

Ithaca Energy Code Supplement

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ABSTRACT

This presentation will tell the story of the Ithaca Energy Code Supplement (IECS). The IECS, adopted by the City and the Town of Ithaca in 2021, consists of requirements for net-zero new construction that emphasize electrification and affordability. The IECS is a major piece of Ithaca's Green New Deal, which aims to achieve an equitable transition to carbon-neutrality community-wide by 2030.

The IECS requires that in 2021 all new buildings produce 40% fewer GHG emissions than those built to NYS code. The IECS will become more stringent in 2023, requiring an 80% reduction in emissions. Starting in 2026, net-zero buildings that do not use fossil fuels will be required.

For the first two phases, the IECS offers the flexibility for builders to comply using an "Easy Path," which is a point-based system, or using the performance-based Whole Building Path. Using the Easy Path, compliance is achieved from electrification of space and water heating (e.g., heat pumps), renewable energy, and affordability improvements which reduce construction costs (e.g., efficient building shape). In 2026, net-zero construction will be required.

Adopting a net-zero building code presents challenges. In Ithaca, we focused on community buy-in, engaging both environmental activists and developers. We stated the project goals early and often, balancing flexibility, affordability and simplicity. We received several hundred comments and responded to them individually. In the end, Common Council and the Town Board accelerated the timeline for requiring net zero buildings from 2030 to 2026. Climate change has finally become undeniable, and we in the green building community need to realize that constituents may be moving faster than we are.

BIOGRAPHY

20th Annual New York State Green Building Conference

March 31 to April 28, 2022

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Nick Goldsmith, Sustainability Planner for the Town of Ithaca, New York, implements the Green New Deal, which aims for an equitable transition to carbon neutrality community-wide by 2030. Nick led the development of the Ithaca Energy Code Supplement, requirements for net-zero new construction that emphasize electrification and affordability. Nick holds an M.S. in Energy Management from New York Institute of Technology and a B.A. in Mathematics from Brown University. Before joining the sustainability field, Nick worked for a decade as a juggler and acrobat. Nick currently plays basketball on a weekly basis.

Ian Shapiro founded Taitem Engineering in Ithaca, NY in 1989. He is the author of the books *Green Building Illustrated* (2014) and *Energy Audits and Improvements for Commercial Buildings* (2016), both published by Wiley. He has been a visiting lecturer at Cornell University, Tompkins Cortland Community College, and Syracuse University. He has undergraduate and graduate degrees in engineering, from McGill and Columbia. Ian is also a juggler, has studied juggling with Nick, and guards Nick in basketball each week.

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