1. I applaud the GC3 decision not to use expansion of natural gas as part of a scenario. I agree that Connecticut cannot reach its 80% emissions reduction if it expands natural gas. Studies on a world-wide scale show that we cannot reach the goal of keeping global warming less than 2 degrees Celcius by 2100 unless we severely cut use of natural gas.

2. The use of 85% ethanol (E85) as a substitute for gasoline should be avoided. Scientific studies have shown that it takes so much energy to make ethanol from corn that using E85 is not carbon neutral. The use of E85 would actually increase carbon emissions. The acreage planted to grow corn would also raise food prices on corn and other grains.

3. Diesel fuel should be phased out as soon as possible. It is very dirty fuel with a high content of PM2.5 (particle matter, 2.5 microns). Essentially PM2.5 is microscopic pieces of carbon that can penetrate into the lungs and then into the blood stream. It contributes to a host of diseases including asthma, COPD, heart disease, liver disease, and others.

4. The use of bio-diesel for heating should be avoided. It is carbon neutral only if vegetation being used for the oil is being replaced. There is also not enough acreage to produce the bio-diesel needed to replace fuel oil in many furnaces. Bio-diesel probably makes sense in cities where the oil can come from waste oil used for cooking. If it is used locally, transportation costs would be minimal, and restaurants should be happy to donate the oil since otherwise they have to pay for disposal.

5. The ideas for storage of renewable energy should be expanded. There have been several articles about electric vehicles charging at home can be used as storage of electricity for the grid after they have charged. Electric water heaters can be metered and connected to the grid so that the electricity they use can be paused to make up for variations of electric supply on the grid. This of course calls for grid modernization and decarbonization of the grid.

Sincerely,
Gary Bent