



Engineering
& Design

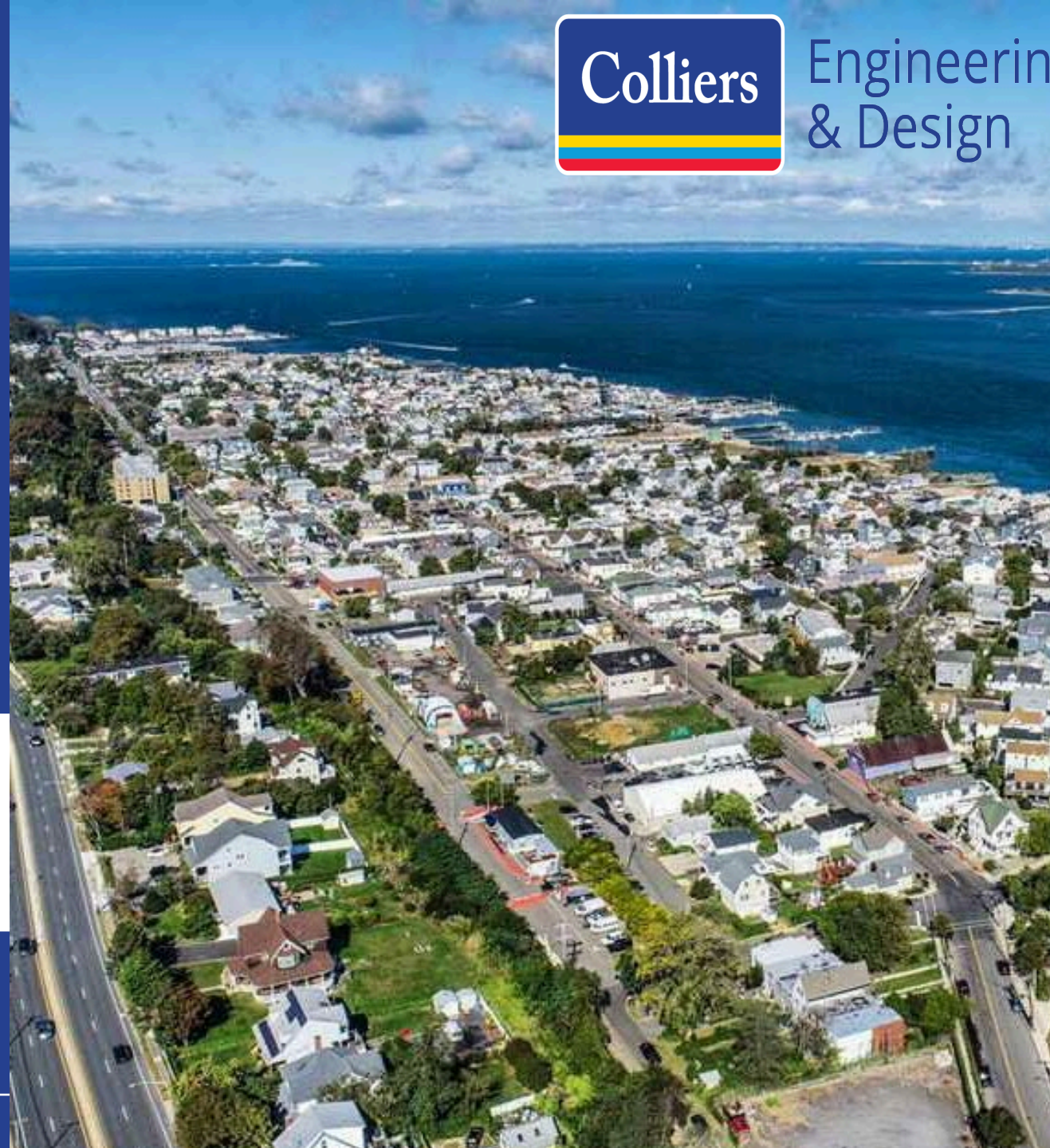
Highlands Community Energy Plan

Highlands Borough

June 21, 2023

Presented to: Borough Council

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What is a Community Energy Plan?

- The State of NJ has created the NJ Energy Master Plan as a way to address climate change and guide the reduction of greenhouse gases.
- Municipalities are encouraged to create their own plans, aligning with the state's goals and focus areas, with projects that are relevant and specific to each town.
- The Community Energy Plan is supported by Sustainable Jersey and the NJ BPU
- As with the NJ Energy Master Plan, municipal Community Energy Plans are a tool to prioritize initiatives toward energy efficiency and resilience, the reduction of transportation emissions, and to support renewable energy.
- Community Energy Plans look 3 to 5 years into the future, targeting community needs and taking advantage of community opportunities.

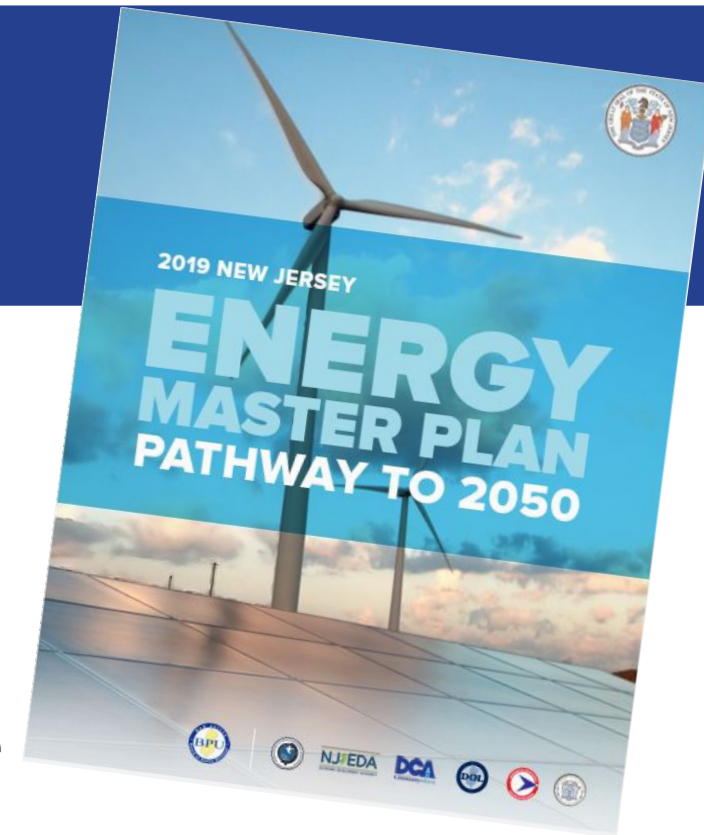
Background work

- The idea of a Community Energy Plan was first explored at a public hearing in February 2022, with discussion around the need to broaden clean-energy opportunities in and for the borough. At a hearing the next month, March 2022, the Borough Council voted to pursue a Clean Energy Grant.
- At a third public hearing in September 2022, it was announced that the grant had been awarded and authorization to execute the grant was approved.
- A Planning Team of 9 community members and municipal representatives was convened, with meetings held in January and February of 2023. Discussed was the purpose of the project and selection of initiatives relevant to the borough.

2019 NJ Energy Master Plan

Sets forth key strategies which guide municipalities

1. Transportation – reduce energy consumption and emissions, EV adoption
2. Renewable Energy and Distributed Energy Resources – solar, offshore wind, etc.
3. Energy Efficiency and conservation – improve energy efficiency / reduce peak demand
4. Reduction of Energy Consumption in Buildings – green buildings, zero carbon homes
5. Support of Participation by Underserved Communities – N/A for Highlands
6. Clean Energy Innovation Economy – support job development in clean energy sector



Planning Team's Work

- Considered 38 initiatives set forth by the state, narrowing down the list to our top choices based on the realities of Highlands:
 - Projects that can happen in 3-5 years
 - Realistically affordable and implementable
 - Would have an impact on the community
 - Relevant based on the demographics, geography, and unique characteristics of Highlands

Community Energy Plan Application Checklist

Community Energy Plan Initiatives	Mark if interested
Strategy 1: Reduce Energy Consumption and Emissions from the Transportation Sector	
1.1 Adopt Supportive Zoning and Regulations for EV Charging Infrastructure Pass NJDCA's model ordinance specifying EV charging infrastructure as a permitted accessory use	<input type="checkbox"/>
1.2 Train First Responders on EVs and EV Charging Infrastructure Require training on EVs and EV charging infrastructure for local first responders	<input type="checkbox"/>
1.3 Train Non-Emergency Staff on EVs and EV Charging Infrastructure Initiate training on EVs and EV charging infrastructure for municipal code officials, etc.	<input type="checkbox"/>
1.4 Purchase Alternative Fuel Vehicles Strategically replace gasoline/diesel municipal vehicles with EVs or other alternative fuel vehicles	<input type="checkbox"/>
1.5 Improve Municipal Fleet Efficiency Replace older municipal vehicles with more efficient versions, downsize fleet, improve driver efficiency	<input type="checkbox"/>
1.6 Install Public EV Charging Infrastructure Install public EV charging infrastructure with appropriate signage and safety/accessibility features	<input type="checkbox"/>
1.7 Encourage Non-Municipal Fleets to Improve Efficiency Encourage fleet operators to improve fleet efficiency via electrification, downsizing, driver training	<input type="checkbox"/>
1.8 Encourage Workplace EV Charging Infrastructure Encourage local businesses to install EV charging infrastructure; offer incentive such as "ribbon cutting"	<input type="checkbox"/>
Other:	
Strategy 2: Accelerate Deployment of Renewable Energy and Distributed Energy Resources	
2.1 Adopt Supportive Zoning and Permitting for Private Solar Provide reasonable permitting standards and procedure for solar developers	<input type="checkbox"/>
2.2 Post Solar Permitting Checklist Provide permitting checklist for solar developers on municipal website	<input type="checkbox"/>
2.3 Adopt Zoning and Permitting for Community Solar Allow large-scale solar in some zoning districts; help community solar developers with permitting	<input type="checkbox"/>
2.4 Train First Responders on Solar Require training on solar for local first responders	<input type="checkbox"/>
2.5 Train Non-Emergency Staff on Solar Initiate training on solar for non-emergency municipal staff such as inspectors	<input type="checkbox"/>
2.6 Install On-site Municipal Renewable Generation Host solar, wind, or geothermal project on municipal property	<input type="checkbox"/>
2.7 Buy Renewable Electricity for Municipal Facilities Sign contract with third-party supplier to supply municipal facilities with renewable electricity	<input type="checkbox"/>
2.8 Offer a Solar Employee Benefit Program Offer solar installation discount to municipal employees	<input type="checkbox"/>

Initiative 1.1 – Adopt Supportive Zoning and Regulations for EV Infrastructure

- Collaborative effort with borough code enforcement, legal department, planning
- Will address growing EV ownership
- Low-cost to execute

Vehicles and Electric Vehicles in Highlands			
Year Updated	Estimated Total Passenger Vehicles	# of EVs	% Electric
2015	3,394	17	.5%
2019	3,519	35	1%

Initiative 1.2 – Train first responders on EVs and EVSE

- Collaborative effort with first aid squad, police, and fire departments
- Low-cost to execute
- At 6-month mark, participation will be evaluated and recommendations made for future training

Initiative 1.6 – Install public EV charging infrastructure

- Collaborative effort with DPW, finance, borough administrator, governing body, mayor's office
- Underway at 171 Bay Avenue
- Will address growing need - EV ownership is on the rise, but few public charging spaces exist locally (two at Bhar's).



Map 1. Public EV Charging Stations in Highlands Area
Source: NJDEP. Public EV Charging Locator Map

Initiative 2.1 – Adopt supportive zoning and permitting for solar

- Collaborative effort with borough code enforcement, legal department, planning
- Borough does not currently regulate solar energy systems
- Can be written to allow for building-integrated, roof mounted, canopy, and/or ground-mounted solar
- Excellent fit for shore community
- Low-cost to execute



Initiative 2.4 – Train first responders on solar

- Collaborative effort with first aid squad, police, and fire departments
- Can be done with the EV training, as a two-part effort
- Low-cost to execute
- At 6-month mark, participation will be evaluated and recommendations made for future training

Initiative 3.1 – Upgrade energy efficiency for municipal facilities

- DPW effort with Green Team
- Consider programs to help the borough become more "green," in line with existing priorities.
- The Green Team will look into technical assistance through Sustainable Jersey to determine next steps for improving energy efficiency in municipal facilities.

Initiative 4.1 – Construct new municipal buildings as Model Green Buildings

- DPW effort with Green Team
- Project to repurpose the Police Department trailers into a permanent raised structure should keep green building components in mind.
- Green initiatives including Energy Star will be considered. This is a mid- to long-term project.
- Highlands is looking to start using green products in cleaning and janitorial services, switch to LED lights in all municipal buildings, etc.

Next Steps

- Open floor to public comment, questions, and Council discussion
- Adoption