



**Climate Council Meeting: MCC Strategy – COK Investments & Initiatives**  
**Friday, November 12, 2021 – 2:30-4PM**

**1) Welcome (Mayor Indya Kincannon)**

- a) Attendees
  - i) Mayor Indya Kincannon, City of Knoxville
  - ii) Erin Gill, City of Knoxville
  - iii) Brian Blackmon, City of Knoxville
  - iv) Amy Hathaway, Forest Heights Neighborhood Association
  - v) Jay Price, University of Tennessee
  - vi) Brian Hann, Dewhirst Properties
  - vii) Cortney Piper, Piper Communications/Tennessee Advanced Energy Council
  - viii) Gabe Bolas, Knoxville Utilities Board
  - ix) Nancy Nabors, Knoxville Chamber
  - x) Liz Upchurch, Tennessee Valley Authority
  - xi) Stan Johnson, Socially Equal Energy Efficient Development
  - xii) Stephen Smith, Southern Alliance for Clean Energy

**2) City updates on strategy advancement (Brian Blackmon)**

- a) Process: We will go through top priorities that ended up in the work plan, listed by importance within each sector
- b) Transportation
  - i) Strategies: bike/pedestrian improvements, public transit, electric vehicles
  - ii) Feedback 'themes' from technical working groups, equity working group, and public
    - (1) Corridors of connectivity/mobility - how people get from where they live to where they shop/work
    - (2) Safety and affordability
    - (3) Increased EVSE support
  - iii) City spending and notable achievements
    - (1) FY22 Adopted: The current fiscal year (ending June 2022) at the time that we adopted it (2021)
    - (2) FY22 Amended: After budget amendments from federal bills and internal reallocation (approved Oct 2021)
    - (3) FY22 budgeted funds (adopted + amended)
      - (a) Multimodal and bike/ped = \$10.22m
        - (i) Includes: neighborhood traffic calming; funding for Magnolia and multi-modal Complete Street projects
        - (ii) Excludes engineering project to reduce road congestion (designed to primarily benefit vehicle traffic)
      - (b) Public Transit = \$2.9m
        - (i) Increase in grant match for KAT bus electrification & opportunity charging
        - (ii) Amended budget includes \$1.3m to support CAC transportation services
        - (iii) Erin Gill: Amended budget also Includes \$300k to jumpstart bus stop and shelter amenities along route
      - (c) Electric Vehicles = \$200k

- (d) Funding for City fleet electrification and fleet/public charging infrastructure.  
These funds are managed by Office of Sustainability, with goal to double ports within the next year

(4) City Initiatives

- (a) 2021 Green fleet purchasing policy – formally adopted this week
  - (i) based on EV-first purchasing policy of peer communities
  - (ii) designed for Knoxville to be a leader
- (b) 2021 KAT electric buses (10 currently, 2 arriving) - most will be servicing routes in early 2022 (routes 11, 41, ...)
- (c) 2021 KAT Operational Analysis & Bus Stop Improvement Plan – KAT is looking at every bus stop to find what is lacking and how they can improve it
- (d) 2021 Vision Zero Resolution – adopted this fall; focuses on bike/ped safety rather than a framework for infrastructure, action planning to come
- (e) 2021 fleet EVs and public EV chargers- should be hitting the street soon
  - (i) Municipally-managed public level 2 ports (increasing from ~20 to 45 over the next year)
- (f) 2021 Knoxville / Mayor featured in TVA In Charge Episode 5 promoting EVs - find ways to engage with commercial fleets and support community EVs
- (g) 2020 Sidewalk study – draft is online right now, has not gone to City Council yet
- (h) 2020-21 partnership with Drive Electric TN

c) Buildings & Energy

i) Feedback themes

- (1) Lead by example
- (2) Partner programs
- (3) Energy access & burden

ii) City spending and notable achievements

- (1) FY22 budgeted funds (adopted + amended)
  - (a) Renewable energy = \$110k
    - (i) funds to enroll City facilities in TVA Green Switch Match pilot; sends message to TVA to expand
    - (ii) Reserved funds to support KUB community solar project, provided 3 acres of City property at no cost to KUB
  - (b) Building decarbonization = \$140k
    - (i) City participating in DOE's Low/No-Carbon Buildings pilot project
    - (ii) Pick 2 buildings and get them as close to net zero carbon as possible
    - (iii) City has opened a bid to find a solar partner for a 3-year contract
    - (iv) First municipal project partner – City featured at COP26 when DOE revealed the challenge

(2) City Initiatives

- (a) KUB Green Invest renewable energy promotion – City / Mayor Kincannon featured in episode promoting renewable energy across the valley

d) Waste

i) Feedback themes

- (1) City incentives and service - establish baselines
- (2) Education and engagement
- (3) Finding ways to engage private partners in this, ex. composting

ii) City spending and notable achievements

- (1) FY22 budgeted funds (adopted + amended)
  - (a) Organic waste (compost) = \$10k

## (2) City Initiatives

(a) Since Climate Council discussions, the Waste Office launched 2 initiatives to reduce methane emitting waste

(i) Community Compost Pilot

1. Take restaurant waste, collect it, take to farm, compost, used in community agriculture

(ii) ConServe low-waste restaurant certification program

1. Provide hands on assistance to them

## e) Federal Infrastructure Bill

i) Tennessee to receive \$7 billion, \$630 million for public transportation \$88 million for electric vehicle charging

ii) Federal: \$7.5 billion in total for EVs and EVSE

iii) City sent letter in the last year suggesting sending funds directly to cities

iv) GHG emissions are a global issue- lots of projects over the coming years

## f) Q&A

i) Stan Johnson: Where are we with the 2030/2050 climate goals?

(1) Brian Blackmon: Too early to tell GHG impact of strategies, estimations when the federal funding arrives in and can fund major projects. Ex. Cumberland streetscape project: high accidents before changes, now down 80% - but the project took 10 years. For vehicle electrification adoption, we can pull EV registrations annually. Office of Sustainability will be posting GHG inventory in the coming months.

ii) Stephen Smith: Decarbonization pilot- How much of data do we have on electricity vs fossil fuels? How much did we look at electrifying everything? Did we quantify impact? From community goal perspective, what have we done there?

(1) Brian Blackmon: Vehicle electrification was the overwhelming majority, along with net zero energy interest. GHG reduction estimates assumes that 10% natural gas electrification (replacement gas furnaces and replacing with heat pumps) plus 100% vehicle electrification would meet climate goals.

(2) Stephen Smith: Are there opportunities to get that number up? Dig in more on community goal aspect?

(a) Brian Blackmon: Example: Low carbon pilot. We are looking at replacing gas furnaces with heat pumps at 2 City facilities, then taking that data and projecting cost and emission for all city operations. The 10% adoption estimate was a swing from community wide 70-80% and was based off projects at the time.

(3) Stephen Smith: With federal funding, is there an opportunity to decarbonize city properties at an accelerated rate? City leads by example...

(a) Brian Blackmon: We know of all facility's current energy usage. There are some limitations to eliminating fossil fuels. Backup generation for emergency operations as an example. We are looking at where we can remove natural gas and move to electric.

## 3) Partner presentations

a) TVA (Liz Upchurch)

i) Tennessee Valley Authority Overview

(1) Here for Rebecca Tolene

(2) TVA is largest public power supplier in the country. Federal, nonprofit, running off of power bill revenue.

- (3) Wholesaler- 153 local power companies (inc KUB) serve customers
  - (4) Also provides power to large customers - like federal industrial properties
  - (5) Mission
    - (a) Provide affordable and reliable
    - (b) Steward of natural resources
    - (c) Partner for economic growth
- ii) TVA Sustainability and Carbon Reports
  - (1) 2021 May - 2<sup>nd</sup> sustainability report
  - (2) Issued first ever carbon report
    - (a) Strategic intent to aspire to net zero by 2050
    - (b) 70% reduction by 2030
    - (c) 80% by 2035
- iii) Carbon Leadership Today
  - (1) Outpacing peers at reducing carbon emissions
  - (2) 57% reduction in carbon emissions while still maintaining low cost and reliable energy
- iv) Decarbonization Journey
  - (1) In 2005, emissions were over 1300 pounds per MWh
  - (2) Progress has been made by retiring coal, adding nuclear, solar and wind, low carbon gas
  - (3) In 2020, under 600 pounds per MWh
  - (4) In 2030, goal of under 400 pounds per MWh by building out renewable asset strategy, retiring additional coal plants
  - (5) Add additional solar, local partner companies adding more solar and decarbonizing
  - (6) Various type of no-carbon or low carbon generation, natural resource investments
  - (7) All of this is with 2021 eyes- What's available today? Some ambiguity built in. Beyond 80% goal, we will need to rely on other technologies to get there
- v) Low Carbon Electricity Supports Communities in Achieving their Climate Goals
- vi) Buildings and Energy: Energy Efficiency
  - (1) 60 GW of energy saved through efficiency programs
  - (2) 15,000 people participated
- vii) TVA Solar Expansion
  - (1) Green Invest and TVA system - in addition to what KUB is doing
- viii) Transportation Priorities
  - (1) Transportation is the top driver of GHG emission with electricity right behind
  - (2) If TVA can support both, that enables everyone to achieve their goals
  - (3) TVA is a member of Drive Electric Tennessee
  - (4) 200,000 electric vehicles on the road up from 20,000 a couple years ago
  - (5) Partnering with state to install 50 fast charging stations in 50-mi intervals on major corridors in the coming years
  - (6) Electric Highway Coalition- all connections are there
- ix) EnergyRight.com/EV
  - (1) InCharge video features Mayor Kincannon
  - (2) Debunks myths around electric vehicles
- b) KUB (Gabe Bolas)
  - i) Sustainability Key to KUB Mission
    - (1) KUB exists to serve customers
    - (2) Sustainability is at KUB's core, part of our legacy
    - (3) Accelerating opportunities, trying to lead by example
  - ii) Green Invest- Buildings and Energy
    - (1) Develop and find opportunities to go renewable

- (2) 502 MW of solar in footprint
  - (3) 20% of electric load will be solar
  - (4) Largest solar investment in country and southeast
- iii) Community Solar- Buildings and Energy
  - (1) Building first community solar project
  - (2) Just bid \$1.5 million investment
  - (3) Make this accessible to the community
  - (4) Will be online next year
- iv) Electric Vehicle Adoption
  - (1) Proud to be involved
  - (2) Part of ribbon cutting for new buses
  - (3) Figuring out charging stations
  - (4) Offering rebates for charging stations in your home
  - (5) How do we make it more accessible?
  - (6) Fast charging stations- lower rate approved
- v) Low-Income Weatherization- Buildings and Energy
  - (1) With many older homes in Knoxville, want to make more homes more energy efficient
  - (2) TVA helped start program – Extreme Energy Makeover program
  - (3) Water savings program – low flow toilets, showers, etc.
  - (4) Help customers do better, it's about the quality of life of community members
  - (5) Renters can apply, but requires landlords' permission
- vi) Commitment to Sustainability
  - (1) New sustainability report
- c) SEED (Stan Johnson)
  - i) We need to do more, we have room to grow, we are so far behind, we still need to make sure we get this stuff done
  - ii) Video- “New Knoxville housing paves pathways for families to get out of poverty”  
[https://www.youtube.com/watch?v=Elh\\_x74-YII](https://www.youtube.com/watch?v=Elh_x74-YII)
  - iii) Solar Home Projects
    - (1) Lot is bought through City’s homemakers' program, TVA helps tremendously, helps out Knox County police department, Habitat for Humanity
    - (2) Young people are making these homes, Styrofoam walls with poured concrete
    - (3) US Building Council designs the houses. They are the most energy efficient houses built in Knoxville
    - (4) How do we create the carbon reduction strategies and bring it to our neighborhoods?
    - (5) Train young people on green construction. 3 of 6 have already gotten jobs in the industry.
    - (6) Also helps with home security
  - iv) Edible Forest + Greenhouse Café
    - (1) Pandemic projects
    - (2) Roof blown off greenhouse- garden manager has turned Edible Forest into playground
    - (3) Free opportunities for food and vegetable at the Greenhouse Café
  - v) Community Engagement
    - (1) Young people out in the community are knocking on doors, doing awesome work
    - (2) Talking about rental assistance and utility assistance
    - (3) Helping people stay on their feet
    - (4) Providing pathways out of poverty

#### 4) Discussion

- a) Brian Blackmon: We are at a point of reflection. We have a new workplan, website, using backend of budgets for outcomes, but we shouldn't rest on our laurels about the great work that has happened. What are opportunities for us that you see?
  - i) Mayor Kincannon: Home Uplift Program is open to renters, but this is not well known. We should amplify that along with community solar, making sustainability something that is accessible across the community.
  - ii) Gabe Bolas: We are looking at what others have done in the country to find ways to make it effective. Anything we can do to encourage and make this affordable and accessible with communication and input.
  - iii) Brian Hann: A partner was asking about contractors that can actually do the work. Its not hard work, they just don't have the bodies to actually do it. Right now, you can essentially start your own business with the funds allocated by TVA and KUB. There are all sorts of new green jobs that we need to put young people in touch with to start their own businesses.
  - iv) Mayor Kincannon: The green jobs label resonates with a lot of people. We need to get people to learn these skills and join/create businesses. Maybe this is something we can get the school system and community colleges to promote, focusing on the greater purpose- making money but also the meaning behind it.
  - v) Jay Price: People coming out of the University may want green jobs now but part time. Part time programs for high schoolers and college students would increase access to green jobs.
  - vi) Mayor Kincannon: With the Infrastructure Bill, more money will be available, but there is still a need for labor.
- b) Mayor Kincannon: Can the EV charging stations be built sooner?
  - i) Liz Upchurch: First round was opened up to local power stations where they are needed.
  - ii) Gabe Bolas: One at Walmart parking lot, near road 407. There is one on east side one on west side.
  - iii) Stephen Smith: Tesla has 2 chargers in the area. They have them about every 100-150 miles, opening to all users in Europe and will likely open up to people in United States. Several Circle K and Seven Elevens are looking at reconfiguring business model for electric transportation: One side for fossil fuels and one for electric. The lower level will have a convenience store and the upper level for will be for entertainment to essentially replicate Tesla entertainment for non-Tesla cars. Shell just rebranded to Shell Electric. Tesla chargers are in Turkey Creek and Brookville.
  - iv) Brian Blackmon: We are working with the Tesla team out of Miami to find more locations for chargers.
  - v) Brian Hann: We should put charging stations in parks and recreation centers.
  - vi) Brian Blackmon: We are looking at opportunities to put them in parks/state parks.
- c) Stan Johnson: Rebates for used electric cars. Sierra Club had a push for low-income people to get electric cars. Utilities companies or the city was giving rebate to give people more reasons to buy electric cars because they are expensive.
- d) Stephen Smith: There is a grant from DOE to get cars for loan cars for lower income communities (trying it in Charlotte now).
- e) Mayor Kincannon: Stan, you are hoping to do ten houses?
  - i) Stan Johnson: We are looking at current programs that already exist. Pinnacle Bank is loaning money to people with Section 8 vouchers. Now you can use your rent money to get a mortgage. Most houses are below \$100k or above \$250. We are building in that niche between prices, and we have a bank that will finance those houses. We are hoping to work with 20 young people and 10 houses over 3 years. We want to make sure we are doing this correctly and make sure that

this is feasible. The current construction should be done in January, and should serve as a model for the whole country.

- f) Mayor Kincannon: Cortney, I was inspired by my visit to Spark. We won't have the plant here, but Knoxville is a center of green technologies.
  - i) Cortney Piper: Phase 2 will be to collect this activity and have Knoxville be an economic hub. In our region, the unique opportunities will be ORNL, Spark Green Tech Accelerators, TechStars Greenstart (?). Lots of startups are coming to the Knoxville area. We need to make sure that those companies know that Knoxville has a climate action plan.
- g) Mayor Kincannon: If we channel growth towards redevelopment, that is the growth that I want to support. People want to walk and bike to work. How do we make these communities safe to walk to work? Urban living has the smallest footprint of all.
- h) Amy Hathaway: What we seem to be missing is a broad outreach and education plan for the city's residents. So much progress to reach these goals will be individual choices people will be making. So many residents do not know about the city goals. We talked about lots of projects but not much touched on how we will get communities involved in the goals. Not sure if TVA and KUB have education plans in the works.
  - i) Brian Blackmon: Individual departments do a lot of education. We have not put education in the context of the sustainability workplan. We're going to work with program directors to figure out what are we doing/not doing.
  - ii) Amy Hathaway: There is a need for a lot more advertising so people know that it is individual choices that make a difference.
  - iii) Cortney Piper: It's about understanding and taking pride that the city chose to take on these goals.
  - iv) Mayor Kincannon: We will work on how we can share with chamber, UT, communities, in order to give people agency over their choices.
  - v) Amy Hathaway: We must figure out how to break this up into bite size formats and snippets of information of how the public's choices make an impact. We need to weave that into the big plan and making sure this is in the budget. A significant amount of funding needs to be put towards marketing.

## 5) **Wrap-up and next steps**

- a) Brian Blackmon: We are entering budget season so we wanted to get your thoughts on these topics. We want to bring that sort of feedback and highlight opportunities for improvements that we can incorporate into workshops with departments. Departments will submit at the end of December, so now is the time to get those ideas. Next meeting, we would like to bring everyone back to talk about the Infrastructure Bill. Final questions?
  - i) Amy Hathaway: For each of these programs, is it up to the individual department to publicize this work? Who does the education campaign?
  - ii) Brian Blackmon: It depends. Usually, departments run the education. For example: The Multimodal Sidewalk Study is run by Engineering. We are sharing information and thoughts. We have recurring dialog. We don't have a director of education.
  - iii) Mayor Kincannon: We must promote the Action Plan more, educate more. The City can lead but who will communicate to the communities? We can amplify it.
  - iv) Stephen Smith: Several groups here have communications teams within the organization. TVA and KUB for example. It may make sense to bring some communications teams together to brainstorm how we can juice up the city's capacity. How can we take these goals and create graphics and infographics to do what is missing? There is not an intentionality. We could get communications teams to collectively brainstorm and bring more awareness.