



2024 Virginia Dominion Energy Envirothon Oral Presentation Problem

Hampton Roads Renewable Energy Plan

With Virginia's growing energy needs, the expansion and reliability of our electricity grid is critical. In 2020, the General Assembly passed the Virginia Clean Economy Act (VCEA), which mandated a goal of 100% zero-carbon energy generation by 2050. This will be benchmarked with 73% or more of our electricity coming from clean energy by 2035. The Commonwealth has already begun work on clean energy transitions, including plans for the largest offshore wind project in the U.S., located 27 miles off the coast of Virginia and scheduled to be completed in 2026, in addition to other solar and wind projects being developed.

The Hampton Roads region is one of the many areas that are actively planning their energy future and must determine which new technologies will best serve the needs of its citizens and natural environment. The Hampton Roads Planning District Commission (HRPDC) has placed you in an advisory role to plan for the transition to renewable energy production and has put you in charge of determining the most appropriate next form of renewable energy to bring to Hampton Roads region.

Your group is tasked with presenting a **Renewable Energy Plan** to the HRPDC. Your presentation to Officers and Members of the HRPDC should include the following–

- An explanation of **why there is a need** to transition from reliance on fossil fuels, to renewable energy sources specifically in the context of the Hampton Roads region.
- **A plan for up to two renewable energy sources to bring to Hampton Roads and why these are the best options for the region. Include details of how the plan should be implemented,** including:
 - A proposed timeline
 - Who will need to be involved in this process
 - Associated cost and financing options
 - Construction details and if there is a supply chain to support the needs of the plan
- Your recommended **next steps** that HRPDC should carry out, to take action on your proposed plan
- Anticipated **challenges and benefits** of implementing your plan. This should include environmental, social, economic, and environmental justice impacts of adopting these new energy sources.
- Information about the region's current and projected energy demand, and how this plan plays a role in meeting these demands.

Consider geographic constraints and what roles of public perception, political policy, community advocacy, and scientific advancements play in your plan for a successful transition to renewable energy.

You should NOT contact any localities within the Hampton Roads Region or any of its agencies for the purpose of this scenario. 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.