

2023 Virginia Dominion Energy Oral Presentation Topic
Adapting to Climate Change

Your group has been hired as a climate advisory consultant for *Keep Hopewell Beautiful* for the city of Hopewell, VA. *Keep Hopewell Beautiful* is composed of fifteen Hopewell citizens appointed by the City Council which work to influence residents of Hopewell to keep the city clean and beautiful, educate residents about problems and issues related to the environment, and act as a liaison between city residents and City Council. Your group has been tasked to educate *Keep Hopewell Beautiful* on the urgent and complicated issues that the changing climate will bring to the City through a presentation that includes a proposal on how the city should prepare for the coming climate impacts. Based on the findings in your presentation, your proposal and recommendations will be advanced by Keep Hopewell Beautiful to the City Council to implement.

Use the attached fact sheet to learn more about the City of Hopewell, in order to present how the City can effectively plan and prepare for the complex challenges that the changing climate will cause, and how the town can mitigate these coming changes with innovative technologies and changes to the way the town uses natural resources.

In your presentation:

- **Explain why** the earth's climate is changing and the impacts that are expected from these changes in the future.
 - Address the impacts and implications these changes could cause on aquatic, forest, wildlife, and soil ecosystems, in addition to human society and culture.
 - Identify what current human actions or activities in the town are contributing to climate change.
- **Propose three** specific, innovative, and plausible initiatives that would mitigate and prepare the City of Hopewell for the impending changing climate.
 - Explain why these three ideas would have the strongest long-term impact on the City, local ecosystem, and economy.
 - Include a timeline of when these initiatives should be implemented
 - Present general costs of your proposal and potential finance options
 - Describe who will benefit or be impacted by these changes. Additionally, think critically about groups that are socio disadvantaged and how they may be disproportionately impacted by the changing climate.
 - What resources will be needed to implement your proposal?

Be sure to also address:

- Are there any local, state, or federal policies you should consider in your presentation?
- Are there any new or existing partnerships the City should utilize?
- How can these strategies be applied at a larger, global level? And why it is important for climate change to be addressed at multiple levels.

A fact sheet on the City of Hopewell, VA is provided below. **You should NOT contact** the City of Hopewell or any of its agencies for the purpose of this scenario. Research should be done online and based on the attached fact sheet.

The only visual aids allowed will be Microsoft PowerPoint (PPT). Google slides may be used in creating the presentation but should be downloaded to a PPT file for competition day.

City of Hopewell Fact Sheet

City Council Commitment: The City of Hopewell recognizes its responsibilities to enhance and preserve the James and Appomattox Rivers and the Chesapeake Bay environment now and for future generations. Therefore, the City of Hopewell is committed to environmental stewardship and leadership. To diminish the environmental impacts of its activities, products, and services, the City will emphasize environmental stewardship and adopt **GREEN** Principles (Reference: <https://hopewellva.gov/environmental-management/>)

Hopewell Environmental Legacy and Steps Forward:

“Between two rivers, a city’s hopes are tied to healthy waters. The Clean Water Act revived the James and the Appomattox, allowing Hopewell to seek its own renewal” Chesapeake Bay Program – September 15, 2022 Reference: <https://www.chesapeakebay.net/news/blog/between-two-rivers-a-city-has-tied-its-hopes-to-healthy-waters>

General Information:

- City Size: 10.28 square miles
- [Click here for a map](#) of Hopewell, VA
- Population as of July 1, 2021: 23,140
- Median Household income (in 2020 dollars): \$43,262
- Persons in Poverty: 24.7%
- Water Source: *“Virginia American Water serves about 9,300 residential, commercial and industrial customers... The source of supply for Hopewell’s drinking water is the Appomattox River, near the confluence with the James River. - Source, [Virginia American Water](#)*

Prominent Industries in the City:

- Manufacturing - (Honeywell, WestRock, Evonik, Ashland Chemical)
- Dominion Energy- power station converted from coal to biomass in 2013
- CSX- Railroad company
- The Hopewell City Marina

Agriculture is not a substantial industry within the City limits, however is much more prominent in the surrounding Prince George County and Charles City County.

Utilities & Waste Disposal:

- [CVWMA](#) partners with Hopewell to provide waste management programs such as weekly trash collection, twice monthly recycling collection and drop-off recycling services. The Citizen’s Convenience Center is operated by the Department of Public Works, a collection center for other residential waste. Learn more [here](#).
- Wastewater: Hopewell Water Renewal *“handles about 27 million gallons of wastewater a day, coming from the City of Hopewell, Fort Lee, the Federal Corrections Complex, portions of Prince George County”- [Source, City of Hopewell](#)*
- Stormwater: *“The City of Hopewell owns and operates a 5-year Municipal Separate Storm Sewer System (MS4) permit to reduce discharge of pollutants with the appropriate water quality State Water Control Law.” – Source, [City of Hopewell](#). The City of Hopewell (City) implements a [Stormwater Utility Fee](#).*
- Sewers: *“Sewer collection pipes run all around and under the City of Hopewell collecting waste from industries, businesses, and homes.... Wastewater collection systems face multi-faceted problems caused by drought, flooding, infrastructure failure, sewer overflows, poor water quality, and climate change.”- [Source, City of Hopewell](#)*
- Energy: Electricity is sourced from the Dominion Energy power grid and Natural Gas is sourced from Columbia Gas of Virginia.
- Office of Emergency Management- Responsible for *“coordinating the City’s response to major emergencies or disasters, whether natural or man-made, with the primary goal being: to save lives, prevent injuries, and protect property and the environment.”- [City of Hopewell](#)*

While this scenario is based on the City of Hopewell, emphasis should be placed on applying strategies to address how the earth’s climate is changing and the impacts that are expected from these changes in the future, and not fine details specific to Hopewell.