

Somerset County ENERGY COUNCIL



CHANGING THE COURSE OF ENERGY

ANNUAL REPORT
2019



TABLE OF CONTENTS

I.	Letter from the Chairman	3
II.	2019 Energy Council	4
	A. Mission	
	B. Members	
III.	Renewable Energy and Technology	9
	A. Focus Areas	
	B. Guiding Principles	
	C. Actions	
IV.	Education and Awareness	11
	A. Focus Areas	
	B. Guiding Principles	
	C. Actions	
V.	Resilience and Sustainability	13
	A. Focus Areas	
	B. Guiding Principles	
	C. Actions	
VI.	Conservation and Efficiency	14
	A. Focus Areas	
	B. Guiding Principles	
	C. Actions	
VII.	Policies and Legislation	16
	A. Focus Areas	
	B. Guiding Principles	
	C. Actions	
VIII.	County Energy Project Tracking	18
IX.	Our Partners	18

I. Letter from the Chairman

Dear Somerset County,

Since the Energy Council's inception in 2008, there has never been a time of more rapid change with regard to State energy and climate policy, regulations and programs. These changes are a timely response to the voices that have been raised by the State's residents, businesses, families and communities who are concerned about the quality of the air we breathe and the impacts that global warming is having on our communities, economy, the environment and future generations. The Energy Council's mission to advise County leaders on energy matters, advocate for energy efficiency conservation and renewable energy and to promote public understanding and awareness of energy opportunities and choices have never been more relevant to ensuring that Somerset County remains a safe, sustainable and resilient place to live, work, learn and play.

These pages highlight the Council's major accomplishments from 2019. I am especially proud of the accomplishments of our Freeholder Director and the members of the Council's Education and Awareness Committee who performed leading roles in our new Energy Efficiency Video. I am excited to make available our new "Household Energy Self-assessment Tool" during 2019 as well. I would also like to recognize the significant amount of time and expertise provided by our members who produced formal review comments on the Draft State Energy Master Plan, which helped to shape the final document.

None of the Council's accomplishments would have been possible without the contributions of our members, support from the County Planning Board and leadership provided by the Board of Chosen Freeholders. I want to personally thank them and all of our members for their time, commitment, dedication, and expertise over the past year. Our goal during the coming year is to identify a set of realistic, do-able, high-impact energy initiatives that the County can accomplish with limited impacts to the County's budget or initiatives for consideration by the Board of Chosen Freeholders; and to take steps to move the Freeholders' energy priorities forward together with our partner organizations.

Please visit the Council's website at <https://www.co.somerset.nj.us/government/public-works/planning/energy-council> to access the information and resources described in this report. Your involvement is welcomed. Please subscribe to the Council's e-mail service list at <https://www.co.somerset.nj.us/about/email-subscriptions> and come to our meetings.

Sincerely,



William Amann, PE, LEED Fellow, DCEP, Chairman

II. 2019 Energy Council

Established by the Somerset County Board of Chosen Freeholders in 2008, the Council is comprised of 11 volunteers interested in helping all of Somerset County save energy and money; transition to clean energy future; and create a modern, reliable energy system. The counsel provided by these volunteers is offered with aim of supporting economic prosperity, enhancing healthy, safe communities, protecting and restoring ecological systems and ensuring essential infrastructure and services remain powered even when hazards strike. These volunteers are constantly looking for fresh, bold new ideas to help accomplish these goals. They have diverse backgrounds and bring a wealth of knowledge, broad-ranging perspectives and specialized expertise to support and serve the greater good of Somerset County in regards to energy-related matters.

A. Mission

To advise the Somerset County Board of Chosen Freeholders on energy matters, to advocate for energy efficiency, conservation and renewable energy, and to promote public understanding and awareness of opportunities, choices, and resources.

B. Members

All members of the Council are residents of Somerset County, and many also work in companies and at establishments located within the County. All have backgrounds and experience in the energy field.

Meet our new member....

William T. Knox IV

Mr. William Knox IV earned a BA degree from Wesleyan University. Following his volunteer service as a Peace Corps Volunteer in Malawi, he earned a JD from Harvard Law School. Mr. Knox worked as a federal tax lawyer in private practices located in Somerset and Hunterdon Counties for many years and served as chair of the Section of Taxation, NJ Bar Association. He later worked in private wealth management, earning Certified Financial Planner and Chartered Financial Analyst designations. He is now retired, but continues to serve as Trustee of Drew University in addition to his role on the Energy Council. He is a proud father of three and hosted over 80 foreign exchange students and YMCA camp counselors over the years.

...Who joined our existing Council in 2019...

William Amann, PE, LEED Fellow, DCEP, Chairman

Mr. Bill Amann is President of M & E Engineering, a “green” mechanical and electrical engineering consulting firm serving the Mid-Atlantic region. He has over 35

years of experience in sustainability, engineering, design and advisory services for HVAC, electrical, plumbing and fire protection systems. He was named as a LEED Fellow by GBCI, the certification branch of the U.S. Green Building Council (USGBC) in 2015. He is a current board member of the NJ Chapter of the USGBC-NJ Chapter, a sponsoring member of Urban Green (the NYC branch of the USGBC), a Climate Reality Leader, Data Center Energy Practitioner, licensed professional engineer in the states of NJ, NY, PA and DE, and member of the Somerset County Business Partnership Board, in addition to serving as Chairman of the Somerset County Energy Council. He is a proud father and grandfather.

Jeanne Perantoni, AIA, LEED AP, Vice Chair

Ms. Jeanne Perantoni is the Chief Executive Officer of SSP Architectural Group, a woman-owned business based in central New Jersey. She leads SSP's planning and design services and is a licensed architect, LEED-accredited professional and certified Educational Facility Planner. Her portfolio of work is nationally recognized for seamlessly incorporating energy efficiency, environmental regeneration, and smart growth planning principles into public sector projects. She has served on the Foundation Boards of Somerset Medical Center, Raritan Valley Community College, and on the NJ State Board of Architects. Ms. Perantoni continues to advise Somerset County Freeholders on matters pertaining to energy, resiliency, and renewable resources as Vice Chair of the Energy Council. She has served for many years on Princeton's Historic Preservation Review Committee and advocates for both open space preservation and Green Schools. Ms. Perantoni holds an A.B. in Architecture and Urban Planning from Princeton University and a Masters in Architecture from Rice University. She became licensed in New Jersey in 1984 at a time when less than 2% of the state's registered architects were women and is the proud mother of two young men.

Wayne DeFeo, LEED AP, Secretary

Mr. Wayne DeFeo is the principal and founder of DeFeo Associates, a full-service environmental consulting firm that provides clients with environmental expertise with a strong emphasis on sustainability. Wayne has been "green" consulting for over 25 years. He has shown many clients how sustainability has evolved from being "admirable but impractical" to comprise streamlined, cost-effective conservation strategies and technologies. Mr. DeFeo specializes in the development of sustainable solutions for commercial, institutional and residential buildings, including every component of building operation, while maximizing comfort, safety and efficiency. He is experienced in developing environmentally friendly purchasing policies, recycling and solid waste handling systems. He is well-versed in energy reduction strategies and LEED building practices. He works with organizations to assess environmental impacts and develop cost and resource saving designs, guidelines and practices. He holds a MA in Environmental Studies from Montclair State College, is a Certified Teacher of Science, serves as a Faculty Coordinator for Rutgers University's School of Continuing and Professional Education and is course instructor in NJ's Recycling Coordinator Certification Program. He is a board member of the USGBC-NJ Chapter and a licensed Energy Auditor.

Axel Breidenbruch

Mr. Axel Breidenbruch currently serves as Vice President of Sales & Marketing and Board Director at INDUSTRONIC Inc., and is responsible for successfully establishing it as a subsidiary for the German parent organization Industronic GmbH & Co KG. Before joining Industronic in 2008, he was Executive Vice President, Global Strategic Development at SAI Global Assurance Services, in addition to leadership positions at several other organizations. He graduated from Northeastern University with degrees in Engineering and Economics.

Susan Dorward

Ms. Susan Dorward serves as the Sustainability and Energy Coordinator at Raritan Valley Community College, which was recently certified as carbon neutral. Through her efforts, RVCC has been lauded for its campus sustainability efforts by the Association for the Advancement in Higher Education (AASHE). The College has been recognized as a top performer in the 2016 Sustainable Campus Index, ranking fourth in the country in the “Associate’s Colleges” category, in addition to other sustainability awards and recognitions. Ms. Dorward has been studying carbon capture, utilization and storage at Columbia University, and recently led a study involving planting seagrass in order to restore blue carbon and prevent sea erosion off Galveston Island in Texas. Ms. Dorward has authored several articles and publications about sustainability and energy issues.

Paul Drake

Mr. Paul Drake is a Professional Planner with over 30-years of urban planning, real estate development and natural resources experience in government, public utility and the private sector. He has a Master of City and Regional Planning from Rutgers University and is a part-time professor at Rutgers, teaching courses in planning, urban design and public health. Prior to his current roles as Regional Public Affairs Manager and Licensing Project Manager for PSEG Corporation, he was a professional planner for Gladstone Design, Inc., Director of Planning for the NJ Office of Smart Growth and Principal Environmental Specialist for NJDEP Land Use Regulation.

Jeffrey J. Foose

Mr. Jeffrey Foose is a commodity executive and is nationally-recognized for his accomplishments in energy market development, electronic trading technology, commodity derivative valuation methods, and commodity portfolio risk management. He has extensive experience in the development of portfolio risk modeling and zero-latency trading interfaces to capture energy market physical/financial arbitrage, monitor real-time risk metrics, and the management of physical energy and storage logistics across all North American and global delivery hubs. He currently serves as Managing Member-Strategic Resources Consulting of AERIS Capital LLC. Previously, he held leadership positions at First New York Securities LLC, PSEG Energy Resources & Trade LLC, KCS Energy Corporation and other firms. He has a

BS degree from LaSalle University and completed coursework at the University of Pennsylvania. He currently serves as a member of the local Zoning Board.

Jeffrey Grant, PE, CEM, CEP

Mr. Jeff Grant has over 30 years of experience in commercial real estate building systems, energy management and electricity procurement. He has expertise in strategic procurement rate reduction, implementing best-operating practices that minimize energy consumption, rate engineering for maximum tenant electric revenue and developing efficiency improvement projects that – in concert with regulatory incentives, generate significant internal returns. He holds a degree in Mechanical Engineering from Tulane University and a MBA from Rutgers University. He currently serves as the Senior Director of Commercial Real Estate and Director of Corporate Energy at Mack-Cali Realty Corporation. He is the former Project Manager at MEP Consulting Engineering/RG Vanderweil Engineers. He serves on the educational and environmental committees of the NJNAIOP and NJBOMA, and is a member of the Association of Energy Engineers, the NJ American Society of Heating, Refrigeration & Air Conditioning Engineers, and the American Society of Mechanical Engineers.

Walter C. Lane, PP, AICP

Mr. Walter Lane serves as the Director of Planning at the Somerset County Planning Division where he oversees a staff of 18 employees. He is responsible for all of the County's planning efforts, the Agriculture Development Board, the County's Cultural and Heritage Commission, the Regional Center Partnership of Somerset County, the Somerset County Green Leadership Hub and the Somerset County Energy Council. He began serving as the Director of Planning in July of 2014. Previously he had served as a Supervising Transportation Planner, Principal Planner and Senior Community Planner during his tenure at the County. He has over twenty-two years of land use, regional planning and transportation planning experience and has managed numerous award winning projects. Walter is a licensed New Jersey Professional Planner and is a member of the American Institute of Certified Planners. He currently serves on the Executive Committee of the NJ County Planners Association and the Somerset County Business Partnership and is leading NJ County Planners Association COVID-19 Long-term Recovery Work Group. Walter also serves as the co-chair of the Sustainable Jersey Transportation and Land Use Committee and the Obesity Task Force of Healthier Somerset. He has served on the APA-NJ Executive Committee and is a past chair of the Regional Transportation Advisory Committee at the North Jersey Transportation Planning Authority. He frequently presents on a wide range of planning issues at various statewide conferences, seminars and workshops. He is a graduate of Cook College, Rutgers University and holds a BS in Environmental Policy.

...Are assisted by the 2019 Freeholder Liaison to the Council...

The Honorable Sara Sooy, Freeholder

Ms. Sara Sooy holds a MBA degree from Rutgers University and specializes is a Commercial Real Estate Industry Specialist. In addition to her current role on the Board of Chosen Freeholders, she is a member of the Somerset County Business Partnership, Bernardsville Senior Center Volunteer, Morristown Soup Kitchen Volunteer, Heart Works member and Kiwanis Club member. . She is a former Commissioner of the Somerset County Commission on the Status of Women. Before being elected to the Board of Chosen Freeholders in 2019, she served as a member of the Somerset Hills School District Board of Education. As Freeholder, she serves as ex office to Constitutional Officers, Courts and Criminal Justice; Finance & Administrative Services (alternate) and Public Health & Safety (alternate) and as liaison to several county boards and commissions.

....And are supported by the following staff.

Laurette Kratina, PP, AICP, Chief of Strategic Planning

Ms. Laurette Kratina has been a member of the County Planning Division for over 30 years. Some of her major contributions include the development and adoption of the County Investment Framework as an update of the Land Use Element of the County Master Plan; updated Housing Element, and Updated Multi-Jurisdictional Hazard Mitigation Plan for Somerset County. She manages the wastewater planning process and provides technical and administrative support to the Somerset County Energy Council and to each of its committees. She is a licensed New Jersey Professional Planner and is a member of the American Institute of Certified Planners. She has a Master in City and Regional Planning from Rutgers, the State University.

III. Renewable Energy and Technology

RE&T Team: Susan Dorward-Chair, Jeffrey Grant, and Axel Breidenbruch

A. Focus Areas: Demand Response, Solar, Wind, Nuclear, Storage, Smart Grid, Electric Vehicles

B. Guiding Principles

- Support the deployment of smart grid, smart metering and energy storage technologies throughout Somerset County, which can add resiliency to the grid, enable the implementation of demand response and enhance energy and cost savings for both customers and electric utilities.
- Help Somerset County serve as a leader statewide in the transition from fossil fuel-based to electric vehicles and motorized equipment and position the County to attain the wide range of benefits that can thus be achieved.
- Promote the development of cost-effective renewable, clean distributed energy resources including but not limited to solar and wind; and the expansion of the clean energy industry sector within Somerset County.

C. Actions

Electric Vehicle Readiness Planning: Chairman Amann and Walter Lane, Council Member and Director of the County Planning Division serve on the Somerset County Electric Vehicle Implementation Task Force, which was established by the Freeholder Board in March 2018. The work of the task force included the adoption of the Somerset County Electric Vehicle Readiness Plan in September 2018. Important strides were taken to implement the plan during 2019 include the acquisition of four (4) electric vehicles as part of the County motor pool fleet. A charging station for County use was installed in the County's Bernie Field Parking Deck and one station for public use was located curbside at the County Complex on High Street in Somerville. Ongoing EV usage countywide is being tracked using the NJ Division of Motor Vehicle data. Several EV presentations were given by SCEC members and County Planning Division Staff at various meetings, events and programs throughout 2019. Additional information on EV planning and implementation is provided on the County's newly-established EV Readiness webpage: <https://www.co.somerset.nj.us/government/public-works/planning/electric-vehicles>

Council members monitored market trends including the roll-out of new electric vehicle models by various automakers, emerging EV policies, regulations and trends pertaining to charging infrastructure and acquisition and operating costs. Issues pertaining to EV battery technology

Emerging Nuclear Technologies: This committee is gathering information about new modular small-scale nuclear reactors, spent fuel rod re-processing and re-use opportunities and other emerging trends in the nuclear sector given the significant reliance on this power source in NJ.

Community Solar: In 2019 the NJBPU launched a 3-year Community Solar Pilot Program aimed at awarding incentives to projects that will result in 75 MW during each of the three years. The NJBPU granted conditional approvals to 45 Community Solar Projects statewide in December 2019, one of which is located at an affordable housing facility in Bridgewater Township, Somerset County. This rooftop facility will provide 1.35674 MWdc. Participation in this pilot program was strongly encouraged by the Energy Council.

Energy Analysis: Work is underway by this committee on a comparative analysis of the costs, benefits and economic impacts of solar, wind and nuclear power versus conventional power sources from a Somerset County perspective.

Off-shore Wind Initiative: The Council is monitoring implementation of the State's Off-shore Wind development and the transmission strategy. NJEDA recently launched a new resource center in support of the wind industry. Associated demand for wind industry support businesses and supply chain networks can potentially represent economic growth opportunities in Somerset County and across the state.

IV. Education and Awareness

E & A Team: Jeanne Perantoni-Chair, Susan Dorward, Wayne DeFeo, and Walter Lane

A. Focus Areas: Events, Publications, Reports, Presentations, Website

B. Guiding Principles

- Expand the Energy Council's outreach efforts using social media, infographics, videos, workshops, presentations, webinars and other venues.
- Improve public awareness and understanding about energy sustainability and resilience, energy conservation and efficiency, clean and renewable energy, and the relationship between energy choices, climate change mitigation, and adaptation solutions.
- Provide resources that can be used by educators in schools and other learning centers for the teaching of energy conservation, efficiency and renewable energy concepts.
- Identify and establish partnerships with agencies, organizations and individuals to work collaboratively and share energy and climate change information, issues and solutions.

C. Actions

Energy Efficiency Day: The Somerset County Board of Chosen Freeholders issued a proclamation in October supporting the implementation of energy efficiency improvements and energy conservation by public and private sector individuals and organizations.

Energy Efficiency Video: The Council completed an informational video in collaboration with the County Public Information Officer for the general public which is narrated by Freeholder Director Gallagher and features several members of the Energy Council describing and demonstrating effective ways to save energy. It was released in September 2019 and showcased as a part of the County's celebration of National Energy Efficiency Day in October.

Household Energy Self-Assessment Tool: This resource for homeowners on how to identify and implement weatherization and other improvements to their homes that will save energy and money was finalized and released to the public via the Council's website in October.

Future Cities Initiative at Valley View School in Watchung: Chairman Amann, Planning Director Walter Lane and County Engineer Matthew Loper were guest speakers at the "Future Cities" contest event at Valley View School in Watchung early this year where strategies for improving energy efficiency and conservation in buildings were discussed. Members of the Council are interested in participating again in this event and in similar programs.

Energy Council E-mail Service List: Members of the public can now join a new County-based e-mail service list established this year, through which information about the Energy Council's programs, events, and initiatives can be shared.

Creating Vibrant Neighborhoods Workshop: Over 40 people attended this Energy Council sponsored event held on September 13th. Freeholder Sooy provided welcoming remarks and Council member Jeanne Perantoni facilitated the Implementation Panel which included Cathleen Lewis from NJBPU's Clean Energy Program and Nancy Quirk from Sustainable Jersey. Matthew Kaplan who serves on the USGBC-NJ Board served as the keynote speaker.

Planning Partners Forum: The Energy Council's work was the main topic of the Somerset County Planning Division's Planning Partners Forum held on September 25th. Council Secretary Wayne DeFeo provided an overview of the Council's goals, priorities and initiatives.

Sustainable Somerset: Mr. Wayne DeFeo was a guest speaker at a meeting of the Somerset County Business Partnership's Sustainable Somerset Committee and made a presentation about energy efficiency, regional recycling, and sustainability initiatives. Other members of the Energy Council, including Mr. Lane, Mr. Amann, and Ms. Perantoni, regularly attend meetings of Sustainable Somerset and contribute to the sustainability focus of the Business Partnership.

Climate Change Policy Statement: Work on the formulation of a climate change policy statement for consideration by the Board of Chosen Freeholders commenced and continues to move forward by this committee.

V. Resilience and Sustainability

R & S Team: Paul Drake-Chair, Jeffrey Foose, William Knox and Walter Lane

A. Focus Areas: Grid hardening, gas infrastructure, Microgrids, CHP

B. Guiding Principles

- Advocate for the identification and implementation of programs, initiatives and investments that will ensure the energy system is reliable, sustainable and resilient.
- Support the transformation of the energy system to renewables in order to mitigate climate change, improve air quality, enhance the quality of life in the region, and achieve public health improvement outcomes.
- Encourage the provision of clean, reliable back-up power solutions that will allow critical facilities, services, and infrastructure to remain operational especially during widespread, prolonged power outages.

C. Actions

Somerset County Hazard Mitigation Plan: The Multi-Jurisdictional Hazard Mitigation Plan for Somerset County was approved pending adoption by the Federal Emergency Management Agency (FEMA) and the NJ Office of Emergency Management in July and adopted by the Somerset County Board of Chosen Freeholders on August 13, 2019. It contains a Draft Energy Resiliency Framework document developed by County Planning Division staff with guidance provided by the Energy Council. The Energy Resiliency Framework is intended to serve as a platform for developing a new Energy Element of the County Master Plan. A draft scope of work has been prepared for updating, refining and transforming this document into an energy resiliency and sustainability plan for Somerset County, which will serve as a resource and guide for the county, our municipalities, residents and businesses. Providing public involvement opportunities throughout the planning process, ensuring the Plan is user-friendly and that it can be easily updated are high priorities. The Hazard Mitigation Plan includes several County-level mitigation projects aimed at improving energy resilience and ensuring back-up power is available for critical/essential facilities and infrastructure which will enable them to remain operational during emergencies.

Hardening of the Electric Grid: Information was collected and compiled by Council Member Jeff Foose concerning the characteristics and condition of the Roseland-Branchburg-Pleasant Valley transmission facility, which was discussed by the Council and shared with the Freeholders. The group is pursuing additional information on the status of repairs and upgrades. Information about strategies used by county and municipal emergency management officials in the event of a widespread power outage and associated cascading impacts will be pursued by the Council. Energy resilience is important in terms of regional economic competitiveness as well as public health and safety. Potential guest speakers for future discussions concerning these topics are being pursued.

VI. Conservation and Efficiency

C & E Team: William Amann, Chair and all Energy Council Members

A. Focus Areas: Eliminate waste and improve efficiency across all sectors

B. Guiding Principles

- Support the identification and implementation of energy savings improvements by the County and local municipal governments, school districts, residents, businesses, corporations, and non-profit entities.
- Promote the use of energy audits to identify energy-and-cost-savings opportunities that can also improve the comfort, health, and safety of home and work environments.
- Utilize tools such as the USEPA Energy Star Portfolio Manager (ESPM) for monitoring building/facility energy use by both government and private-sector entities.
- Encourage the adoption of higher energy efficiency construction code standards and promote energy code enforcement.
- Support the expansion of energy management capabilities at all levels of government and also within the private sector by sharing findings, analytics, and the development of innovative science/data-based resources for informing and making decisions.

C. Actions

LEED for Cities and Communities: Chairman Amann together with Dr. Vatsal Bhatt, Director, LEED for Cities and Communities at USGBC from Brookhaven National Laboratory provided a session at the NJ Chapter of the American Planning Association's Conference in January. LEED for Cities and Communities focuses on high-performance metrics and a collection of specific actions. Creditable actions are grouped into 9 categories ranging from "Natural Systems and Ecology", "Transportation and Land Use", and "Water Efficiency" to "Energy and Greenhouse Gas Emissions" and "Quality of Life". There are 14 core metrics such as energy use and greenhouse gas emissions per person for which an online platform has been established for use by participating jurisdictions to record progress called "ARC". Communities can be defined at different scales. The city of Hoboken was the first entity in New Jersey to achieve LEED for Cities and Communities certification

Members of the Council attended the LEED for Cities and Communities Training Session on March 28th to learn more about the ARC Platform that supports this program. A subscription to the ARC Platform must be purchased, and a significant investment of staff and volunteer time and resources, as well as cooperation from utilities and government agencies are required in order for the County to participate in this program. LEED-certified communities could have a competitive advantage in terms of attracting companies and talent for whom community sustainability is important.

Energy Aggregation Program: The Energy Council has been monitoring the potential energy savings that electric customers could achieve while also buying a greater percentage of Class 1 renewables by participating in an energy aggregation program. A group of northern NJ counties started an aggregation program involving 30% PJM Class 1 renewables that is saving \$3M per year. Another group called NJSEM is buying 25% renewables while also providing savings to their customers. The Council established an ad-hoc committee to research and make recommendations on this matter.

Sustainable Jersey: Members of the Council serve on Sustainable Jersey's Energy Task Force and provide feedback on proposed updates to certification actions in the energy category. Municipal participation in the SJ certification program is supported by the Council. SJ actions being worked on this year by the taskforce include municipal support for home energy audits, establishment of renewable energy aggregation programs, participation in energy saving improvement programs (ESIP) and planning for electric vehicle infrastructure.

Somerset County Participation in the LGEAP: Paul McCall Director of the County Public Works Department met with officials from NJBPU's Clean Energy Program in September 2019 as recommended by the Energy Council. The meeting's goal was to identify the Clean Energy Programs that the County is eligible for and to initiate the application process. Director McCall arranged for the County's bill management company to provide energy utility billing records directly to Local Government Energy Audit Program (LGEAP) Officials as part of a County application for funding resources.

Net-zero County Warehouse: The Council Chairman submitted a recommendation to the County administrator that the new warehouse facility to be built by the County be designed in accordance with "net-zero" design standards.

Green House Gas Inventories: The Council supports the provision of aggregate data from electric, gas and water companies that can be used to prepare municipal-level and countywide greenhouse gas (GHG) inventories to provide tools for municipalities and the county to establish a baseline and monitor and track progress in emissions reduction. The Council is reaching out to state agencies and NJTPA who may also be pursuing this information for similar purposes.

Energy-Efficient Affordable Housing: The Council supports the application of green design and energy efficiency standards in new low- and moderate-income housing resulting from the Mount Laurel IV settlements that have been recently reached by many of the County's municipalities. Affordable housing developers that demonstrate cost savings as a result of applying these standards are potentially eligible for funding incentives through the NJ Housing and Mortgage Finance Agency.

VII. Policies and Legislation

P & L Team Leaders: Wayne DeFeo and William Amann

A. Focus Areas: Legislation, regulations, NJ Clean Energy Program, Energy Construction Code, NJ Energy Master Plan

B. Guiding Principles

- Promote the enactment of energy policies, regulations and programs to advance the goals of the State Energy Master Plan and align with the mission and goals of the Energy Council to help advance climate change mitigations and adaptations.
- Provide feedback to legislators and community leaders at all levels of government regarding opportunities to strengthen and enhance proposed energy policies, regulations and programs along with identifying potential unintended consequences.
- Foster an understanding of the costs, benefits of potential of proposed energy policies, programs and regulations in terms of equity, economic growth, quality of life and environmental protection.

C. Actions

New Jersey's Renewable Energy Bill (A3723): Signed into law in May 2018, the Energy Council has been closely monitoring steps underway to reform the State's SREC Program; establish tax credits for off shore wind development; implement utility-driven energy efficiency initiatives aimed at reducing electricity usage by 2% and natural gas usage by 0.75 percent; establish a community solar energy program that expands access to renewable energy benefits; and advances the development of grid-scale energy storage (600 MW by 2021 and 2,000 MW by 2030). Albeit ambitious, this Energy Council supports the goal of reaching 100% clean energy by 2050 established by this law.

Review of Draft NJ Energy Master Plan Update: In accordance with Governor Murphy's Executive Order No. 28, an updated State Energy Master Plan (EMP) was drafted to provide a blueprint for converting the State's energy production to 100% clean energy sources by 2050. The NJBPU serves as the lead EMP agency and is tasked with overseeing and coordinating development of the draft EMP by the State's EMP Committee, which is chaired by Grace Power, NJBPU Chief of Staff. The Council reviewed the draft EMP and submitted formal written comments to the State EMP Committee prior to the September 16th deadline. Several public meetings were held, some of which were attended by Energy Council representatives. Several studies associated with the plan have been commissioned by the NJBPU but have not yet been released. The Council will be reviewing these as they become available.

RGGI: Members reviewed the information released by the NJ Economic Development Authority and other leading state agencies concerning program prioritization and funding distribution of the proceeds resulting from rejoining this program. The Council continues to monitor this program and opportunities for the County and its municipalities that become available.

Nuclear Bailout Bill: The Council gave considerable attention to this legislation, which was followed by NJBPU approval of a \$300 million annual nuclear bail-out for PSE&G this spring. The cost impact will be \$41 per year for the average homeowner.

The NJ Solar SREC Transition Planning Process: The Council closely monitored the status of this legislation, which is important for continued growth of the solar industry in NJ. The current Solar Renewable Energy Credit (SREC) Program is scheduled to end when renewables reach 5.1 percent of production.

PSE&G “Clean Energy Future Proposal: The Council reviewed and discussed the three-part “Clean Energy Future” proposal filed by PSE&G with NJBPU in October 2018. Part 1 involves changing existing street lighting to LEDs together with a comprehensive energy efficiency program. Part 2 involves electric vehicle infrastructure and energy storage, and Part 3 involved deploying smart meters/AMI technology and is referred to by PSE&G as “The Cloud”. The company is also advocating for reforms to the financial structure of the company and its basis for charging customers referred to as “decoupling” (wherein separate charges are established for energy distribution and energy use). These changes would allow PSE&G to become a provider of energy efficiency services and improvements as well as an energy distributor. If this new model is implemented, then PSE&G can be more proactive in promoting conservation and efficiency, without losing revenue. Costs to customers are expected to increase if this proposal is adopted. The NJBPU has not acted on this proposal as of December 2019. The Energy Council continues to track and monitor the status of this proposal.

Community Energy Planning Grant Program: Council members contacted the NJBPU for information about this new program. A program application was obtained, and a draft application has been prepared. Before submission, a meeting with the program managers at NJBPU is being sought to obtain clarification about certain grant requirements.

Electric Vehicle Transition Bill: Council members have been examining closely the many issues that must be addressed to achieve this primary goal in the draft EMP. The Council supports the development of a comprehensive, coordinated statewide EV transition plan.

Executive Order 89: This order has been reviewed and discussed by the Council. The Council will be monitoring its implementation closely in the months ahead.

VIII. County Energy Project Prioritization and Tracking

The SCEC instituted a “Project Prioritization and Tracking” tool for monitoring progress being made on county government-specific projects and initiatives recommended to the Board of Chosen Freeholders. The projects that are monitored are those currently supported by County leaders and are in various stages of planning and implementation. The tracking sheet is provided in the Appendix.

X. Our Partners

The Energy Council champions a collaborative approach for identifying solutions to complex energy issues through its affiliations with various organizations as well as representation by its members on various national, state and regional organizations, committees, and agencies. Successes achieved thus far are attributed to the work of many county and municipal leaders, dedicated residents, members of our business community, academia and public employees who come together to support each other, collaborate, and achieve common energy-related goals. These partnerships enable the pooling of resources, expertise, and manpower in order to produce policy and planning resources, provide information to the public, and implement energy improvement projects on a regional scale. Members of the Energy Council actively seek to maintain and promote these partnership connections by sharing reports, publications of interest and news about upcoming events. The Council also co-hosts events with organizations such as the Somerset County Business Partnership, NJ Chapter of the American Planning Association and the NJ Chapter of the Green Building Council, and its members serve as guest speakers at events hosted by diverse organizations throughout the State.



For more information:

Visit

<https://www.co.somerset.nj.us/government/public-works/planning/energy-council>

Call

(908) 231-7021

Write

Somerset County Energy Council
C/O: Somerset County Planning Board
Somerset County Administration Building
20 Grove Street, P.O. Box 3000
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E-mail

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FAX

(908) 231-7179

APPENDIX

SOMERSET COUNTY ENERGY COUNCIL: COUNTY PROJECT TRACKING SHEET

RECOMMENDATION	PRIORITY	POTENTIAL LEAD PERSON, AGENCY	PARTNERS & STAKEHOLDERS	IMPLEMENTATION STATUS	STATUS AS OF [DATE]	ROADBLOCKS	NEXT STEPS
Electric Vehicle Charging Stations at County Complex & Electrification of County Fleet	1A	Freeholders, Public Works Dept. Head	NJTPA, Sustainable Jersey, Municipalities, Businesses Residents	A County EV Readiness Plan was adopted and is posted on the County's EV Readiness webpage with information about NJDEP's and SJ's EV grant programs. A Model Ordinance has not yet been completed. An application for acquisition of an Electric Bus through the VW Settlement Fund has been submitted. Development of a strategy for transitioning the County-owned fleet to EVs is underway. Four EV cars (Chevy Bolts) have been purchased for the County Fleet through a State Contract and two EV charging stations have been installed in the County Complex Parking Garage. A public charging station has been installed on High St. in Somerville. A workshop for municipal officials and planners has been provided.	11/20/2019	Updated construction code, adoption of local EV ordinances and State standards for inclusion of EV infrastructure in both new construction and redevelopment Planning are needed. Legislation requiring municipalities to plan for public infrastructure has been proposed.	Complete County EV Transition Plan and model Ordinance. Review and potentially support proposed "EV Ready" and "Right to Charge" legislation. Develop a County Energy Plan (apply for BPU Grant), which includes a "Clean Transportation" Section and adopt as an element of the County Master Plan.
Energy Audits of County Buildings	1B	Director of County Public Works Dept.	NJBPU, EnergySolve	The Director of Public Works and the Planning Division met with NJBPU representatives in Sept. 2019. They accepted the NJBPU's offer to work directly with EnergySolve to acquire and compile the billing record data and assist in preparing a LGEAP application that includes all county facilities.	11/20/2019	complicated BPU application requirements	Follow-up on the status of the County LGEAP application
Energy Conservation Measure (ECM) Implementation	1C	Freeholders, Public Works Dept.	County Departments and Divisions	Category A & B ECM recommendations included in the 2004 County Facility Audits have been implemented.	11/20/2019	An updated Level II Audit for the County Complex, and first-time audits for balance of County facilities is needed to identify ECMs.	
Energy Tracking (Portfolio Manager)	1D	Public Works Dept. Head	EnergySolve	Participation in the LGEAP will include this	11/20/2019	Depends on submission of LGEAP application	Chairman Amann is pursuing a list of facilities that are purchasing green energy while saving \$ and the strategies used to accomplish this.
County Facility LED Lighting Pilot	1E	County Planning Division	County F & S	Use of the Planning Division to test employee comfort and determine the ability to successfully deploy LED lighting in County Facilities has been approved by the Public Works Director. The new LED bulbs have not yet been installed.	11/20/2019		

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Improved/Expanded Public Messaging	1F	County Planning Division, Energy Council	County Public Information Office	2018 SCEC Annual Report, EE Video, Home Energy Self-Assessment Tool, EE Proclamation, Creating Vibrant Neighborhood Workshop and SCEC Presentations at SCPB Meeting, Planning Partnership Forum and other events were completed during 2019	11/20/2019	staff resources and funding	Planning for a 2020 SCEC conference on State EMP Implementation in April was postponed. SCEC Special meetings involving guest speakers open to the public may be pursued in 2020 as well. 2019 Annual Report to be developed. Separate SCEC History document to be developed. New Infographics and metrics will be pursued.
Microgrid Feasibility Study, County Complex	2B	County Administrator and County Public Works Dept.	Engineering, Facilities & Services Divisions, Energy Council, County Office of Emergency Management	Included as a mitigation project in the adopted HMP. An analysis of the feasibility of leveraging the existing parking garage solar installation and conventional back-up generators with added battery storage and microgrid technology is recommended. The County complex does not have to serve as a emergency shelter to be eligible for energy storage, microgrids and other incentives available though the NJCEP; in order to address back-up power needs during a prolonged regional power outage.	11/20/2019	Identification of sources of funding to conduct feasibility study is needed.	Compile similar success story case studies. Address in future County Energy Plan.
Multi-municipal ESIP	3A	County Administrator	Public Works Division, Energy Council	Promotion of ESIP Feasibility Study by Energy Council took place during the past few years.	11/20/2019	Complexity of the project. Expertise and resource constraints	Analyze existing NJ Municipal ESIPs and degree to which they have been successful. Address in County Energy Plan.
Microgrids at emergency shelters and other essential facilities	3B	County OEM, County Administrator, Public Works Dept. Facility Owner/Operators	Planning and Engineering Divisions, Energy Council	Recommended in Updated HMP. Solar panels were installed at County and municipal facilities as part of the County Solar Initiative. Schools often serve as emergency shelters. Determine if this investment can be leveraged with generators, energy storage and microgrid circuitry to create islanding capability at essential facilities.	11/20/2019	Feasibility analysis and State/Federal funding incentives are needed	Monitor NJ Town Center Microgrid Initiative and NJ Energy Resiliency Bank programs and projects. Address in future County Energy Plan.

Notes:

1) A County-wide Energy Aggregation Program was excluded from the above list because the program that was established by the County several years ago, proved to be unsuccessful and was discontinued for the following reasons: 1) no economic advantages for consumers in the PSE&G Service Area; only for those within the JCP&L Service area; 2) Insufficient municipal participation, with interest expressed by only one municipality who did not sign onto the program; 3) A competing aggregation program offered by ESCNJ was available for government and commercial customers; 4) County facility peak demand load is comparatively less, PSE&G's rates apply, and it has few facilities such as pump stations with energy assurance surcharges which diminish energy aggregation advantages for the County. NJBPU representatives have agreed to assess whether any savings can be realized at a meeting with the Public Works Director in September.

2) The 2004 Audit recommended a Cogeneration facility for the County Complex. Upon further investigation, it was found that site constraints would make it very difficult to locate a CHP at the County Complex.

Prepared by Somerset County Planning Division, Revised 11-2019.