

# Environmental Structures

Staten Island Children's Museum

*Under construction*

## LINKING SUSTAINABILITY TO EDUCATION

At the Staten Island Children's Museum (SICM), a series of Environmental Structures challenge the limits of traditional approaches to sustainability, employing renewable energy sources and innovative technologies to engage, educate, and delight museumgoers of all ages. These translucent forms act as icons, identifying SICM within the Snug Harbor campus, while showcasing the integration of environmental systems.

The Meadow Structure is a 2,200 square foot freestanding tensile structure with a translucent, photovoltaic fabric roof that collects solar energy to power low voltage lighting. It provides a flexible, weather-protected outdoor gathering and program space, acting as an anchor for physical activity.

At the Museum's roof, two existing skylights are replaced by a Windscoop and a Vertical-Axis Wind Turbine. The Windscoop passively ventilates the main stairwell, while a colorful translucent rotating drum extends down from the scoop to signal wind direction and animate the interior space. The Wind Turbine powers an exhibit that demonstrates the potential of wind, while providing visceral evidence.

