a local website. She noted that all events were free and the event itself would be hybrid. She hoped the event would become annual.

Mr. Martindale added that he would attend and speak on the energy savings performance contract project. He looked forward to meeting with everyone and was pleased to learn that it would now be tied to a national event. Ms. Chajes credited Mr. Martindale and Mr. Fortner for showing how a municipal facility fit into the City's overall Sustainability Plan, its development, and how it included the community through share purchase. She informed that bad weather would turn the event into a virtual Zoom meeting.

Mr. O'Donnell asked when the website would be live, and Ms. Chajes hoped it would be linked to the national website by the next day, but it was currently live. Ms. Smith asked if reregistration was necessary since the event was rescheduled and Ms. Chajes hoped that all registrants would receive an email asking if they would like to reregister.

7. MONTHLY CONSERVATION ARTICLE WITH THE NEWARK POST

Ms. Smith noted that she wrote an article in August and Dr. Huntley wrote one for September on flooding and riparian buffer zones. She asked members for October article suggestions and volunteers. Mr. O'Donnell offered to write an article on leaf blower emissions. Ms. Smith said that her article on lawns argued that one way to cut down GHG emissions was to mow less but thought it was helpful to have follow-up articles that went into more detail. She suggested he include ideas about fall clean-up and make the point that technology was not changing as far as lawn equipment.

Ms. Smith noted that the articles were typically planned out months in advance and realized that the members had already written many articles that addressed individual concerns. She asked that anyone reach out to her with suggestions and said that she was interested in writing an article about trees, shade, and the impacts of climate change on existing trees.

October – GHG Emissions and lawn equipment – O'Donnell

8. PLANNING AND DEVELOPMENT REPORTS

Ms. Smith noted that the construction on Hillside Road cut down more than 20 mature shade trees and asked Mr. Martindale if the trees would be replaced. Mr. Martindale could not recall the exact plans and pointed that the project began before he started with the City but imagined there would be a replacement program included as part of the plans. Dr. Huntley interjected that Councilman Suchanec recently issued a message that reported that the developer had not begun the landscaping yet because it was normally the last step in a construction project. She continued that the planting would take place before the permanent certificates of occupancy were issued for the buildings. Ms. Smith was sure the plans existed as part of the process.

Ms. Matsumoto noticed there were a number of cars parked at the property already and would not be surprised if students were already living in the buildings. She believed that the developers had attempted to save some of the trees initially, but none had been saved. Mr. Mateyko shared that the Washington's vision was that the GHG would be cut by 45% by 2030 and asked if there was discussion within the City of how the goal would be reached. He noted that cutting down trees for development was more expensive for a contractor and suggested that the effort to cut GHG begin immediately.

Ms. Smith wanted to address the topic on a future agenda and Mr. O'Donnell suggested that the discussion include an update on the carbon audit so the group could first determine the current level and set a target for reduction. Mr. Martindale confirmed that AECOM was working on the data collection phase of the audit. Ms. Smith reiterated that the CAC needed to be intentional about its interest in green infrastructure.

9. OLD/NEW BUSINESS

Mr. Martindale informed that from June through September 2, the Opt-In/Out Program had 4,071 residents automatically join the program, 220 residents chose to opt-in, and 45 opted-out. He noted that the manual opt-in versus manual opt-out was slightly under 5:1. Dr. Huntley suggested the CAC reintroduce the program for Council to consider whether the program should be 100% opt-out because there was a significant hurdle for existing customers to join the program. Mr. Martindale offered to support additional discussions. Mr. O'Donnell spoke to Councilman Bancroft and shared that the average cost for the users was \$6.51 per month. He suggested that the CAC return to Council with the argument that for an average of \$6.50, the City could be 100% renewable, and added that the increase could be 20% per year for the next five years.

Ms. Smith asked for staff's perception on the enrollment numbers. Mr. Martindale replied that staff anticipated the automatic joins to be a solid number and were most likely UD students which would turn over yearly. He believed that anything that required manual user interface to make changes would be minimal, so the results were as anticipated.

Dr. Huntley suggested providing forms to opt-in during the next Community Day or Ag Day event and Ms. Smith confirmed that the intent was to include them at Community Day and informed that Jayme Gravell was working on the forms.

Mr. Martindale would continually update the Commission with the program's stats and shared that the solar installation was progressing in City Hall and at the Warehouse at the Maintenance Yard. Solar installation was slated for the George Wilson Center and another building, but the plan was scrapped because the output was less substantial than initially thought and staff was able to get better output from other procured panels. He emphasized that the City was not losing output with the changes and they actually left opportunities for future installments. He added the City also had the reservoir solar field and the McKees expansion. He noted there were pallets of panels in the parking lot of the Yard and explained there was initially a supply chain issue that would have likely delayed the project into next year but there was a project in New Jersey that was cancelled at the last minute so staff was able to purchase the panels. The project was slated to begin in October and would be completed months earlier than anticipated.

Mr. Martindale continued that the dimmable LED streetlights were nearing the installation part of the project and staff had installed the nodes but still needed to procure pins that were in transit from Texas. He hoped the Electric Department would be able to finish by the end of the year and staff would work with residents to determine proper light intensity. He updated that the vendor for the EV charging stations slated for installation was finishing up the last piece of installation and tech set-up, but staff believed the vendor might be experiencing labor shortage issues. He reminded that he proposed the purchase of an additional three dual-port charging station through 2022 budget and received preliminary support from Council when the facilities budget was up for review. He hoped to double the City's charging station quantity by next year and asked for CAC support.

Dr. Huntley asked for the cost of a single charging station and Mr. Martindale replied that when staff purchased the first three, the cost was \$30,117. The City received \$7,000 per unit from DNREC in rebates so the cost was about \$3,000 per unit after rebates. Dr. Huntley asked if the rebates would be in place next year and Mr. Martindale replied that the rebates would be in place at least through June 30, 2022 because DNREC did not push out multiple years in advance because of the State budgeting process.

Ms. Matsumoto asked where the new stations would be installed. Ms. Smith wanted to know how many stations were in the City and their locations. Mr. Martindale replied that the City currently had zero in place but there were two Level II at-home charging stations at the Maintenance Yard to ensure the fleet was well-charged. He informed that he drove one of the Nissan Leafs to a meeting in Pennsylvania that day and it used half of the battery and the stations at the Yard were non-public. He continued that the three installations would include one dual-port charging station at Lot 1, behind the Galleria, where the Parking Division would primarily charge its EV but would also be accessible to the public. He added that another two dual-port charging stations would be located at City Hall and available to the public.

Ms. Matsumoto referred to the lighting being installed at the Pomeroy Trail from North College through UD and the new Fairfield Crest Trail. She asked how bright the lighting would be and if it would be dimmable. Mr. Martindale was unfamiliar with the trail and Ms. Matsumoto replied that the installation was new because the trails would be closed for about three weeks. Ms. Matsumoto did not think the trail was currently lit and Ms. Smith informed the trail had been lit for nearly two and a half years from Creek Road to Fairfield Shopping Center. Ms. Matsumoto added there was a connection from North College that went out to Creek Road and behind the UD tennis courts and paralleled Cleveland Avenue. Ms. Chajes received a notice about the trail from DNREC and Ms. Matsumoto agreed the trail could be funded by the State and not necessarily know about the lighting issue in the forested area. Mr. Martindale did not know enough about the project but would follow up with the Parks Department for insight. Dr. Huntley pointed that the property belonged to the State Park and Ms. Matsumoto reiterated that she wanted to ensure that the right kind of lighting was installed. Mr. Martindale agreed that DNREC was the appropriate agency with which to speak.

Dr. Huntley shared that she drove her EV to Ohio and back and she noticed that most of the charging stations were in undesirable locations such as gas stations or shopping mall parking lots. She wondered if the next set of charging stations could be installed at fun locations for users to visit a playground or hike. She then referred to Mr. Martindale's comment that the scope of the solar installation project was reduced in terms of the size of the solar panels but not in terms of the output. She asked how much it would cost to add solar panels to the GWC. Mr. Martindale replied that the ESCO project for the GWC was slated for \$92,000 so the CAC could support the project, but it would take the entire year's funding. He was pleased that the CAC spent nearly the entirety of its funding over the last two years and agreed that it could be a possibility in the future. He reminded that staff installed a new roof on the GWC in anticipation of the solar installation so the repair would not have to be incorporated into the scope. Ms. Smith thanked Mr. Martindale.

Ms. Smith asked Mr. Mateyko to explain how the IPCC Climate Change report was relevant to the CAC. Mr. Mateyko began that the there was a series of seven reports: five of them were high-level science reports and two were White House directives. He noted that one of the directives was a memo on how a fraction of the \$3.5 trillion had to be spent on communities and types of projects that were laid out by the Office of Management and the Budget. Another report was the America the Beautiful or the 30 by 30 Program and he believed it was directly related to the CAC and was not necessarily dependent on the funding currently in discussions; the Program funding was to set aside 30% of land and waters by 2030 in

some characteristic. He encouraged the CAC to read the report because there was funding available for consideration. He continued that the other reports discussed reversing biodiversity loss which was a joint project of the National Academy of Science and similar academies throughout the G7 countries. He emphasized that the time was at hand where the critical issue was dealing with improvements to industrial products. He shared that nature-based solutions offered great paybacks and the goal was to decrease greenhouse gases using nature-based solutions. He noted another document was from the United Nations Environmental Program and was very inspirational and was the main document to consider in terms of explicit direction on where the science was going and moving the world to nature-based solutions. He agreed that solar installations, EVs and energy efficient buildings were necessary but reiterated that nature-based solutions must be made universal and pointed that it was the CAC's mandate.

Mr. Mateyko then described another article he considered to be interesting; a commentary from Nature that was solicited from experts by the editors on reducing the demand. The title was Towards Demand-side Solutions for Mitigating Climate Change and the article presented the summary of Chapter 3 of the Mitigation Report of the IPCC due in March. He believed the type of thinking in the article could become pervasive in the next IPCC Report. He repeated a great way to reduce demand was through nature-based solutions. Another article was similar, Climate Change and Ecosystems, and co-authored by the National Academies of Science and the World Society of the United Kingdom. He repeated that naturebased solutions were becoming prominent and alternative demand for side-walked shaded streets. He suggested that the City could obtain funds to encourage people from using their vehicles and noted that all of the reports emphasized the need for shade. He stated that one example was that tree canopy should be over at least 80% of anyone's frontage. He explained he was trying to introduce best available science to the CAC's mission. He shared that his sister lived in Queens and houses five blocks from her home were destroyed and people died as a result of the recent flooding. He reiterated that the world was changing for the worse, as indicated by the scientific reports, and he had sent articles of the best available science to the CAC members. He felt that higher levels of local government could feel comfortable if they responded to the City's request for funding under the Biden proposal and the CAC cited the science as the authority and reiterated the big reports would be from the IPCC.

Mr. Mateyko shared that he was an architect and in 2014, he was asked to start presenting at the AIA about the "big picture". He repeated that it was necessary to install solar, purchase EVs, and get to negative zero GHG through nature-based solutions. He stated that an article was published in Nature that the protocol heretofore had been to stop counting any carbon attributable to food at the farm gate. The article investigated the situation through the entire life cycle until it became waste and determined that food accounted for up to 48% of typical GHG generation. He encouraged the members to read the articles because he found them to be very welcoming and sympathetic recommendations that agreed solar energy was necessary. He noted the industrial hardware system was needed, as indicated by President Biden's efforts to secure funding, but added that nature was also necessary as was how humans came to grips with the situation. He informed that New Yorkers were experiencing the air pollution from the California wildfires and he believed politicians would be looking to connect high level science to the funds Delaware could secure through President Biden.

Ms. Smith thanked Mr. Mateyko and appreciated the outlines of the articles and his attempt to make them accessible and relatable to the CAC's mission. She reminded that members had sent links to the chat feature including the Lighting Project, the Draw Down Project, the Hillside Development to review the plantings, and the solar tour.

10. NEXT MEETING – OCTOBER 12, 2021

MOTION BY MS. MATSUMOTO, SECONDED BY MR. MATEYKO: TO ADJOURN THE MEETING.

The meeting adjourned at 9:11 pm.

Nichol Scheld Administrative Professional I

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