

AEE COMMENTS IN RESPONSE TO THE NEW YORK CLIMATE ACTION COUNCIL'S DRAFT SCOPING PLAN Submitted to the New York State Climate Action Council July 1, 2022

Advanced Energy Economy ("AEE") is submitting these comments in response to the New York State Climate Action Council's Draft Scoping Plan. AEE is a national association of businesses that are making the energy we use secure, clean, and affordable. We work to accelerate the move to 100% clean energy and electrified transportation in the U.S. Advanced energy encompasses a broad range of products and services that constitute the best available technologies for meeting our energy needs today and tomorrow. AEE represents over 100 companies in the \$238 billion U.S. advanced energy industry, which employs 3.2 million U.S. workers, including more than 157,000 workers in the Empire State.

New York's Climate Leadership and Community Protection Act ("CLCPA"), represents one of the nation's most ambitious and comprehensive climate and clean energy legislation. But achieving the carbon reduction and clean energy goals spelled out in the CLCPA, and the resulting growth in the advanced energy industry, will require smart implementation strategies and policies. The Climate Action Council is tasked with identifying and outlining those strategies, yet the strategic paths presented in the Draft Scoping Plan are mostly conceptual in nature and not sufficiently detailed to guide policymakers to implement specific regulations and other approaches to meeting the goals of the CLCPA. The Draft Scoping Plan also only gives cursory attention to proposing financing mechanisms necessary for attaining these goals cost-effectively.

According to the Draft Scoping Plan, the total cost for meeting the CLCPA's goals through 2050 is approximately \$300 billion on a discounted present value basis. AEE supports the Climate Action Council's inclusion of carbon pricing, clean energy supply standards, low carbon fuel standards, and other economy wide strategies in the Draft Scoping Plan. AEE encourages the Council to build upon these strategies as tactics for financing New York's transition to a decarbonized economy in the Final Scoping Plan. Specifically, the Climate Action Council should:

Maximize the Consideration of Demand-Side Resources

Electricity demand in New York is expected to increase by at least 65% by 2050, further complicating the achievement of New York's decarbonization goals on the timeline established by the CLCPA. Investing in both energy efficiency (reducing energy waste) and demand response (targeted reductions in energy use during periods of high demand) are thus critical to addressing this expected

increase in power demand and meeting the 100% zero-emission electricity goal by 2040. Because energy efficiency reduces energy costs for all customers by lowering wholesale energy prices and deferring or avoiding the need for additional electricity generation resources and other costly infrastructure investments, it is the lowest cost and most readily available resource to meet energy demand. The Brattle Group and AEE member Oracle/ Opower recently completed a study that quantified the relative emissions impacts of various utility customer actions, both energy supply relative to demand solutions, and demand-side solutions relative to each other. Of all the demandside actions (electric and gas efficiency, distributed solar, EV adoption, and home electrification), energy efficiency makes the largest single contribution in 2030. The research also found that consumer-driven demand-side solutions can contribute nearly two times the avoided emissions value than that of supply-side solutions alone, and at a significantly lower cost.

With greenhouse gas emissions from the operation of buildings hitting their highest level ever in 2019, New York's recently passed Advanced Building Codes and Appliance Standards Act is an excellent first step at lowering the demand on New York's electric grid and reducing customer energy costs. Unfortunately, New York utilities are still incentivized to focus on specific outcomes, such as arbitrary effective useful life metrics, in their demand side management programs, rather than achieving all cost-effective energy efficiency or focusing on emissions. The Final Scoping Plan should advocate for changing the success metrics of utility demand response programs to primarily concentrate on avoided greenhouse gas emissions. Currently, the Draft Scoping Plan references the value of nearterm resources such as energy efficiency and references New Efficiency: New York, but the details are opaque and do not appear to fully account for the potential of these solutions. The Final Scoping Plan, therefore, must include a more robust consideration of the specific role demand-side resources will play in meeting the goals of the CLCPA.

Endorse a Low Carbon Fuels Standard for New York

In New York, the transportation sector accounts for 47% of carbon dioxide emissions, making it the economic sector that contributes the largest share of global warming causing pollutants. Drastically cutting oil use in the transportation sector through improved vehicle efficiency, clean fuels, and powering vehicles from a clean energy supplied grid, therefore, are among the most important strategies for decarbonizing the transportation sector in New York. A low carbon fuel standard is a critical policy tool to scale up advanced transportation technologies and meet New York's decarbonization goals on the timeline established by CLCPA. Low carbon fuel standards work to transform the fuels market from one that relies nearly exclusively on petroleum-based fuels to a diversified one that uses a variety of clean alternatives, effectively making polluters pay for the development and deployment of clean alternatives and electric vehicles ("EVs") through a credit-trading system based on total life-cycle emissions. Under this paradigm, all fuels produced in or

imported to New York are assessed on a carbon intensity scale that measures the full lifecycle emissions of each fuel, including extracting and refining oil, growing crops and producing biofuels, or generating electricity. A low carbon fuel standard is established based on an assessment of the life cycle analyses of individual vehicle fuels. Fuels that pollute more than the established standard generate deficits while fuels cleaner than the standard generate credits. Over time, the low carbon fuel standard is gradually reduced, creating a growing market for advanced transportation fuels.

The Final Scoping Plan should endorse the Department of Conservation ("DEC") establishing a benchmark for carbon intensity based on each energy source and its associated lifecycle emissions with the carbon intensity of fuels being determined by program administrators and annually certified by third-party verifiers. Notably, a low carbon fuel standard is not a tax and the resources generated stay in the private market. The fuels with a carbon intensity level below the benchmark generate credits for the producer or importer. The most efficient fuels, such as biodiesel and electricity, generate the most credits, where fuels with the greatest carbon intensity, such as gasoline and diesel, generate deficits that must be matched with clean fuel credits. As higher-carbon fuels run deficits and lower carbon fuels earn credits, a funding mechanism for cleaner fuel options is put in place. Finally, the credits generated by low carbon intensity fuels will make it easier for transit agencies to move to electric buses, truck fleets to switch to low carbon biofuels, and could encourage ride-hailing companies to make EVs available to their drivers. By joining California, Oregon, and Washington, New York would help create a market for clean fuels while taking a whole life-cycle approach to decarbonizing the transportation sector.

Continue Developing Policy Support for Transportation Electrification

The Draft Scoping Plan includes several strategies that the State has since implemented. Governor Hochul signed legislation in 2021 creating ZEV targets for all vehicle classes, including 100% ZEV sales of medium- and heavy-duty vehicles ("MDHD") by 2045, and subsequently DEC established the Advanced Clean Trucks ("ACT") rule requiring vehicle OEMs to increase sales of ZEV. The next step described in the Draft Scoping Plan is an Advanced Clean Fleets ("ACF") policy requiring procurement of ZEV vehicles by fleet operators. In combination with ACT, this policy builds long-term confidence in New York's market for vehicle and EV charging equipment, project development, EV charging service providers, and utilities to plan accordingly for future EV charging projects. New York can prioritize fleet vehicles subject to an ACF – the Draft Scoping Plan specifically calls out government owned and/or contracted fleets and New York transit bus operators.

These policies build on New York's investment through NYSERDA and state electric utilities in various types of EVs and EV charging infrastructure. Further incentive support is needed to expand and accelerate the deployment of all types of EVs. State incentives that stack and leverage multiple

funding sources will encourage near- and mid-term projects that advance to a market future where upfront costs of electrification compete with liquid fossil fuels. In the near term, for example, the Federal Bipartisan Infrastructure Law is making available vehicle co-funding for electric school buses across the country including many prioritized school districts in New York. New York has an opportunity to leverage these funds with incentive programs, New York Green Bank financing opportunities, and/or utility programs expanded to incorporate MDHD EVs.

Propose Carbon Pricing as a Tool to Meet CLCPA Goals

Carbon pricing, implemented through a tax on the carbon content of fossil fuel emissions, has the potential to be a key element of New York's strategy for cost effectively meeting the decarbonization goals on the CLCPA's established timeline. The incentives generated by carbon pricing can be reinforced with regulations on emission rates or feebates, whose fees and rebates for products (for example, vehicles, appliances) or firms (for example, power generators, steel producers) depend on the intensity of their emissions. Carbon pricing can also be implemented through emissions trading systems—firms must acquire allowances for each ton of greenhouse gases they emit, with the supply of such permits limited by government. Businesses can buy and sell allowances, thus establishing a price for emissions. Emissions trading programs can be designed to mimic the advantages of taxes through price-stabilizing mechanisms like price floors and revenue-raising measures such as permit auctions.

The global spike in energy prices since Russia's invasion of Ukraine underscores the need to transition away from dependence on energy sources that are subject to recurrent disruptions. Setting a carbon price provides across-the-board incentives to reduce energy use and shift to cleaner fuels and is an essential price signal for redirecting new investment to clean technologies. Assigning a price to carbon creates certainty concerning future emission prices, thus sending a strong market signal to the advanced energy industry. Revenue from carbon pricing can also fund public investments needed for advanced energy infrastructure, such as power grid extensions or transmission upgrades. Carbon pricing can play an important role in the just transition by boosting the economy and counteracting the economic harm caused by higher fuel prices, while also reducing air pollution in communities most impacted by poor air quality. The resulting revenues can also create a funding stream for workforce development and retraining, and other equity focused programs.

The Final Scoping Plan should encourage the Board of Directors of the New York Independent System Operator ("NY-ISO"), the entity responsible for operating the electric transmission system that serves New York, to integrate carbon pricing into New York's wholesale energy markets. Once New York State sets a social cost of carbon as a price per ton of emitted carbon dioxide, the onus is placed on power plants to pay for the carbon they release into the atmosphere. While the Federal Energy Regulatory Commission would ultimately be responsible for accepting NY-ISO's carbon pricing proposal, adding a carbon price to wholesale markets is proven strategy for lowing emissions and clean energy costs. The Analysis Group recently released a NY-ISO commissioned report that determined that carbon pricing can help the state reach the CLCPA mandates faster and more cost-effectively while reducing emissions and maintaining grid reliability.

AEE greatly appreciates the opportunity to comment on the Climate Action Council's Draft Scoping Plan. We look forward to further engagement with the Council as they continue to lay the groundwork for the decarbonization of New York's economy.

Sincerely,

Leah Meredith Policy Principal Advanced Energy Economy Imeredith@aee.net