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Mark Chambers

Director of Sustainability City of New York









Panel Session

Matthias Altwicker

Principal, Studio A+H, Associate Professor of Architecture, New York Institute of Technology

Ehsan Kamel

Assistant Professor and Director of Energy and Green Technologies Laboratory, New York Institute of Technology

Suzanne Musho

Chief Architect and VP, Capital Planning and Facilities Management, New York Institute of Technology

Dan Stubbergaard

Founder and Architect MAA, Cobe

Mirella A. Vitale

Senior VP, Marketing, Communications and Public Affairs, ROCKWOOL Group











Matthias Altwicker

Principal, Studio A+H, Associate Professor of Architecture, New York Institute of Technology



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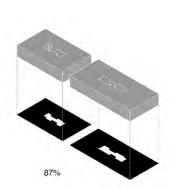


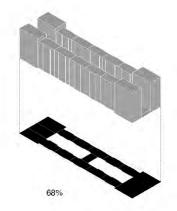
London Terrace - 1930

Queensbridge Houses- 1939

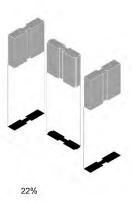
Taft Houses - 1962

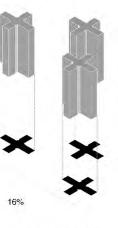
Polo Grounds Towers - 1968

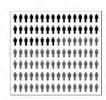




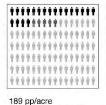
















400 pp/acre (2016) 1100 pp/acre (c. 1900)

931 pp/acre

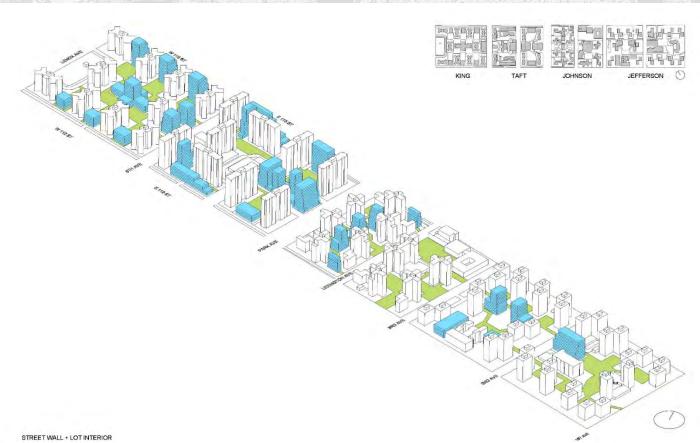
245 pp/acre (1939)

237 pp/acres

268 pp/acres



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Ehsan Kamel

Assistant Professor, College of Engineering & Computing Sciences





NYC Local Laws



Smart Cities













Mirella A. Vitale

Senior Vice President
Marketing, Communication & Public Affairs
ROCKWOOL Group

Cities are on the front lines – both as a source and as a key solution to a substantial part of the climate challenge.

Buildings hold the largest climate action potential and within that energy efficiency is the cheapest path. 40% of all carbon emission reductions in low-carbon 2°C scenarios come from energy efficiency 1

70% of New York's greenhouse gas emissions comes from buildings

70%
- the potential energy savings stone wool insulation can contribute in buildings ²

Fire affects the economy, the community and the environment.

Fire safety must be an integral part of renovation.



~2% total cost of fire (\$328.5bn) in the US

source: Fire Protection Research Foundation, 2017 data from 2014) https://www.nfpa.org//imedia/Files/News-and-Research/Fire-statistics-andeports/US-Fire-Problem/RFTotalCost.pdf

90,000 children in the UK are disrupted by school fires each year.

source: LGA Research, 2007 https://www.nfer.ac.uk/publications/lfw01/lfw01.pdf

Fires contribute to air contamination from the fire plume and water contamination from runoff

source: Fire Protection Research Foundation, 2020 https://www.nfpa.org/News-and-Research/Dataresearch-and-tools/US-Fire-Problem/Theenvironmental-impact-of-fire



¹ Source: OneNYC, Office of the Mayor 2018

² Calculation conducted by Material Economics, 2018 based on IPCC AR5 Database, 2018.

COVID-19 has created simultaneous health and economic crises, on top of a climate crisis that isn't going away

30-50% of excess winter mortality is attributed to housing conditions

Solution 2008 Energy poverty means 30% greater risk of admission to hospital or primary care facilities for infants

15% of all people in developed countries live in energy poverty Energy poverty can affect **mental wellbeing** and social contact

Energy poverty affects children's diet if households reduce spending on food to afford fuel to keep warm

Source: BPIE 2014 and IEA 2017

Energy poverty is defined as "households not being able to adequately heat or cool their homes at affordable cost"

source: EU Energy Poverty Conservatory
https://www.energypoverty.eu/about/what-energy-poverty

The most cost-effective, long-term methods for alleviating energy poverty are energy efficiency and renovation

source: Regulatory Assistant Project (RAP), 2020 https://www.raponline.org/knowledge-center/equity-in-

The issue is how to achieve the greatest economic and the greenest climate and social impact in the shortest possible timeframes.

Energy efficiency renovation of the existing building stock is among the best ways of achieving these mutually reinforcing goals.













Suzanne Marie Musho AIA, NCARB

Chief Architect and VP, Capital Planning and Facilities Management,
New York Institute of Technology





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Dan Stubbergaard

Founder, Architect MAA, Cobe















Q&A Session











Berit Basse

Ambassador Counsul General of Denmark in New York





