

H.E.C. must become sustainable. Here's why:

There is US and worldwide scientific agreement that we must reduce our Greenhouse Gas (GHG) emissions by 45% by 2030 to avoid catastrophic climate impacts. Our most prestigious scientific institutions, NASA, NOAA, the National Academies of Science, and US military leaders are in agreement with the Intergovernmental Panel on Climate Change.

Harrisonburg is not acting quickly enough to reduce its GHG emissions. Although the City Council established EPSAC in 2017, unanimously supported a 100% clean energy goal in 2020, and amended its 2040 vision for the City, these steps have not yet resulted in the scale of GHG reductions necessary, nor the resiliency needed to protect Harrisonburg households.

The reason: Harrisonburg Electric Commission (HEC) strategies are not aligned with City goals. The great majority of GHG emissions under City influence are those associated with our municipal electric utility. The Harrisonburg City Code identifies HEC as "a unit of City government." HEC is owned by the City and operates pursuant to City Code. While the City itself accounts for only 4% of Harrisonburg's total emissions, HEC is responsible for at least 32% of the total, a number that will likely double in years to come, as diesel and gasoline vehicles are replaced with electric vehicles.

Harrisonburg cannot make meaningful progress toward its sustainability goals without direct collaboration with HEC. Without City Council direction, HEC has proven unable to align its goals with City goals. At present, HEC has neither direction nor incentive to reduce GHG emissions. Only the City Council has the authority to provide such direction. The appropriate mechanism for doing so is adjusting the City Code relating to HEC. This is a necessary first step in unlocking solutions to the challenges of spiraling energy costs, energy freedom and electricity burden for Harrisonburg families.

Locally owned solar power is cheap. Communities in Virginia are getting electricity from the sun today for much less than we are paying for HEC power. Thoughtful development of local solar resources can help to protect Harrisonburg citizens from the high and rising costs of Dominion energy. Under HEC's current contract, HEC is forbidden (until 2031) to generate any of its own power locally. This contract restricts our freedom to produce low-cost solar power locally. We must encourage HEC not to sacrifice our freedom in the next contract, which will be negotiated starting next year (see below).

SOME THINGS TO CONSIDER

Energy poverty

- The average electricity burden for Virginians (3.1%) is higher than the national average (2.7%). Electricity bills are unaffordable for 75% of Virginia households.¹
- Harrisonburg's population is designated 60% ALICE or below poverty level. The 2018 average electricity burden for zip code 22801 was reported at 4.1%, and is undoubtedly even higher today, due to recent rate increases.

Rising cost of electricity.

- In 2020 Dominion Energy announced a residential rate increase of nearly 40% over the coming decade.² Soaring fuel costs and the war in Ukraine will now raise prices even more.³

¹ Virginia Poverty Law Center: <https://vplc.org/electricity-burden-and-the-myth-of-virginias-rate-utopia/>

² Dominion's nearly \$50 monthly power bill hike in Virginia is a warning for other states. <https://www.utilitydive.com/news/dominions-nearly-50-monthly-power-bill-hike-in-virginia-is-a-warning-for/577666/>

³ <https://wtop.com/virginia/2022/05/dominion-bills-need-to-go-up-to-cover-higher-fuel-costs/>

- Since October 2021, the cost of residential electricity in Harrisonburg has risen by about 20 percent. This is due mainly to the rising cost of natural gas, as reflected in the "fuel adjustment factor" on HEC bills. Natural gas prices were rising significantly prior to the war in Ukraine. The recent diversion of US natural gas to Europe, however, will ensure that domestic prices will remain high for the foreseeable future.
- Dominion is experiencing high "impairment" costs from early retirement of polluting energy plants, especially coal plants. Going forward, many of Dominion's recently built gas plants may meet the same fate, leaving ratepayers stuck with the bill.⁴ Financially, this is like purchasing a home with a 30-year mortgage, but having to abandon it after 20 years, while still having to pay off the mortgage.⁵
- Dominion is seeking to pass these large impairment costs on to ratepayers, further raising rates for HEC and other Dominion customers.⁶

Locally owned solar is cheaper.

- Locally owned solar generation is considerably cheaper than electricity from Dominion. A solar array will be installed on Bluestone Elementary School this summer. Using standard levelized cost of energy calculations,⁷ the electricity generated at Bluestone will end up costing 5-6 cents per kilowatt-hour over the next 25 years. Currently, the City pays HEC 9.1 cents (plus the fuel adjustment factor) for primarily fossil-generated electricity. Solar power requires no fuel (only free sunshine), and therefore no fuel adjustment cost.

Harrisonburg's clean energy commitment.

- In Nov. 2020, the Harrisonburg City Council unanimously adopted a resolution to reach 100% renewable energy on our local electrical grid by 2035, but has provided no direction to HEC since that time to pursue this goal. Without City guidance, HEC's only criteria in contracting for electricity is the lowest price and reliability, with no incentive to pursue innovative options that could allow the City and HEC to work together to meet sustainability goals. Even options financially favorable for the City have thus far been excluded. Bluestone Elementary School is an exception.

HEC constraints and City opportunities.

- Until 2031, HEC's 100% procurement contract with Dominion Energy prohibits HEC from generating its own electricity. The City is free, however, to put up solar generation on municipal properties and schools. This can be done through a third-party service contract, at no cost to the city, and with immediate taxpayer savings in energy cost on the order of 20-35%.
- With direction from the City, HEC can be encouraged in its next contract to negotiate freedom for the Harrisonburg community, including HEC, to build and operate low-priced, local solar generation (far below Dominion cost).

Why a change in City Code?

- The most straightforward way to provide guidance is simply to amend City Code section 8-1-8 to include the words "environmentally sustainable" in the description of expectations for HEC. This approach is a policy-appropriate City Council action, and minimally prescriptive. It gives HEC Commissioners both direction and the incentive to pursue GHG reductions, in a way most beneficial to the Harrisonburg community.

⁴ <https://powerforthepeopleva.com/2015/04/12/dominions-natural-gas-gamble-looks-risky-for-ratepayers/>

⁵ <https://cleantechnica.com/2022/04/19/you-might-be-paying-for-a-worthless-gas-plant/>

⁶ <https://hburgcitizen.com/2021/12/02/hec-among-utilities-accusing-dominion-energy-of-improper-accounting-overbilling/>

⁷ Levelized cost of energy is a term describing the cost of power produced by solar over a period of time.

<https://www.simpleray.com/resources-and-informations/how-to-calculate-simple-lcoe-for-solar>