

**GREENSBORO COMMUNITY SUSTAINABILITY COUNCIL**  
**greensboro-nc.gov/csc**  
**Minutes, Regular Meeting**

4pm, Monday, March 14, 2022  
Virtual Meeting, using the Zoom videoconferencing tool

**CSC Members Present:**

Nicole Gaines, Chair	Veda Howell	Andrew Randall
Dr. Vicki Foust	Dr. Marcia Hale	

**Staff and Others Present:**

Will Yearns, CSC Advisor	May Htun, CoG, Transportation
Hugh Holston, City Council	Russ Behn, CoG Neighborhood Development
Jeff Sovich, CoG Planning	Sean MacInness, UNCG Sustainability Office
Bill McNeil, Solar Power Now Coalition	Selima Sultana, UNCG
Hank Henning, Duke Energy	

**1. Chair Greeting / Welcome Visitors**

Chair Gaines called the meeting to order at 4:02 pm and welcomed visitors and city staff in attendance.

**2. Welcome New CSC Member Andrew Randall**

Chair Gaines introduced newly appointed CSC member Andrew Randall, who is serving at-large. Mr. Randall stated that he is from Greensboro. He currently works in solar sales with SELS Solar, focusing on all types of lighting. He specializes in dealing with city ordinances in communities throughout the east coast region.

**3. Approval of January 10, 2022 CSC Meeting Minutes**

Chair Gaines invited the CSC to discuss the draft minutes of the January 10, 2022 CSC meeting. Ms Howell noted that on page 6, second paragraph, in the first bullet item, it appeared that the word “planted” should be added between the word “successfully” and the word “each”. There being no further comments, Chair Gaines called for a motion to approve the minutes, as corrected. Ms Howell moved the item, which was seconded by Mr. Randall. The CSC approved the motion unanimously.

**4. Air Curtain Burner Proposal – CSC Recommendation**

Chair Gaines asked Mr. Sovich to provide a summary of the proposal by the Field Operations Department to purchase an Air Curtain Burner device.

Mr. Sovich stated that the Field Operations Department operates a yard waste composting and mulching facility on a portion of the White Street Landfill, which sells compost and mulch to the general public (<https://www.greensboro-nc.gov/departments/field-operations/white-street-landfill/compost-and-mulch>). The amount of yard waste stored on the site, awaiting processing, combined with the amount of processed mulch and compost, have reached a point that the facility is frequently on the verge of exceeding the amount of space specified in the permit for that facility. In order to better manage the available space at the site, the department has proposed acquiring an Air Curtain Burner (ACB).

The ACB uses a rapid uniform air flow, combined with very high temperatures, to convert yard waste (organic vegetative material only) into bio-char, thereby reducing the volume to just 10% of its original form in a matter of hours. Bio-char is a very pure form of carbon with a porous texture that has excellent moisture retention properties. For this reason it is a valuable and highly marketable soil amendment for both commercial agriculture and home gardening. The process of producing bio-char is carbon-negative; it extracts atmospheric carbon and fixes it in a form that, when mixed with the soil, remains in solid form for centuries or longer, so it would help to reduce the City's net greenhouse gas emissions from municipal operations. Finally, the proposed ACB device is available with an optional heat to energy generator, which turns the waste heat from the bio-char process into electricity. It's estimated that the amount of yard waste processed at the facility would generate enough electricity to offset most of the power used at the White Street Landfill. But even without the co-generation unit, public sale of bio-char alone could provide a significant revenue stream.

Mr. Sovich stated that Richard Lovett of the Field Operations Department has presented about this proposal in several previous CSC meetings and informal work sessions. He has extensively investigated the potential benefits and drawbacks of operating an ACB. He has been unable to discover any significant environmental impacts or reasons for concern that would result from operating an ACB at the White Street Landfill. However, he has encouraged the CSC to carry out their own investigation and to bring to his attention any potential negative impacts. He has also offered to arrange a field trip for interested CSC members to visit the ACB operated by the Town of Shelby. A tour could provide a better understanding of the how the process works and what the conditions are like while the ACB is in operation. Shelby's air quality testing results show virtually zero particulates (smoke) generated by operation of the air curtain burner, except during the 5 to 10 minute start-up phase. The purchase of an ACB has been entered into the City's 2022-2031 Capital Improvements Program as Project #698. The Field Operations Department has requested the CSC to provide a letter of support for the project.

Dr. Foust noted that during the January CSC meeting, it was determined that any letter of support the CSC provides should include language ensuring that the concerns of surrounding residents, who historically have been impacted by the negative effects of the White Street Landfill, are heard and addressed, and that their health and safety are appropriately protected from any harmful effects of the project.

Chair Gaines called for a motion from the CSC to prepare a letter of support for the Field Operations Department's proposed Air Curtain Burner project, including language intended to appropriately address any environmental justice concerns associated with the project. Dr. Foust moved the item, seconded by Mr. Randall. The CSC voted unanimously to approve the motion.

##### **5. Strategic Energy Plan, Background Information (Timeline - from Resolution to Now and Importance of Environmental Justice 'Lens')**

Chair Gaines stated that this item provides an opportunity to explain the importance of ensuring that all voices are heard in the process of developing the SEP. In addition, we have the technical expertise provided by Dr. Foust and the team of people who have worked on preparing this document. She noted that she had the privilege of working with the CSC's Environmental Justice Task Force, and that she would provide a brief summary of the work of this task force. This effort held up the process a little bit, because we wanted the SEP to include language reflected the City Council's directive for a just transition to renewable energy for all of Greensboro's residents.

Chair Gaines recounted the timeline of developing the SEP, beginning in November, 2019, when efforts were under way to draft the City Council resolution that initiated the SEP process. She noted that the CSC and members of the community who were advocating for that resolution were already on the ambitious trail of making sure that the plan would incorporate principles of equity and environmental justice, and would acknowledge the voices and concerns of marginalized people. By taking the City Council's intent as stated in the resolution, and expanding upon it within the SEP, we have made environmental justice recommendations an intentional part of how the City will serve its residents through implementing this plan.

She noted that the process has been delayed by the Covid-19 pandemic and by the need to ensure that all the necessary background information had been compiled from the many City departments and staff members. And although there are some who may be dissatisfied with how long the process has taken, that time was necessary to get the substance and details of the plan right, so that it addresses the needs of all of our community, including those who may not know what an energy plan is or be aware of its existence. And the resulting plan, as Dr. Foust will share with us shortly, succeeds in addressing issues of disproportionate energy cost burdens and in ensuring that the impacts and benefits of renewable energy projects are distributed equitably.

## **6. Strategic Energy Plan Final Draft – Presentation**

Dr. Foust stated that development of the plan began with the 10-step process outlined in the US Department of Energy's *Guide to Community Energy Strategic Planning*. Starting in January, 2020, an internal Leadership Team representing every City department was formed and met numerous times as both a group and at the departmental level. They reviewed data, proposed strategies, and provided information and context throughout the process. Also, a diverse and dedicated Community Partnership was formed which included individuals from the business, academic, civic, and faith sectors, along with interested residents who actively participated in SEP meetings and at CSC meetings. The level of engagement by these groups and the volume of input received was truly extraordinary.

The City Council resolution stated that the plan should establish a pathway to transition to 100% renewable energy in City operations by 2040, so this became the plan's Energy Vision. The next step was to analyze the City's current energy and emissions profile, using calendar year 2019 as the baseline, and compare it with the previous 2007 levels. The City's energy usage data was compiled for four energy sources: electricity, diesel, gasoline, and natural gas. These sources were found to contribute 60%, 19%, 14%, and 7%, respectively, of greenhouse gas emissions from city operations. Energy use was also analyzed by department. Departments with the highest electricity use were Water Resources (49%), Transportation (18%), and Coliseum (12%). Departments with the highest diesel use were Field Operations (47%) and Transportation (33%). Departments with the highest gasoline use were Police (49%) and Transportation (31%). Departments with the highest natural gas use were Coliseum (34%), Parks & Recreation (14%), and Transportation (12%).

Once the energy and emissions profile was prepared, recommended strategies and actions for city operations as a whole to reach 100% renewable energy by 2040 were developed. These organization-wide strategies include:

- Establishing a sustainability office
- Prioritizing disadvantaged business for energy-related contracting
- Making all energy decisions in a way that promotes a just transition and protects vulnerable populations
- Requiring new and substantially renovated city buildings to meet green standards

- Transitioning the City fleet to zero-emission vehicles by 2040
- Ensuring no net-loss of City's tree canopy
- Developing energy and water conservation education programs for City staff; and
- Evaluating vehicle and equipment lease/purchase policies for potential efficiency gains.

Then, for each of the four energy sources, recommended strategies and actions were developed for the departments having the highest percent usage of that energy source. A collection of strategies and actions were also developed that are intended to incentivize residents and businesses to achieve similar progress on greenhouse gas reduction, energy efficiency, and renewable energy. Next all of the recommended action steps were prioritized into four phases of plan implementation: Years 1-5, Years 6-10, Years 11-15, and Years 16-20.

With the implementation steps prioritized, the team next developed the financing strategy, to identify how to pay for the various projects and initiatives. Key financing methods include savings and avoided costs resulting from improved energy efficiency, user fees, green bonds, grants, the NC Clean Energy Fund, and others. To track and assess progress in implementing the SEP's recommended actions, an evaluation plan was developed and a template for annual progress reports was created.

The remaining steps in the process are for the CSC to make a recommendation to the City Council, and then for the City Council to officially adopt the SEP. The final draft of the Strategic Energy Plan, as presented here, is available on the City website at:

<https://www.greensboro-nc.gov/home/showpublisheddocument/52021/637816601570330000>

## **7. Break (10 Minutes)**

The CSC adjourned for a brief break at 5:18 pm and reconvened at 5:28 pm.

## **8. Strategic Energy Plan – CSC Review/Discussion/Recommendation**

Chair Gaines invited those in attendance to raise any comments or questions they may have regarding the presentation or the Final Draft SEP document. Dr. Hale stated that although the CSC's Environmental Justice Task Force had not yet met to review this latest draft, she was very pleased to see clear expressions of environmental justice language woven throughout most sections of the plan. She commended Dr. Foust and the entire team on a job well done. She also noted several points of concern. First, regarding symbology, she stated that she envisioned the plan being used to guide decisions over the next 10 to 15 years or more. She asked if it would be possible in the Executive Summary to mention the importance of environmental justice. As it stands, a casual reader who doesn't read the entire document could get the mistaken impression from the Executive Summary, that environmental justice is not included in the plan, or is less important to the plan's intent. Second, regarding implementation, she noted that environmental justice language seems to be absent from the Prioritize Actions section. Dr. Hale stated that the evaluation method regarding environmental justice metrics could be improved by adding language about quantifying what is meant by an equitable distribution of impacts and benefits from renewable energy projects and initiatives, and about ensuring meaningful engagement with the most vulnerable and impacted communities in decision-making processes.

Bill McNeil of the Solar Power Now Coalition noted that regarding the matter of developing criteria to identify vulnerable and impacted communities, there is some very good work that was done a year or so ago by North Carolina Interfaith Power and Light, regarding the

energy cost burdens borne by low income and minority households, at the Census tract level. He also stated that he liked seeing that energy efficiency and water efficiency were identified in the plan as items that could be acted on fairly quickly. He speculated that water fixtures, appliances, HVAC systems, and lighting the homes of many low income households have not been updated to modern efficient versions, and that these households could benefit greatly from City programs to provide free or low-cost upgrades. Mr. McNeil also noted that the plan calls for annual progress updates, but he is concerned that one year may be too long an interval, for the City Council to receive updates about implementation activities. He expressed his interest in seeing more frequent updates about implementation, especially in the early stages, to keep the attention of the public and the City Council.

Regarding city street lighting, Mr. Randall noted that there are many different options for this infrastructure and formats through which this function can be provided. There are over 26,000 streetlamps in Greensboro that are owned and operated by Duke Power, but only a small percentage of these has been converted to LED fixtures. He asked if there is any way we can get a status update on this process and the anticipated timeline for completing it? Dr. Foust stated that this is an action item in the plan. The City could request Duke Energy to accelerate their pace in converting the incandescent fixtures to LEDs, but Duke would charge the City an extra fee for this. She also noted that Duke Energy charges the City a higher tariff on the electricity provided to LED fixtures than to the standard fixtures. So this transition could be accelerated, but there is a cost associated, so there would need to be a discussion and evaluation to weigh the benefits and costs. Hank Henning of Duke Energy introduced himself, noting that since Davis Montgomery's recent retirement, he is now serving as the City's account representative. He is very new in the role and is still learning many things about Duke Energy's relationship with Greensboro, but he has written down some questions that he will research in order to be able to respond more informatively during the next CSC meeting. He stated that he is looking forward to helping the City meet its energy and greenhouse gas emissions goals.

Dr. Foust stated that she appreciated the many thoughtful and valuable comments and questions raised regarding the Final Draft SEP. Following this meeting she will review the plan and make revisions to address as many of these points as possible. Mr. Sovich noted that the SEP is in essentially final form but there is still time to ensure that these and any other important revisions are made before the City Council is asked to take action. He stated that Dr. Foust and he would be presenting an update on the current draft of the SEP to the City Managers' Office in the next two weeks.

Chair Gaines called for a motion to recommend the Final Draft SEP, subject to further revisions as needed, to the City Council for review and adoption. Dr. Hale moved the item, seconded by Ms Howell. The CSC voted unanimously to approve the motion.

## **9. Acknowledgment of Absences**

Chair Gaines acknowledged the absence of Vice Chair Jones-Curtis and Mr. Pierre.

## **10. Incidentals and Announcements**

- **Items from Chair** – None.
- **Items from Vice-Chair** – None.
- **Items from CSC Members** – None.
- **Items from Public** –None.
- **Items from Staff** – None.

**11. Adjournment** - Chair Gaines adjourned the meeting at 6:24 pm.