

REQUEST FOR QUALIFICATIONS SOLAR TOMPKINS PROJECT MANAGER

Summary

On behalf of the Solar Tompkins Steering Committee, the Tompkins County Planning Department is soliciting a qualified person to serve as Project Manager for the Solar Tompkins county-wide community education and volume solar PV purchasing initiative.

Statements of Qualifications from interested contractors are requested by **11 AM (EST) Friday, February 7, 2014** and should be submitted to the Tompkins County Purchasing Department (submission details identified below).

The information in the RFQ is organized as follows:

1. Project Background
2. Project Goals
3. Project Budget and Overview of Job Description
4. Project TimeLine
5. Project Manager Duties
6. Selection Process
7. Submission Requirements
8. Evaluation Criteria
9. Other Important Information
10. Attachments

1) Project Background.

Solar Tompkins is a county-wide community education and volume purchasing initiative building on the successes of the pilot project, *Solarize Tompkins SE*, which has had a spectacular public response during 2013 in the towns of Danby, Caroline and Dryden. The intent of the *Solar Tompkins* project is to help consumers save money, generate clean energy, and reduce carbon emissions, while stimulating the solar installation sector and creating local jobs.

The campaign is based on a volunteer grassroots effort and is led by a volunteer Steering Committee with one member residing in each Town, one from the City of Ithaca, and Liaison members from Tompkins County and Cornell Cooperative Extension of Tompkins County. Tompkins County will act as the fiscal sponsor of the project.

The project functions as a community initiative in which a local group organizes the project and 1) generates interest through a broad campaign and holds community forums to explain how solar electricity generation works and the available incentives and financing options, and 2) vets the available installers through an RFP (request for proposals) process and arrives at a small number (often just one) who can deliver a quality product at a great price and provide all necessary services for the installation of a large number of photovoltaic systems (PV) in a limited period of time.

These efforts address two of the main barriers to adoption of solar electricity: homeowners often don't know much about the systems and they are often stymied by the inability to assess the available installers and their product offerings. By vetting companies through a process that takes into account such things as cost; ability to adequately explain the systems; quickly screen residents and support them through the process; quality control; and the wages they pay their workers, the *Solar Tompkins* project does a lot of the legwork for homeowners.

Funding for Solar Tompkins has been secured from the Park Foundation, which has generously granted \$80,000 for the management of the project. Funds are expected to cover the costs of running an 18 month project, including a Project Manager for 17 months (March 1, 2014 – August 1, 2015), expert speakers, printing costs, database management, and project assessment. The project will be run by (the Solar Tompkins Project Manager, hired by the County as an outside contractor. The selection of the contractor will be primarily based on the recommendation of the Steering Committee.

2) Project Goals

The overarching goal of Solar Tompkins is to install at least 300 PV systems on homes and businesses in Tompkins County over an 18 month period between January 2014 and July 2015. The Project Manager will be directly involved with the Steering Committee in shaping the project to allow the community to reach those goals, and will be in charge of the day-to-day operation and management of the project. Other key goals of the project are a) to educate residents in the community about solar PV and solar hot water systems, b) expand understanding of the role of renewable energy in a clean energy future, and c) build community cohesion and connections through volunteer engagement.

3) Project Budget and Overview of Job Description

The total budget for this project is not to exceed \$80,000, including Project Manager salary, travel costs for the Project Manager, legal fees, printing, meeting publicity and implementation, database development and management, celebrations and project evaluation.

The Project Manager will be a contract position with achievement milestones and payments based on meeting those milestones. It is intended that the Project Manager will help guide and direct the project and will not be supervised as an hourly position. The Project Manager is ultimately responsible to the Steering Committee which will appoint a subcommittee of two or three members to evaluate achievement with respect to milestones and performance goals in coordination with a defined payment schedule. The Project Manager will not be provided office space and is expected to have his or her own work space, computer and internet access.

It is anticipated that the position will require between half and full time effort during different periods. More intense effort is likely to be associated with the early stages of program development, periods of RFP release and installer proposal evaluation, and the limited periods of customer enrollment with accompanying public meetings. The Project Manager will participate in, and often lead, efforts that include vetting, selecting, and establishing working relationships with installer(s), assisting project volunteers in organizing, publicizing and holding approximately 30 Solar Tompkins Public Meetings in locations around Tompkins County, participating in those same public meetings with educational presentations, working with project volunteers to set up customer-friendly project enrollment forms and processes, tracking enrollment, and acting as liaison between enrollees and installer(s), to help create positive experiences in the site assessment phase of the project.

Once these initial tasks are completed, expected at the end of 2014, it is anticipated that during the remaining seven months of the Solar Tompkins project, the Project Manager activities could be handled at a half time level of effort. Tasks expected during the final months of the project are to oversee the end of the contracting and installations, troubleshoot issues that arise during this phase of the project, conduct overall project evaluation, and write the final report to the Park Foundation. The total amount available for the Project Manager is between \$50,000 and \$55,000. No benefits are provided in addition to the contract fee, and any additional costs such as social security and employment taxes and personal travel to meetings, and to meet as needed with a limited number of enrollees at their homes, are the responsibility of the successful contractor and must be covered out of this single contract fee. The successful contractor is expected to provide their own vehicle for such within-county travel.

4) Anticipated Project Timeline (subject to revision)

February 7, 2014	Responses for Qualifications deadline
Feb 17 - March 3	Project Manager starts work
March 1	Public outreach begins
March 21	Installer(s) selected for project
April 1	Project enrollment begins
May 1	Installer site assessments begin
June 1	Solar PV installations begin
June 15	Project enrollment ends
June 15	Second RFP issued and second project round begins, if warranted
Aug-Sept	Second round enrollment period, if warranted
Dec 15	Third RFP issued and third project round begins. Unlikely, but if project goals are not met at this point, a third round may be warranted
Dec 31, 2014	Installer site assessments complete for rounds 1 and, if warranted, round 2
July 1, 2015	Installations completed
July 31, 2015	Final report submitted to the Park Foundation

5) Project Manager Duties

- Manages grant funds from the Park Foundation in coordination with Solar Tompkins Steering Committee;
- Supports and coordinates volunteer activities maintaining communication with and enhancing consistency among local outreach groups in each town ;
- Participates in project-wide Solar Tompkins meetings including the Solar Tompkins Steering Committee meetings and All-Solar Tompkins meetings
- Responds to requests for information and complaints about the project from the public, community organizations, PV installers, volunteers, State and local government officials, and steering committee members;
- Works with project volunteers to develop effective media releases and publicity;
- Ensures that project website is current and up-to-date;
- Makes formal and informal presentations to inform and advise citizens, legislative bodies, and public officials on the Solar Tompkins project;
- Coordinates with installers, keeping up-to-date on relevant issues relating to installer activities and ensuring that project enrollee information is relayed to the appropriate installer(s) in a prompt manner;
- Tracks the ‘customer experience’ of project enrollees, developing a mailing list for newsletter updates, and ensuring that expected services are being received in a timely and effective manner;
- Develops the project scope of work, timeline, and budget in coordination with outreach teams;
- Prepares planning and evaluation statistics, data, plans, designs, charts, maps, records and reports in support of the project;
- Prepares and presents quarterly progress reports for evaluation and action by the Steering Committee;
- Surveys enrollees about the Solar Tompkins experience to use in project evaluation for the Park Foundation final report;
- Prepares final report for Park Foundation and presents the findings to the Steering Committee, All-Solar Tompkins Committee, and Tompkins County Legislature, as appropriate.

6) Selection Process

A Solar Tompkins Project Manager will be selected in a three-step process:

1. Interested individuals will submit a response to this Request for Qualifications, by February 7, 2014.

2. Following review and screening of Qualification Submissions, individuals may be invited for interviews, likely during the week of February 10.
3. Following interviews, an individual will be selected and invited to enter into contract with the County (likely before the end of February).

7) Submission Requirements

Responses to this Request for Qualifications (RFQ) should include the following:

1. Contact Information
 - a. Name
 - b. Mailing address
 - c. Telephone
 - d. E-mail
 - e. Website (if applicable)
2. Resume
3. Description of experience related to this project
4. Statement of Qualifications. Provide a narrative description (no more than two pages) of qualifications for the proposed project.
 - a. Please include a statement verifying that you have a valid New York State driver's license and access to a reliable vehicle for trips within Tompkins County.
5. Statement of Availability. Provide a brief statement on availability to undertake the proposed project, within the preferred timeframe, starting on or before March 1, 2014 and finishing by July 31, 2015.
6. List of Relevant Projects. Provide a list of up to five completed within the last seven years that illustrate the skills and experience needed to manage an endeavor of the size and nature of Solar Tompkins.
7. References. Provide names, telephone numbers, and emails of persons to be called for references regarding past performance, ideally on similar projects.
8. Signed and completed attachments

8) Evaluation Criteria

The individual will be evaluated based on the following criteria:

1. Ability and expertise in the following key areas
 - a. Demonstrated commitment to renewable energy issues and willingness to learn
 - b. Basic knowledge of solar PV systems
 - c. Familiarity with bulk solar purchasing-type projects a plus
2. Experience completing projects on tight deadlines, within budget, and in a professional and thorough manner
3. Experience or demonstrated abilities needed to manage projects of a similar nature, size and scope to the Solar Tompkins project.
4. Interpersonal and communication skills in the following key areas
 - a. Working well with a wide variety of people possessing differing levels of understanding of complex topics
 - b. Motivating and productively engaging volunteers
 - c. Giving presentations to varied audiences
 - d. Preparing written materials in a clear, concise and compelling manner
 - e. Problem solving and conflict resolution
5. Formal education in areas that would support work in this position. Examples of such areas include: renewable energy systems, communication, conflict resolution, construction, natural resources, business, and data management.

6. Familiarity with Tompkins County and local issues

9) Other Important Information

Indemnification

Contractor, shall indemnify, hold harmless and defend Tompkins County and its officers, employees, agents and elected officials from and against any and all claims and actions brought against Tompkins County and its officers, employees, agents and elected officials for injury or death to any person or persons or damage to property arising out of the performance of this contract by the contractor, its employees, subcontractors or agents except all actions and claims arising out of the negligence of Tompkins County.

Workforce Diversity and Inclusion:

Tompkins County government is committed to creating a diverse and fully inclusive workplace that strengthens our organization and enhances our ability to adapt to change by developing and maintaining:

- A. An organization-wide understanding and acceptance of the purpose and reasons for diversity;
- B. Recruitment and retention policies that assure a diverse workforce;
- C. A workplace environment that is welcoming and supportive of all;
- D. Awareness, understanding, and education regarding diversity issues;
- E. Zero tolerance for expressions of discrimination, bias, harassment, or negative stereotyping toward any person or group;
- F. A workforce ethic that embraces diversity and makes it the norm for all interactions, including delivery of services to the public.

Corporate Compliance:

FEDERAL FUNDING COMPLIANCE. The Contractor agrees to comply with all Federal, State, and local laws and regulations governing the provision of goods and services under this Contract. To the extent that federal funds are provided to the Contractor under this contract, the Contractor agrees that it will comply with all applicable federal laws and regulations, including but not limited to those laws and regulations under which the Federal funds were authorized. Further, Contractor agrees to comply with the County’s Compliance Plan regarding Federal and State fraud and abuse laws; the Compliance Plan can be reviewed at www.tompkins-co.org, or a copy can be obtained at Tompkins County Administration, 125 East Court Street, Ithaca, New York 14850.

Contractors that are providers of healthcare services certify that the Contractor, and all employees, directors, officers and subcontractors of the Contractor, are not “excluded individuals or entities” under Federal and/or New York State statutes, rules and regulations. The Contractor agrees to screen all employees, directors, officers and subcontractors on a monthly basis at the New York State Office of Medicaid Inspector General website, and any other website required by Federal and/or New York State Medicare or Medicaid statutes, rules and regulations, to determine if any of them are on or have been added to the exclusion list.

The Contractor shall promptly notify the County if any employee, director, officer or subcontractor is on or has been added to the exclusion list. The County reserves the right to immediately cancel this contract, at no penalty to the County, if any employee, director, officer or subcontractor is on or has been added to the exclusion list.

By submitting a bid, you are attesting to that fact that you and/or the provider, which you represent, have not been sanctioned nor excluded by any of the aforementioned entities.

Deadline

The deadline for submission of qualifications is **11 AM (EST) Friday, February 7, 2014**. Submissions should include one (1) original, three (3) copies, and one electronic copy of the response. Responses should be submitted **in a sealed envelope** to:

Lisa M. Hall
Tompkins County Finance-Purchasing Department
125 East Court Street, 2nd Floor
Ithaca, New York 14850

A copy of the Request for Qualifications may be obtained from the following website(s):

www.tompkinscountyny.gov/purchase/currentrfps
www.empirestatebidsystem.com (registration required)

The County reserves the right to reject any or all responses and to negotiate with any company submitting a response. Responses will not be accepted by fax or electronic file transfer.

10) Attachments

1. Contractor's Representation - Livable Wage Policy
2. Anti-Discrimination Clause
3. Affidavit of Non-Collusion
4. W-9: Request for Taxpayer Identification Number and Certification
5. Park Foundation Grant Proposal

Tompkins County Contractor's Representation—Livable Wage Policy

Livable Wage Policy: By policy, Tompkins County must “consider the wage levels and benefits, particularly health care, provided by contractors when awarding bids or negotiating contracts, and to encourage the payment of livable wages whenever practical and reasonable.” Paying the living wage rate to all employees directly involved in providing the contracted County service is not mandatory. However, the attainment of a broadly-applied living wage is a County goal and is therefore an important consideration applied by the County when reviewing contract proposals.

The Current Living Wage: The Living Wage in Tompkins County is computed by the Alternatives Federal Credit Union and is currently \$12.62 per hour if the employer contributes at least half the cost of an employee's health insurance/benefit cost and \$13.94 per hour if the employer does not make such a contribution. The rate will be adjusted again in May 2015.

Requirement of All Contractors: As a part of its proposal or contract representations, a prospective service contractor must advise the County whether it will pay the AFCU livable wage rate to all Covered Employees directly involved in the provision of the contracted service, including employees of any subcontractor engaged to assist in providing the service.

Additionally, contractors are asked to estimate the number of employees who will be directly involved in the provision of the contracted service.

Covered Employees include all full- and part-time employees, other than those Excluded Employees described below, who are directly involved in the provision of the contracted service, including employees of sub-contractors engaged to assist in providing the service.

Excluded Employees are:

- Employees under the age of 18
- Seasonal or temporary employees (90 days or less)
- Employees in a probationary status (90 days or less)
- Those employed in a sheltered or supported work environment
- Employees participating in a limited-duration (90 day) job training program
- Employees participating in an academic work-study or academic internship program
- Volunteers
- Employees participating in mandated welfare-to-work programs
- Employees paid pursuant to a collective bargaining agreement

Contractor's Living Wage Representation

Approximately how many Covered Employees, including employees of any subcontractor involved in providing the service, will be involved in the provision of the contracted service?_____

Will all Covered Employees, including employees of any subcontractors directly involved in the provision of County services, be paid at least the living wage?

Yes No

Contractor

Name:_____

If you answered “Yes” to the Living Wage Representation and are awarded the County contract, you will be expected to maintain all employees directly involved in the provision of services under this contract at or above the living wage as of the time of execution of the contract for the duration of the contract.

If you answered “No,” your response will be among the considerations applied by the County in making its contract award. As a part of contract negotiations, the County may request additional information from you regarding the basis of this response.

ANTI-DISCRIMINATION CLAUSE

During the performance of this contract, (the contractor) hereby agrees as follows:

- (a) The contractor will not discriminate against any employee or applicant for employment because of race, creed, color or national origin, and will take affirmative action to insure that they are afforded equal employment opportunities without discrimination because of race, color, creed, ethnicity, Vietnam-era veteran status, disabled veteran, marital status, disability, national origin, or status as an ex-offender. Such action shall be taken with reference, but not be limited, to: recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff or termination, rates of pay or other forms of compensation, and selection for training or retraining, including apprenticeship and on-the-job training.
- (b) The contractor will send to each labor union or representative of workers with which he has or is bound by a collective bargaining or other agreement or understanding, a notice, to be provided by the State Commissioner for Human Rights, advising such labor union or representative of the contractor's agreement under clauses (a) through (f) hereinafter called "non-discrimination clauses". If the contractor was directed to do so by the contracting agency as part of the bid or negotiation of this contract, the contractor shall request such labor union or representative to furnish him with as written statement that such labor union or representative either will affirmatively cooperate, within the limits of its legal and contractual authority, in the implementation of the policy and provisions of these non-discrimination clauses or that it consents and agrees that recruitment, employment and the terms and conditions of employment under this contract shall be in accordance with the purposes and provisions of these non-discrimination clauses. If such labor union or representative fails or refuses to comply with such a request that it furnish such a statement, the contractor shall promptly notify the State Commission for Human Rights of such failure or refusal.
- (c) The contractor will post and keep posted in conspicuous places, available to employees and applicants for employment, notices to be provided by the State Commission for Human Rights setting forth the substance of the provisions of clauses (a) and (b) and such provisions of the State's and local Tompkins County Laws against discrimination as the State Commission for Human Rights shall determine.
- (d) The contractor will state, in all solicitations or advertisements for employees placed by or on behalf of the contractor, that all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color or national origin.
- (e) The contractor will comply with the provisions of Sections 291-299 of the Executive Law and the Civil Rights Law, will furnish all information and reports deemed necessary by the State Commission for Human Rights under these non-discrimination clauses and such sections of the Executive Law, and will permit access to his books, records and accounts by the State Commission for Human Rights, the Attorney General and the Industrial Commissioner for purposes of investigation to ascertain compliance with these non-discrimination clauses and such sections of the Executive Law and Civil Rights Law.
- (f) This contract may be forthwith cancelled, terminated or suspended, in whole or in part, by the contracting agency upon the basis of a finding made by the State Commission for Human Rights that the Contractor may be declared ineligible for future contracts made by or on behalf of the State or a public authority or agency of the State, until he satisfies the State Commission for Human Rights that he has established and is carrying out a program in conformity with the provisions of these non-discrimination clauses. Such finding shall be made by the State Commission for Human Rights after conciliation efforts by the Commission have failed to achieve compliance with these non-discrimination clauses and after a verified complaint has been filed with the Commission, notice thereof has been given to the Contractor and opportunity has been afforded him to be heard publicly before three members of the Commission. Such sanctions may be imposed and remedies invoked independently of or in addition to sanctions and remedies otherwise provided by law. The Contractor will include the provisions of clauses (a) through (f) in every subcontract or purchase order in such a manner that such provisions be performed within the State of New York. The Contractor will take such action in enforcing such provisions of such subcontract or purchase order as the contracting agency may direct, including sanctions or remedies for non-compliance. If the Contractor becomes involved in or is threatened with litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor shall promptly so notify the Attorney General, requesting him to intervene and protect the interests of the State of New York.

GENERAL CONDITIONS ACCEPTED BY:

Firm: _____

By: _____

Date: _____

Title: _____

**COUNTY OF TOMPKINS
GENERAL CONDITIONS**

AFFIDAVIT OF NON-COLLUSION

NAME OF RESPONDER: _____ PHONE NO.: _____ FAX NO.: _____

BUSINESS ADDRESS: _____ EMAIL: _____

I hereby attest that I am the person responsible within my firm for the final decision as to the price(s) and amount of the proposal, or If not, that I have written authorization, enclosed herewith, from that person to make the statements set out below on his/her behalf and on behalf of my company.

I further attest that:

1. The prices in this bid/proposal have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition with any other contractor, responder or potential bidder; and
2. Neither the price(s), nor the amount of this bid/proposal, have been disclosed to any other firm or person who is a responder or potential responder on this project, and will not be so disclosed prior to bid/proposal opening; and
3. No attempt has been made or will be made to solicit, cause or induce any company or person to refrain from responding to this RFB/RFP, or to submit a bid/proposal higher than the proposal of this company, or any intentionally high or non-competitive bid/proposal or other complementary proposal; and
4. The bid/proposal of my company is made in good faith and not pursuant to any agreement or discussion with, or inducement from any firm or person to submit a complementary proposal; and
5. My company has not offered or entered into a subcontract or agreement regarding the purchase of materials or services from any other company or person, or offere, promised or paid cash of anything of any value to any company or person, whether in connection with this or any other project, in consideration for an agreement or promise by a company or person to refrain from responding to this RFB/RFP or to submit a complementary bid/proposal on this project; and
6. My company has not accepted or been promised any subcontract or agreement regarding the sale of materials or services to any company or person, and has not been promised or paid cash or anything of value by and company or person, whether in connection with this or any project, inc consideration for my company's submitting a complementary bid/proposal or agreeing to do so on this project; and
7. I have made a diligent inquiry of all members, officers, employees, and agents of my company with responsibilities relating to the preparation, approval or submission of my company's proposal on this project and have been advised by each of them that he or she has not participated in any communication, consultation, discussion, agreement, collusion act or other conduct inconsistent with any statements and representations made in this affidavit.
8. **By submission of this proposal I certify that I have read, am familiar with, and will comply with any and all segments of these specifications.**

The person signing this proposal, under the penalties of perjury, affirms the truth thereof.

Signature & Company Position: _____

Print Name & Company Position: _____

Company Name: _____

Date Signed _____ Federal I.D. Number _____

Request for Taxpayer Identification Number and Certification

**Give form to the
 requester. Do not
 send to the IRS.**

Print or type See Specific Instructions on page 2.	Name (as shown on your income tax return)	
	Business name, if different from above	
	Check appropriate box: <input type="checkbox"/> Individual/Sole proprietor <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Limited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=partnership) ▶ <input type="checkbox"/> Exempt payee <input type="checkbox"/> Other (see instructions) ▶	
	Address (number, street, and apt. or suite no.)	Requester's name and address (optional)
	City, state, and ZIP code	
	List account number(s) here (optional)	

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Social security number
or
Employer identification number

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. See the instructions on page 4.

Sign Here	Signature of U.S. person ▶	Date ▶
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General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

- The U.S. owner of a disregarded entity and not the entity,

- The U.S. grantor or other owner of a grantor trust and not the trust, and
- The U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person, do not use Form W-9. Instead, use the appropriate Form W-8 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a “saving clause.” Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity not subject to backup withholding, give the requester the appropriate completed Form W-8.

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 28% of such payments. This is called “backup withholding.” Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the Part II instructions on page 3 for details),
3. The IRS tells the requester that you furnished an incorrect TIN,

4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or

5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See the instructions below and the separate Instructions for the Requester of Form W-9.

Also see *Special rules for partnerships* on page 1.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Name

If you are an individual, you must generally enter the name shown on your income tax return. However, if you have changed your last name, for instance, due to marriage without informing the Social Security Administration of the name change, enter your first name, the last name shown on your social security card, and your new last name.

If the account is in joint names, list first, and then circle, the name of the person or entity whose number you entered in Part I of the form.

Sole proprietor. Enter your individual name as shown on your income tax return on the “Name” line. You may enter your business, trade, or “doing business as (DBA)” name on the “Business name” line.

Limited liability company (LLC). Check the “Limited liability company” box only and enter the appropriate code for the tax classification (“D” for disregarded entity, “C” for corporation, “P” for partnership) in the space provided.

For a single-member LLC (including a foreign LLC with a domestic owner) that is disregarded as an entity separate from its owner under Regulations section 301.7701-3, enter the owner’s name on the “Name” line. Enter the LLC’s name on the “Business name” line.

For an LLC classified as a partnership or a corporation, enter the LLC’s name on the “Name” line and any business, trade, or DBA name on the “Business name” line.

Other entities. Enter your business name as shown on required federal tax documents on the “Name” line. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on the “Business name” line.

Note. You are requested to check the appropriate box for your status (individual/sole proprietor, corporation, etc.).

Exempt Payee

If you are exempt from backup withholding, enter your name as described above and check the appropriate box for your status, then check the “Exempt payee” box in the line following the business name, sign and date the form.

Generally, individuals (including sole proprietors) are not exempt from backup withholding. Corporations are exempt from backup withholding for certain payments, such as interest and dividends.

Note. If you are exempt from backup withholding, you should still complete this form to avoid possible erroneous backup withholding.

The following payees are exempt from backup withholding:

1. An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2),
2. The United States or any of its agencies or instrumentalities,
3. A state, the District of Columbia, a possession of the United States, or any of their political subdivisions or instrumentalities,
4. A foreign government or any of its political subdivisions, agencies, or instrumentalities, or
5. An international organization or any of its agencies or instrumentalities.

Other payees that may be exempt from backup withholding include:

6. A corporation,
7. A foreign central bank of issue,
8. A dealer in securities or commodities required to register in the United States, the District of Columbia, or a possession of the United States,
9. A futures commission merchant registered with the Commodity Futures Trading Commission,
10. A real estate investment trust,
11. An entity registered at all times during the tax year under the Investment Company Act of 1940,
12. A common trust fund operated by a bank under section 584(a),
13. A financial institution,
14. A middleman known in the investment community as a nominee or custodian, or
15. A trust exempt from tax under section 664 or described in section 4947.

The chart below shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 15.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 9
Broker transactions	Exempt payees 1 through 13. Also, a person registered under the Investment Advisers Act of 1940 who regularly acts as a broker
Barter exchange transactions and patronage dividends	Exempt payees 1 through 5
Payments over \$600 required to be reported and direct sales over \$5,000 ¹	Generally, exempt payees 1 through 7

¹ See Form 1099-MISC, Miscellaneous Income, and its instructions.

² However, the following payments made to a corporation (including gross proceeds paid to an attorney under section 6045(f), even if the attorney is a corporation) and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, and payments for services paid by a federal executive agency.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-member LLC that is disregarded as an entity separate from its owner (see *Limited liability company (LLC)* on page 2), enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note. See the chart on page 4 for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local Social Security Administration office or get this form online at www.ssa.gov. You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at www.irs.gov/businesses and clicking on Employer Identification Number (EIN) under Starting a Business. You can get Forms W-7 and SS-4 from the IRS by visiting www.irs.gov or by calling 1-800-TAX-FORM (1-800-829-3676).

If you are asked to complete Form W-9 but do not have a TIN, write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note. Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: A disregarded domestic entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if items 1, 4, and 5 below indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). Exempt payees, see *Exempt Payee* on page 2.

Signature requirements. Complete the certification as indicated in 1 through 5 below.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

Secure Your Tax Records from Identity Theft

Identity theft occurs when someone uses your personal information such as your name, social security number (SSN), or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

Call the IRS at 1-800-829-1040 if you think your identity has been used inappropriately for tax purposes.

Victims of identity theft who are experiencing economic harm or a system problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes.

Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to phishing@irs.gov. You may also report misuse of the IRS name, logo, or other IRS personal property to the Treasury Inspector General for Tax Administration at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at: spam@uce.gov or contact them at www.consumer.gov/idtheft or 1-877-IDTHEFT(438-4338).

Visit the IRS website at www.irs.gov to learn more about identity theft and how to reduce your risk.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account)	The actual owner of the account or, if combined funds, the first individual on the account ¹
3. Custodian account of a minor (Uniform Gift to Minors Act)	The minor ²
4. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee ¹
b. So-called trust account that is not a legal or valid trust under state law	The actual owner ¹
5. Sole proprietorship or disregarded entity owned by an individual	The owner ³
For this type of account:	Give name and EIN of:
6. Disregarded entity not owned by an individual	The owner
7. A valid trust, estate, or pension trust	Legal entity ⁴
8. Corporate or LLC electing corporate status on Form 8832	The corporation
9. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
10. Partnership or multi-member LLC	The partnership
11. A broker or registered nominee	The broker or nominee
12. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity

¹ List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

² Circle the minor's name and furnish the minor's SSN.

³ You must show your individual name and you may also enter your business or "DBA" name on the second name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

⁴ List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships* on page 1.

Note. If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons who must file information returns with the IRS to report interest, dividends, and certain other income paid to you, mortgage interest you paid, the acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA, or Archer MSA or HSA. The IRS uses the numbers for identification purposes and to help verify the accuracy of your tax return. The IRS may also provide this information to the Department of Justice for civil and criminal litigation, and to cities, states, the District of Columbia, and U.S. possessions to carry out their tax laws. We may also disclose this information to other countries under a tax treaty, to federal and state agencies to enforce federal nontax criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism.

You must provide your TIN whether or not you are required to file a tax return. Payers must generally withhold 28% of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to a payer. Certain penalties may also apply.

Solarize Tompkins

Organizational Background

Tompkins County

The Tompkins County Planning Department provides planning and related services to agencies of the County government and to local municipalities. The County Charter identifies, in very broad terms, the range of activities that may be undertaken by the Department of Planning. The Department is charged with preparing a comprehensive plan for the development of the county; collecting and distributing data and information on the County's population, land use, housing, environment, and community facilities; preparing planning studies and analyses; and acting as a resource for county agencies and communities seeking funding from sources other than County government.

This broad definition of Department activities is refined in the department's annual work program. The work program balances the resources available to the Department (primarily personnel) and the mission, vision and goals of the Legislature. The Department strives to be responsive to current needs, keeping under consideration the long-term impacts of its activities. There is a need to balance the ability to address immediate and critical issues with the need to address the long-range concerns of the County.

The Department's focus is on implementing the Tompkins County Comprehensive Plan and its associated priority action plan. The County Comprehensive Plan is organized around eleven principles having to do with regional cooperation and the interrelationships between housing, transportation, jobs, the environment, and neighborhoods and communities (www.tompkins-co.org/planning).

In 2008, the Plan was amended to include an element on energy and greenhouse gas emissions. The public outreach conducted in developing this element resulted in the County Planning Department taking on a leadership role in addressing energy and climate change issues in the community in a thoughtful and strategic manner. By acting as fiscal sponsor for the Solarize Tompkins program, it is hoped that the community will see that work as an extension of the substantive work already underway in the Department on the broader topics of energy and greenhouse gas emissions.

In 2013, the Department has 8.5 full-time-equivalent (FTE) permanent positions. The Department also relies on consultants from time to time to complete specific tasks, and several grant-funded projects will make use of consulting services – most notably in 2013 the completion of the Hazard Mitigation/Climate Adaptation Plan Update and the Southern Tier Regional Sustainability Plan. Highlights from the Department's 2013 Work Program are:

- Creating an integrated approach to assessing energy demand and supply for the residential and commercial sectors in the County today and in the future under the development framework and the objectives established in the County Comprehensive Plan;
- Working with EcoVillage at Ithaca (EVI) and others to: document EVI best practices; create model building codes, policies and zoning ordinances that incorporate these best practices; and apply these principles in three pilot projects in support of an EPA Climate Showcase Communities Grant;
- Managing the Community Housing Fund, which provides grant and loan funding to promote the development of affordable housing in Tompkins County.
- Implementing a new program to provide matching funds to municipalities striving to implement elements of the County's Development Focus Area Strategy.
- Working with advisory boards and the community to determine the extent to which the existing County Comprehensive Plan needs to be updated, identify additional issue areas to be addressed, and establish a schedule for the updated plan to be adopted by the Legislature in 2014.

- Continuing implementation of its on-going programs: hazard mitigation coordination, first-time homeownership, agricultural purchase of development rights, county forest management, and capital reserve fund for natural resource protection.

As with local governments, the County Planning Department is devoting what time and resources it can to reduce energy consumption and encourage the transition to renewable energy. The ability to engage a contractor to perform the necessary oversight and management of the Solarize Tompkins program will greatly improve the community's ability to increase the amount of renewable energy used to power its buildings.

Solarize Tompkins

Solarize Tompkins is a county-wide community education and volume purchasing initiative building on the successes of the pilot program, *Solarize Tompkins SE*, which has had a spectacular public response during 2013 in the towns of Danby, Caroline and Dryden. The pilot project received funding from the Park Foundation under the name *Solarize Caroline and Dryden*, but had admitted the Town of Danby and adopted the name *Solarize Tompkins SE* during the period when the grant was still under review. The pilot initiative was inspired by the successes of similar efforts in Madison County, New York, Portland, Oregon and similar solar group purchasing initiatives throughout the United States. The intent of the *Solarize* program is to help consumers save money, generate clean energy, reduce carbon emissions, create local jobs, and promote equity by creating local economic opportunities and career pathways in the region.

Solarize Tompkins will build on the successes and momentum of the past year. It shares several leaders with last year's program, but has greatly expanded its ranks to include volunteers living in the City of Ithaca and every town in the County. The *Solarize* initiative is partnering this year with Tompkins County, which will act as fiscal sponsor as well as providing direct participation, and Cornell Cooperative Extension of Tompkins County (CCETC).

The campaign is based on volunteer grassroots effort. We are guided by a volunteer Steering Committee with one member residing in each Town, one from the City of Ithaca, and Liaison members from the County and CCETC (all listed in the Background and Qualifications of Principal Personnel section). Additional working groups will include, 1) Community Purchasing and Contracts, and 2) Community Education and Mobilization.

Executive Summary

The speed with which modern society can fully adopt clean, renewable sources of energy to replace fossil fuels is one of the most crucial issues of our times. Extensive climate change has already begun and threatens to precipitate a massive loss of global biological diversity, degrade human health, reduce food security, and generate economic instability. The timespan in which effective action can avert the worst of these consequences is running out, and the next decade is a critical window for effecting change.

In this context, the Solarize Tompkins SE volunteer team recently appeared on the podium at the *Rock the Plan* benefit concert at Stewart Park promoting the *2030 Plan* (Jacobson, Howarth, Delucchi et al. 2013; Energy Policy 57:585-601), a roadmap to achieve comprehensive deployment of renewable energy technology by 2030. We followed a presentation by one of the plan's authors, Robert Howarth, on the podium. Bob told the assembled crowd that the impediment to full deployment of renewable energy is not technical, because we have the means. It is not financial, because the technology is affordable right now and renewable energy promises a robust and more stable economy. The main impediment is one of insufficient social awareness and engagement and the lack of political will to make dramatic changes. Following Bob's presentation our *Solarize* group contributed a ray of hope with news of the dramatic successes we have achieved this year in speeding up the rate of solar energy deployment in Danby, Caroline and Dryden. We invited volunteers to join in the launching of *Solarize Tompkins*, a full countywide program for 2014-15 to increase the rate of solar energy installations by as

much as 5- to 10-fold in one year. Even more importantly, the program produces a more educated and engaged public that has committed itself financially and intellectually to the changes our society needs to embrace.

Solar power is among the most promising renewable energy sources, freely available to all. It is abundant, clean and dependable, but requires a large footprint for deployment if done in a centralized location. Happily, the capture of solar energy is uniquely suited for integration within communities and can be implemented home by home, and business by business, making it an ideal target for cooperative engagement by individuals and their communities. Further, the desire for solar is at an all-time high in our local communities because of the successful grass-roots efforts to achieve local moratoria and bans on hydro-fracking. These efforts have energized our communities and demanded extensive soul-searching by individuals, organizations and local governments about how we want to conceive of our energy future and what we are willing and able to do to get there. Clean renewable energy is the positive side of this growth process which is already vigorous. We do not need to create the desire for an alternative clean energy future: that is already intense! We need rather to remove the obstacles and be the catalyst of human energy, information, and organization to allow these needs to be fulfilled.

In the pilot program Solarize Tompkins SE, volunteer efforts were financially supported by a \$37,000 grant from the Park foundation, about \$800 in other charitable giving, and \$900 in matching funds from CCE. To date, based on signed contracts, the program lists 61 purchased solar PV systems totaling 376 kW. Using 2012's mean market value of \$5.80/W for solar PV installed in Tompkins County (NYSERDA Powerclerk website, <http://nyserda.powerclerkreports.com/Default.aspx?ReportId=8>), these systems represent new solar infrastructure in our towns valued at \$2,180,800, ***an immediate 57-fold leverage of program investment!***

Due to excellent pricing from the community group-purchase contract, however, the average installation cost of these systems (after our tier 5 community bulk purchase rebate) will only be \$3.58/W (our base price for a basic roof-mounted system was as low as \$3.05/W, \$3.58/W is the program average including all optional charges for pole mounting, microinverters etc), providing \$835,372 community-wide savings.

In 2012, the year before our pilot program, there were only 9 solar PV systems installed in our three towns (based on NYSERDA's PowerClerk site and GIS map) and our stated goal in the first Park Foundation proposal was to increase this rate of installation by at least 5-fold. Our current contract numbers have already exceeded this goal, and contracts are still being signed! Our program enrollment ended in late June, but due to the tremendous community response, the last on-site assessments were only completed in mid-September. Based on the number of recently offered contracts and the overall acceptance rate so far, the PV installer estimates that when this activity reaches closure in mid-October, we will have at least 30% more contracted PV than described above, which will bring total PV to be installed over 0.5 MW. This is an amazing figure for just three Towns in one year!

In addition to the purchased PV described above, there were also contracts for 5 additional leased PV systems and 28 systems for SHW. The PV systems already contracted can be expected to produce an annual renewable energy of 511,654 kWh/yr. Using the EPA greenhouse gas calculator, (<http://www.epa.gov/cleanenergy/energy-resources/calculator.html#results>) this will result in a decreased emission of roughly 361 metric tons of CO₂ per year. The solar hot water systems will reduce carbon pollution by another 50 metric tons. All of these proximate benefits, however, both in immediate renewable energy investment and GHG reductions, are considered secondary to longer-term market stimulation and a change in community perception of solar and renewable energy that we believe the program is achieving. Although our direct stimulus program will be of finite duration, the longer-term effects will multiply onwards at a variety of levels in the years ahead.

Since *Rock the Plan*, Solarize Tompkins has formally launched itself with a commitment by volunteers from every town in the county and the City of Ithaca. Several of the leaders from the pilot program have volunteered to work in this new effort bringing Solarize experience and lessons learned. The steering committee and full membership also includes numerous new members bringing an increased wealth of experience and ideas to

make the program even better, and the expanded grass-roots connections throughout the region needed to achieve the same levels of success county-wide as were enjoyed in the SE towns this year.

To help achieve these goals we are seeking \$91,882 in this proposal. The proposed funds will cover a Project Manager for 18 months (full time for first 6 months during installer selection and enrollment and halftime for 12 additional months during installer assessment and installation), a solarize program consultant, expert speakers, printing costs, database management, and a rigorous project assessment effort. These resources will help make the transition to solar an immediate reality in Tompkins County. This is a large step toward a sustainable energy future, and one that builds strength and energy for the next steps through an engaged public.

We anticipate that the countywide effort may culminate in the installation of as much as 2.5 to 3.0 MW of solar panel capacity. This represents a very large effort for any installer, and planning is underway to ensure that the work is undertaken within a framework of rational and defined expectations between *Solarize Tompkins* and the chosen installer(s). We project that it will take 18 months to complete a *Solarize* project across the entire county. We are also evaluating ceiling caps in maximal enrollment to ensure the program does not grow beyond its capacity to deliver quality installations in a reasonable time-frame. In this context we also plan to offer only photovoltaic systems (PV) in this period and not solar hot water (SHW).

Proposal Narrative

Program Basics

Our goal is to establish home solar power as part of the ‘new normal’. It is not eccentric, impractical, or difficult to implement. Rather, it is affordable, an economic boon to the individual and the community, a sensible and positive action addressing security and sustainability, and a mainstream, commonplace, everyday action that can be shared with hundreds of neighbors across our communities. We will help achieve this conceptual breakthrough through a *Solarize* campaign that generates an immediate surge in solar installation and a sense of community momentum. This is done by offering simple, vetted options, public education and grassroots mobilization and group purchasing power that offers the best available prices. This outward surge, and the experience of community members entering into this process together through our extensive public meetings, will change how the community thinks and feels about solar power. Although the *Solarize* program will be of short duration as a temporary stimulus and related educational opportunity, recorded experience from other *Solarize* programs nationwide suggests that it can leave a long-term legacy of more vigorous markets, increased accessibility, public awareness and reduced barriers to solar adoption.

In brief, the program functions as a community initiative in which a local group organizes the program and 1) generates interest through a broad campaign and holds community forums to explain how solar electricity generation works and the available incentives and financing options, and 2) vets the available installers through an RFP (request for proposals) process and arrives at a small number (often just one) who can deliver a quality product at a great price and all necessary services for the installation of a large number of photovoltaic systems (PV) in a limited period of time. *Solarize Tompkins* is organized with a steering committee, and two working groups, Education and Community Mobilization, and Community Purchasing and Contracts to implement efforts 1 and 2, respectively.

These efforts address two of the main barriers to adoption of solar electricity: homeowners often don’t know much about the systems and they often feel so overwhelmed by the many available options for reducing their carbon footprint – solar electric and thermal, geothermal, wind, wood and pellet stoves, driving less, adding insulation to their homes, etc. – that they don’t do anything. And if they are able to decide on an action, like the installation of PV panels, they are often stymied by the inability to assess the available installers and their product offerings. There are many, many difficult decisions to make along the way. By vetting companies through a process that takes into account such things as cost; ability to adequately explain the systems, quickly screen residents and support them through the process; quality control; and the wages they pay their workers, the

Solarize program does a lot of the legwork for homeowners. We will offer limited choices with high confidence of quality. This removes the barrier for many homeowners of not having sufficient time and confidence to evaluate all the options, and not knowing how to pick the right installer for such an expensive, complex commitment.

The first major step of the campaign is to formulate a request for proposals (RFP) that will be sent out to all the certified solar installers in the state and evaluate them based on common criteria:

Firm Profile

Qualifications of Project Team

Capacity in both assessment and installation to handle the expected customer volume

Impact on local economic development

Sustainability practices

Employment practices

Scope of services and Schedule

Pricing Schedule

As a result of this vetting process, potential community participants will find reduced barriers to action for multiple reasons. One is assurance that they are receiving a good price without having to go through an exhausting process of multiple complex bids. Equally important, they will be assured that essential system design choices and the expected quality of materials and workmanship have been vetted and approved by an expert panel. ***This leaves them free to simply make the big decision of Yes or No about whether this is the time to go solar!*** Their remaining choices, guided by discussions with the chosen installer, are things they can be comfortable about, such as placement of the panel arrays and the size of the array needed to meet their needs.

In addition to pricing and technical competence, the criteria by which proposals are to be scored include employment practices, local jobs, sustainability practices, ability to handle the anticipated surge in solar installations, and the competence to contribute to educational workshops. This latter component is not a burden but a huge opportunity for the right installer. We are providing a process where they do not have to educate customers individually in a lengthy and costly process. Basic education will be provided at community meetings with substantial cost savings to the installers (which we expect to see passed on to the customers). These community meetings will benefit from joint interactions including both the installers and other experts chosen by the *Solarize* steering committee. It is this complete process including group-vetting of the installer combined with effective education that removes the technical knowledge impediment from the decision process. Home and business owners will be informed about the basic concepts driving the design and function of these systems, but do not need to research and develop individual competence in judging the technology.

Public informational meetings will include basic background on solar power and viability, the fundamentals of solar PV and solar thermal (because even though the program will only offer PV, we still see this as an opportunity to educate a large number of homeowners about related technology), cost and incentive programs, different financing options, and nuts and bolts meetings about equipment and the functionality of the systems, as well as information about the importance of energy-efficiency upgrades to reduce wasted energy. These meetings will emphasize a basic understanding of the technology actually being offered, and promote a readiness to incorporate these new elements into their homes and lifestyles. The meetings will be organized by the *Solarize* campaign in coordination with CCETC and will have speakers, including the *Solarize* Project Manager; Guillermo Metz from CCETC; Jan Myers from *Solarize Madison* (funds requested as described below to allow her participation); the selected solar installers; and other experts as identified by the *Solarize* working group. The goal is to guide participants through the logistics to a confident assessment of what will best fit their needs and budget.

Community Mobilization

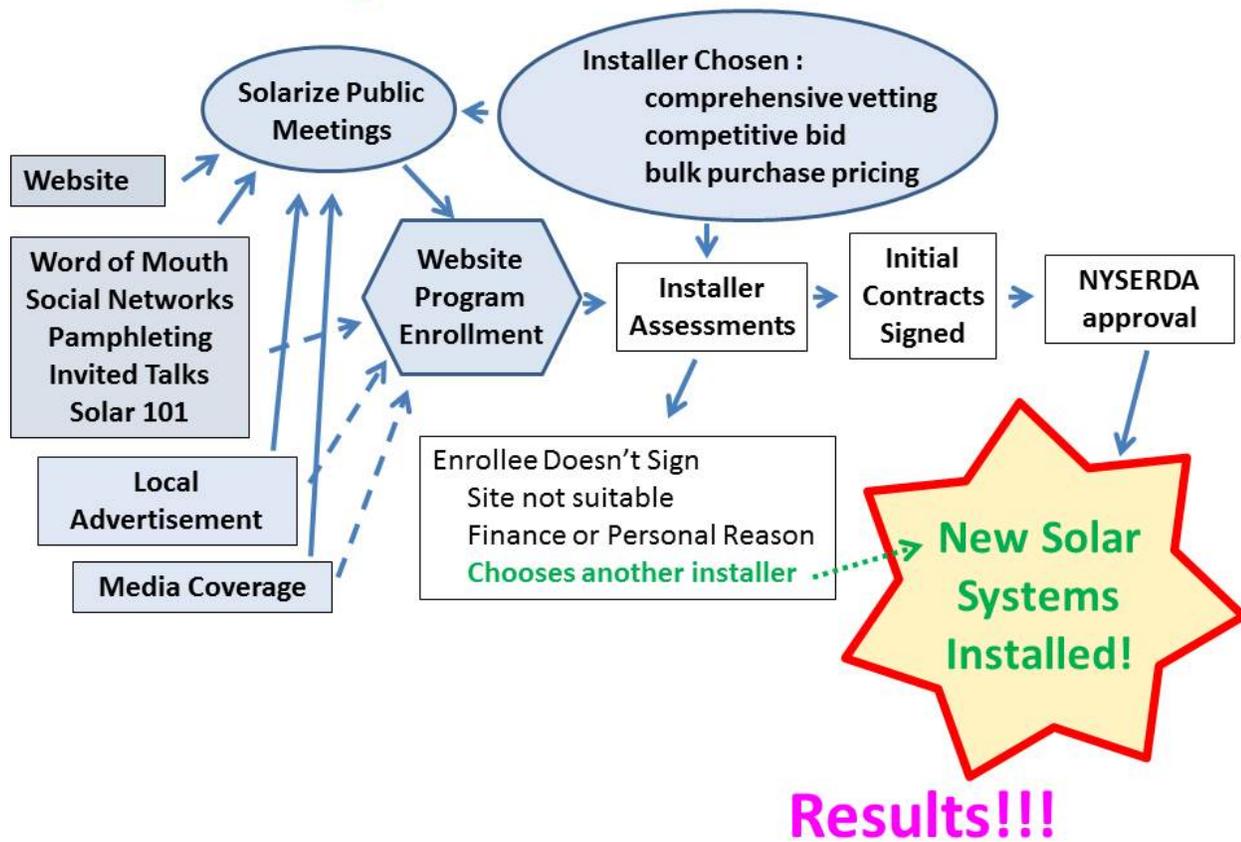


Figure 1. Flow Chart of Solarize activities leading to the proximal program results of increased deployment of solar energy in homes and local businesses. Equally important but not explicitly diagrammed are the long-term changes in community awareness and interest in solar energy options, a more robust solar market beyond the end date of the program, and investment by participants toward understanding and managing their overall energy use.

For a general member of the public, initial exposure to the *Solarize* program can happen through any of the paths starting with a square blue box in Figure 1. This phase is referred to in our Timeline (See figure next to program budget at end) as Preliminary Public Outreach. It includes both formal and informal messaging, and indeed we believe that our grassroots connections and word-of-mouth spread of information are crucial early parts of the program, an aspect we propose to explore more quantitatively with skilled assessment of both the pilot and full county-wide programs. Preliminary Outreach begins a few months prior to Enrollment while another *Solarize* team is simultaneously vetting installer proposals and conducting interviews culminating in choosing a particular installer (Figure 1, large blue oval).

At this point we begin having our formal public meetings (there were 7 in 2013) and accepting program Enrollment via our Website (hard copies of enrollment form were available upon request). Most people considering enrollment in the *Solarize* program attended one or more of the formal Public Meetings. In addition to serving an educational function, this is an important element to cut costs by allowing the installer to cover general basics of the offered systems in a group context. It also provides a sense of community connection in the decision making process (Figure 1, flow of solid arrows culminating in blue hexagram). This is a decision that is good for the individual, but also good for communities. Group Q&A at these meetings also helps individuals without technical background feel that the important issues are being raised and considered. Attendance is not required, however, and many people also enrolled without ever attending a Public Meeting (Figure 1, flow of dashed arrows to blue hexagram). The contrasting needs and natures of the people following these two paths

will be another question of interest in program assessment. What are the roles of grassroots networks versus formal information for either route? What distinguishes solid line from dashed line route takers?

Enrollment does not equal signing a contract, it just means that the homeowner or local business wants a personal assessment from the installer and is considering a contract. There is no obligation or cost to Enrollment in the *Solarize* program, or the site evaluation and assessment by the installer. Enrollees are passed from the *Solarize* database to the Installers by the *Solarize* Project Manager. The manager spends considerable time monitoring progress, responding to concerns and questions, and making sure that the participants have the best possible experience. Nonetheless, the responsibility for the important interactions shifts from *Solarize* personnel to the chosen installer at this point (Figure 1, white boxes in flow chart). A subset of the enrollees will actually sign contracts and have systems built, and evaluating this success rate will be a key concern of the assessment process.

Jan Myers was the *Solarize* Project Manager for Madison County and is a key *Solarize* organizer at the New York State level. Jan has been a consultant to *Solarize Tompkins SE* on organizing and coordinating various parts of the program. Her work with the program will continue in the coming year as we complete installation of systems in the pilot study and begin work county-wide. Two areas that will be emphasized in her consulting this year will be 1) navigating the challenges of associated with the size of the countywide program and 2) helping to train *Solarize* personnel to be able to make inspections of installations and assure some basics of quality control within the solar program.

Lessons Learned from Solarize Tompkins SE pilot program

The pilot program received a \$37,000 grant from the Park Foundation and these funds were the principal source of operating costs. About \$15,700 are still held by the town in late September. These funds include \$11,000 of the \$15,000 allocated for incentive grants. The incentives have all been awarded, but payment is made only after NYSERDA approval of the respective jobs. We anticipate distributing the rest of the incentive money as construction of these jobs begins in autumn 2013 and spring 2014. The town also holds \$3,500 in remaining payments for the Project Manager position. \$1,000 is earmarked for a Celebration event to build on the sense of community involvement with these solar installations.

Due to the huge response and other factors, the assessment phase has taken longer than expected. Solar Hot Water systems are currently under construction and several installations are complete. For the PV systems installation will not begin until the third week of October. Weather permitting, the expectation is that about 30 PV systems will be installed before heavy winter weather inhibits activity, and the rest will be installed in the early spring. We may have the Celebration event in November or wait until spring depending on how quickly installations progress. Of \$5,500 allocated in the grant to 'printing, meetings, database', an \$800 balance is still unspent. These remaining funds will support the maintenance of the website, ongoing publicity and miscellaneous expenses in the fall and spring.

The distribution of costs in \$5,500 'printing, meetings, database' helps in planning a budget for a countywide program. Some costs, like maintaining a website and survey monkey accounts, will not increase at all with project size. These are relatively minor components, however, accounting for only a few hundred dollars in the pilot program. About \$1,000 was spent on printing and other functions that will likely scale directly with population size as we expand the program (5-fold), while about \$3,400 was spent directly on our public meetings and on publicity surrounding them. These costs are more likely to scale with the number of public meetings. expected to go up by about 3.5-fold.

The request for proposals from installers issued in 2013 generated 10 proposals, including several of high quality. This was in spite of the fact that we were just three modest-sized towns and had to work for their attention. In the coming year we expect even more high-quality proposals, due in large part to the great success of the pilot project and our ability to project large community purchases with great confidence. We also learned a great deal from the first year on how to revise the details of the RFP to be specific on expected information

content, thus making proposals more easily comparable. We will also ask for more detailed specifics of implementation plans and assessment rate expectations rather than allowing emphasis on just the credentials of various teams. This will be crucial for evaluating readiness to handle the countywide program, which is expected to have a very large volume of business. Specifying features of tiered pricing (prices per watt at various “tiers” of number of contracts signed), flat per-watt pricing across a range of total system sizes, explicit costs of various options, etc., will allow us to put out an RFP that more precisely describes the programmatic needs so they can be addressed consistently in installer proposals.

One of our goals during the *Solarize* stimulus is to see systems going in across as broad an economic spectrum as possible. This is accomplished primarily by offering the most affordable pricing available and removing technical and social barriers, but in our last round of funding from the Park Foundation we also received \$15,000 to be offered as incentive grants to low-income (80% of median income) applicants. We offered 15 such grants at \$1,000 each, and all 15 were claimed by eligible participants. Although we believe that these incentives made the difference between deciding to install or not for at least some recipients, the low prices offered by our installer and the tremendous overall response by the community this year has led us to reevaluate the importance of incentive grants in a tight budget. The budget for 2014-15 is considerably expanded over that of 2013-14 simply due to the 5-fold increase in the population being served. Such an expanded effort will require more hours by the Project Manager and more funds for advertisement, printing, etc. We also anticipate that the entire county will take more than 12 months to complete, and are asking funds to maintain the manager position for 18 months in order to see all the installations completed (see Timeline). In an effort to keep our request to the Park Foundation in reasonable bounds and ask only for essential support, we have opted not to pursue incentive grant funds in the countywide program.

The Project Manager position remains the single largest item in the budget. This position was essential in the current pilot, but the need will greatly increase when we go to the whole county. Our teams of volunteers will grow very large. While the Steering Committee and Community Purchasing and Contracts working group will be of limited sizes, there cannot be too many people helping in the Community Education and Mobilization efforts. We anticipate having these groups work in subgroupings of towns of approximate size as the pilot program this year. The Project Manager will be the glue that holds all this together, coordinating messaging so that it remains consistent even while it is adapted to the needs of different regions in the County. The Manager will also help coordinate the Community Purchasing and Contracts working group as it develops and releases the RFP, receives and vets proposals, and interviews the top installer candidates. Choosing an installer could be a very intensive period if *Solarize* must mediate installer team-building from individual proposals (see longer discussion in *Roll-Out* section below). The Manager will have final responsibility for logistics of the formal community meetings. The Project Manager will further establish a database for tracking interested enrollees. This will include initial sign-ups and information, follow-up confirmation of any choices, and tracking the participant’s experience with the installer and other needs throughout the process. Past experience in other areas has shown the importance of connecting potential customers to the installer promptly after enrollment rather than waiting until the enrollment period ends. This allows the installers to begin site assessments sooner and manage installations over a longer construction period without generating unnecessary waits and lag-times.

In 2013, we gained 291 total enrollees. A subset of 66 of these have signed PV contracts as of September 20th, and that number will likely go up to 80 or 90 by the close of this phase in mid-October. Another 150 attended public meetings without ever enrolling. Some of these were members of the same households as contract signers, some remained unconvinced or decided to wait for personal reasons, and some may have been motivated to move forward but chose some other installer based on any number of valid reasons. So long as it is for positive reasons and not programmatic short-comings we are delighted to have such a positive spill-over effect on the rest of the local solar market. We know of a few anecdotal cases where this is definitely the case, and will contact every meeting attendee in the assessment phase to document all experiences and outcomes of meeting participants who don’t enroll and enrollees who don’t sign contracts (Figure 1, central white box).

Program participation for our 2013 public meetings encompassed a total of 294 attendees across 7 meetings. 165 of these meeting attendees went on to enroll in the *Solarize* program and ask for individual assessments

from the installers. An additional 126 people enrolled on the website without ever attending one of our formal public meetings. While this means 43% of our total enrollee pool skipped the public meetings altogether, the percentage of enrollees in the pool going on to sign contracts was over twice as high (29%) for those who had attended a meeting compared to those who hadn't (14%). Both of these percentages will rise somewhat by the time contract-signing ends in mid-October, but the relative difference is likely to be similar.

This raises a number of intriguing questions about what different groups of people are looking for and need to know to complete their decision-making processes. Were those who attended no public meetings, on average, more impulsive but less firmly committed? Motivated by low price? Less able to individually resolve questions during the limited time of home visits? Conversely, is the higher percentage of meeting attendees going on to sign contracts a function of technical preparation alone, or did the community aspects of the experience reinforce the decision-maker toward a new path?

Immediate Lessons for County-Wide Program

Looking ahead to 2014-15, we think that there are important lessons to be carried forward. It would be a mistake to plan on a limited number of larger meetings in a countywide program. Our experience confirms the central role of the public meetings in the *Solarize* model, and a full 73% of all contracts resulted from people who had attended the public meetings. Neighborhood meetings at the town level were likely very important. In all of our meetings in the pilot program (2 in each town) about 70 % of attendance always came from town residents where the meeting was hosted, although there was no programmatic constraint and the towns are not far apart. Further, although Dryden accounted for 66 percent of all population in the pilot study, the combined towns of Caroline and Danby contributed 55% of all contracts. This highlights the need for a full outreach effort into each region without being overly influenced by population alone. The hotspots are not fully predictable. We are likely to divide the county into geographic sectors to handle the large total population and anticipated business that will flow from it. Each sector needs a series of several meetings, however, and they need to be widely distributed geographically rather than concentrating on a few large meetings in population centers.

We have enlisted Professor Shorna Allred of the Human Dimensions Research Unit at Cornell University to undertake the assessment phase of our project. Funds are included in this proposal to support student activities associated with this assessment, especially a student summer salary, and costs of developing and implementing a fully informative survey, including interview completion and transcription during development and mailing costs for some groups. A more detailed description of the planned assessment goals and process can be found at the end of this proposal after the budget request.

Plans To Roll Out a *Solarize* Program at the County Level

First of all, we do not plan to offer either PV or Solar Hot Water at the county level for more than one year in succession each. This year we plan to offer only solar PV, as discussed below. We believe from the results of the pilot program that one year at the county level will be an optimal stimulus. It will be a huge and attitude-changing event in our communities. By being county-wide, it will challenge the entire suite of installers and not just the chosen *Solarize* installer to rethink business models and structure and aim to meet a more vigorous market with competitive pricing as well as quality products. By ending after one year, the potential demand will be greatly stimulated and in no way saturated, and the members of the installer community who recognize and respond to the opportunity will flourish.

The three towns of Solarize Tompkins SE contributed 20.7% to the total population of Tompkins County in the 2010 census. Thus a first estimate of expected program size county-wide would multiply the pilot program results by a factor of five. We anticipate about 90 PV contracts total in the pilot (we will know exactly by late October) and this gives a current estimate of 450 contracts encompassing 2.7 MW of total PV installation expected in an expanded countywide *Solarize* program. This estimate might be high, because some regions may have lower response rates than the pilot. The City of Ithaca, for example, has a large population but could have a lower per capita response rate due to housing density and shading issues, high levels of rental properties and other factors. Conversely, the success of the pilot program is already well known in many circles throughout the

county, and many areas may see even higher turnouts than we achieved in the SE because we are starting out with greater recognition. For these reasons, while the pilot project gives us a solid ground for estimating the approximate size of the countywide response, we still need to place error bars on our estimates of +/- 25% or more. While this is far more constrained than the a priori expectations for the pilot program, the sheer size of the countywide effort, potentially challenging the installation capacity of the chosen installer, requires careful planning and definition.

A successful program will require clear communication in our installer RFP of the expected size of the job, and clear instructions that the installers, in their proposals, need to quantitatively describe their capacity to do the required number of assessments and installs in a defined timeframe. We are also planning to have a pre-RFP installer meeting, inviting all qualified installers, announcing our intent to formulate and release an RFP. At this meeting we will collect information on installer capacity and a few other issues from the installers themselves. Based on this information we will construct an informed and explicit RFP. Among many other considerations, we will be sure to ultimately choose an installer with a coherent plan and the capacity to succeed. We will likely have to build in further safeguards beyond this. For instance, some flexibility in timing could be allowed, and enrollment caps might need to be in place. These caps would not be artificially low to limit the program's success, but would provide a guarantee that it will not flounder in too much success if the enrollment response threatens to overwhelm installer capacity and reasonable expectations even after other planning and preparation. Exact measures, like caps, are still just under consideration, and will not be fixed until more information has been gathered. We clearly recognize that the quantitative level of success we expect to achieve will push the limits and we will ensure that both *Solarize* and the chosen installer enter into the project with informed and realistic mutual expectations. Appropriate safeguards will be built in.

Another step to deal with the countywide effort will likely include dividing the County into sectors. One likely division into four sectors would be 1) Groton, Lansing and the eastern half of Town of Ithaca, 2) Ulysses, Enfield, Newfield, and the western half of Town of Ithaca, 3) the City of Ithaca, and 4) Danby Caroline and Dryden.

If one installer is chosen, these sectors would surely be approached with temporally offset enrollment periods. This allows installation to begin much sooner, and with a greater efficiency of geographic concentration, as soon as the first sector completes its enrollment and assessment phases. Other sectors would follow in a staggered fashion and sales and installer teams would all be active at once, but not simultaneously in the same sector. We will also encourage joint proposals from multiple-installer teams if they can provide a coherent plan for how work would be divided and ensure consistency of offerings for all enrollees. This would also allow simultaneous enrollment in all sectors. Some good precedence for this exists from other regions, but successful joint proposals of that nature are not common. We prefer these above two options over choosing multiple single-installer proposals because past experience indicates that such arrangements are prone to overly competitive interactions and poor customer experiences. Nonetheless, in a multi-sectored program where each installer could be assigned a unique sector, we believe that multiple installers could be identified by us during the RFP process while retaining the efficacy of the *Solarize* model. This would, however, require an additional stage of mediation among the nominated installers to achieve optimal coordination throughout the program, and could still result in somewhat different offerings in different sectors. We will construct our RFP with all these possible outcomes in mind, and choose the best option from available proposals based on simplicity, certainty of capacity, and the best consistency and overall experience for participants.

Another step with, we think, multiple positive consequences, will be that we will offer a chosen *Solarize* installer only for PV systems and not Solar Hot Water (SHW) in this round of activity. This step is taken in large part because of the program complexity brought on by the expected magnitude of the response to even PV alone. We feel that it is prudent to keep the program focused. We do expect, however, to still cover SHW systems in the educational portion of our formal public meetings. This would likely have the effect of creating a greatly increased demand for SHW which could be met by the full population of local installers of SHW. We also believe that, even during our year of PV offerings, non-*Solarize* installers active in the region will likely receive more PV business than normal as a result of our educational program spill-over, and not less due to

Solarize installer competition. This spill-over effect was the experience, for instance, in *Solarize Madison* and other programs, although we do not yet have hard data to support that prediction in Tompkins County. By not offering solar PV and SHW simultaneously, we ensure that we are having a large net positive effect on the installer community outside the chosen installer(s) for PV.

In summary, we have taken a community-based model for promoting the conversion to clean, renewable solar power, the *Solarize* model, and set a new standard for effectiveness in New York State. We believe that this extraordinary success is due to multiple factors including 1) past public education and market development in this area, 2) a population that is sensitized to its energy use impacts from current deliberations over hydraulic fracturing for shale-gas and extreme weather impacts on our communities, and 3) the current activist networks and grassroots support that we were able to align in support of the endeavor. Our program is being watched by other groups throughout the state that are considering adopting the *Solarize* model in their own communities. Its program structure is also being eyed by numerous groups within our own area as an approach that may be adaptable to promoting adoption of other sustainable practices. We are now ready to bring the benefits of this program to all of Tompkins County, but we also realize that our soaring success rate is itself a challenge that needs to be carefully evaluated as we scale up the program. We have learned many specific lessons from the pilot program that will help us to do this effectively and without missteps. We are also including a robust process for the assessment of the program itself because we think the general insights of method and approach of tapping into a wellspring of grass-roots activism will be very valuable in moving our communities into a sustainable future.

Matching Funds and Other Support for Solarize

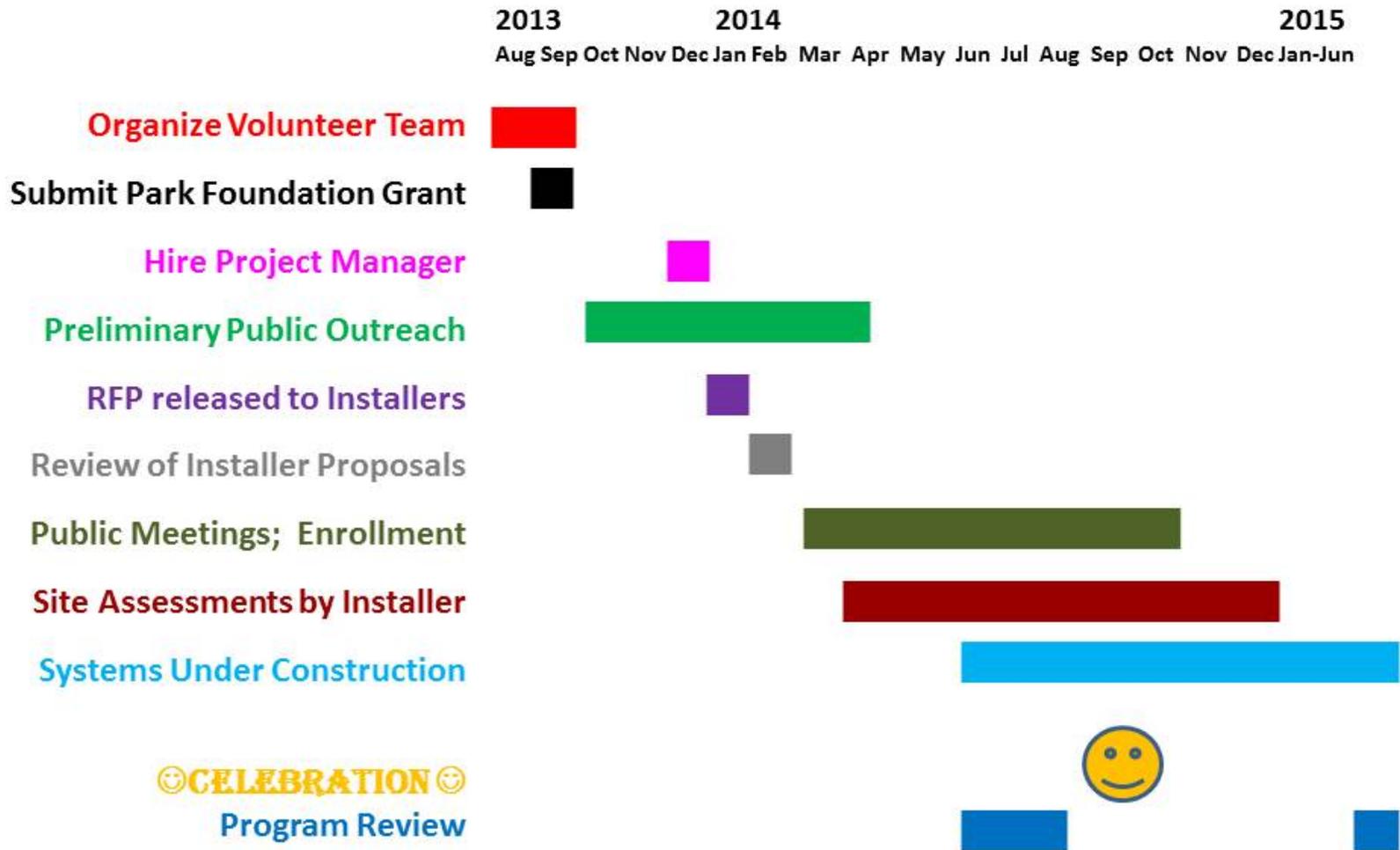
In addition to this proposal, some matching funds have been pledged by CCETC for half of the salary (\$1,100 match) and all fringe costs (\$1,220) associated with participation by Guillermo Metz (total match: \$2,320). The County has not quantified its match monetarily, but is acting as fiscal sponsor with a zero-overhead request. It is therefore donating accounting services and other activities and personnel efforts associated with supporting the project. Katie Borgella, Principal Planner of the Tompkins County Planning Department, will act as County Liaison to the *Solarize* Steering Committee, and the county will also support the RFP process. We also expect to run the majority of the program effort by utilizing volunteer efforts (See Volunteer Table below). The *Solarize* Steering Committee and all current working and planning groups fall into this category. We will further be tapping into existing grassroots networks that have pledged their enthusiastic support to the *Solarize* effort, and expect to continue to receive a great deal of tactical resource support from *Solarize Madison*. Letters of support are included with this proposal documenting commitments from the following people and organizations:

Jan Myers (*Solarize Madison* and *Solarize New York*)
Don Barber (Town Supervisor, *Town of Caroline*)
Rebecca Sparrow and Kenneth Schlather (CCETC-*Cornell Coop. Ext. of Tompkins County*)
Jim Holahan (President, IGBA- *Ithaca Green Building Alliance*)
Gay Nicholson (President, *Sustainable Tompkins*)
Steve Nicholson (co-chair, EIC-*Energy Independent Caroline*)
Brian Eden (TCEMC-*Tompkins County Environmental Management Council*)
Hillary Lambert (CLWN-*Cayuga Lake Watershed Network*)
Marie McRae (President, DRAC-*Dryden Resource Awareness Coalition*)
Bill Padulka (Founding Member, ROUSE-*Residents Opposed to Unsafe Shalegas Extraction*)
Marie Terlizzi (PAUSE -*People Advocating the Use of Sustainable Energy*, Newfield)
Ken Zeserson (CCU-*Concerned Citizens of Ulysses*)
Julie Schroeder (ENSAW-*Enfield Neighbors for Safe Air and Water*)

Paid and Volunteer Hours to Run *Solarize Tompkins*

	Project Manager	Volunteers	Guillermo Metz, CCETC	Jan Myers, Consultant	Cornell Assessment Team	Chosen Installer(s)
Project Management & Steering Committee	600	1000	20	--	6	20
Community Purchasing & Contracts Working Group	170	720	--	20	--	--
Administrative Structure (databases, etc)	120	640	--	2	--	--
Community Education and Mobilization Working Group	120	1600	40	4	--	--
Workshop Design and Delivery	160	480	40	10	--	100
Tracking and Communicating with Participants	400	--	--	--	--	--
Installation Inspection	300	300	--	30	--	--
Celebration	20	40	--	--	--	--
Final Evaluation	175	100	8	6	500	--
Total Hours	2065	4880	108	72	506	120

Solarize Tompkins Timeline



Budget for Solarize Tompkins 2014 to mid-2015

		hrs/wk	wks	\$/hour	25% fringe
Project Manager	\$57,057	26.6*	78	\$22	\$11,411
Consultant Fee (Jan Myers)	\$2,000				
Program Assessment (Prof. S. Allred & Students)	\$8,225				
CCETC Community Program Leader (Guillermo Metz)	\$1,100				
Travel to workshops, conferences and giving talks	\$1,500	**			
Legal Fees	\$2,000				
Printing, meetings, database	\$18,000	***			
Final celebration & evaluation	\$2,000				
Total Direct Costs	\$91,882				
Indirect	--				
Total Park Foundation Request	\$91,882				

*Project Manager will be a contract position with achievement milestones and periodic payments. It will not be supervised as an hourly position, but effort-based calculations were included here to show how the contract sum was generated. We anticipate that the position may need to be full time in the first six months of Installer vetting, Solarize Public Meetings, and Enrollment, but can be handled at half time for the subsequent year through the end of Installations estimated in June 2015. The value of 26.5 hrs per week is an average over all 78 months.

** This travel may include sending the key personnel to energy-related conferences, training workshops that would help achieve main goals, and providing support to new groups evaluating *Solarize* and asking for input.

***We have scaled this up based on last year's budget and the magnitude of program expansion. We are serving five times the population this year, but we felt the most expensive items would be scaling with advertising and the number of formal meetings. We anticipate 3 times the number of meetings and scaled accordingly.

Evaluation

We anticipate a tremendous response and expect Tompkins County to set an example statewide in the quest for renewable energy adoption. We will of course gather a full suite of data on numbers of systems and their statistics. More subtly, we wish to know something about the indirect effects of how many people may have been motivated by our meetings, press releases, increased community awareness, and yet, for any of a variety of valid reasons, chosen to use another installer and not the program for their personal action. These, too, we count as victories, for our goal is the adoption of renewable energy and the development of robust markets to do so.

Of even more interest is an evaluation of how attitudes are changed throughout the community, what aspects of our program deployment were most helpful in effecting those changes, and how these methods and lessons can be passed on to other communities and analogous efforts on other energy issues in our own community. To these ends we are partnering with professionals at Cornell University who study community dynamics and personal motivation.

Evaluation of Solarize Tompkins & Solarize pilot program

Professor Shorna Allred of the Human Dimensions Research Unit at Cornell University will undertake a study in collaboration with *Solarize Tompkins* to assess the impact of both the pilot *Solarize Tompkins SE* program, and the countywide *Solarize Tomkins* program. The goal of this evaluation is to determine the key factors and decision points in communication mobilization around adoption of solar technology. This information can help to strengthen the program and will also result in recommendations on how to overcome barriers to adoption. The assessment will focus on gathering data from three distinct groups of people: 1) *Solarize* enrollees, 2) those that sought information about *Solarize* but never enrolled (specifically those that attended public meetings without enrolling), and 3) those that installed solar but not under the *Solarize* program. Enrollees are those that have taken the first step towards a contract by asking for individual assessments from the *Solarize* chosen installer.

Assessment findings will be drawn from questions regarding reasons for participating, reasons for dropping out or not enrolling, tipping points in the decision-making process, barriers to enrollment, and satisfaction and experience with various aspects of the program. We will also investigate the role of formal (website, pamphlets, meetings, invited talks, advertisement) and informal (peer communication, social networks) communication networks on decision-making. Data will be gathered through in-depth interviews of *Solarize* staff and enrollees and a quantitative survey of 1) *Solarize* enrollees, 2) those that sought information about *Solarize* but never enrolled, and 3) those that installed solar but not under the *Solarize* program. The survey data will allow comparison of these three groups (comparing enrollees and those that dropped out or chose another path) as well as a description of barriers encountered, reasons for participating, project strengths and benefits, satisfaction and experience with the program, and any needed improvements to the approach. The comparative analysis will also assess the role of the “grassroots” communication network, such as the local informational meetings and informal communication channels. As part of the evaluation process S. Allred and the research assistant will meet with the *Solarize* staff and board and will present findings and a final report at the conclusion of the project.

Program Assessment Budget (single line-item of \$8,225 in project budget above)

Research Assistant: (full-time intern summer 2014 and hourly during academic year) \$7,000 (\$5,000 in summer and \$1,000 each semester)

Interview transcriptions: \$525

Travel: \$200

Printing and mailing of survey for group three: \$500

	Sample Group	Initial Program (n)	County-wide Program (n)
1	Solarize Tompkins SE Enrollees	291	1,300
2	Sought information (meeting attendees), but did not enroll	150	700
3	Installed solar, but not through Solarize Tompkins SE	20	50

Budget Justification

Dr. Allred will train and supervise a research assistant that will assist with this evaluation project. The employee will work full-time in the summer and as an hourly employee during the academic year.

Approximately 10-15 interviews will be conducted with enrollees and Solarize Tompkins SE staff; the data will be used to inform the questions asked on the survey instrument. Funds are included for transcription of the interviews.

The survey will be administered by web to groups 1 and 2 above; this budget assumes that we will have valid e-mail addresses for groups 1 and 2 but only postal mailing addresses for group 3.

Travel funds are requested to cover local travel via fleet vehicle to conduct interviews.

Background and Qualifications of Principal Personnel

County Liaison

Katherine Borgella, Principal Planner with the Tompkins County Planning Department, has worked in regional planning for over 20 years. She currently coordinates Tompkins County's energy and greenhouse gas emissions initiatives and was the primary author of the Tompkins County 2020 Energy Strategy. Prior to focusing on energy issues, she worked in a wide variety of planning areas including sustainability, agriculture, natural resources, transportation, housing and economic development. Over the course of her career, she has successfully managed many local, state and federal grants in support of various planning initiatives.

Steering Committee Members

Jonathan Comstock- Chair of the *Solarize Tompkins* steering committee. Resident of Caroline. He is a PhD researcher in Horticulture at Cornell, and a co-author on both the Agriculture and Ecosystems chapters of the ClimAID report sponsored by NYSERDA and providing a comprehensive analysis of climate change impacts expected in New York and potential steps for adaptation. He has been a local activist for many years and is co-chair of Energy Independent Caroline.

Marie Terlizzi- Resident of Newfield since 2002. She has lived off-grid since 2008, and founded, with several others in 2011, the Newfield group PAUSE (People Advocating the Use of Sustainable Energy) which has held about 10 educational events on gas drilling since then, as well as one on renewable energy. She was an active participant in writing Newfield's newly adopted Comprehensive Plan (wrote the Industry chapter and contributed to the writing of the chapter on Natural Areas, Geology and Wildlife, also helped with public input sessions). She has a BS in Chemical Engineering and MPS (Masters of Professional Studies) in Environmental and Forest Biology.

Karim Beers- Resident of the City of Ithaca and Coordinator of Get Your GreenBack Tompkins.

Guillermo Metz- Resident of Danby and CCETC Liaison for *Solarize Tompkins*. He is a CCETC Extension Specialist and the Green Building and Renewable Energy Program Coordinator. He has lived off the electrical grid with solar and wind power in Danby since 1999 and was involved in Solarize Tompkins SE.

Brian Eden- Resident of the Village of Cayuga Heights. His current affiliations include: EMC Executive Committee and Chair, Energy Committee (County); Chair, Hillview Road Landfill CAC (County); Ethics Advisory Board (County); and Energy Action Plan Advisory Committee (Town of Ithaca). He lived off-grid from 1975 – 2002 and the sole source of his electricity was from solar panels, from 1980 – 2002

Julie Schroeder-Resident of Enfield. She is a 40 year resident of Tompkins County and has owned and operated Homespun, a retail fabric and yarn shop, in downtown Ithaca for 35 years. She serves on the steering committee for Enfield Neighbors for Safe Air and Water (ENSAW), which led a successful campaign to enact a ban on hydrofracking in Enfield and supports efforts to bring safe renewable energy options to Enfield. She and ENSAW have a good network of communication to town residents that are good candidates for the *Solarize* program.

Marie McRae- Resident of Dryden. She is a farmer in Dryden and founding member of Dryden Resource Awareness Coalition, as well as a member of many other groups that focus on preventing fracking in NY. She is an organizer of Solar Tour Dryden 2013, and a working member of Solarize Tompkins SE 2013

Roxanne Marino- Resident of Ulysses. She is employed as a Senior Research Associate at Cornell, and has resided in Ulysses for 28 years. She has served on the TC Environmental Management Council, TC Water Resources Council, TC Council of Governments, Ulysses Comprehensive Plan Committee, and Ulysses Town Board. Most recently, she served as Ulysses Town Supervisor from Jan 2010 - April 2013, where she led sustainability-based initiatives including a project that put solar panels on the Town Hall and Town Barn, a zoning law amendment to disallow high volume hydraulic fracturing activities in Ulysses, and an amicus brief to the NYS Appellate court on behalf of a coalition of 53 municipalities, in support of municipal home rule with regard to land use authority

Linda Allen Mizer-As a long-time resident of Tompkins County and Senior Lecturer at Cornell University, she shares the strong desire for reduction in energy usage and independence from non-renewable resources. Keeping energy usage to a minimum (she currently heats with a wood burning stove), her “food footprint” to within our local community (she raises her own garden, supplemented by a share in a local CSA, and hunt venison on our own land) she tries to slow and relieve the human impact on our natural resources and offer a helping. She believes being involved with *Solarize Tompkins* will help spur solar energy conversion within our county and contribute to the long-term diminishment in non-renewable energy usage.

Project Manager for Pilot Program, *Solarize Tompkins SE*

Mark Witmer-is a biologist (Ph.D. 1994 on the nutrition and ecology of fruit-eating birds, like Cedar Waxwings and American Robins), currently teaching at Wells College. He is a 10-year resident of Caroline where he lives with his wife, Ann Herzig, and their two daughters, Ruth and Freida. They live in a log cabin warmed by firewood, with warm water and electricity generated by sunlight. He is a member of Caroline's Energy Independent Caroline, Aquifer Protection Committee, and Subdivision Review Board. He is a board member of the Cayuga Lake Watershed Network and helped draft an informed "Position Statement on High-volume Hydraulic Fracturing" that was adopted by the Network last May. He is also on the steering committee of ROUSE and has been active in educating our community about High-volume Hydraulic Fracturing for shale gas.

Consultants

Jan Myers - Has been a key consultant to the steering committee of *Solarize Tompkins SE*, and continues to support efforts for the countywide expansion. We are asking limited travel money and consulting fees to allow her continued active participation. She is the founder of *Solarize New York* and currently the program coordinator for Madison County's *Solarize Madison* campaign. In 2012, she partnered with the Madison County Planning Department, the Central New York Regional Planning and Development Board, the Renewable Energy Training Center at Morrisville State College and received support from NYSES to launch the first Solarize campaign in New York State. The first Solarize campaign was launched in 2009 in South East Portland, Oregon and has since been recognized as a successful volume purchasing solar initiative by the National Renewable Energy Laboratory and the Department of Energy through their Sun Initiative program. She spent three years researching and networking with numerous *Solarize* communities throughout the United States prior to developing and launching *Solarize Madison*.