Dear Colleagues,

The purpose of this letter is to provide an overview of the objectives of a Solarize program in Stamford, as well as an organized listing of sources. It is divided into four parts, respectively, (i) an overview of Solarize programs, (ii) the rationale for launching a Solarize program in Stamford, (iii) specific proposed objectives for a Solarize campaign, and (iv) proposed next steps.

1) Overview of Solarize Programs

A Solarize program is a volunteer-led solar purchasing program, typically targeted for residents and small business. Solarize programs were first started in Portland over ten years ago and have since been implemented across the country. Stamford itself participated in a "Solarize Choice" program in 2013/2014, and Connecticut has generally promoted Solarize campaigns over the last decade.³

A new Solarize campaign for Stamford would have two objectives, respectively, (i) to immediately promote a small wave of solar installations and (ii) to generally increase public education on solar energy options.

The first objective is relatively straightforward. A Solarize campaign is a community bulk purchasing effort; the Solarize committee puts out an RFP for a solar installer who agrees to provide a discount in exchange for a coordinated sign-up campaign. During the sign-up period, the installer meets with each resident and business to set up each individual transaction.⁴ Because each installation is part of a bulk purchasing program, residents and businesses save 10 - 20% on the overall cost of the system. A good target for a Solarize campaign in Stamford might be 100 homes and businesses altogether, with a 1 megawatt of installed capacity.

The second objective promotes the broader social objective of increasing renewable energy production. To take a step back, climate change is an existential threat to a coastal community like Stamford and achieving carbon neutrality by 2050 is essential to blunt the worst effects. Hitting that goal will require changes to many industries that are outside of our control such as

Alaska: https://akcenter.org/climate-clean-energy/solarize-anchorage/

Midwest (WI, IL, IA, MN, MO): https://www.growsolar.org/

Rhode Island: http://www.energy.ri.gov/policies-programs/programs-incentives/solarize-ri.php New York:

https://www.nyserda.ny.gov/All%20Programs/Programs/NY%20Sun/Communities%20and%20Local%20Governm ents/Solarize

Washington and Oregon: https://solarizenw.org/

Pennsylvania: https://solarizephilly.org/

¹ See generally "The Solarize Guidebook: A community guide to collective purchasing of residential PV systems" published by the Department of Energy in 2012, attached in our record. ² For example, please see:

³ For a good overview, please see Yale's study of CT's program, which also includes several helpful improvements to maximize the effect of a Solarize program. "Lessons Learned from Solarize Campaigns in Connecticut", https://cbey.yale.edu/our-stories/lessons-learned-from-solarize-campaigns-in-connecticut

⁴ It is important to note that the municipality and committee are not parties to this transaction.

aviation and heavy manufacturing.⁵ However, it will also require massively increasing renewal energy production, which put simply means that we must get as many solar panels up as possible in as many locations as we can – and that is something we can control.⁶

2) Rationale for Launching a Solarize Program

Solar technology has improved dramatically since Stamford's last Solarize campaign, such that there is widespread consensus that solar systems generally pay for themselves (in that the cost of financing the system is less the average consumer's electrical bill). The current problem for adoption is not therefore the economics, but rather the complexities of potential transactions. Here, a Solarize campaign can increase public education on this topic and thereby increase adoption rates.

Putting up a solar system is still an unfamiliar transaction to most people, which explains the long lifecycle of a solar transaction (for example, the DOE found in 2012 that it can take upwards of two years for someone to decide to go solar). The financing options, ranging from leasing to direct purchases, the calculation of savings can vary, and the potential risks of a transaction aren't well understood. Businesses face additional complexity, in that they can avail of themselves of the Commercial Property Assessed Clean Energy ("CPACE") program through the CT Green Bank to obtain 100% financing for energy improvements, which is helpful albeit another topic to research. The "due diligence" cost of a solar transaction is accordingly quite high on a per transaction basis.

The solution to this due diligence problem is education from trust sources, which can help residents and businesses establish a baseline of common knowledge and know the right questions to ask in order to be comfortable with their choice. Solarize campaigns can be a source of community led education, which helps speed adoption of solar energy. Naturally, there are already many such sources of information, but having such information come from one's neighbors, rather than a sales pitch, can be impactful.

3) Proposed Objectives for a Solarize Campaign in Stamford

A Solarize campaign for Stamford can particularly promote solar adoption and education for three types of property owners, respectively (i) senior citizens, (ii) multifamily homes, and (iii) small businesses.

⁵ Princeton's "Net Zero America" study is only one of many helpful studies on these challenges. https://environmenthalfcentury.princeton.edu/

⁶ To that point, Connecticut still generates nearly 50% of its electricity from natural gas (https://www.nytimes.com/interactive/2018/12/24/climate/how-electricity-generation-changed-in-your-state.html). Every solar panel helps reduce the need for such power plants.

⁷ For technological improvements, see the following Forbes article "Solar Technology Will Just Keep Getting Better: Here's Why" (https://www.forbes.com/sites/peterdetwiler/2019/09/26/solar-technology-will-just-keep-getting-better-heres-why/?sh=6222eaa67c6b). Though cost-savings vary by location, the general consensus is that solar energy is a net positive to consumers. https://www.energy.gov/energysaver/benefits-residential-solar-electricity Id.

⁹ See the Solarize Guidebook, page 5.

¹⁰ See https://www.cpace.com/building-owner/ for more information.

A program for seniors would be helpful in that many our seniors have restricted incomes and would therefore particularly benefit from a reduction in monthly expenses. Similarly, small businesses have been hit hard in our area due to Covid protective measures and could equally use assistance with obtaining a better understanding of the CPACE program and options to reduce their monthly expenses as well. Lastly, Stamford is relatively unique in that it has many multifamily homes and small housing complexes where residents may own an individual unit while their homeowners associate retains legal ownership of their roof. Resolving the question of legal ownership of a roof is not a barrier to adoption of solar for a given home, though it is an additional complication that could be resolved with additional education.

Besides these objectives, the CT Green Bank has a revamped program offering, "Solar For All", targeted towards low income households that could also be incorporated into any such program. ¹¹ Bedford New York has an excellent general purpose program to encourage energy efficiency. ¹² There are many other opportunities to explore in this space that may be uncovered when a Solarize committee begins its work.

4) Next Steps

Though the City would not be involved in a Solarize transaction, nearly all Solarize campaigns are launched as part of a municipal effort. In essence, a Solarize committee is like any other advisory committee formed by the Mayor. Recruitment of volunteers and community standing are best achieved with the City's nominal participation, and any findings of the committee are easier to communicate back to the City through this model (for example, a review of the building permit process for solar installations and possible improvements would be a good topic for this particular committee).

Chair Jacobson and I have already been in touch with Chief of Staff Pollard and Robin Stein on the City side, as well as Bring Your Own Stamford, Women on Watch, the DSSD, and the Senior Center for initial discussions. We expect to continue to broaden these discussions with potential stakeholders and move forward with recruiting potential volunteers to serve on a Solarize committee.

Though the Mayor certainly has the authority to form a Solarize committee by himself, as a community-led project, the political backing of the Board through a resolution would be helpful. To that end, a draft resolution has been included in our record.

Thank you all for your consideration of this potential project. I would be happy to discuss anytime and look forward to our meeting.

Respectfully submitted,

¹¹ See https://www.ctgreenbank.com/solarforall/

¹² See https://bedford2030.org/

O30.081 – Overview of a Solarize Program

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