

Comments on the CLCPA Draft Scoping Plan from Rochester Institute of Technology Submitted June 28, 2022

We applaud NYS's leadership in addressing climate change and appreciate the comprehensive effort in analyzing the complex, interconnected system of responses that will be needed. That said, we find the CLCPA Draft Scoping Plan to be lacking in some areas. For example, there is a focus on leakage for industry and how it can be avoided. However, there is a very large not-for-profit sector in NYS that also is extremely price sensitive, including higher education and healthcare. This sector contributes tremendous economic benefit to the State and merits consideration in the Scoping Plan. In order to rectify this, the Scoping Plan should be expanded to take this sector into account in the Energy Intensive and Trade Exposed (EITE) section.

Many higher-education institutions have had climate action plans in place and have been working toward carbon neutrality for over a decade. We often have been early adopters of technology in order to advance our goals and we are actively monitoring advancements in technology that will move our commitments forward. In some instances, our strategies and timelines do not completely align with the state's targets, as our assumptions regarding timing of the availability of technologies differ. Given our early work and continued efforts on this front, the regulations should allow for some flexibility for these higher-education institutions to realize or realign their goals and strategies to meet the state's targets in a cost-effective manner, given that planned investments already may be in the pipeline, requiring adjustment.

The Scoping Plan establishes a fixed schedule, which has not fully considered the pace at which technology is developing. Thus, implementation dates should provide flexibility to account for this. Additionally, regulatory and technological advancements in air-source heat pumps, hydrogen fuels, deeper geothermal wells, and energy storage must be incentivized and encouraged. One example would be for the State to examine required permitting from the Division of Mines for drilling geothermal wells deeper than 500 ft. Geothermal wells at 1,000 ft would allow greater capacity per well and decrease implementation cost considerably.

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The Scoping Plan does not include any detailed consideration of conversion costs and the opportunity cost of these investments. This uncertainty makes it difficult to thoroughly comment on the scenarios and strategies outlined in the document. Experts in the energy industry project increases in the cost of natural gas and electricity of 30% initially and up to an expected 100% by 2027. Even as universities plan and design for electrification, these increased operating costs will be impactful. At RIT, such a change would increase current operating costs by \$2.2M in FY23 and \$7.5M by 2027. Capital investment also needs to be considered under the EITE provisions. For example, RIT's electrification conversion will require a capital investment currently estimated at \$350M based on existing technology. Assuming a 30-year bond issuance at current interest rates, these costs would require repayments in excess of \$20M per year. Altogether, our initial estimates are that these costs would correspond to a required tuition increase of more than 10% per year. If this were to occur across the state, with all higher education campuses substantially raising tuition, we could drive students to out-of-state schools.

One thing is certain - SIGNIFICANT State or Federal financial support will be needed in order to meet the aggressive targets set by the CLCPA.

Lastly, we strongly encourage the State to establish an academic advisory committee for the CLCPA to ensure that both technological research and workforce pipeline opportunities and concerns are a central part of all discussions. Academia can play an important role in developing and deploying the solutions needed to address the daunting challenges ahead.