1) Provide the updated/latest version of the presentation.

See attached file "City_Council_100_pct RE_Dist.pdf"

2) Provide a list of accomplishments for the Office of Sustainability

Using the 2009 launch of the Sustainable Cleveland 2019 initiative as a starting point, the Office of Sustainability has worked to improve the quality of life for Cleveland residents by engaging the community to elevate sustainability as a priority, building collaborative relationships with diverse stakeholders, securing external funding for key projects, and working with other City departments and divisions to engrain sustainability in municipal operations. Below is a listing of select accomplishments grouped by major focus areas.

Sustainable Cleveland Initiative

- Convened annual Sustainable Cleveland Summits with more than 5,000 attendees from 2009 to present.
- Supported the formation of more than 50 volunteer working groups, eight of which have become businesses or non-profit organizations working to improve sustainability in our community.
- Developed the Sustainable Cleveland Dashboard of Indicators to report on sustainability progress in the City and the region.
- Led and partnered on various initiatives throughout the Sustainable Cleveland celebration years and beyond, including, but not limited to:
 - Energy Efficiency (2011)
 - Formation of the <u>Cleveland 2030 District</u> which supports voluntary disclosure and implementation strategies to reduce energy and water consumption and transportation emissions.
 - Local Food (2012)
 - Supported more than 175 community gardens through Summer Sprout, Gardening for Greenbacks, and other programs.
 - Collaborated with Stone Soup and Hunger Network of Greater Cleveland to support food rescue and connect those with excess food to those in need.
 - Advanced & Renewable Energy (2013)
 - Completed renewable energy site screening project to identify potential locations to support clean energy installations.
 - Awarded Solsmart Bronze Certified for having published a Solar Energy Guide to help streamline permitting and inspection processes and information for residents and businesses to install solar at their homes and businesses.

 Supported policy positions in favor of retaining or strengthening the state's energy efficiency and renewable energy portfolio standards.

Zero Waste (2014)

- ZeroWasteNEO working group promotes event waste reduction by hosting and/or providing support for more than 50 zero and reduced waste events throughout Cleveland.
- Created the <u>Zero and Reduced Waste Event Guide</u> and hosted several Zero Waste Workshops providing information and resources which empower others to host their own zero and reduced waste events.

Clean Water (2015)

- Collaborated on the Clean Water Sweepstakes and Tour, which engaged more than 15,000 people over 25 events throughout the year.
- Chaired the Plastic Reduction Working Group which created a Skip the Straw campaign in partnership with the Ocean Conservancy.

Sustainable Transportation (2016)

- Helped launch UH Bikes in 2016, the City's first bike share system.
- Hosted/partnered with other community organizations to conduct several Alternative Fuel Vehicle <u>Ride-N-Drive</u> events to allow Clevelanders to experience various Electric Vehicles (EV) and alternative fuel vehicles.

Vibrant Green Space (2017)

- Worked collaboratively with multiple organizations to develop the Cleveland Tree Plan and set aggressive tree canopy restoration goals.
- Helped create the <u>Cleveland Tree Coalition</u> to support public and private planting actions outlined in the Cleveland Tree Plan.
- Co-chair the Forest City Working Group in partnership with Holden Forests and Gardens. The Group, formed in 2013, is currently conducting an inventory on the Moses Cleaveland Trees.
- Helped secure US EPA grant to install two green roofs at Cleveland Hopkins International Airport.
- Partnered with the Trust for Public Land to create the <u>Climate Smart</u> <u>Cities</u> tool, which helps connect potential climate risks to equitable solutions which improve resilience and health outcomes in Cleveland's neighborhoods.

Vital Neighborhoods (2018)

- Partnered with ioby (In Our Backyards) to provide dollar-for-dollar matching funds for resident-led climate action and sustainability projects through the <u>Cleveland Climate Action Fund</u>.
- Partnered with Cleveland Neighborhood Progress on the Resilient Cleveland initiative, which included support from the Kresge Foundation to advance climate resilience work and outreach efforts through 16 climate ambassadors.

o People (2019)

- Required all 90+ members of Cleveland's Climate Action Advisory Committee to participate in racial equity workshops through the Racial Equity Institute.
- Launched annual <u>Youth Sustainability Leadership Program</u> (YSLP) to connect Cleveland youth with sustainability topics and practices, and supported youth in leading their own sustainability projects at home, at school, or in their community.
- Led the year-long <u>Cuyahoqa50</u> celebration, which engaged more than 200 organizations and 50,000+ people across 100+ events, conferences, and exhibits to commemorate the 50th anniversary of the last Cuyahoga River Fire.

Grant-Funded Projects

The Mayor's Office of Sustainability has played a critical role in securing and managing more than \$7.5 million in grant funding since 2008, which has supported numerous sustainability projects and programs. These include:

- Distributed more than 5,000 rain barrels to Cleveland residents since 2008 through Mayor Jackson's Youth Summer Employment Program, with annual funding support from the Northeast Ohio Regional Sewer District, representing a total investment of more than \$288,000.
- Successfully implemented a \$4.5 million Energy Efficiency and Conservation Block Grant (EECBG) through the U.S. Department of Energy's American Recovery and Reinvestment Act (ARRA) funding, which included multiple projects, programs, and planning activities to improve energy efficiency and reduce waste and carbon emissions throughout City operations and the community. Projects included:
 - Lighting and HVAC upgrades at 16 City of Cleveland facilities, including recreation centers, fire stations, health centers, and police stations.
 - Energy audits for 25 of Cleveland Public Power's commercial and industrial customers.
 - LED Streetlight Pilot to help Cleveland Public Power initiate and develop specifications for LED streetlights city-wide.
 - Installation of a Solar Thermal Domestic Hot Water heating system at the LEED Gold certified Collinwood Recreation Center.
 - Implementation of EnergyCAP, Cleveland's utility data management system, which is being used to-date to track \$60M worth of annual energy, water and fuel cost and consumption information, and analyze for and act on savings opportunities.
 - Deconstruction of 22 residential structures in the City, which resulted in approximately 6,000 tons of material diverted from the landfill.
 - o Procurement of recycling containers to support waste reduction:
 - 24 drop off recycling dumpsters;

- 15 recycle bins for Cleveland's West Side Market;
- 2,000 curbside recycling containers; and
- 40 outdoor recycle bins for Cleveland's downtown area.
- Construction of the LEED certified Bike Rack, Cleveland's first downtown bike station offering cycling commuters bicycle parking, shower/change facilities, bicycle rental, and bicycle repair.
- Installation of a segment of the Lake-to-Lakes Bike Trail, connecting the Shaker Lakes area to University Circle.
- Implementation of the Cleveland Energy\$aver® Program, a residential turnkey energy efficiency program targeted at middle income households which provided low-cost energy assessments, comprehensive home energy reports, and financial support (rebates, incentives, and low-interest loans) to implement home retrofits for more than 150 households with an average of 25% annual energy savings.
- Development of the 10-year 2010 Sustainable Cleveland Action & Resources Guide, 2013 Cleveland Climate Action Plan and Sustainable Cleveland Municipal Action Plan.
- Secured more than \$425,000 from the US Forest Service through the Great Lakes Restoration Initiative to support tree planting throughout the City of Cleveland:
 - 2014- 625 street trees planted in the Central, Collinwood, Ohio City, Old Brooklyn, and Slavic Village Neighborhoods;
 - o 2015- 270 trees planted in downtown Cleveland;
 - 2016- 198 street trees planted in the Cudell and Buckeye-Shaker neighborhoods; and
 - 2018- 175 street trees planted in the Bellaire-Puritas and St. Clair Superior Neighborhoods.
- \$32,000 grant from the National Oceanic and Atmospheric Association (NOAA) to create an education and awareness campaign about plastic marine debris in the Great Lakes, which led to the creation of the Don't Break the Lake campaign.
- \$14,000 grant from OH EPA to support education and training around stormwater control measures for public employees in the Cleveland region.
- \$1 million in funding from the Northeast Ohio Regional Sewer District and US EPA (through a Great Lakes Restoration Initiative grant) to install more than 40,000 sq. ft. of permeable pavers and various stormwater control measures at the West Side Market parking lot.
- \$200,000 grant from the OH EPA to procure a new recycling truck for the Division of Waste.
- \$25,000 grant from the OH EPA for outreach and education around the City's curbside recycling program, which support the distribution of 70,000+ magnet mailers to Cleveland households.

- \$436,000 grant from the US EPA's Great Lakes Restoration Initiative Program to install more than 20,000 sq. ft. of permeable pavers and plant 100 trees at Marion Motley Park.
- \$350,000 in funding the US EPA and Northeast Ohio Regional Sewer District to install green infrastructure at Wildwood Park.
- \$200,000 from the Northeast Ohio Regional Sewer District's Green Infrastructure Grant program to install a Rainwater Harvesting System at the Cleveland Kennel.
- \$110,000 from the Funder's Network/Partners for Places Program and Gund Foundation to support the 2018 update of the <u>Cleveland Climate Action Plan</u>, with an intentional focus on equitable climate action.
- \$45,000 from the Ohio EPA's Local Government Innovation Fund (LGIF), to develop a comprehensive and collaborative Alternative Fuel Vehicle and infrastructure feasibility plan for the City of Cleveland, Cuyahoga Metropolitan Housing Authority (CMHA) and the University Circle Inc. (UCI).
- Five (5) Community Recycling Awareness Grants through the Cuyahoga County Solid Waste District, totaling more than \$28,000 to support outreach and education activities around the City's curbside recycling program.
- \$5,000 from the Urban Sustainability Director's Network to provide racial equity workshops for City of Cleveland employees, including all of Mayor Jackson's cabinet members.
- \$40,000 from the National Recreation and Parks Association to support community engagement around Cleveland's park investments.
- \$25,000 from the US Green Building Council to provide technical assistance and cover initial certification fees for Cleveland's LEED for Cities and Communities certification.
- \$150,000 from the Funder's Network/Partners for Places Program, Cleveland
 Foundation, Gund Foundation, and the United Black Fund of Greater Cleveland to
 create <u>Cleveland's Clean and Equitable Energy Future</u>, a roadmap for achieving
 Cleveland's 100% renewable energy goal, while helping to reduce energy burden for
 Cleveland residents and support local economic development and job creation.
- \$160,000 from the Robert Wood Johnson Foundation for the <u>Circular Cleveland</u> initiative, which supports Cleveland's transition to a more circular economy, including composting at the West Side Market and small business incentives through the City's Economic Development department.

Municipal Operations Sustainability

 Ongoing implementation of EnergyCAP, Cleveland's utility data management system, to analyze for and act on energy savings opportunities. This has delivered approximately \$2M in direct financial savings to-date through the capture of billing

- errors, consolidation of energy supply procurement, and closing out accounts at unused facilities. As of 2019, this has allowed us generate \$3.3M in annual avoided cost savings since the 2010 baseline, through various capital improvement and energy management initiatives.
- Helped manage the City-wide natural gas supply procurement for Dominion and Columbia Gas accounts, and electricity supply procurement activities for First Energy electricity utility accounts, to deliver cost savings and consolidate the procurement processes for all relevant accounts across the City.
- Lead annual reporting efforts to demonstrate Cleveland's sustainability and energy management progress and reduction of greenhouse gas emissions, including American Council for an Energy Efficiency Economy (ACEEE), US Department of Energy's Better Building Challenge, and the Carbon Disclosure Project (CDP).
 - Cleveland has consistently received an "A" rating from (CDP) for its disclosure on climate mitigation and adaption progress, since 2015.
- Participated in efforts to draft and pass Complete & Green Streets Ordinance in 2011 (Ord. No. 798-11).
- Helped develop <u>Cleveland's Green Building Standards</u>, which developers and homeowners must meet in order to receive the 15-year residential tax abatement.
- Developed the <u>Sustainable Cleveland Municipal Building Policy</u>, requiring all new construction or major renovations at City facilities to meet LEED Silver standards.
- Implemented the City's first set of dedicated electric vehicle charging stations for city's fleet in 2018, and led the collaborative procurement of EVs in 2020
- Developed specifications for Building Automation Systems (BAS) and Systems Integration, and helped implement the first sets at the general fund facilities.
- Procured more than 60 water bottle filling stations for City facilities, including all
 25 Recreation Centers, Public Auditorium, and City Hall.
- Led Cleveland's community choice electricity aggregation, which helps provide Cleveland residential and small business customers serviced by the Cleveland Electric Illuminating Company (CEI) with rate savings and cost stability, as well as energy backed by 100% Renewable Energy Certificates (RECs).
- Helped pass the Riparian Setback Ordinance in 2016, protecting areas along banks and streams of rivers (Ord. No. 1555-13).
- Supported shared mobility legislation providing guidance and permitting requirements for scooters, e-bikes, and other types of shared mobility systems.
- Consistently maintained EPA Voluntary Green Power partner status since 2015, for having met or exceeded the voluntary renewables purchase, primarily through the city's community choice aggregation (CCA) program.
- Conducted waste audits at Cleveland City Hall, Cleveland Hopkins International Airport, and the Department of Public Utilities Administration Building.

- Led Cleveland's reporting efforts for the STAR Communities rating program, achieving a 3-Star rating (note: STAR Communities has transitioned into the LEED for Cities and Communities rating system).
- Participated in the US Water Alliance's Water Equity Task Force, which created <u>An Equitable Water Future Cleveland</u>, outlining key focus areas to help improve water equity here in Cleveland, including affordability, job creation/workforce development, and climate resilience.

Major Planning Activities

- 2010 <u>Sustainable Cleveland Action & Resources Guide</u> which outlined the path for Cleveland's leaders to transition to a more sustainable economy by the year 2019.
- 2013 <u>Cleveland Climate Action Plan</u>, Cleveland's first climate action plan, which included a city-wide greenhouse gas inventory and 33 high-level actions to strengthen our economy, clean our environment, and improve the health and wellness of Clevelanders.
- 2013 <u>Sustainable Cleveland Municipal Action Plan</u> outlining 25 actions to reduce greenhouse gas emissions from Cleveland's municipal operations and allowing the City of Cleveland to lead by example and achieve cost savings by implementing sustainable practices.
- 2015 <u>Cleveland Tree Plan</u>, a community-wide collaboration to rebuild Cleveland's urban forest and tree canopy through partnership. (<u>Cleveland Tree Plan 2020 Tree Canopy Progress Report</u>).
- 2017-18 Cleveland Alternative Fuel Vehicle and infrastructure feasibility plan, funded by the Ohio EPA's Local Government Innovation Fund (LGIF), to develop a comprehensive and collaborative plan for City's municipal fleet, Cuyahoga Metropolitan Housing Authority (CMHA) and the University Circle Inc. (UCI).
- 2018 <u>Cleveland Climate Action Plan Update</u>, which included an updated city-wide greenhouse gas inventory, five (5) focus areas and four (4) cross cutting priorities, 28 objectives and 107 actions to advance climate action and resilience in Cleveland, with an intentional focus on equity and improving outcomes for Cleveland's most vulnerable residents. This plan received American Planning Association (APA)'s award for climate action.
- 2021 <u>Cleveland's Clean and Equitable Energy Future</u> a roadmap for achieving Cleveland's 100% renewable energy goal, while helping to reduce energy burden for Cleveland residents and support local economic development and job creation

3) Provide a rate comparison for CPP and First Energy (PUCO cost differences)

CPP is not regulated by PUCO. CPP rates are posted at <u>Rate Schedule | Cleveland Public Power (cpp.org)</u>. All IOU price to compare rates are posted at <u>Energy Choice Ohio - Electric</u>. In addition, the tariffs for the First Energy Ohio Companies can be found at https://www.firstenergycorp.com/customer-choice/ohio-/ohio-tariffs.html

4. Provide an explanation on "avoided costs" and how it impacts a customer. Include a chart detailing it for CPP and First Energy

"Avoided costs" are costs on a utility bill that can be offset by the amount of onsite renewable energy generation, such as behind the meter solar installations. It has positive savings impact for a customer whose facility has such an on-site renewable energy installation. These reductions are the product of the amount of on-site solar generation (kWh) times the unit avoided cost of electricity (\$/Kwh). Not all utility costs can be avoided. The costs that are avoidable are dependent on how a utility charges for its service. Generally, a larger percentage of CPP costs are avoidable than CEI costs due to rate structure differences. Below are tables showing the various bill components (what you see when you look at an electric bill), whether those costs are avoidable, and how much of each component is avoidable for both CPP and CEI.

CEI*

Bill Components	Avoided by on-site generation?	Extent
Generation Related Component	Yes	100%
Customer Charge	No	0%
Distribution Related Component	Yes	50%
Cost Recovery Charges	Yes	50%
State Tax (if applicable)	Yes	100%
Total Charges	Yes	Partial

^{*}First Energy/CEI's summary billing items are actually a complex combination of monthly and seasonal utility tariffs and supplier (or utility) consumption charges, such as: Customer Charge + Advanced Metering Rider; Reactive Demand Charge; State Tax (if applicable); Universal Service Fund (USF); Base Energy Cost; Demand Cost; Kwh Rider Costs and such.

Cleveland Public Power

Bill Components	Avoided by on-site generation?	Extent
Total Commercial Electric Charge	Yes	100%
Demand Charges (If applicable)	No**	0%
Energy Adjustment Charges	Yes	100%
ORC kWh Tax	Yes	100%
Total Charges	Yes	Most

^{**} Assumes no demand charges are avoided by on-site solar production for both CPP and First Energy sites.

5) Who is CPP's largest customer?

CPP does not disclose individual customer information.

6) Provide a breakout of the anticipated jobs added to the workforce. (It was suggested pulling an existing chart from the report.)

The table below can be found on page 55 of the "Cleveland's Clean and Equitable Energy Future" report. The table includes changes in job opportunities for the MCE and MAX pathways.

Table 6-1: Green job opportunities in Cleveland through 2050 in the MCE and MAX Pathways

Sector	Net Job-Years (MCE Pathway)	Net Job-Years (MAX Pathway
Construction	464	1,159
HVAC&R	259	648
Water Heating	38	94
Lightning	131	327
Material for Envelope	85	208
Motors, Drives, and back-up generators	29	75
Other Electrical Equipment	56	139
Energy and Environmental Management and Smart Controls	316	794
Insurance and Finance	23	58
Program Administration	127	318
Architecture and Engineering Services	119	298
General Economy	11,550	41,719
Fuel and Utilities	(2,076)	(25,323)
GAIN	13,196	45,836
LOSS	(2,076)	(25,323)
TOTAL NET JOB-YEARS	11,120	20,513
TOTAL NET JOBS	2,800	5,150

7) Provide coverage maps for CPP and First Energy.

CEI can, generally, serve all parts of the city of Cleveland. See attachment "CPP_ServiceArea.jpg" for CPP coverage area.

8) Provide the anticipated impact to the energy adjustment charge.

For on-site solar installations at CPP-served facilities, the energy adjustment charge is a part of the avoided costs. We do not anticipate any separate impact outside of these installations.

9) Provide additional detail on the ground square footage used. Include rough footprint maps and security/fence plans.

See attached file "RFP On-site Solar Ground Mounted Sites Schematics.pdf"

All on-site ground mounted installations are within City controlled facilities. In addition to existing security and perimeter fencing, any additional security/fence implementation will be the responsibility of the down-selected solar developer, and has been included in the proposal prices.

10) Update the chart," Ord. 978-2020 Estimated Facility Specific Information" to include the current service provider.

See attached file "Estimated Facility Specific Information_Update.pdf"