

# Smart Blue-Green Roofs for Cost-Efficient Stormwater Management

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## ABSTRACT

Urban rooftops are a vastly underutilized resource for battling the negative effects the human race is having on the environment. When properly designed, they can keep our waterways clean, sequester carbon from the atmosphere, create clean renewable energy, provide access to Nature urban dwellers, grow local healthy food, reduce impact on local and migratory ecology, improve property values and quality of life.

Much is known about rooftop solar and green roofs. But far less is known about Blue Roofs and their ability to manage stormwater right where it lands - on the roof. With many cities like NYC mandating onsite stormwater management and DC financially incentivizing it, Blue Roofs are a great potential tool for architects.

Integrated systems which hybridize solar, blue, green and amenity deck solutions allow for all the benefits to be enjoyed on the same rooftop. Participants will gain knowledge regarding the differences present in various rooftop development options including: vegetated (green) roof systems, smart blue roof systems, integrated blue-green roof systems, and blue-paver roof systems, and how those systems are appropriate for differing needs.

Participants will be given instruction in best practice and use of green and blue roofs so that upon completion they will be able to offer the highest quality service available.

Participants will learn how by taking advantage of current stormwater management regulations and incentives, strategically designed smart-blue-roofs can profoundly affect the overall profitability of modern building projects.

## BIOGRAPHY

**20<sup>th</sup> Annual New York State Green Building Conference**

March 31 to April 28, 2022

<https://www.esf.edu/greenbuilding/>

Principal of award-winning firm Urbanstrong, **Alan Burchell** is a professional engineer, LEED-AP, and Green Roof Professional. Urbanstrong works with developers, property managers, and building owners looking to boost property values, reduce energy expenditures, improve occupant health and wellness, reinvest in their building assets, reduce their environmental footprint, and green their brand. Urbanstrong offers consulting, financing, and design-build-maintenance services for living walls and several rooftop development solutions including green, blue, solar, amenity or farming.

As a specialist on green infrastructure, Alan co-founded the non-profit “The NYC Agriculture Collective,” provides regular training for architects, has spoken at the United Nations, appeared on MSNBC, consulted for corporations, nonprofits and municipal governments, and provided expert testimony in court.

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