Joint Environmental Taskforce MEETING SUMMARY

2/19/2020

Committee Members in Attendance: Karl Frisch, Elaine Tholen, Dan Storck, Penny Gross, Susan Stillman, Smita Chandra Thomas, Meg Mall, Greg Ulses, Ire Kim

WELCOME/UPDATES

- Dan Storck: Community-Wide Energy and Climate Action Plan (CECAP) process started to
 address greenhouse gas emissions reductions for whole county. Expect final report to share in
 12-18 months. Website has more information: https://www.fairfaxcounty.gov/environment-energy-coordination/cecap
- Dan Storck: Recommendations do not need to wait until final report to begin implementation.
- Elaine Tholen: Amendment in Capital Improvement Plan to make renovations and new builds net zero ready. Will also have 3rd party CHPS verification for renovations and new builds.
- Elaine Tholen: Forum topic upcoming on promoting opportunities for renewable energy education
- Penny Gross: Some actions may have budget implications which may result in slower implementation. Behavioral changes may not require funding but may be equally difficult to implement. Need to keep in mind funding sources and consider low-cost/free options.
- Penny Gross: Early childhood teachers came forward with ideas for reducing environmental
 impact in early childhood programs and shared formal proposal. Headstart classes may use
 16,000 utensils a week for all the meals served each day would like to eliminate single-use
 plastics. Complicated by federally mandated requirements that could limit potential actions.
- Karl Frisch: School Board is no longer using single-use water bottles for meetings and installed water bottle filling stations at Luther Jackson and Gatehouse.
- Karl Frisch: Consider cost of both making changes and not making changes.
- Staff is being asked to do "other duties as assigned" and need to be considerate of time commitments. Also need to be clear about which staff should be present at each meeting.

NEW MEMBER & SUPPORT STAFF INTRODUCTIONS

SUBCOMMITTEE WORK SESSION – Subcommittees took their own notes

- a. Review staff responses
- List of additional questions/information needed from county/school staff to start drafting recommendations
- c. Discuss what county/schools are doing and planning in your areas
- d. Next steps

JET NEXT STEPS

- Subcommittees will send their notes and any additional questions to Camela
- Will meet again on March 4

OTHER NOTES

Meeting Dates: First Wednesday of each month Next Meeting: Wednesday, March 4, 2020

Subcommittee Meeting Notes

WORKFORCE DEVELOPMENT

Subcommittee members in attendance: Ire Kim, Elaine Tholen and Greg Ulses

Subcommittee members reviewed staff responses to questions developed in the December 2019 JET meeting and developed some follow-on questions:

- What can the Solar PPA companies add to help us educate our students as our solar panels are being installed?
 - o Can they use interns? How can our students learn from them?
 - O What kind of employees are they looking for?
 - Does Trades for Tomorrow fit with this? Solar panel maintenance? Energy efficiency?
- How do we get students working on more real-life problems that have environmental foci?
- Can we talk to David Corsar, NWF, on a Green Career Working Session?
- How do we find out about the green careers that are available? Do they need a college degree, NOVA?
- Should we do an info fair—for those not going to college—here are opportunities.
- Do we need training for our HS guidance counselors?
- What online resources are available?
- What about the wastewater treatment/stormwater careers?
- Is there someone from Career and Technical Education (CTE) that needs to be involved?
- What are we already teaching that could be used in green careers—GIS, Mapping, AP Environmental Science (APES)?

Subcommittee members then developed a task list for themselves to help with finding answers to these questions:

- Elaine will find the name for a stormwater contact at the county.
- Members will touch base with Energy Management or Sustainability in Facilities and Maintenance in the Schools on the solar, Trades for Tomorrow questions.
- Members will invite David Corsar, NWF, to a JET meeting for an update.
- Elaine will talk with Sloan Presidio about a Career and Technical Education person to help.
- Members will try to determine if Fairfax County has any type of apprenticeship program for the trades.
- Greg will find information on NOVA courses on green careers programs.

ENERGY

Subcommittee members in attendance: Dan Storck, Smita Chandra Thomas

County staff present included Kambiz Agazi (Director, Office of Environmental and Energy Coordination), Sam Kang and Kate Daley.

Staff expanded on subcommittee questions developed in the December 2019 JET meeting:

Benchmarking Fossil Fuel Use

- 1. How many facilities have been benchmarked for fossil fuel energy use electricity, gas and water? When will all buildings be benchmarked/when will this information be available for the public?
 - Fully benchmarked, and county is working on an interactive dashboard that will show data on electricity, gas, and water and carbon.
 - This data is updated monthly.
 - Countywide emissions are also evaluated every 3 years under COG initiative.
 - Data can be found at FFX County > Cool counties page > environment and energy page >

Carbon Emissions

- 2. How much carbon is emitted by the county at present?
 - See response above.
- 3. Given the overarching goal of net-zero carbon, what is the county's plan/timeframe for net zero carbon emissions?
 - There is no timeline for zero carbon emissions yet. The School Board has certain goals (refer to attachment provided by Mr. Kambiz Agazi)

Energy Efficiency Efforts

- 4. What has the county done for energy efficiency so far? (specific actions taken on measures such as air tightness, insulation, energy audits, LED lights, etc.)
 - Mostly Lighting, some EV, more details in the attachment provided by Mr. Agazi.
- 5. Has the County considered a portfolio approach -- installing the same measures in multiple buildings instead of a project-by-project approach?
 - ESCO model being used in near future.

Financing Efficiency

- 6. The county is using a state-of-the-art financing mechanism for the solar RFP (Power Purchase Agreement). Has the county considered similar unique financing systems for other aspects of energy efficiency?
 - Looked at green bonds etc., 6-7 different opportunities. Financing is always more expensive.

Solar RFP

- 7. How much will the solar RFP reduce county emissions?
 - Included in the attachments provided.

- 8. Also, what is the timeline for the implementation of the solar projects? i.e. when will awards be given, when will solar be installed, what is the schedule for implementation?
- 9. How many schools/government buildings are covered by the RFP?

RECYCLING/WASTE REDUCTION

Subcommittee members in attendance: Penny Gross, Meg Mall

County and Schools staff present included Eric Forbes (County Director of Engineering and Environmental Compliance) and Donna Volkmann and Ali Culhane, FCPS Get2Green staff. Also present were several teachers from the Head Start Program, at the invitation of Supervisor Gross.

Subcommittee and staff members discussed a range of topics, which included:

- Discussion of goals as there are a lack of numerical goals related to waste on both the school and county side.
- Need for an aspirational goal of Zero Waste (with a date TBD) to go along with SMART goals. Such a goal will serve to inspire and motivate and leaves room for creativity.
- Emphasized the importance of simple messaging (i.e. Zero Waste); following on Ed Maibach's "Simple messages, repeated often from a variety of trusted sources"; will create solidarity, unity in efforts to get to Zero Waste.
- Once establish aspirational goal, can work to fill in the SMART, or intermediate goals and benchmarks.
- Logical first step to identify milestones/intermediate goals is to conduct a waste audit for
 county and school operations. The county performed an extensive audit of residential waste,
 which involved about 10 people over the course of 5 days. A more basic audit could be done in
 both county and schools to gain an understanding of the composition of waste. This will guide
 next steps for action and goal setting so that it will be data driven. Will need to determine
 when this audit could be performed and when the results can be brought back to JET (ideally in
 the next month).
- It would be useful to understand what neighboring jurisdictions are doing related to Zero Waste, especially within county operations (e.g. leaders like PG County and Montgomery County).
- Explore an RFP or an RFI to get interest from the private sector; could be a way to inject funding of this work via sponsorships, etc.
- Need to explore how current policies in place related to waste on county/school facilities can have more teeth. (no known policy exists for county-owned facilities). What tools or levers would help to move the needle in terms of policies, guidelines, incentives and potential penalties?
- Discussion about waste audits, how much it would cost, and how to obtain cost-effective data. Eric Forbes gave examples of what has been done by county staff.
- County has a contract with Free State Farms for composting, which cuts time from 9 to 12 months down to 3 to 4 months for usable compost (discussion with schools indicated that compostable trays are not recycled due to food contamination and health risks).
- To make school recycling programs work, you need an advocate at each school; suggestion made that perhaps recycling program should be led at the pyramid level.

- End of school year trash is huge, as teachers clear out their classrooms; largest amount of trash collected is in June; lowest month is July!!
- Head Start teachers recommend in-service training at the beginning of the school year (see their proposal which was distributed).
- Simple message from many voices.
- Set aspirational goals for zero waste, set a time frame, and need rewards, too.
- Enforcement? Eric Forbes said that the community doesn't have an appetite for that in his opinion.
- Brief discussion of potential for business sponsorships with schools, especially for rewards.

TRANSPORTATION

Subcommittee members in attendance: Karl Frisch, Susan Stillman

Staff in attendance included Francine Furby (Director, FCPS Department of Transportation), Tom Biesiadny (Director, Fairfax County Department of Transportation). Others in attendance included Bobby Monacella, Joe Rupp and Ellie Reynolds.

The discussion between subcommittee members and staff is summarized below:

- Members spoke first with Francine Furby, Director, FCPS Department of Transportation, and discussed the upcoming EV School Bus program with Dominion Energy Virginia. FCPS was awarded 8 EV school buses in the first round of the Dominion program and they expect delivery in August and December of 2020. FCPS pays the amount of the cost of a diesel bus and Dominion pays for the batteries. Dominion then gets the right to use the buses for load balancing of the grid using vehicle to grid technology (V2G).
- Questions were asked about alternatives to the Dominion program. To better understand alternatives, FCPS issued a Request for Information on December 13, 2019. This is to better understand transition in the entire fleet to electric vehicles by 2030. FCPS has received 8 responses and is in the process of evaluating those responses.
- Part of the value chain in V2G is being able to sell grid services to a utility. The question was
 raised, could FCPS sell the grid services of the bus fleet (if FCPS owned the buses) to PJM or
 some other entity? If Dominion is the only buyer, it seriously constrains the value of the grid
 services.
- What will be the generation mix of the electricity that the buses are charged with? Dominion's generation mix in Virginia includes 33.6 percent natural gas, 26.5 percent coal, 33.8 percent nuclear and 5.6 percent renewables (remember that renewable energy in Virginia includes pre-WWII hydropower and biomass, sustainably sourced or otherwise).
- The current FCPS bus fleet is almost all "international" brand buses. They do not manufacture electric buses. Thomas is the manufacturer selected by Dominion. Bluebird and Lion also manufacture EV buses but Lion doesn't meet Virginia specifications. Dominion typically uses leases to own contracts for bus acquisition.
- Committee members posed a question that FCPS probably can't answer but warrants investigation: How will Dominion pay for the buses in its school bus program? Will the cost be borne by electrical ratepayers? If it is paid for by ratepayers, will Dominion then be allowed to

- get a return on capital investment (ROI) on that outlay essentially "double dipping." There is legislation in the 2020 General Assembly to enable the electric school bus program. After the session it will be worthwhile to see if this question is answered.
- The question was asked, how far are students allowed to walk or bike to school. Answer: middle and high school students 1 ½ mile. Elementary students 1 mile and must have a crossing guard if they cross a road where the speed limit is 25mph or greater.
- Another member of the JET (not on the transportation subcommittee) raised an interesting
 question: What would it take to reduce the number of parents who drive their children to school
 and cause backups at the Kiss and Ride? Point being that there are buses to bring the children to
 school and these idling vehicles are creating pollution and wasting fuel.
- Will FCPS be installing charging stations at schools for faculty and student use? Answer: Not
 currently in the plan. Thomas Jefferson High School gained approval a few years ago but have
 not yet installed the charging stations.
- Tom Biesiadny, Director, FCDOT, was asked if the FFX Connector system is considering electric buses. He said that they are monitoring the experiences in other localities and that they are looking for a grant that would pay the difference between a diesel bus and an electric bus. Urban transportation buses have a different usage pattern than school buses. They run all day and into the evening, so range is an issue and there doesn't seem to be an opportunity to use the buses for V2G creating a mitigating revenue stream.
- To better understand alternative transportation options such as biking and walking reference the FCDOT bike master plan: https://www.fairfaxcounty.gov/transportation/bike/master-plan