The Business Council

memo

| | |
|---|---|
| TO: | Members, Government Affairs Council |
| FROM: | Ken Pokalsky |
| SUBJECT: | Overview of CLCPA Draft Scoping Plan |
| DATE: | 1/23/22 |

**Legislative Mandate** - The "Climate Leadership and Community Protection Act" (CLCPA), adopted in 2019, commits New York State to aggressive carbon emission reduction and renewable energy targets. Its specific statutory goals related to the energy sector include:

- A reduction of statewide greenhouse gas (GHG) emissions to 60% of 1990 levels by 2030 and to 85% of 1990 levels by 2050.

- 70% renewable electric power generation by 2030 (excludes nuclear generation) and a statewide electric system that will be zero emissions by 2040 (includes nuclear generation).

- specific technology goals including 6 gigawatts of distributed solar by 2025, 3 gigawatts of storage by 2030 and 9 gigawatts of offshore wind by 2035, and a 185 trillion Btu increase in statewide energy efficiency compared to 2025 forecast levels.

The statute also created a "Climate Action Council" (CAC) and several advisory groups. The CAC was required, by the end of 2021, to issuing a "scoping plan" that outlines recommendations for attaining the GHG emission limits set forth in the CLCPA, and to also make recommendations for going beyond the 85% emission reduction goal by 2050, with these recommendations to be incorporated in a subsequent updating of the state energy plan. The statute requires at least six regional hearings and 120 days for public comments on the CAC scoping plan, with the CAC issuing a final scoping plan by the end of 2022.

The scoping plan was issued on December 30, 2021, and the plan and supporting documents are accessible here.

**Scoping Plan** - The scoping plan and supporting documents amount to more than 1,000 pages and provide significant details on the CAC's analysis and recommendations. Some sections, i.e., transportation and buildings, provide specific recommendations and timelines for action. Others, including sections on the electric power and natural gas sectors, and on industry, provide far less in the way of a detailed implementation plan.

This memo is intended to provide an overview of the most significant energy-related proposals impacting major sectors of the New York State's economy. Most businesses will be impacted by the recommendations of multiple sector-specific proposals. We urge our members to review the scoping plan in detail, and we welcome your addition feedback as we prepare our submission for the CAC public comment process.

**Benefits and Costs**

- The plan discusses the range of adverse impact caused by climate change and asserts that climate change will be affected by the actions proposed in the scoping plan.

- In addition to reducing the impacts of climate change, it recognizes that the state will need to adapt to risks that cannot be avoid.

- While the report provides few specifics on the cost of implementation measures, it reports on macro-level models of the cost and benefits of multiple compliance scenarios, each of which projects that benefits will significantly outweigh implementation costs, with benefits including public health benefits from improved air quality Improvements in air quality, increased active transportation, and "energy efficiency interventions" in homes generating health benefits ranging from approximately $165 billion to $170 billion. However, this

analysis compares the costs of implementing this state specific scoping plan with benefits, including estimates of avoided economic damage from climate change at up to $250 billion, benefits that would require actions beyond those proposed in this scoping plan to achieve.

- The scoping plan applies an analytic framework that projects approximately $140 billion in annual New York State energy system expenditures, including capital expenditures and fuel costs, representing 8.9 percent of gross state product. A significant share of that amount, including $30 billion of $50 billion in fuel costs, leaves the state. In part, the economic impact study discusses the effect of redistributing these annual expenditures to achieve the state's renewable energy and energy efficiency objectives.

- Public health benefits from reduced GHG emissions will include those related to heat, flooding and food, water, and vector-based diseases, and will result in indirect benefits from the reduction of emissions of GHG co-pollutants including particulates and various toxic emissions.

- The scoping plan focuses significantly on historic disparate impacts on disadvantaged communities. Throughout the document, the scoping plan references recommendations of the Climate Justice Work Group (CJWC) and the extent to which they were not adopted by the Climate Action Council.)

- The plan asserts that it establishes "the country's – and perhaps even the plant's – strongest GHG emission reduction and clean energy requirements," and it will serve as a model for other jurisdictions.

- The scoping plan will result in a cleaner environment and a more competitive economy, and will support new jobs, new businesses, and new economic opportunities. (The CAC also issued a report on projected job creation resulting from CLCPA implementation.) It contains several recommendations for retraining workers displaced by CLCPA mandates, and for offsetting any adverse economic consequences on communities impacted by the loss of facilities. It recognizes that CLCPA implementation will require an expanded, trained workforce, and supports measures such as project labor and community workforce agreements on CLCPA-related projects.

- It recognizes the potential impact of emission leakage due to actions that increase the cost of energy, reduces the reliability of energy, or increase the cost of GHG emissions, and recommends some approaches, including credits for early action and targeted incentives.

**Industry (Chapter 14, page 180)**

Vision for 2030

- Reductions through 2030 are expected to come from energy efficiency and limited electrification of low temperature processes, fuel switching and, indirectly, from decarbonization of the power network, and possibly from "negative emissions" (described elsewhere as including direct air capture of $CO_2$ but provides few details.)

Vision for 2050

- Longer term (2050) reductions to come from alternatives for high-temperature processes including green hydrogen or other low carbon fuels, plus carbon capture and storage.

- Industrial sources may qualify for the use of "alternative compliance mechanisms" to extent they are developed by DEC (although the statutory requirements for alternative mechanisms are confusing and restrictive, which may significantly reduce their practical application.)

Key Findings

- The largest share of industrial GHG emissions from food, paper, bulk chemicals, glass, cement, metals, semiconductors, wood products, and plastics.

- Am emphasis is placed on incentives that are less likely to cause emission and economic leakage, as the sector is highly sensitive to increase cost of energy or emissions, and less able to pass along increased costs due to competition. It specifically recognizes that leakage could result in increased in global emissions.

- The heterogenous nature of this sector results in need for customized solutions on an industry-specific basis.

- It describes in general terms current state programs offered through NYSERDA, NYPA and ESDC.

Legislative and regulatory recommendations

- The DEC should develop expanded GHG emission reporting regulations, as already required by the ECL.

- The state should offer economic incentives to develop an "in-state supply chain of green economy businesses."

- NYSERDA should issue a solicitation for research "on the most appropriate areas for investment in emerging industrial decarbonization solutions."

- Adopt state procurement incentives for low emission goods to increase demand for such goods, specifically building materials (cement, steel, aluminum).

- General recommendations on workforce development training and research and development efforts.

- The state should monitor and evaluate energy intensive "emerging industries" (data centers, crypto currency mining) that could interfere with meeting the state's GHG objectives.

- The report cites the Climate Justice Work Group's concerns that the plan does "not [recommend] regulation to drive down industrial emissions as close to zero a sis technically possible."

**Transportation (Chapter 11, page 94)**

Vision for 2030

- Nearly 100% of new light duty vehicles and 40% of medium and heavy duty (MHD) are zero emission vehicles (ZEVs), with 3 million ZEVs on the road; additional shifts to public transportation and other low-carbon modes.

- pPe-2030, the state will achieve "limited use of renewable diesel and other low carbon fuels".

Vision for 2050

- 2050 most medium and heavy duty (MHD) vehicles are ZEVs, marine operations and port facilities will be fully electrified; use of green hydrogen and renewable biofuels in aviation, freight rail and some MHD vehicles.

- Will require regulatory actions and investments; additional incentives may be required to retire older internal combustion engines.

Legislative and regulatory recommendations

- Provide direct rebates for ZEVs supported by new fees on purchaser of fossil fuel vehicles.

- Expand direct-to-consumer sales of ZEVs by manufacturers; provide dealer incentives to sell ZEVs.

- Fund rebates or incentives for investments in EV charging stations and hydrogen filing stations.

- PSC to direct utilities to offer lower rates or other mechanisms to encourage off peak charging or other managed charging; to examine current incentives; to consider the value of ZEVs as grid-interactive assets and energy storage devices.

- Adopt state procurement targets for ZEV purchases.

- Adopt California's Advanced Clean Cars 2 regulations, expected to require 100% light duty ZEV sales by 2035.

- Adopt California Advanced Clean truck regulations (increased percentage of ZEV MHDs through 2035); consider CA's proposed Advanced Clean Fleets regulations (100% MHD ZEV sales by 2045.)

- Require use of ZEV equipment by state contractors, require ZEV use in targeted facilities such as intermodal rail yards.

- Make significant investments in and improvements to public transportation systems.

- Continue state investments in electrification of public bus fleets

- Implement incentives and policies for businesses and localities for development located adjacent to public transportation services.

- Provide tax credits for businesses that accommodate non-vehicle commuting.

- Incorporate public transportation factors into ESDC economic development incentive programs; promote developments that are adjacent to and integrated into public transportation systems.

- Encourage businesses to consult transit agencies when seeing to expand or locate in areas with existing public transit options.

- Update the state's smart growth public infrastructure policy act to avoid investment in infrastructure that would promote "sprawl" and identify priority development areas (transportation-oriented development.)

- Expand funding for bike, pedestrian, transit, and complete street projects.

- Adopt mechanisms to discourage vehicle use and generate funds for public projects, including congestion pricing, variable cost parking, increased registration fees on carbon-intensive vehicles, adoption of a per mile vehicle user fee systems, and increased municipal use of special assessment districts to fund public transportation investments.

- Establish a "first loss protection program" to insure a minimum residual value of ZEVs to eliminate a barrier to purchase.

- Expand the mission of NY's green bank to include investments in EV charging infrastructure and related projects.

- Adopt a clean fuel standard, and fund incentives for infrastructure for clear fuels including green hydrogen, where market support is necessary.

**Buildings (Chapter 12, page 119)**

<u>Vision for 2030</u>

- 1 to 2 million homes electrified and with heat pumps; heat pumps providing heat for 10 to 20% of commercial space; heat pumps used for majority of new space and water heating.

- Significant state funding for energy efficient building envelope upgrades and installation of heat pumps.

- Updated state building code requires new construction to be highly efficient, all electric and climate change resilient.

Vision for 2050

- 85% of homes and commercial (meaning non-residential) building space electrified and with heat pumps.

- Elimination of all embedded subsidies for fossil fuels.

- Significant achievements from R&D into batteries and thermal storage, grid-interactivity, ultra-low global warming-potential refrigerants, and other advanced technical solutions for hard-to-electrify building types.

Findings

– Recognizes that the state would need to "scale up dramatically" its financial incentive programs to achieve necessary building improvements (and continue to do so for at least the coming decade).

- It also recognizes that for many properties "costly repairs are needed before making energy improvements."

- Assessments on electric and gas rate payers currently are the largest source of funding for the state's energy efficiency programs. Funding sources could include "cap and invest" or carbon pricing mechanisms, levying fees on fossil fuel using equipment. Project-specific incentives are also discussed.

Major Recommendations

- Improved incentives would include direct cash incentives or tax incentives for electrification, energy efficiency, ground source heat pumps (GSHP), energy storage, geothermal and others. Incentives would prioritize housing for low/moderate income (LMI) and disadvantaged communities and public housing.

- Pursue dynamic electric rate structures to provide appropriate price signals to customers to incentivize deployment of distributed energy resources (DERs.)

- Establish procurement requirements and design specifications for state-funded projects for reduced carbon materials.

- Pass legislation to establish and enforce efficiency standards for all appliances subject to state-level regulation.

- Provide assistance to promote expansion of in-state manufacturing of products with lower embodied carbon or made of carbon sequestering materials.

- Update codes to allow the use of low GWP alternatives for refrigerants; phase out use of high GWP refrigerants.

The scoping plan includes timelines for multiple proposals, including:

- By 2023, require owners of multifamily and commercial properties larger than 10,000 square feet to annually report on building energy and water use.

- By 2023, all new HCR funded houses should be high performing and all electric.

- By 2024, prohibit utilities providing new gas service to existing buildings

- Updated "all electric" building codes by 2024 for low rise construction and 2027 for multi-family buildings over four stories, and for commercial buildings (and additions and alterations.). For single family and low rise residential, prohibit gas/oil equipment for space conditioning, hot water, cooking and other appliances. Updated building codes would include high thermal performance and air tightness, electric readiness for space conditioning, hot water, cooking and dryers; EV readiness where parking is provided; solar where feasible; building resilience features including energy storage and/or renewable generation as well grid-interactive appliances to support grid reliability.

- By 2025, require multifamily and commercial properties larger than 25,000 square feet to undertake comprehensive building energy assessment (every 10 years), and file assessment reports with NYSERDA.

- By 2025, require an embodied carbon budget for al permits for commercial and institutional new construction, additions, and alterations.

- By 2025, require owners of single family and multifamily residential, and commercial, buildings to publicly disclose prior year energy consumption as part of any sale or lease listing.

- By 2027, require owners of single-family buildings to disclose energy performance ratings as part of any sales listing.

- By 2027 require existing properties over 25,000 square feet to upgrade to energy efficient lighting in all commercial spaces and all common spaces.

- By 2030, adopt energy performance standards for all existing commercial and multifamily properties over 25,000 square feet.

- By 2030, prohibit replacement of gas or oil-fired heating, cooling and hot water equipment for single family homes and residential buildings under 4 stories and up to 49 units.

- By 2035, prohibit gas/oil replacement of heating, cooling and hot water equipment for single family homes and residential buildings over 4 stories and 50 or units and all commercial buildings

- By 2035, prohibit gas appliance replacement for cooking and clothes drying.

- By 2035, prohibit gas and oil use in “large fuel burning equipment” (defined as used to heat buildings 50,000 square feet or larger.)

**Electric System (Chapter 13, page 149)**

Vision for 2030

- The CLCPA requires 70 percent of statewide electric use from renewable sources by 2030, 6,000 MW of distributed solar by 2025 and 3,000 MW of energy storage by 2030, and the necessary procurement mechanisms are already in place.

Vision for 2050

- The CLCPA requires zero emissions from power generation by 2040, and 9,000 MW of offshore wind by 2035, targets that will require further procurement of renewables and “new technology solutions” and updated energy markets.

- The growing power demand from widespread electrification will shift peak power demands from summer to winter, will require the grid to have increased load flexibility and controllability, will require new and upgraded transmission and distribution capacity as well as advanced long duration storage.

- The state will need to address challenges to meet rapid, steep ramping needs, requiring large amounts of dispatchable power.

- The state anticipates electricity demand growth of 65 to 80 percent by 2050.

Findings

- It recognizes the challenge of phasing out fossil fuel generation while maintain a safe and reliable power grid. Reliability risks should be addressed thru storge, transmission upgrades, energy efficiency, demand response or other zero emission alternatives before considering new or repowered fossil fuel generation.

Major Recommendations

- The CJWG recommends a moratorium on the permitting of new fossil fuel plants until the final scoping plan is in place or there is a demonstrated reliability need that can only be met through fossil fuel generation.

- The DEC should evaluate regulatory options to further reduce GHG emissions from existing generation to the maximum extent practicable.

- By 2040, the state should identify options to reduce emission from existing generation, including but not limited to efficiency, storage, load flexibility, DERs, and transmission and distribution upgrades. It also needs to: assess potential revenue impacts on schools and municipalities from power plant closures; assure site remediation by plant owners; evaluate options for repurposing property.

- Evaluate and implement market mechanisms to eliminate fossil fuel generation, including carbon pricing. creation of clean dispatch credits, and other mechanisms.

- The PSC should initiate generic "earnings adjustment mechanism" to consider ways to promote decarbonization and social equity goals of the CLCPA.

- The state should continue and expand on the Clean Energy Standard and siting efforts to promote large scale renewable generation.

- To support distributed renewable generation, the state needs to assure adequate investment in local transmission and distribution infrastructure; provide incentives for "high benefit DER projects; adopt model zoning laws to promote "solar ready" buildings; encourage aggregation of distributed resources; among other measures.

- Adopt host benefit programs to address community opposition; evaluate laws necessary to promote cooperatively owned enterprises.

- Promote "community choice aggregation" of renewable purchases; micro-grids; and district systems.

- Promote increased storage though financial mechanisms such as clean dispatch credits or an expanded CES; create a dedicated CES-type funding mechanism for storage investment by 2022; integrate storage into the state's transmission planning process.

- As part of the state's transmission system planning process, plan for full phase out of $SF_6$ insulators.

- Create "renewable energy zones" and assure that each zone has sufficient transmission for import and export of renewable energy.

- Additional offshore wind projects must partner with one of eleven prequalified New York ports to stage, construct, and manufacture key components.

- The state should promote demand side management programs, including expanded appliance standards, as well as universal communication protocols for equipment.

- Evaluate by 2029 whether subsidizing any of the state's remaining nuclear reactors will be necessary to meet 2040 emission free electric generation goals.

**Natural Gas System Transition (Chapter 18, page 264)**

- Achievement of CLCPA emission limits will entail a downsizing of the fossil gas system, and the vast majority of current fossil gas customers will transition to electricity by 2050.

- The transition to a decarbonized fossil gas system should not impose undue cost burdens on customers "especially those who can least afford cost increases."

- This transition will include identification of opportunities to retire existing pipelines as demand declines, [to identify] the least expensive approaches for an orderly transition.

- As this transition occurs, it will also be essential to quickly mitigate methane emissions from the natural gas sector.

- The pace of gas utility infrastructure transition will be impacted by the pace of end-use customer adoption of efficiency, demand response and electrification.

- Utility rate cases will be assessed with respect to requirements of the CLCPA and should contain strategies such as no marketing of natural gas and positive marketing of electrification.

- The state should upstate statutes that conflict with the CLCPA, such as Public Service Law provisions saying that it is in the public interest of the state to assure the continued provision of gas services to all residential customers.

- The state should consider gas demand side management measures, such as shifting commercial and industrial customers from peak consumption periods, the capture of waste heat, and others.

- The state needs to "create an equitable transition plan for the gas industry workforce," including "protections" and training; this requires a system-wide strategy and "utility-level equity strategies."

- Electric utilities benefiting from the increased revenue of electrification of heating load should absorb some of the potential burden of stranded costs resulting from the closure of gas infrastructure; bankruptcy of gas utilities should be avoided," and gas-only utilities should be allowed to become holistic energy providers to provide a path to their exit from the fossil gas system.

- The state should adopt legislation to limit the marketing of gas or allow gas extensions at no cost to new customers; incentives and rebates for gas equipment offered by utilities or NYSERDA should be ended immediately; the state should deny gas infrastructure permits that are inconsistent with the CLCPA.

- The state should update its building codes to limit the use of fossil gas and other fossil fuels in new construction.

- The state should identify funding sources to locate and cap abandoned gas wells.

**Wastes (Chapter I, page 233)**

Vision for 2030

- Short term actions to focus on increased diversion of materials from landfills and increased emissions monitoring and leak detection from landfills, wastewater treatment and other sources.

Vision for 2050

- Long term emission reductions will require a dramatic shift in waste management practices, with limited continuing use of landfills, significant waste reduction and increased recycling.

Findings

- Significant emission sources in the waste sector include landfills (78%), wastewater treatment (15%) and waste combustion (7%)

- The report takes an expansive view of "waste management strategies" and discusses the impact on wastes of the full life cycle of materials that are disposed of. It also recommends significant pre-disposal strategies including waste reduction and material recovery that are seen as producing significant GHG emissions as well.

Major Recommendations

- The state needs to further limit the disposal of organic wastes, with actions including broader collection of organic wastes and the eventual ban on disposal of organics; and applying a per ton surcharge on waste disposal to fund organic material management.

- Limit landfill emissions by limiting the amount of material to be disposed through strategies including per ton disposal charges; reductions and eventual elimination of all single use packaging "for use in stores;" expanded container deposit laws; adoption of state procurement standards for recycled materials; additional product specific stewardship mandates, including textiles. The state should also enhance landfill gas recapture requirements and require improved landfill covers.

- Promote packaging and paper waste reduction and recycling through expanded producer responsibility legislation. Alternatively, adopt stewardship mandates for specific products with greatest lifecycle GHG impacts (packaging, printed paper, carpets, tires, textiles, solar panels, wind turbines, large-scale batteries, appliances, and mattresses.)

- The state should also support recycling facilities and markets for recovered resources (including a production tax credit for recycled materials; research and expand uses for recovered construction materials; update state procurement laws to require recycled building materials.

- To address wastewater emissions, support the beneficial reuse of biosolids and renewable biogas from wastewater treatment processes, with biogas use for "essential needs" during the transition to electrification. Encourage the transition from septic systems to sewers.

- Address waste refrigerants by requiring their reclamation or destruction when appliances are disposed of; ban the sale of virgin high GWP refrigerants for servicing purposes.

**Economy Wide Strategies (Chapter J, page 252)**

The report discusses "economy wide strategies" to effectively price greenhouse gas emissions to promote reductions, provide a source of funding for CLCPA implementation projects, and provide market signals.

It suggests that a well-designed program could support economic development, while a poorly designed one could increase economic burdens and reduce competitiveness.

It recommends three options:

- Carbon pricing through a state-established tax or fee.

- Emission caps, or "cap and invest" program that allocates most emission allowances through an auction with prices set by the market.

- A clean energy supply standard, that would require providers of fuels to reduce the carbon intensity of the fuels they sell.

The report sets forth proposed criteria for evaluating these options, including impact on CLCPA compliance; price certainty; impact on emission reductions in disadvantaged communities; the level and sufficiency of funding it generates; their impact on "average New Yorkers;" and the ability to avoid emission leakage; among others.

The report provides a brief discussion of how its three economy-wide strategy options would be evaluated based on proposed criteria.

It states that the Climate Action Council will make a recommendation in its final scoping plan based on public input.

Ken Pokalsky
Senior Advisor to the President
The Business Council of New York State, Inc.
111 Washington Avenue Suite 400 | Albany, NY 12210
Direct 518.694.4460 | Cell: 518-339-5894
ken.pokalsky@bcnys.org | www.bcnys.org