

# The Science Barge

Self-sufficient greenhouse floating on the Hudson River



The Science Barge docks in Manhattan [JIM.HENDERSON](#)

*According to the Groundwork Hudson Valley website, the Science Barge is, "the only fully functioning demonstration of renewable energy supporting sustainable food production in New York."*

A functioning farm and interactive science museum, the Science Barge is powered exclusively by renewable energy sources such as biofuels and wind and solar power generated by on-site solar panels and wind turbines. The hydroponic growing system takes its water supply from collected rainwater and purified river water which can be recirculated indefinitely. The Science Barge engages in organic growing process which eschews the use of chemical fertilizers and pesticides. The end result is a self-sustaining farm with zero net water consumption, zero greenhouse emissions, and no harmful runoff.

The Science Barge was originally developed by NY Sun Works, an environmental nonprofit who conceived of the barge as a mobile way to demonstrate a prototype for rooftop farming technology. The barge's inaugural tour of New York City took place between May and October of 2007, during which time it hosted around 9,000 curious visitors. In 2008 the barge was purchased by Groundwork Hudson Valley for a grand total of \$2 and moved to its permanent home in Yonkers where it continues to educate school groups, volunteers, and the general public on sustainable growing practices. Produce grown on the Science Barge is donated to a local church.