

SUSTAINABILITY HERO

February 2018



Michael Hornsby

Former Chair, West Windsor Environmental Commission

Michael Hornsby served as the chair of the West Windsor Environmental Commission for the past 16 years, leading West Windsor Township to become one of the most impressive silver-certified Sustainable Jersey towns in New Jersey.

For 40 years, Mike has worked to help make New Jersey more sustainable. His primary passion is to solve the climate crisis. He pursues this goal at work, in his community and at his home. As the chief project development officer at the New Jersey Board of Public Utilities Office of Policy and Planning, Mike created and leads New Jersey's Electric Vehicle Infrastructure Work Group. Mike is also the technical leader for BPU's Microgrid Program and New Jersey's Energy Resilience Bank. Mike is a member of the Sustainable Jersey Energy Task Force.

To summarize the climate change challenge, Mike said, "In a nutshell, we're causing climate change, it's bad and it's getting worse. The solutions are to reduce carbon emissions, build resilience and to help others understand the gravity of the situation." At home, Mike conducted a home energy audit and completed the upgrades needed to make his home more energy efficient. The work included installing a geothermal heat pump system that provides the home with heating, cooling and hot water. Environmental Commissioner Andrew Kulley provided Mike with expert technical advice, as he had experience installing his own geothermal system. Mike also installed a Level 2 electric car charger and has owned electric cars since 2012. Mike indicated that about half of New Jersey's carbon emissions come from transportation and transportation electrification is the essential way to address these emissions. Mike sources almost all of his home and auto energy needs from 100 percent purchased wind power certificates, not gasoline, heating oil or natural gas.

West Windsor Environmental Commission

Dr. Shing-Fu Hsueh served four terms as the Mayor of West Windsor; from 2002 to January 2018. When Mayor Hsueh started his initial term, he asked Mike to lead the Environmental Commission. Their partnership, and the key contributions from the Township's Landscape Architect Dan Dobromilsky, led to an impressive 16 years of progress. Mike credits former West Windsor Environmental Commissioner Marty Rosen with kick-starting sustainability programs in West Windsor. In 2006, the Commission engaged the Rutgers Center for Green Building to prepare a Sustainable West Windsor Plan.



When Sustainable Jersey was launched in 2009, West Windsor transitioned to Sustainable Jersey's program. West Windsor has since achieved silver-level certification three times, in 2010, 2013 and 2016. The actions completed for certification are listed in the West Windsor Township Sustainable Jersey certification report. The Commission was twice awarded the Association of New Jersey Environmental Commissions (ANJEC) Achievement Award. In 2014, the

Commission earned the award for developing the Environmental Education Center as part of the West Windsor History Museum at Schenck Farmstead. Former Environmental Commissioner and local farmer Kevin Appleget was instrumental in developing this project.



West Windsor Climate Action Plan

Mike led a Climate Action Plan (CAP) effort for the Township to reduce energy consumption and greenhouse gas emissions. The West Windsor Climate Action Plan (CAP) was funded through a \$25,000 Sustainable Jersey grant. The CAP provides an estimate of the quantity of greenhouse gas emissions (the carbon footprint) produced by municipal government operations and the community sources at large within the township. The CAP also establishes a greenhouse gas emission reduction goal equal to the State of New Jersey's Global Warming Response Act. Mike explained, "The CAP proposes a plan of action to achieve greenhouse reduction goals and initiates a discussion on how the community should plan for and adapt to climate change. The plan was an important educational tool and we have seen our residents become aware of the issues and the steps they could take to help with solutions."

Mike built upon Sustainable Jersey's CAP requirements by adding chapters on the science of climate change and resilience. The Commission held several public outreach sessions on the CAP. As part of the CAP, the Commission arranged for energy audits and energy conservation measure to be installed in municipal buildings. The Commission was awarded a second ANJEC Achievement Award in 2015 for the CAP. Most recently, the Commission has been advocating that a microgrid be constructed on the Township's municipal complex, linking critical facilities together with a resilient energy system, for example providing power to critical facilities during events, such as a hurricane, where the main power grid may not operational.

Mike said, "Sustainable Jersey is a great asset to municipalities because it takes the large, complex subject of sustainability, organizes it logically, and then breaks it down into bite size, actionable pieces. With over 100 sustainable actions to try, the program makes sustainability accessible to municipalities."

Site Remediation at New Jersey Institute of Technology (NJIT)

Since 1992, Mike has been an adjunct professor at the New Jersey Institute of Technology. He instructs the Site Remediation graduate course for the Department of Civil and Environmental Engineering. Mike said he enjoys leading students through the remediation process from start to finish, including environmental law, risk assessment, permitting, health and safety and construction. Mike was honored with NJIT's Excellence in Teaching Award in 2005 and 2002 (Honorable Mention) as well as the New Jersey Gubernatorial Proclamation for Teaching Excellence. Mike was also an author of the New Jersey Licensed Site Remediation Professional (LSRP) exam. LSRPs are certified professionals charged with overseeing the investigation and cleanup of environmental contamination in the state. Mike also guest lectures in other environmental and energy classes at the university.



OPEC Oil Embargo Leads to Career in Energy and the Environment

Mike cites two things that helped shape his career in sustainability. The first was the OPEC oil embargo in the 1970's that triggered a short-lived national resolve for energy security and renewable energy. He took a high school environmental science class with teacher Jane Settle where he was read Paul Ehrlich's book, *Ecoscience: Population,*

Resources and Environment. The book opened his eyes to natural resource depletion, population growth and environmental degradation. Mike then attended Rutgers University to study solar power engineering. Mike went on to earn a B.S. in Environmental Engineering Technology and an M.S. in Environmental Engineering – Toxicology at the New Jersey Institute of Technology.

Mike's first environmental job was as a college intern, starting in 1978 for the Middlesex Borough Health Department. He escorted New Jersey Department of Environmental Protection (NJDEP) inspectors around the Borough to test for radiation. The federal government had operated the Middlesex Sampling Plant to test uranium ore as part of the Manhattan Project. Ore waste was dumped on the property and residents then scavenged it for use as fill on their own properties. Mike worked on this future Superfund Site before there was a Superfund.

Mike was employed as a wastewater treatment plant operator which turned out to be a foundational environmental skill. He was also a lab technician at ETC, which at the time was the world's largest environmental testing lab. Mike served as a water pollution investigator for the Interstate Environmental Commission. A highlight of this job was sampling surface waters from Connecticut to Sandy Hook on an EPA helicopter. Mike conducted water pollution compliance investigations for the Commission in the NY, NJ and CT region. Mike managed Superfund projects and programs for the NJDEP and as a consultant. Mike worked for Cordis Corporation, a Johnson & Johnson company, as a staff environmental engineer and was responsible for all aspects of environmental management, including regulatory compliance, ISO 14001 and permitting at multiple facilities. Mike said, "It was joy to work for J&J, with their world-leading energy and environmental programs and renowned Credo."

Mike worked five years at the Public Service Enterprise Group (PSEG), first as the corporate environmental issues manager and then for their utility as the product manager for renewable energy. He led the development of new alternative energy programs such as the electric vehicle, compressed natural gas vehicle, Solar4All Extension, Solar Loan 3 and Class 1 renewable energy programs.

Mike moved on to NRG Energy, Inc., which is the nation's largest electricity generating company, as measured by capacity. Mike served as the environmental policy manager, where he worked on national air, water, waste and climate issues. Mike also developed and led Power2Serve, NRG's nationwide disaster response team.

What You May Not Know About Mike

In addition to chairing the Environmental Commission, Mike is a trustee with the [Stony Brook Millstone Watershed Association](#) and a firefighter with the Princeton Junction Volunteer Fire Company. Mike received a Ten-Year Service Award from the fire company in 2017, and was recognized by the fire company as a Top Ten Responder annually from 2007 to 2016. Mike also received the West Windsor Mayor's Citizenship Award in 2016. Mike cites the late Bill Librizzi, a distinguished employee of the Federal Water Pollution Control Administration and the U.S. Environmental Protection Agency, as an inspiration for his own career. Mike played fullback on the Rutgers varsity lightweight football team, competing with the likes of Army and Navy. Fun fact: Mike was an extra in the 2002 Best Picture, *A Beautiful Mind*, which was about Mike's former neighbor, the late Nobel Prize winner John Nash.



Advice for Sustainability Professionals

When asked about his advice for fellow sustainability professionals and green team members, he said "Work on what you love to do. If you are passionate about the environment like I am, there are plenty of opportunities out there to make a real impact."