

Charleston County  
Resilience and Sustainability Advisory Committee (RSAC)  
Meeting Minutes  
October 25, 2023

**ATTENDEES**

RSAC: Joe Boykin, Scott Runyon, Stewart Weinberg, Scott Curtis, Kyle James, Sally Brooks, Adrian Cain

Absent: Jen Jones, Diamond Curry

County Staff: Arielle Gerstein, Karen Burney-Green, Walter Smalls, Sheetal Verma<sup>+</sup>

SSG Staff: Erica Heath, Naomi Devine, and Amber Nicol

Civix: Jared Genova

Outreach Coordinator: Thetyka Robinson

**CALL TO ORDER**

Stewart Weinberg called the Charleston County RSAC meeting to order at 9:32 a.m.

**ADMINISTRATIVE OFFICERS' REMARKS**

- Approved meeting minutes at 9:32 a.m. from September 19, 2023.
  - Motion to approve introduced by Stewart Weinberg. Motion was approved by Kyle James and Sally Brooks with no opposition.

**TOPICS DISCUSSED**

Review of Feedback

*Presented by Erica Heath (SSG)*

- 1) The goal is to facilitate the committee's progress in climate action planning for the Charleston community.
- 2) Currently the project is in the phase of scenario modeling and moving into implementation planning.
- 3) They have a lot of research completed at this point, so now engagement activities are underway.
  - a. The format of the remainder of the meeting was meant to have portions of presentation with allocated time for comments and questions.

Implementation Planning

*Presented by Jared Genova (Civix)*

- 1) We are now shifting towards taking all of the information that we've gathered from the models, including the greenhouse gas emissions model, and seeing what the County and community can do about it.
- 2) Civix's prior experience is in federal and state funding, so a lot of their research is focused on new funding opportunities.

- 3) These opportunities will be considered along with the capacity of the County and county partners to deliver these projects and programs over the coming years to meet the targets established in the model.
- 4) Considerations in Implementation Planning:
  - a. Funding Availability
  - b. Feasibility + County Capacity
  - c. Community Priorities
- 5) The goal is to prioritize climate actions and identify specific funding pathways and program designs for major actions.
  - a. Ensuring revenue and funding will make implementation more possible.

#### Funding Opportunities:

- 1) Inflation Reduction Act (IRA) (works alongside the BIL)
- 2) Bipartisan Infrastructure Law (BIL)
- 3) Climate Pollution Reductions Grant (CPRG): derived from the IRA
  - a. Administered by the EPA
  - b. SC Office of Resilience (SCOR) is leading the state in the planning effort.
    - i. Charleston did not qualify regionally, but there is an opportunity to influence the types of programs and policies that are incorporated in the State's planning efforts. This could potentially help in the short term with implementation.

#### Feasibility + County Capacity

- 1) Emissions reductions potential
  - a. This is integral to the low carbon scenario.
- 2) Capacity to Act
  - a. The general understanding of the staffing resources, existing funding, and delivery mechanisms that are available within the County and among partners in terms of prioritization.
- 3) Ability to improve services
  - a. A consideration of whether efforts will improve the services made available by the county upon which citizens rely.
- 4) Cost
  - a. A review of whether the cost is too great or difficult to prioritize.
  - b. An assessment of available funding resources that can be utilized.
- 5) Co-benefits/Equity benefits
  - a. An exploration of any benefits that climate action would deliver.

#### Priority Action Considerations

- 1) There are a number of questions that must be asked of the vast number of actions that can be taken.
  - a. This will narrow the actions down based on priorities.
  - b. This will also address the appropriateness of the actions for the overarching plan and the County.

#### Action Criteria & Ranking

- 1) This is the database that stores all of the potential questions for each action coupled with all the possible answers.
- 2) This system allows determinations to be made in the prioritization of different actions based on prospective advantages and funding.



Questions and Comments:

- Erica asked if there were any questions, concerns, and feedback on those portion of the presentation.
- Stewart shared that Jared is doing what has been done by other jurisdictions in the past, so he thinks they're on the right path.
- Kyle commented on the evaluation framework: He recommends using a multi-level evaluation framework, with the first level quantifying the effectiveness of the proposed strategies' ability to reduce greenhouse gas emissions and the estimated costs. These two evaluation criteria could be combined into a single "cost effectiveness" metric so that it can be communicated more easily with elected officials and the public. The second level would then include the more qualitative assessments described in the presentation related to jurisdictional control, staff resources, political will, available funding, and community feedback. These qualitative assessments could be presented using Harvey Balls diagrams to make it easier to communicate the results to elected officials and the public.
- Jared shared that we can adjust where these things land and continuously manipulate strategies. In the coming weeks, he will be working with the team on refining questions particularly concerned with feasibility because efforts must be tailored to the capacities that exist today and that might exist in the near future.
- Kyle further recommended using a continuous scale for the estimated cost or cost-effectiveness metric in the first level of the evaluation framework. The presentation showed examples in which the estimated costs were placed into tiers based on a discrete threshold (i.e., \$ = <\$10k, \$\$\$\$ > \$100,000, etc.). Given the likely wide range in costs and effectiveness that an analysis of the proposed strategies will produce, a discrete scale will result in a bias towards strategies that fall near the breakpoints. Whereas, a continuous scale will avoid this bias.
- Kyle also asked if there will be the capacity to monetize the co-benefits (i.e., public health, air quality, economic development, etc.) or if they will only be discussed qualitatively.
- Jared explained that it would depend on the priority of the action. In some cases where the action is straightforward and the co-benefits and research are pretty clear, monetizing wouldn't be out of the question. However, to monetize all of the co-benefits would most likely be outside the scope of the project.
- Naomi added that in the presentation of the low carbon pathway projection model, there is modeling for financial projections, which includes potential monetization of actions and associated co-benefits.
- Jared provided that this type of modeling is a part of the quantitative/qualitative approach that is able to be broken down more discretely.
- Naomi shared that they have noted this feedback for continued consideration.
- Erica invited any further questions and then transitioned to the next portion of Jared's presentation.

Priority Action Analysis Example 1:

This is the more qualitative analysis of proposed actions because we haven't entered the quantitative phase at this point. The background on fees for the county and funding availability are still being researched. What's being presented are examples of the topline takeaways within the actions.

- 1) Upgrade county fleet to electric or zero emissions vehicles.
  - a. Components Include:
    - i. County Authority



- ii. Staffing and Technical Capacity
- iii. Existing Resources
- iv. Political Will/County Readiness
- v. Community Readiness

Questions and Comments:

- Stewart wanted to know if full consideration is being given to electric vehicles beyond their initial purchase price to the decrease in maintenance costs throughout their lifecycle. He also wants to make sure that current resources are being accounted for locally as Trident Tech has begun or will begin to offer training to maintenance technicians specifically in the electric vehicle realm.
- Jared greatly appreciated both of these comments. He confirmed that the lifecycle of an electric vehicle is extremely relevant as there is a decrease in maintenance costs as well as fuel costs. He also expressed that knowledge of existing programs, such as those provided by Trident Tech, are essential contributions that they will need from the county team moving forward. As he continues to conduct research, it is beneficial to receive input from the County as it could further develop the tables of information and make transitions that much easier.
- Stewart shared that under Arielle, we had a very successful EV event in September, which made him aware that the local bus system, CARTA, currently has 30 electric buses and is expected to grow this fleet.
- Arielle added that the county has an internal fleet department that will be able to provide input for transitioning to all electric vehicles. She noted that the community wide transition will be the trickier endeavor.
- Kyle asked for guidance on what would be a good approach to documenting the political perspective on these efforts. He wanted to know if County Council will be interviewed and their feedback documented as part of the "political will" evaluation criterion.
- Councilman Boykin responded that the council relies heavily on the staff, financial personnel, and fleet facilities. Ultimately, their input will be sought, but if the budget doesn't exist at this time, progression in these actions won't happen.
- Kyle further clarified to ask if outreach to individual County Councilmembers is part of the scope for the climate action plan.
- Councilman Boykin shared that he doesn't believe anyone on the council is opposed to reducing greenhouse gases and carbon emissions. He added that it becomes a matter of feasibility, timing, and costs. As a member of CARTA's board of directors and the CHATS Policy Committee, he's observed the transition to electric buses, but there are obstacles encountered in repairing them as companies and resources are not always consistently available, which can leave vehicles out of commission. He believes that the conversion of fleet vehicles to electric is a great idea, and on a larger scale, the eventual use of electric vehicles/equipment for all of the Public Works fleet (dump trucks, bulldozers, etc.) would be ideal; we don't know if the technology exists, yet, though. So, it still all comes down to feasibility, timing, and costs. He wants to make sure that when we make these sweeping changes that we don't run into deficiencies.
- Arielle addressed Kyle's inquiry on political will. She explained that she is planning to meet with County Council members to learn about their opinions. However, she will also spend time reviewing the agenda for County Council. Affordable Housing has been an important issue, so if the RSAC actions rank lower, they may have to be revisited in the future.
- Councilman Boykin added that adaptability is required just based on the area that we live in; it's very much surrounded by water. Due to the cost associated with construction and infrastructure, for example in the case of the rail system, it's hard to progress towards the ideal situation.



- Kyle explained that he was just trying to determine from a practical standpoint how discussions will County Council will be captured and incorporated into the evaluation framework.
  - Adrian expressed that in relation to political will, we will have to consider the will of the business community and the general populace as they will be sharing in the associated costs of conversion. At some point, the will of these groups will influence political will.
  - Stewart added that he doesn't disagree with this sentiment. He reiterated the important of understanding the entire lifecycle of these new building and vehicles; they may cost more upfront, but in total, much less in the long run. He explained that if we don't consider the entire lifecycle, we're not getting the full picture.
  - Kyle noted that there is conflicting reports on lifecycle costs for light-duty electric vehicle ownership, which limits the general public's ability to make an informed purchase.
  - Stewart was in agreement. He used Georgetown, Texas, as an example. They don't have discussions about climate change in that area, but they are close to being 100% renewable based on the savings for taxpayers.
  - Arielle inserted that community readiness will be an important aspect of the process.
  - Councilman Boykin added that Charleston County has four of the largest municipalities, and with as much as the County can do, it would be best to pursue a collaborative effort between the County and the municipalities so that we can leverage funds and efforts. That would be ideal with the level of urbanization that we now have.
  - Arielle agreed with this idea; she shared that the other working group has representatives from Charleston County, the City of Charleston, and the Town of Mount Pleasant that contribute to discussions.
  - Kyle asked how we will capture "community readiness" within the evaluation framework and if this is part of the scope for the climate action plan.
  - Arielle informed him that an engagement slide had been incorporated in the presentation for the meeting.
  - Erica really appreciated the level of discussion and how members of the committee are working through different ideas; she suggested that members also add their comments/concerns to the workbook.
  - Jared shared that he was particularly fond of the Georgetown, Texas, example because it is one of the bedroom communities surrounding Austin, Texas. Although Austin typically gets all of the credit, it's normally the smaller towns on their outskirts, like Georgetown, that are doing most of the work.
- 2) Presentation Continued:
- a. Park, Florida, case study.
    - i. Sometimes, there are cases of synergy where if there is a priority to transition a fleet to electric in one area then a transportation plan might be accelerated regionally.

#### Questions and Comments

- Adrian mentioned that there are number of large companies in the area that operate substantial fleets. There may be an opportunity to incentivize a pilot program of converting the vehicles to electric that parallels the County; however, the initiative may need to be labeled as regional rather than county.
- Arielle was in favor of this idea and made a note of it.
- Stewart shared that in developing zoning changes for the city, with respect to EV charging and EV readiness, there were a number of recommendations offered by the chamber; a final proposal is still in the works.



- Adrian added that he is aware of five to six companies that operate fleets of 100 or more vehicles, so there is an opportunity to develop a business solution and pilot that could lead to larger adoption.
- Councilman Boykin expressed that incentivizing and mandating are very different. He feels people may respond to an incentive more positively than compulsion. He further remarked that it's important to allow the market to build itself as citizens make the transition because we can't literally flip a switch in this matter. He holds that if the public buys into this, thereby presenting public willingness, they will provide the support that he and other representatives at the county, state, and federal levels need to build the respective infrastructure.
- Adrian proposed that there are a couple of ways that businesses could be incentivized, which could include having dealerships facilitate the installation of charging stations at business locations based on a cost structure that is sensible due to mass purchasing.
- Arielle shared that there would be an opportunity to discuss this further in greater detail in the future.
- Stewart added that in future, there may be universal chargers introduced that could be used by multiple vehicles as Ford and GM adopt Tesla's charging technology.
- Arielle expressed hopefulness in a federal solution to this possibility, and Kyle noted that the (North American) auto industry was already consolidating around Tesla's EV charging connector.

3) Presentation Continued

- a. Jared explained that if the County transitions to electric vehicles and increases the demand for charging stations, it could lead to induced demand for EV infrastructure throughout the county; this could be a decentralized way of achieving progress that wasn't considered.
- b. On the market development side of things, the availability of the infrastructure could encourage more people to purchase EVs as access to charging would be less of a concern, especially in light of the partnerships discussed. Businesses that have land holdings and manage fleets could facilitate the induction effects as well.

4) Due to time constraints, Naomi decided to present Community Priorities at a future meeting.

5) Jared briefly shared that the RSAC seems to have very good understanding of how the program will need to be shaped, and that collaboratively, they will build on this as a team as the project proceeds in the coming months.

Questions and Comments:

- Arielle asked if anyone was limited in their schedule to the 10:30am departure time or if they could stay a little longer to continue the discussion.
- Erica shared that she and some of the SSG team did have to leave by the set time due to other obligations.
- Naomi agreed to stay within the allotted time for the presentation but would stay after to answer any questions.
- Erica encouraged anyone who hadn't had a chance to speak to voice any concerns or questions they had.

6) Low Carbon Assumption (Draft Model):

*Presented by Naomi Devine, SSG*

- a. Since the last meeting, they've taken the low carbon assumptions and developed a first draft of the low carbon modeled scenario.

- b. Each of the colorful sections are different discrete actions that Jared and the Civix team will work on to make the plan actionable/implementable.
  - i. This implementation will set the direction and speed of the actions to meet the targets for 2035 and 2050.
- c. The model is based on the science-based target scenario that was selected in the last meeting.
- d. Scenario considerations were presented.
- e. Example of Residential Building Retrofit Action presented.

#### Questions and Comments

- Stewart revisited the suggestion he made at the last meeting of the SSG team working with the local power companies, Dominion Energy and Berkeley Cooperative. He shared that Dominion will be closing two coal power plants in the next five years, and that should have a major impact even if they switch to natural gas. He believes that this would still reduce greenhouse gas emissions and should be included in the information and projections that SSG is compiling.
- Naomi shared that this information is already included.
- Councilman Boykin expressed a desire to further explore the capacity of our current electrical grid. He would like to hear from the local power companies with respect to their ability to meet heightened electrical demands from the increased EV charging station needs that are expected with a transition.
- Stewart agreed with this point. He shared the limited ability in installing solar panels at the new Fire Station on James Island.
- Councilman Boykin further affirmed that it does literally come to considerations of the power lines and how we generate power, whether it be hydroelectric, nuclear, and the like.
- Kyle provided an answer to Councilman Boykin's question in that currently Dominion doesn't have the capacity for the level of electrification that's being proposed but they have modeled how much power generation will be needed to accommodate electric vehicles at different levels of EV adoption.
- Naomi added that Amber, the modeler for the low carbon scenario, factored the energy companies' decarbonization plans into the models we reference. She also shared that there will be another draft scenario. She also shared a question that was logged in the workbook asking if all the data and assumptions will be received.
  - The assumptions are received live in the process; for example, they discussed and gathered assumptions during the last meeting. Those can now be seen in a spreadsheet and modeled out.
  - They are now receiving more information regarding transportation from the last meeting, so another version of the scenario and further implementations will be discussed in December.
  - The assumptions are received live, and they update information and RSAC in stages.
  - In the final plan, all of the final assumptions and data will be included in a Data Methods and Assumptions Manual.
- Adrian asserted that any assumptions developed for retrofitting existing structures should avoid utilizing national standards. Based on the unique coastal environment of the Lowcountry and flooding, he believes more unique standards should be designed.
- Naomi shared that this specification has been noted and is currently being addressed.



- Kyle asked how the county fleet electrification strategy in the draft low-carbon modeled scenario outperformed the combined impacts of commercial and passenger vehicle electrification, transit, and active transportation.
- Amber said that the county fleet electrification strategy did not outperform the combined impacts of commercial and passenger vehicle electrification, transit, and active transportation.
- Kyle asked how the “transportation shift to green fuels” strategy differs from the electrification strategies shown in the draft low-carbon modeled scenario chart.
- Amber shared that in the modeling, hydrogen was designated as the green fuel, but it could be any substitute that doesn’t have an emission factor.
- Naomi advised everyone to review the scenario in the workbook as this is a first draft. Another draft scenario will be provided for the next meeting in December as well.
- Erica announced the end of the technical and implementation portions of the presentation.

#### 7) Outreach Updates:

*Presented by Thytyka Robinson*

- a. Thytyka and Arielle have been focused on engaging with municipalities and community stakeholders for in person discussions and questionnaire completion though:
- b. Community Engagement & Outreach
- c. Communications
  - i. The goal is to make the information more accessible and relevant to citizens who may not be as familiar with the inherent topics and their importance.
- d. In Person Meetings
  - i. Hispanic Chamber of Commerce Meeting Expected
  - ii. Charleston Climate Coalition scheduled at the College of Charleston
- e. Sharing the Questionnaire

#### Questions and Comments

- Thytyka asked that if there were any specific contacts that RSAC members have with the Chamber of Commerce, please, share with her and Arielle.
- Arielle confirmed that Diamond represents the Chamber of Commerce and is a member of RSAC.
- Adrian also confirmed his representation of the Builders’ Association and expressed that between himself and Diamond, there is an array of connections that can be made.
- Thytyka encouraged any affiliations with other organizations and/municipalities to be shared with Arielle so that it could be added to their outreach list.
  - She also shared that the deadline for the questionnaires and in person meetings is December 15, 2023. This will give Jared enough time to further design implementation approaches before the spring meeting for RSAC.
- Arielle re-emphasized the important of placing any questions, concerns, and/or ideas in the workbook between meetings.
  - Conversing over email extensively could be construed as a meeting, which needs to be avoided.
- Sally expressed an interest in gaining more information as they pertain to Zoning and Planning. With discussions of EVs and the respective changes in infrastructure that will be required, there are multiple ordinances and potential changes that will have to be considered as the department determines the minimum standards for



developing/redeveloping multi-family homes, small businesses, parking lots, charging stations, etc. She stated that it would be ideal to have documented guidance that Zoning and Planning could refer to and build from in this process.

- Naomi confirmed that this request has been noted.
- Arielle and Karen invited Sally to share her input and expertise as well in the future because minimum standards for facilities, such as parking lots, are often overlooked.
- Stewart shared that there are ideas being circulated on how to reduce greenhouse gasses. He wanted to know if SSG will make any suggestions that could then be discussed by RSAC. He gave an example of the County requiring any new multifamily home to have “X” capacity for EV, and wanted to know if SSG would provide specific or general recommendations in circumstances such as these regarding financials, staffing, etc., and he asked for clarification as to what RSAC’s role would be in these recommendations.
- Adrian added that in these recommendations from SSG, there would need to be the inclusion of the cost of impact.
- Stewart elaborated that he would like to know the degree to which all variables are addressed in recommendations.
- Councilman Boykin asserted that mandates wouldn’t, in this example, be introduced until the Federal Government came to a consensus on what uniform charging stations would entail.
- Sally offered some clarification in what was being asked. For example, having specifications determined by how many parking spaces are available in a lot or per however many dwelling units that are present.
- Adrian revisited the idea that incentivizing the process would make it more attractive to businesses.
- Councilman Boykin stated the importance of the County having the agreement of the inherent municipalities in the process as they have a larger footprint than unincorporated Charleston.
- Stewart agreed and shared the example of the single-use, plastic shopping bags.
- Sally also agreed on the importance of consensus even if the recommendation is more general.
- Arielle invited Naomi to explain the role of the committee in the regard of actions.
- Naomi explained that ultimately, County Council will have the final say on how efforts proceed. The RSAC and community engagement will help SSG and Civix develop a plan for successful implementation, including how fast and far they will have to go in implementation as well as how feasible it might be with funding. They will also pay attention to what the community states that they would like to see happen first because this is a multidecade implementation process. SSG and Civix won’t delve into specifics like how many parking spaces per lot or dwelling units need to be reserved for EVs, but they will provide the framework and details that will allow the County to decide what steps are necessary and feasible for success. Also, they do follow regional approaches to climate change actions plans, but they will have customizable features that fit the Lowcountry as a key player in rectifying a global scale issue in a regional way. Ultimately, however, they can only make the recommendations; County Council will have to provide the necessary approvals; matters of incentivizing and regulating certain issues will be up to the County to determine.
  - Naomi shared that this information is available in the workbook.

- Stewart revisited Council Boykin's discussion of utilizing municipality consensus/participation and asked about the resilience and sustainability teams for Mount Pleasant and North Charleston.
- Arielle confirmed a resilience representative who oversees emergency management in Mount Pleasant.
- Karen shared that North Charleston only has emergency management at this time.
- Stewart asked if it would be possible to invite them to the RSAC meetings along with resilience representation for the City of Charleston.
- Arielle responded that they are members of the internal working group, which is the better way to gain their input. The RSAC meetings are more formal and require public comment, which makes it more challenging for them to attend.

### **RECOMMENDATIONS MADE**

Recommendations were made by SSG and Arielle for the continued use of the workbook as ideas and questions arise as opposed to communicating via email.

### **Next Meeting**

The next meeting, which is scheduled for December 12, 2023, will include a revised low carbon scenario with continued implementation discussions.

### **CHAIR'S REMARKS**

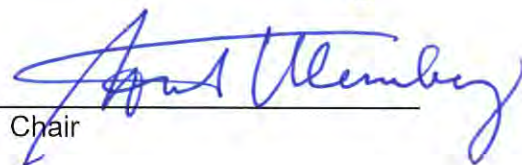
No remarks were offered as this time.

### **ADJOURNMENT**

The Chair, Stewart Weinberg, adjourned the meeting at 10:41 a.m.

Sheetal Verma<sup>+</sup>

Ratified by the Charleston County  
Resilience and Sustainability Advisory Committee  
this 25<sup>th</sup> day of October, 2023.

  
Chair



Attest:

  
Administrative Officer - Resilience

  
Administrative Officer - Sustainability