

June 6, 2022

Draft Scoping Plan Comments
NYSERDA
17 Columbia Circle
Albany, NY 12203-6399
Sent via email: scopingplan@nyserda.ny.gov

Re: New York Climate Action Council's Draft Scoping Plan

Dear NYSERDA,

The Polyisocyanurate Insulation Manufacturers Association (PIMA) would like to take this opportunity to comment on the Climate Action Council's draft Scoping Plan from December 31, 2021. PIMA supports the Council's emphasis on existing buildings and on the importance of improving building thermal envelopes. As the report recognizes, the thermal envelope is key to energy efficiency, the success of building electrification, and passive survivability and resiliency.

PIMA is the trade association for North American manufacturers of rigid polyiso foam insulation – a product that is used in most low-slope commercial roofs as well as in commercial and residential walls. Polyiso insulation products and the raw materials used to manufacture polyiso are produced in over 50 manufacturing facilities across North America, including Montgomery, New York.

I. Building Energy Codes

Adopting a building energy code that meets or exceeds the current model code is one of the most important and cost-effective policies available to states and cities for addressing the negative economic and environmental consequences of building energy waste – a sector that is responsible for 40% of total U.S. energy use. Therefore, the adoption and enforcement of building energy codes is instrumental to achieving New York's climate goals. However, to get maximum benefit from the Energy Conservation Code of NYS (the Energy Code), it is important that New York State amends its Energy Law as proposed under the Advanced Building Codes, Appliance and Equipment Efficiency Standards Act of 2022, which we understand is now close to enactment. Passage of this legislation will permit the Fire Prevention and Building Code Council (the Council) and the Department of State to adopt future building energy codes in a manner that place New York on a path towards building decarbonization. Following enactment, we urge the Council, the Department of State, and NYSERDA to quickly implement this new law.

The key provisions of this legislation related to the Energy Code include:

- Removal of outdated language related to exceptions that currently limit the effectiveness of the Energy Code in addressing the energy savings opportunities of alterations in existing buildings. The legislation would instead allow the Council to adopt the language in the most recent version of the model energy code, the International Energy Conservation Code (IECC). The IECC language more effectively addresses the energy efficiency opportunities for lighting retrofits and roof alterations.

- Replacement of the current 10-year payback cost-effectiveness requirement with a more appropriate analysis that evaluates the costs and benefits of a measure over its full life cycle and “secondary or societal effects, such as reduction in greenhouse gas emissions.” For measures that easily last 30 or more years (in buildings that last 50 or more years!), the requirement to only allow measures that have a 10-year or shorter payback severely limits New York’s ability achieve future improvements in the stringency and effectiveness of the Energy Code. Also, without a significant tax or fee on carbon, incorporating the social cost of carbon into regulatory decisions is important if New York ever hopes to implement policies that go beyond business-as-usual.
- Directing the Council, during its next code adoption cycle, to “use its best efforts” to adopt an Energy Code to “achieve energy savings greater than” what would be achieved by adopting the latest model energy code.

II. Policies Addressing Existing Buildings

The Scoping Plan’s recommendations for new policies addressing existing buildings is encouraging. Building Performance Standards along with better enforcement of energy codes are cost-effective and long-term strategies that can significantly increase the rate of improvements in commercial buildings. It should also be noted that these policies will benefit from the additional funding and technical assistance that is expected over the next 5 years from the federal government under the “Infrastructure Investment and Jobs Act.”

Policies intended to reduce energy use in existing buildings can be expensive and challenging to implement, especially for improving the thermal envelope. However, replacing a roof and adding insulation when the roof covering is otherwise being replaced or nearing the end of its useful life is a proven cost-effective measure for increasing energy-efficiency. In the context of Building Performance Standards and compliance with the Energy Code’s requirements for building alterations, roof replacements are an example of a readily available opportunity for improving the building envelope.

In October 2021, ICF International released an analysis (commissioned by PIMA) that quantifies the energy and carbon emission savings of energy code-compliant (2021 IECC/90.1-2019) roof replacements. Most commercial building roofs are low sloped (vs. pitched roofs), and the weather resistant covering is replaced or recovered every 17-20 years. As the report shows, this regular maintenance requirement of commercial buildings represents a cost-effective opportunity to also improve building performance. The report details the savings associated with roof replacements on 4 common U.S. Department of Energy prototype commercial buildings for 7 cities that represent Climate Zones 2-7. ICF found that upgrading a typical existing low-slope roof to a code-compliant roof results in whole building energy savings of between 2%-11% depending on building type and Climate Zone. The savings in natural gas used at the building site is even higher, in the range of 5%-33%. A copy of the ICF report can be found at this link: <https://www.polyiso.org/page/EnergyCarbonSavingsAnalysis>

a. Building Performance Standards

Building Performance Standards (BPS) are an increasingly popular policy requiring building owners to address energy waste in existing buildings. Traditional energy efficiency policies for existing buildings, such as green-building labeling, utility incentives, and tax incentives, have had limited reach and building energy codes apply only when an alteration is already underway and are often undercut by weak enforcement. A BPS policy fills this vacuum. The structure of a BPS policy gives New York the ability to calibrate the program’s requirements to the State’s climate goals and can be reevaluated and adjusted in future years. Also, the multi-

year performance targets used under a BPS policy afford building owners the flexibility to determine the best way to achieve compliance and to efficiently plan and execute the necessary capital investments over a longer time horizon. With respect to multifamily affordable housing, BPS policies typically provide additional flexibility and financial assistance, which would also address New York's equity goals.

b. Code Compliance & Enforcement

The effectiveness of a building energy code is only as good as its enforcement. Without enough local building officials that have training on the Energy Code and a robust process for reviewing permits and construction documents and performing inspections, compliance with the Energy Code can become voluntary in nature. The importance of local building officials and their level of knowledge about the Energy Code cannot be overstated. Unfortunately, it is difficult for the Energy Code to compete with the other "life safety" codes for available resources and attention within many local jurisdictions. Since resources for this function are constrained in many cities and local communities, we endorse the efforts by NYSERDA in encouraging alternative enforcement approaches, such as third-party plan reviews and inspections.

III. Embodied Carbon

The insulation industry is a leader in measuring, reporting and reducing the environmental impacts associated with insulation products' full life cycles. Almost every insulation product available today is covered by an Environmental Product Declaration, which discloses the impacts associated with that product, including embodied carbon. Moreover, insulation products reduce carbon emissions over their useful life by eliminating building energy waste. These savings are many times greater than the environmental impacts associated with a particular insulation product's manufacturing process or end of life disposal.

Maximizing energy efficiency should be the primary goal when integrating building decarbonization goals into energy codes and standards. To supplement policies that reduce operational carbon, efforts to reduce the embodied carbon of buildings should establish whole building targets. Adopting material-level targets for products like insulation ignore other critical performance factors that influence a design professional's product selection decisions. Establishing whole building targets allows building professionals the flexibility to consider the full range of a product's performance benefits, including low embodied carbon, against other project needs. Material-level targets too often lead to unintended consequences and regrettable substitutions. Policies aimed at reducing embodied carbon can incentivize action at the product level by requiring documentation like Environmental Product Declarations that provide building professionals access to environmental impact information that can be used to inform product selection decisions.

Thank you for the opportunity to submit these comments. Please contact myself (jkoscher@pima.org) and Jeff Mang (jeff@jcmangconsulting.com) should additional information be necessary.

Sincerely,



Justin Koscher
President