## Sustainability Hero





April 2024

## Robert McCoy Chair, Maplewood Township Environmental Advisory Committee (Essex County)

Robert McCoy has served on the <u>Maplewood Township</u> Environmental Advisory Committee for over two decades and has been the municipally appointed chair for 19 years. Bob is a standout sustainability hero—humble, smart and stubbornly persistent, he has been at the forefront of New Jersey's most important sustainability initiatives. Constantly pushing the boundaries of what is possible, Bob is reimagining the world around him and inspiring everyone to do the same.

With major involvement by Bob, Maplewood Township was one of the first 34 towns certified by Sustainable Jersey and has maintained certification since 2009. Bob has led the implementation of programs to reduce solid waste, cut greenhouse gas emissions, support energy aggregation, encourage solar and promote energy efficiency incentives among low- and moderate-income residents. You may not find Bob front and center in the award photos, but know he was responsible for crunching the

numbers, evaluating the policies, tabling at events and spending his Saturday knee deep in the Rahway River pulling out trash at the annual Maplewood river clean-up.

Bob has served on the Sustainable Jersey Energy Task Force since 2009, helping to develop and review the energy program actions. He is a frequent speaker at state-wide events including the New Jersey Sustainability Summit.

"I'm an optimist," Bob said. "Over the span of 20 years, I've seen enormous changes in policy and technological advances and progress in renewable energy and sustainability issues. I can add continuity and institutional knowledge to our work. One of my roles is to sustain the sustainability movement in Maplewood." And he has. In mid-April, Maplewood Township will launch its Community Energy Plan, which represents a foundation forged by Bob and others



over the years that will set the course for the Township to implement actions that will address local opportunities and changes that are required to support the New Jersey Energy Master Plan's strategies to reach the goal of 100% clean energy by 2050.

"Global warming and its impact on climate change is an enormously compelling challenge," Bob said, "There are no shortcuts. We need to be able to do the hard stuff. Getting rid of plastic bags alone won't do it. I want people to understand the magnitude of the change needed and know that we should work individually, collectively, at the local level and the global level. We must aggressively seek out ways to have less of a climate impact."

Bob does not shy away from difficult issues and is not afraid to challenge the norm. He helped raise environmental injustice concerns that led to the defeat of two artificial turf referendums in Maplewood, endorsed deer management and pushed forward energy efficiency issues. Comfortable with numbers, Bob conducts his own research and makes independent decisions based on data.

A unique childhood encouraged his independent thinking and helped set Bob on his path as an advocate for social justice and sustainability. Bob spent the first six years of his life in Midland, Michigan. His father was an executive at the Dow chemical

plant located alongside the Tittabawassee River. Bob has early memories of the chemical smells and haze that often rose above the area. Bob's parents moved him and his four siblings to Zurich, Switzerland. Bob said living in the mountain region of the Swiss Alps and attending the local school, where he learned to speak and write in German, was a formative experience. Bob's family moved to Hong Kong, then a British colony, where he graduated from high school before returning to the United States to attend Swarthmore College. "In Hong Kong, I learned the rich definition of sustainability. It's not just about making healthy forests. People and equity are key elements of the balance," Bob explained.

Essex County Deer Management Program: One of Bob's first projects on the Environmental Advisory Committee was a controversial decision to support the Essex County Deer Management Program in South Mountain Reservation and Essex County Hilltop Reservation. After researching the topic, Bob advised Maplewood Township to support the program to reduce the number of deer. Bob encouraged Essex County to understand that the forest understory was being destroyed by deer and the loss of this vegetation was preventing new trees from growing, creating erosion problems, allowing invasive plants to flourish and causing the number of native animal species that rely on the plants for food or protection to decline. In addition to culling the deer herd, an aggressive replanting program to accelerate the regrowth of the forests was completed in South Mountain Reservation and Eagle Rock Reservation. Bob and the Township Committee, working through the South Mountain Conservancy and Essex County, were instrumental in the addition of 47 enclosures (42 in South Mountain and five in Eagle Rock) where native vegetative species have been planted so their seeds can be reintroduced into the area. The fences are designed to prevent deer and other large animals from foraging on the planted areas, and allow smaller animals, such as rodents and birds, to enter and exit. The planting project was funded with grants from the NJ Green Acres program received

by the South Mountain Conservancy and the Eagle Rock Conservancy and grants from the Essex County Recreation and Open Space Trust Fund.

Maplewood Township Community Energy Plan: Bob helped lead the effort to develop the Maplewood Township Community Energy Plan that is set for release in mid-April 2024. The Maplewood Community Energy Plan identifies 17 areas where local initiatives are needed to implement and support the various New Jersey Energy Master Plan: Pathway to 2050 goals. The plan includes specific strategies that Maplewood will pursue in the



coming years to reduce greenhouse gas emissions from the local energy system. The Plan covers municipal operations such as the municipal vehicle fleet and buildings, as well as public policies and programs designed to encourage and support the community in reducing emissions.

Work on the plan began in July 2022, when the Sustainable Maplewood Committee--a group comprised of members of the Maplewood Environmental Advisory Committee, Green Team, Township Committee and staff--reviewed the Sustainable Jersey Guide for Sustainable Energy Communities and Community Energy Plan Workplan Template. The Committee then began meeting with other municipal staff to determine how to prioritize and implement high-impact energy initiatives. Relevant community data was gathered from the Sustainable Jersey Data Center and other sources. The New Jersey Board of Public Utilities (NJBPU) launched the Community Energy Plan Grant Program, offering support and funding for municipalities to develop a Community Energy Plan to promote action at the local level in support of the state's goals. Maplewood Township received a \$10,000 Community Energy Plan Grant to support development of the plan.

During the creation of the plan, the Township provided several opportunities for public input, taking care to enable low-and moderate-income residents to participate. The plan will be presented to the Maplewood Township Committee in mid-April 2024 and then made available on-line.

**Energy Tracking and Management:** Bob has been collecting data on Maplewood Township's energy use over the years. The Maplewood Environmental Advisory Committee has access to monthly Township utility use data. The committee members, working with the assistant township administrator, update the EnergyStar Portfolio Manager on a regular basis. This in turn facilitates continuous monitoring of weather-adjusted Energy Use Intensity metrics as the township goes through the process of identifying and implementing appropriate energy upgrades. Maplewood Township received 20 Sustainable Jersey certification points with the completion of the action: Energy Tracking & Management.

Maplewood Library Gold LEED: As part of Bob's tracking of energy use in Maplewood, he made a regular stop at the Maplewood Public Library to get the data and advise on energy efficiency issues. When the township started a library renovation project, Bob was asked to help review and consult with the architects renovating the new library on sustainability issues. The renovation team was interested and open to suggestions, resulting in the new library being enhanced to meet Gold LEED certification. The new library will be among the most energy efficient municipal buildings in New Jersey. The facility will be all electric, using no fossil fuels. An electric building will avoid emitting 80,000 tons of carbon dioxide into the atmosphere annually. The installation of solar roof panels is expected to provide 55% of the library's energy use, producing 170,000 kilowatt hours of emissions-free energy annually. With an estimated \$45,000 savings in energy costs per year, along with the New Jersey incentives, the panels should pay for themselves within a decade.

Sustainable Essex Alliance Energy Procurement Cooperative: In 2019, Maplewood, Glen Ridge, Montclair, South Orange and Verona came together to form the Sustainable Essex Alliance Energy Procurement Cooperative, a joint purchasing initiative. Its goal was to use bulk purchasing power to procure electric power supply, including a novel program to support energy efficiency planning for residents at a lower price, and with a higher renewable content, than power supply provided by PSE&G. Bob helped bring the group together, with Maplewood serving as the Lead Agency of the Sustainable Essex Alliance. In 2024, the group hopes to seek additional opportunities for municipal energy aggregation contracts at an electricity supply cost below the utility charge.

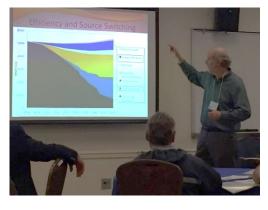
**Commitment to Solar Power:** With Bob as the lead, Maplewood demonstrated a commitment to solar power early on by permitting solar installation in all zones within the township and removing geographic obstacles to residential or commercial owners. Maplewood also streamlined and incentivized the process for installing solar technology by making electrical and construction permits related to solar installation a flat fee, regardless of the installation size (<u>Ordinance 2894-18 and 2895-18</u>).

Maplewood has supported two organized efforts to promote local solar adoption. In 2014, a group of residents of Maplewood and South Orange initiated "Solarize SOMA," to contract with Astrum Solar to promote residential solar at advantageous terms. Then in 2016 -2017, as part of the <u>Sustainable Jersey Solar Challenge</u>, Maplewood partnered with solar marketplace EnergySage to create an online marketplace specific to Maplewood residents. Maplewood's solar installations increased significantly between 2014 and 2024, suggesting the two campaigns had a noticeable impact on local solar adoption. Maplewood's collaboration with EnergySage is ongoing: <u>EnergySage Partnership</u>. Maplewood Township received 15 Sustainable Jersey certification points with the completion of the action: <u>Make Your Town Solar Friendly</u>.

Maplewood Police and Court Building Solar Roof: The Maplewood Police and Court Building was dedicated in 2008 as the first LEED-certified municipal building in the State (LEED Silver). The building was constructed with a flat roof that included the installation of a 20-kilowatt photovoltaic array. The size of the array was limited by the size of the building's footprint. Bob said, "The solar roof on the police building showcases renewable energy technologies. We hope it sets an example to other municipalities and to the residents who could, on a smaller scale, employ similar technologies in their own homes." Two milestones were reached in 2018: the system surpassed 200,000 kWh of electricity production and exceeded \$100,000 in combined savings and revenue from selling Solar Renewable Energy Certificates (SRECs). This also represents over 100 tons

of avoided carbon dioxide emissions. Maplewood Township received 10 Sustainable Jersey certification points for this project with the completion of the action: <u>Municipal Onsite Solar System</u>.

Sustainable Jersey Silver-Certified: The Sustainable Maplewood Committee works in partnership with the Maplewood Green Team and Environmental Advisory Committee to complete actions for Sustainable Jersey. Bob said, "One of the things I have been working to learn is how to encourage members of the Environmental Advisory Committee to feel empowered to take the lead in areas where they feel the most passion. We currently have members leading contributions on energy and climate, pedestrian/biking infrastructure, playing fields, stormwater management, shade trees, open space funding, and yard care, which contributed to enacting the full ban on gasoline leaf blowers. In addition, we are lucky to have the support of our Township Committee including



Committee Member Victor DeLuca who has been a longtime supporter of the work." Maplewood Township achieved silver-level certification in 2013, 2016 and 2019. Maplewood Township received the Sustainable Jersey Collaboration Award in 2013 and 2016. In November 2023, Maplewood Township achieved silver-level re-certification (2023 Certification Report) and the Sustainable Jersey Gold Star in Health (2023 Health Gold Report).

Climate Action Plan: In 2006, Bob secured support from the Clean Air-Cool Planet organization for a grant to create a Climate Action Plan. Bob led the development of the Maplewood Climate Action Plan which included public meetings and local review to share the sources of Maplewood's CO<sub>2</sub> emissions and set the original goal to reduce greenhouse gas emissions by 20% by 2015. The need to dig in deeper and more creatively became apparent to Bob and Maplewood, as achieving that goal slipped away with recognition of the magnitude of the challenge and what they felt was inconsistent state and federal support programs.



More about Bob: Bob has an undergraduate degree in economics from Swarthmore College and a Master of Engineering degree from Stevens Institute of Technology. He has reduced his home's energy use to about 1,000 kilowatt hours a year above his net-metered solar production. Bob has a ground source/geo-thermal heat pump supplying heat and air conditioning and a heat pump water heater. He is planning to phase out his gas stove and gas clothes dryer that account for the remaining 15 Therms of natural gas use. He uses electricity to charge his plug-in Prius. Bob was an early solar adapter in 2003; he is #53 on the New Jersey State Solar Registry. When he added solar to his garage, he was featured in the New York Times and became the poster child for a rising solar industry. As a local solar celebrity, Bob was asked to join the Maplewood Township Environmental Advisory Committee in 2004.

Bob met his wife Laurel Kearns in 1985, when they were both living and working in Atlanta. They first bonded over a shared commitment to social advocacy and environmental causes, and have been pursuing these issues together ever since. After spending 17 years in Atlanta, Bob and Laurel moved to Maplewood in 1994. Laurel is Professor of Sociology of Religion and Environmental Studies at Drew Theological School and the Graduate Division of Religion of Drew University. They have two grown children who continue to make them proud as they chart their own lives.

In his free time, Bob enjoys biking and can be seen on his regular route, an 18-mile loop from his house and on the roads through the South Mountain Reservation. He thinks he has ridden this loop about 1,000 times. He has revived the hobby of birdwatching with a new interest in water birds. Recently he has taken to visiting the Great Swamp and the Edwin B. Forsythe National Wildlife Refuge to learn to tell the difference between birds such as Hooded Mergansers and Buffleheads, which he used to just call "diving ducky birds."