

LONG ISLAND SOLAR ROADMAP PROJECT

CONSORTIUM MEETING NOTES

NOVEMBER 7, 2018

ATTENDEES

Leadership Team

Jessica Price, The Nature Conservancy
Amanda Lefton, The Nature Conservancy
Catherine Morris, Facilitator, CBI
Aimee Delach, Defenders of Wildlife
Karen Leu, The Nature Conservancy
Chelsea Schelly, Michigan Technological University

Steering Committee

Erich Weltsek, Town of Brookhaven
Tara Schneider-Moran, Town of Hempstead
Michael Deering, LIPA
Jossi Fritz-Mauer, PSEG LI
Tara Bono, Long Island Solar Energy Industry Association

Consortium Members

See list of attendees in Appendix A

PROJECT OVERVIEW

- Jessica Price, TNC, gave an overview of the project, including our goals and the process.
- The overall goal of the project is to **advance the pace of solar installations on Long Island (LI) by reducing siting conflicts and lowering the barriers to installations on low-impact sites like parking lots, large rooftops and previously disturbed areas.** The increase in renewable generation to replace aging fossil fuel plants will in turn reduce GHG emissions and help mitigate climate change. She reviewed the findings of the recent International Panel on Climate Change report, which outlined the critical pathways to limiting global warming to 1.5 degrees C and the potential impacts of exceeding this threshold.
- Jessica highlighted the statewide goal of 50% renewable energy by 2030, which requires 17,000 MW of new renewable energy generation. Long Island currently generates 5% of its electricity from renewable sources, which does not that include approximately 42,000 residential and commercial behind the meter solar installations totally 328 MW in capacity.
- **Deliverables of the project include** 1) Maps showing low-impact areas of opportunity for solar development; 2) Estimates of economic costs and benefits of installation on low-impact sites; 3) Social science research identifying the locations, types, business models, and messages Long Islanders perceive most favorably; and 4) a Final Roadmap, a cohesive set of strategies and actions to lower barriers for solar energy development on low-impact, low-conflict sites.
- During the discussion, Jessica clarified that the LI Solar Roadmap project is coordinating closely with **Suffolk County Renewable Energy Task Force** that is also conducting a mapping exercise. Suffolk Co. is piloting the steps and data that will also go into this analysis.

INTERVIEW INSIGHTS

- Dr. Chelsea Schelly, Professor in Social Sciences at Michigan University of Technology, presented the synthesized results of the interviews conducted by the LT.
- To date, we have conducted 19 Consortium interviews with the following findings:
 - Economic challenges (cited by 10 respondents): General expense of installations; funding and lack of incentives; questions about who is paying up front costs vs. who benefits; What kinds of benefits and collaborations are possible?
 - Policy challenges (cited by 10 respondents): Complexity regarding permitting; lack of transparency; different codes across areas; questions about VDER (value of distributed energy resources; NYSERDA’s new mechanism for valuation of electricity provided to the grid) and Article 10 (NYSERDA’s rules regarding the siting and operation of electrical generation facilities 25MW and larger).
 - Technical challenges (cited by 10 respondents): Grid interconnection and difficulties with large scale
 - Social and perceptual challenges (cited by 8 respondents): Barriers to increasing acceptance
 - Lack of space. Issues of “green vs green; that is, conflict between using land for clean energy vs. open space or preservation.
 - **Among those 12 respondents who said they had direct experience with solar projects**, policy challenges were mentioned most frequently, followed by social challenges, economic challenges, and technical challenges.
 - **Those 7 respondents who did not have direct experience**, talked about codes and permitting, state policy, local siting conflicts and perceptions. 5 mentioned limited space and land, 4 noted economic challenges, split incentives and lack of development incentives, decommissioning costs
 - Most commonly cited as the reason people supported solar development on Long Island were economic and environmental benefits.

Technical problems prevented completion of the presentation. A written report of the findings from the Consortium interviews will be made available at a later date.

- Discussion of the findings and the experience of the Consortium members highlighted:
 - The disconnect between the best sites and the distribution of costs and benefits (e.g. the best locations may not deliver the benefits to the property owner or the initial costs may be too high, particularly public building owners).
 - What could be learned from projects that did not go forward?
 - The challenge of capturing the value of grid stability in VDER (Value of Distributed Energy Resources) and the importance of including the full value of projects in different locations and at different times of the day and season.
 - Challenges will be different for different individuals – municipal leaders, end users, developers, etc.
 - Understanding the economics of solar projects is complex and relies on a number of assumptions, including the future price of electricity. Often the environmental benefits are not factored into the economics.
 - The controversy around tree removal to accommodate solar (green vs. green) is unique to solar according to some participants and can become a major challenge.

CHARTER

- Catherine Morris, CBI, presented the key elements of the charter that defines the roles, responsibilities, and decision making process, and communication protocols for the Leadership Team, the Steering Committee and the Consortium members. (Visit the project website for a copy of the Charter).

- The Consortium raised several issues including:
 - whether the SC, LT, and the Consortium are adequately representative of the diversity of interests in the Consortium
 - whether the final report will be binding on the Consortium members.
 - Whether the final report will reflect the diversity of experience on Long Island. What works in one place may not work in another.
 - Whether there is funding to bring additional members who may need financial support to participate.
 - Whether the name of the project adequately reflects the scope and deliverables of the project. May need to revisit this.
- No changes to the Charter were requested. One Consortium member requested time to consult with the individual she was representing, and Jessica Price also acknowledged the need to get the approval of individuals who could not attend today.
- The Charter will be finalized by email if no further changes are suggested.

WORKPLAN

Jessica Price provided an overview of the Workplan and Timeline for the project.

- **Spatial Analysis** will identify low-impact sites for rooftop, parking lot, and ground-mounted solar installations based on site suitability criteria defined by the Consortium. Possible scenarios for the spatial analysis include 1) Technical maximum, the technical potential by suitability criteria only (such as minimum size, slope, aspect); and 2) Business as usual scenario, which incorporates zoning codes and other land use and development policies in addition to the suitability criteria. There may be other scenarios that this group wants to explore. Interconnect information will be provided by LIPA to help identify where new projects could connect to the grid now and where grid modifications would be needed to utilize additional solar resources
- **Economic Analysis.** The goal is to get high-level estimates of costs and benefits of building on low impact sites and to whom each accrue. The Consortium will help determine what is the most important economic parameters to measure and sources of local or regional data.
- **Social Science Research.** This part of the project will attempt to find out what Long Island residents want for their neighborhoods and energy future. Methodologies could include surveys, as well as reaching smaller target groups through interviews, focus groups, etc., to understand stakeholders' perception of solar and whether these vary across geographies. These insights should help to develop information and recommendations about which types of installations, business models and messages will be most successful with residents, and lead to projects that people want in their communities.
- **Final Recommendations.** The final product will include a a set of recommended strategies and actions by energy stakeholders that will lower barriers to solar energy development on low-impact, low-conflict sites and reduce siting conflicts. There might be recommendations about process and practices, policy, financial and other incentives, communication and outreach, or ways to better leverage existing programs. The project does not envision creating a blueprint for all of Long Island, but rather a menu of options that can be applied to best fit a local context.

Consortium members divided into four groups to provide input on preliminary questions for advancing each element of the workplan.

Spatial Analysis

- What are some characteristics that make a site suitable? *Zoning, vacant properties, topography (slope, wetland, soil), proximity to interconnection, farmland preservation, landfills, large and contiguous rooftops, solar-ready buildings.*
- What are some characteristics that make a site not suitable? *Transfer of development rights, deed restrictions, DEC or historic properties protection, near wetland or freshwater, State parks, poor roof quality, aesthetic concerns, reflection, downtown communities where buildings might be going in that would shade solar.*

Economic Analysis

- What economic costs are most critical for us to capture to understand if a project is viable? *Type of customer needs to be clearly defined. Commercial very different from residential or community solar. Return On Investment is key. 5 to 10 years depending on customer. Externalities are very complex, need to dive deeper. Can you quantify some of the aspects like avoided carbon, other environmental benefits? One of the things that impacts ROI is site design or other considerations that add to cost. Permitting is a soft cost that can impact a project. Consider.*
- What economic benefits are most critical for us to capture? *Local tax benefits for community, differences in taxing projects across municipalities, resiliency, How does this impact the grid? More distributed system, local jobs, sustainability, benefits from different perspectives, eg customer perspective or lease owner.*

Social Science

- What would you ask ratepayers to better understand how to develop solar projects that meet the needs of LI communities? *What level of understanding does ratepayer have? Start with small group before going to all ratepayers. What would it take to say yes to large scale solar? What are alternatives? What would it take for you to be comfortable with large-scale solar in your neighborhood? Community flavor, different communities might think differently. What benefits do ratepayers see? What got rooftop customers to get to yes? Is it applicable to larger scale?*
- Who else (what other stakeholders) should we survey or speak to on LI, and what should we ask them to get a better understanding of opportunities and challenges for development of solar PV projects? *Other stakeholders, influencers, real estate developers, landlords, churches, etc. Certain neighborhood groups might be able to give very valuable feedback. Get feedback from developers on what it takes to get to yes.*

Solar Roadmap

- What examples of existing policies and practices that encourage solar energy developing on low impact sites can we look to? *Brownfield/ superfund/ landfill development, efficiency and electrification policies, community choice aggregation models, improving renewable energy credits/ VDER, rate codes, tariff optimization, expedited permitting ("Greendesk"), grants, incentives, zoning, advanced metering infrastructure, PACE financing, tax abatements/ IDA, carbon tax.*
- Are there geographies (like a city or state) or entities (like a particular solar developer or utility) that we can learn from about successful low-impact solar energy development? *California, Massachusetts, Washington, DC, Denver, Austin, Athens (OH), SolSmart designated communities.*

NEXT STEPS

- Consortium members will be asked to sign up for Work Groups that are most relevant to their interests.
- Consortium members should notify members of the LT or SC if they have suggestions for additional individuals who should be considered for the Consortium or the Steering Committee.
- Next Consortium meeting will be in late January. Leadership team and Steering Committee will present a more detailed workplan for further input for the launch of the spatial and social science research.

APPENDIX 1: LIST OF CONSORTIUM MEMBERS

- Rachel Brinn (Meagan Fastuca) – Town of North Hempstead
- Lisa Broughton – Suffolk County Energy Office
- S. Karen Burke, CSJ* – Sisters of St. Joseph
- Robert Carpenter – Long Island Farm Bureau
- Michael Catalano – Green Guru, LLC
- Gina Coletti* – Suffolk County Alliance of Chambers
- Sammy Chu – Edgewise Energy & US Green Building Council
- JP Clejan – GreenLogic LLC
- Steven Englemann – EnterSolar LLC
- Jessica Enzmann – Sierra Club
- Adrienne Esposito – Citizens Campaign for the Environment
- William Feldmann – Empire Clean Energy Supply
- Peter Gollon – LIPA Board of Trustees
- Meme Hanley – Land Trust Alliance
- Marj Issapour* – Farmingdale State College
- Terese Kinsley – Town of Huntington
- Jeff Laino (Ben Cuzzo*) – New York Power Authority
- Samantha Levy – American Farmland Trust
- Neal Lewis – Sustainability Institute @ Molloy College
- Ryan Madden – Long Island Progressive Coalition
- Nicholas Palumbo* (Carol Malley) – Suffolk County Community College
- Ryan McTiernan – City of Long Beach
- Sarah Oral – Cameron Engineering
- George Povall* (Joanne Moore) – All Our Energy
- Gordian Raacke – Renewable Energy Long Island (reLI)
- Kyle Rabin – Long Island Regional Planning Council
- Kim Shaw* (Lauren Steinberg) – Town of East Hampton
- Mark Thielking (Sarah Smiley) – Energize NY
- Francis Zappone – Town of Southampton

* Members that could not attend November 8th meeting.

Individuals in parentheses are alternates designated to represent their organization.