Table Topics: Buildings and Industry

Sector 1: Buildings

Key statistics from the NY State Scoping Plan:
The buildings sector was the largest source of emissions in 2019, responsible for 32% of emissions statewide (34% from residential 19% from commercial, 33% from imported fuels, 14% from HFCs.

Theme: Adopt Zero Emission Codes and Standards and Require Energy Benchmarking for Buildings	**High**	**Medium**	**Low**	
		x		

Strategies	**Strategy Summary**	**Co-Benefits**	**Examples**	**Priority Level**			**Comments & Notes**
Adopt advanced codes for highly efficient, zero-emission, and Resilient New Construction	NYS's Building Code Council voted in July 2025 to include the All-Electric Buildings Act in the latest building code update. The law requires all newly constructed single-family and low-rise buildings to be all-electric starting in 2026 and all remaining new construction to be		https://nyassembly.gov/all-electric-buildings/ https://www.rewiringamerica.org/newsroom/press-releases/All-electric-buildings-act-New-York	xxxx xxxx			All electric buildings are meaningless w/o robust standards of air sealing, thermal boundaries, high performance windows, and controlled ventilation. Emissions from building materials must also be calculated as a fact of the GHG Drawdown. New development is electric w/o code. Problem is the electric grid. Priority is improving grid so this goal can be achieved.

	fully electric by 2029.						
Adopt standards for zero-emission equipment and the energy performant of existing buildings	The State should enact legislation to enable regulations to improve energy efficiency in existing buildings and zero-emissions standards to phase out fossil fuel combustion equipment for cooking, water heating, clothes drying, and heating.		• Requiring existing properties larger than 25,000 square feet (sq. ft.) to upgrade to energy-efficient lighting in all commercial spaces and common areas. • Adopting an energy efficiency performance standard for existing commercial and multifamily properties larger than 25,000 sq. ft. informed by statewide benchmarking data and aligned with NYC Local Law 97.	xxxx xxx	x		All building materials must be healthy. Eliminate petro chemicals. Code should address building envelope. Must align with natural phase out of systems.
3. Require energy benchmarking and disclosure	Require owners of properties larger than 10,000 sq. ft. to annually report energy and water consumption data to NYSERDA for public disclosure. Require utilities to provide automatic utility customer data directly to the EPA ENERGY STAR Portfolio Manager.		The state should require benchmarking for large buildings the way NYC does: https://www.nyc.gov/site/buildings/codes/benchmarking.page	xx	xxxx	xx	Why public disclosure? May be counter intuitive – owners may feel comforted by having better than average EUI and relax. Only good with lots of regulatory push. Only as a precursor to regulations to reduce energy.

	Require energy disclosure as part of sale or lease listing the prior-year energy consumption and energy performance rating.						
Theme: Scale Up Public Financial Incentives and Expand Access to Public Private Low-Cost Financing for Building Decarbonization				**High** x	**Medium**	**Low**	
Scale up Public Financial Incentives	Increase financial incentives to motivate homeowners and building owners to install high-efficiency electric heat pumps and make energy efficiency improvements such as sealing air leaks, adding insulation, and using building controls.		NY has existing programs that the scoping plan suggests should be increased to meet the goals: https://www.nyserda.ny.gov/All-Programs/EmPower-New-York-Program https://hcr.ny.gov/weatherization	xxxx xx	x		Scale up AND make more accessible. Renters
Expand access to public and private low-cost financing	Low-cost financing products for energy efficiency, electrification, electrification		Components of the strategy include: integrating energy requirements and resources into affordable housing deals, integrating energy performance into underwriting, expand access to financing, creating a revolving loan fund, and	xxxx xx		x	Should be ZERO cost to homeowner over time. Carbon offset – Tompkins County

	readiness, solar photovoltaics (PV), energy/thermal storage, resiliency measures, and related improvements are needed so that single-family, multifamily, and commercial and institutional building owners can access low-cost capital at the scale needed to pay for the building upgrades necessary for decarbonization.		expanding energy savings performance contracting for public sector buildings. Environmental Facilities Corporation's (EFC) Clean Water State Revolving Fund provides a model for enabling public mandates to be coupled with access to low-cost capital. This would be implemented through a bond-issuing government authority.				Build savings into long-term loans so people don't pay upfront
Support development of thermal energy networks	Thermal energy networks (TENs) provide space heating and cooling to connected buildings, using distribution pipes and heat pumps to move thermal energy from an initial source (such as a geothermal borehole or waste		NYSERDA has a program for TENs: https://www.nyserda.ny.gov/All-Programs/Large-Scale-Thermal Components of this strategy include: workforce training for gas sector workers to operate thermal energy networks, developing appropriate regulations for geothermal wells, streamlining access to public and utility rights of way, supporting public-private partnerships for geothermal financing and development, prioritizing public sector support for thermal energy networks that serve LMI housing and buildings in DACs, exploring TENs as part of gas system transition.	xxx	xxx	x	Need small scale TEN Shift in infrastructure good for cities but less for rural areas. How/Where is this realistic?

	heat from local facilities) to connected buildings.						
Align energy price signals with policy goals	The low cost of gas compared to electricity is a barrier to electrification and will need to change.		Components of the strategy include: Pricing GHG emissions from fossil fuels, aligning electric rates to incentivize deployment and usage of distributed energy resources, and aligning bill discount programs.	xx		xx	Electric rates, no incentives But not too soon? Carbon tradeoff could help fund
Theme: Expand New York's Commitment to Market Development, Innovation, and Leading by Example in State Projects				**High**	**Medium**	**Low**	
Invest in Workforce Development	Investments in workforce development are critical to address the shortage of qualified, skilled workers who are ready to install heat pumps at scale.		Heat pump installers today have gaps around best practices for sizing, selecting, and installing ASHPs in New York's cold climate. Components of the Strategy include: expanding training through investments in infrastructure, career pathways and pre-apprenticeship and apprenticeship programs, curricula and career services, and prioritizing disadvantaged communities and other priority populations.	xxxx x	x		Needs to be at the school level And then subsidize the installation. We need to change the paradigm of workforce development
Scale up public awareness and consumer education	This strategy will create strategic partnerships with trusted community leaders and scale up targeted outreach and decision-making support to increase market demand and accelerate the		Components of the strategy include: scaling up campaigns, creating strategic partnerships, prioritizing disadvantaged communities, publicizing leaders in the field, and providing technical resources.	xxx	xxx	xx	To promote real solutions, real rules to be followed. **Not useful without incentives and assistance.** **This is critical if included with incentive funding for programs.**

	transition to low-carbon, energy-efficient, and electrified buildings.						
Support innovation	Innovation is needed to reduce the cost and increase the value of building decarbonization technology to make them competitive with conventional building systems.		Research and development could include long-duration energy storage and ultra-low GWP alternatives to HFCs, including natural refrigerants, spray foam insulation, HVAC, water heating, and refrigeration technologies.	xxxx	xxx		Good example: Window unit heat pumps AND REUSE **Support incentives before more innovation.**
Reduce embodied carbon from building construction	The strategy will establish procurement requirements and design specifications for State-funded projects and provide education on building reuse, de-construction and in-state manufacturing of alternative products.			xxxx xx	x		Low carbon concrete, better spray foam insulation Strategy based on carbon emissions. Low embodied emissions reflect healthier materials. Some can even store carbon. This should be incentivized.

Theme: Transition from Hydrofluorocarbons				**High**	**Medium**	**Low**	
Advance a managed and just transition from reliance on hydrofluorocarbon use	HFC use is currently widespread in refrigeration and HVAC equipment. This strategy supports HFC phase out in food stores and phasing out high-global warming potential HFCs.		NYS DEC Adopted Part 464 regulations: https://dec.ny.gov/news/press-releases/2024/12/dec-announce-adoption-of-regulations-to-reduce-harmful-climate-pollutants	xxxx xxx			Prevent off-gassing, pay for recycling. Not phased. No incremental adoption.

Sector 2: Industry

This Sector contains incentive-based strategies for mitigating the direct greenhouse gas (GHG) emissions attributable to certain industrial activities within the State. In general, the sector strategies in this chapter target the direct, on-site emissions that originate from stationary sources in sectors including manufacturing, mining, and quarrying, where such emissions are not already addressed separately in the Scoping Plan. Industrial emissions made up 9% of statewide emissions in 2019, including emissions from methane leaks and combustion from the oil and gas system in New York (45%), the direct combustion of on-site fuel (27%), emissions from imported fuels (20%), and non-combustion industrial processes (6%).

Strategies	**Strategy Summary**	**Co-Benefits**	**Examples**	**Priority Level**			**Comments and Notes**
This sector targets the direct, on-site emissions that originate from stationary sources in sectors including manufacturing, mining, and quarrying, where such emissions are not already addressed separately in the Scoping Plan.				**High**	**Medium**	**Low** x	
Provide financial and technical assistance	The industrial sector is confronted with many barriers and other		Specific solutions could include NYSERDA's engineering study support, financial incentives to buy down project costs, and potentially NYPA's Energy Solutions programs and its Power Proceeds programs within the geographic regions they serve.	xx	x	xx	

	challenges to implement emission reduction strategies. The State should help overcome these barriers by providing technical and financial assistance in implementing various solutions for decarbonization.						
Incentivize procurement of low carbon products	NY should create State procurement incentives so that manufacturers will produce less emission-intensive goods to capitalize on the increased demand for such goods.		The initial focus for this effort should be to incentivize the manufacturing of lower-carbon building materials such as cement, steel, and aluminum. The public sector purchases a large proportion of building materials produced in the market. This enables the State to exert significant influence on the producers of building materials to develop low-carbon options across its entire range of products. 50% of all cement and 20% of all steel that is purchased in the U.S. is paid for with tax dollars.	xxxx xxx			DE incentivize doing bad also
Support workforce development	As NY's industry plans, operates, and maintains various clean energy technologies, additional skilled workers will be needed. State		NYSERDA should partner with training organizations and businesses to provide more individuals with training, particularly displaced workers and those from DACs. NYSERDA should also work with training organizations to update training content to prepare workers for jobs with established and emerging technologies.	xxxx x	x		Workforce programs need to be revamped.

	programs should mitigate barriers to workforce development in this area such as time and resources to provide training and maintain in-house expertise.						
Facilitate research, development, and demonstration	Reducing GHG industrial emissions broadly includes four main categories: • Energy efficiency • Industrial electrification • Alternative fuels, feedstocks, and energy sources, and utilizing more renewable electricity • Carbon capture, utilization, and sequestration Given current trends, many of the required technologies for deep		NYSERDA should develop a research agenda for industrial decarbonization solutions and issue a solicitation for third-party services to conduct research and provide recommendations on the most appropriate areas for investment in emerging industrial decarbonization solutions. Based on the results of the analysis, NYSERDA should work to provide funding to optimally scale identified solutions.	xxx	x	xx	Depends on the industry – who should the gov be a "patient partner" with?

	decarbonization of the industrial sector will not be available in the timeframe necessary for the State to meet its targets. However, the State could speed the deployment of some of these solutions.						
Establish greenhouse gas registry and reporting system	DEC should promulgate regulations to establish a new GHG registry and reporting system or expand the existing GHG reporting requirements. This could be accomplished as a component of another regulatory program, such as the Cap and Invest program.		Components of the Strategy • Develop internal draft of GHG reporting regulation: DEC should promulgate regulations to establish new or expand the existing GHG reporting requirements, which may be a component of another regulatory program, such as an economywide program of the type discussed in Chapter 17. Economywide Strategies. When developing the regulatory program, DEC should evaluate existing online reporting systems such as those established by EPA and the California Air Resources Board. DEC should work with the State's Office of Information Technology Services or other appropriate entity to develop an online electronic reporting platform for this regulatory program. • Provide training to regulated entities: DEC should work with impacted facilities to ensure information exchange and to ensure that applicable reporting requirements are clearly understood.	xx	xx	x	Yes to Cap and Invest. Who knows if EPA flight tool will continue?