



## PE4 Action: Green Power Procurement Policy

2 Points

4 Points

### A. Why is this action important?

Adopting a policy to require the use of renewable energy to meet government needs helps drive the expansion of the market for renewable energy. Depending on the scope of the local government's facilities and operations, its purchasing power can be considerable. This type of policy makes a commitment to allocate funding for the purchase of renewable energy, renewable energy credits (RECs), and/or the installation of renewable energy systems. A renewable energy procurement policy is a key action that helps local governments achieve their greenhouse gas (GHG) emissions reduction goals and demonstrates their leadership in supporting the shift to an economy powered by clean, renewable energy.

### B. How to implement this action

The local Climate Smart Communities (CSC) task force and local government staff should begin conversations with elected officials to build support for the purchase or installation of renewable energy. Conversations might include strategies to increase the reliance on renewable energy in phases, to spread costs over time, ensure reliability, and make a smooth transition. The policy could be developed through a larger climate action planning process, or the policy could be a standalone initiative to develop a strategy for scaling up the percentage of energy sourced from renewables and to adopt a policy initiating that process.

The next step is to draft a policy or resolution for adoption by the legislative body. This can be developed by local government staff and/or by an elected official. Also consult with the local government attorney for guidance on drafting and enacting the new policy.

In drafting the policy, local governments should also take into consideration any data on municipal energy use, such as those undertaken for [PE2 Action: Government Operations GHG Inventory](#) and [PE3 Action: Government Building Energy Audits](#) and renewable energy feasibility studies, such as those completed under [PE4 Action: Renewable Energy Feasibility Studies](#). Such analyses should inform the strategy for increasing the use of renewables. If a GHG inventory and/or feasibility study has not been performed, local governments may want to include one as a requirement in the policy.

Local governments may gather input for this policy through engagement with key stakeholders and/or the public at large. They may also want to consider consulting with utilities, state agencies, and green power marketers and brokers.

For this CSC action, the policy must include specific goals and timeframes that define the proportion of government energy use to come from renewable sources. To receive full credit for this action, local governments must also develop a plan for implementing the policy that outlines the approach to increasing the use of renewables in government facilities and operations. This plan could be included in the policy or resolution or could be a standalone document.

Once the policy is finalized and passed, local governments may want to celebrate this accomplishment through a press release or event designed to increase public awareness around the benefits of switching to clean, renewable energy.

### C. Time frame, project costs, and resource needs

The time frame for establishing such a policy depends partly on the level of local support for renewable energy and the quality of information available about the options and the energy needs of local government operations. The costs and resource needs for developing a policy and/or passing a resolution may be considered part of the normal legislative costs. However, some local governments may elect to perform a renewable energy feasibility study as part of developing

the policy, which will require staff time and possibly consultants (see guidance under *PE4 Action: Renewable Energy Feasibility Studies*).

#### **D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?**

This action is applicable to any local government. Staff who manage government's GHG inventories would likely help provide data to inform the policy. Staff from the planning department may be involved in drafting the policy and developing a plan to implement it. The legislative body would facilitate the adoption of the policy.

#### **E. How to obtain points for this action**

Points for this action are tiered based development on the two following components:

	POSSIBLE POINTS
Adopt a resolution or policy to increase government use of renewable energy.	2
Develop a plan or strategy for increasing the use of renewables.	2

#### **F. What to submit**

Submit a policy that is consistent with the guidelines described above and provide evidence that it was formally adopted by the local government. The policy may have been adopted any time prior to the application date. For full points, also submit the plan or strategy for implementing the policy. The implementation plan can be included in the policy or could be a standalone document. Applicants should also provide information on progress toward meeting their renewable energy targets, if applicable.

All CSC action documentation is available for public viewing after an action is approved. Action submittals should not include any information or documents that are not intended to be viewed by the public.

#### **G. Links to additional resources or best practices**

- [US EPA Green Power Procurement](#)
- [DEC CSC Renewable Energy for Climate Smart Communities](#)
- [DEC Renewable Energy - Cutting Pollution, Creating Opportunity](#)

#### **H. Recertification requirements**

The recertification requirements are the same as the initial certification requirements.



## PE4 Action: Renewable Energy Feasibility Studies

3 Points

4 Points

5 Points

### A. Why is this action important?

Prior to implementing any renewable energy technologies, local governments must understand which technologies are most feasible or applicable to their local constraints. A feasibility study evaluates the geographical, technological, financial, and regulatory considerations around implementing renewable energy for government operations.

### B. How to implement this action

Local governments should determine the types of technologies they would like to include in the scope of the study, such as wind, solar, biomass, or geothermal, and then develop a scope of work for the study. Depending on the scope and budget for the study, some local governments may prefer to issue a request for proposals to hire an external consultant with expertise in analyzing and installing renewable energy systems. The consultant should be familiar with various renewable energy technologies, the cost to implement those technologies, and all relevant federal, state, and local regulations.

Local governments should also explore the possibility of working with a local university to analyze renewable energy options. Some graduate level courses include projects with external “clients” to allow professors and students to work on real-world situations. These types of reports can be a useful way to gather some initial information on the feasibility of various technologies; they are not, however, a substitute for a more comprehensive feasibility study performed by an engineer or renewable energy expert. In addition, local governments should consider consulting with utilities, state or federal agencies, and green power marketers and brokers.

In examining the options, local governments should review any data collected on energy use in government operations to determine where renewable energy investments will have the greatest impact and how much power is needed. Such data may have been collected under actions [PE2 Action: Government Operations GHG Inventory](#), [PE3 Action: Government Building Energy Audits](#), and [PE3 Action: Energy Benchmarking for Government Buildings](#).

Local governments can earn points for this Climate Smart Communities (CSC) action by submitting a completed feasibility study that analyzes the potential for at least one, if not more, renewable energy technologies. The study must have been completed within five years of the application date. The study should consider geographical and local considerations, policy considerations, financing options, costs, and risks.

### C. Time frame, project costs, and resource needs

The time frame to complete a renewable energy feasibility study depends on the scope of the analysis. Local governments can estimate approximately 3 to 6 months to complete the study. The project may require a project manager or liaison from the local government and, for most applicants, the expertise of an outside consultant. Local governments could also consider working with a local university with relevant expertise to complete an initial analysis.

### D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any type of local government. Departments such as the sustainability office, planning, purchasing, economic development, or facilities may be involved in implementing this action.

## E. How to obtain points for this action

Points for this action are tiered based on the number of renewable energy technologies analyzed in the feasibility study.

	POSSIBLE POINTS
Conduct a feasibility study for 1 renewable energy technology	3
Conduct a feasibility study for 2 renewable energy technologies	4
Conduct a feasibility study for 3 or more renewable energy technologies	5

## F. What to submit

Submit a copy of a feasibility study report that analyzes the feasibility of at least one renewable energy technology to supply energy for the local government's facilities and operations. The study should consider geographical and local considerations, policy considerations, financing options, costs, and risks. The study must have been completed within five years of the application date

All CSC action documentation is available for public viewing after an action is approved. Action submittals should not include any information or documents that are not intended to be viewed by the public.

## G. Links to additional resources or best practices

- [US EPA On-Site Renewable Energy Generation: A Guide to Developing and Implementing Greenhouse Gas Reduction Programs](#)
- [US EPA RE-Powering America's Land](#)
- [Columbia University CHP in NYC: A Viability Assessment](#)
- [NYSERDA Renewable Energy](#)

## H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.



## PE4 Action: Renewable Energy Credits

2 Points

3 Points

5 Points

7 Points

### A. Why is this action important?

A renewable energy credit (sometimes referred to as a renewable energy certificate or "green tag") is an environmental commodity that represents the added value, environmental benefits and cost of renewable energy above conventional methods of producing electricity, namely burning coal, oil and natural gas. Renewable energy credits, or RECs, help wind farms and other renewable energy facilities grow by making them more financially viable, thereby incentivizing development of renewable energy sources. Renewable energy facilities generate RECs when they produce electricity. Purchasing these credits is the widely accepted way to reduce the environmental footprint of electricity consumption and help fund renewable energy development. For jurisdictions that are unable or elect not to install their own renewable energy systems, purchasing RECs allows them to offset their energy consumption by supporting the production of more renewable energy nationally. Purchasing certified RECs ensures that the RECs meet certain quality standards and were produced using accepted renewable energy technologies.

### B. How to implement this action

Local governments seeking to reduce greenhouse gas (GHG) emissions by increasing their use of renewables should evaluate the costs and benefits of installing renewable technology locally versus purchasing RECs. For local governments that do not have suitable conditions for renewable technologies such as wind or solar, or who do not want to go through the process of installing renewable energy systems locally, RECs could be a good option.

RECs command a lower price premium than other green power options, such as onsite systems, for several reasons: 1) RECs have no geographic constraints and therefore can provide access to the least expensive renewable resources; 2) the supplier does not have to deliver the power to the REC purchaser, avoiding the associated transmission and distribution costs; 3) the supplier is not responsible for meeting the purchaser's electricity needs on a real-time basis; and 4) REC prices reflect greater competition because RECs are fungible in a voluntary market.

Local governments should determine the amount of renewable energy they seek to purchase and negotiate the purchase of the RECs in conjunction with their annual or renewed electricity purchase agreement. Data on the amount of electricity consumed by the local government per year may be found in the GHG inventory produced under [PE2 Action: Government Operations GHG Inventory](#). Applicants for this Climate Smart Communities (CSC) action must provide information on the local government's average annual electricity use because points are tiered based on the percentage of the local governments' average annual electricity use that is covered by the RECs.

The cost of renewable energy can fluctuate, so local governments should monitor the market and determine the quantity of renewable energy they can purchase. Some local governments may aim to establish an annual renewable energy target, such as 25 percent, and then find the most cost-effective approach to meeting that target.

The following factors should be considered when purchasing RECs:

- Duration of contract
- Quantity of renewables
- Renewable energy source
- Certification and vintage of the RECs

To earn points for this CSC action, the RECs must be certified by [Green-e](#) (or the equivalent). Green-e is a program of the

nonprofit Center for Resource Solutions that acts as a standard setting body and verifies the validity of RECs.

### C. Time frame, project costs, and resource needs

The time frame to purchase RECs may depend on the process the local government follows to establish a contract to purchase electricity every year. Local governments may elect to sign a contract to purchase RECs for several years at a certain price to lock in a price and minimize the effort in the future to renegotiate the contract. The cost for purchasing RECs depends on the amount and length of the contract, along with the current market price for RECs.

### D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government. The department with the responsibility for purchasing energy for government owned facilities is most likely to be responsible for managing the purchase of RECs. However, a representative from the chief elected official's office and/or the sustainability office may also be involved in the analysis and planning for the REC purchase agreement.

### E. How to obtain points for this action

The points for this CSC action are tiered based on the percentage of the local governments' average annual electricity use that is covered by the RECs.

	POSSIBLE POINTS
Purchase RECs for 10-14% of total electricity use	2
Purchase RECs for 15-29% of total electricity use	3
Purchase RECs for 30-49% of total electricity use	5
Purchase RECs for 50% or more of total electricity use	7

### F. What to submit

Submit documentation of the purchase of RECS that are certified by Green-e (or equivalent reputable source). Provide data on the total average electricity use by government operations that was used as the basis for calculating the percentage of the electricity use that is covered by the RECs.

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### G. Links to additional resources or best practices

- [Green-e](#)
- [US DOE Renewable Energy Certificates](#)
- [US EPA Renewable Energy Certificates](#)

### H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.



## PE4 Action: Geothermal Installation

9 Points

14 Points

17 Points

19 Points

20 Points

### A. Why is this action important?

Geothermal technology harnesses the energy of the earth to provide for heating and cooling needs. Geothermal heat pumps take advantage of the relatively constant temperature (50-60°F) of the Earth's surface layer as a heat source in winter and a heat sink in summer. Fluid circulates through wells to reach this moderate temperature, requiring less energy from electricity, gas, or oil for heating and cooling. Geothermal heat pumps are also known as ground-source heat pumps, low-temperature geothermal, or geo-exchange systems. Investments in geothermal heating and cooling often produce significant net cost savings due to the high efficiency of ground-source heating and cooling and the long-term reduction in energy costs. Other benefits of implementing geothermal technology include increasing the demand for renewable energy, lowering greenhouse gas (GHG) emissions, and leading by example.

### B. How to implement this action

Local governments considering retrofitting or remodeling an existing building, or in the process of designing a new building, should consider a variety of renewable energy options, based on their heating and cooling needs. Working with the engineering and design team, local government staff should evaluate whether geothermal technology is appropriate for the building, location, and climate through a feasibility study. Local governments should also assess the payback period and policy considerations for such technology and consider how it could be used as an example for other buildings or projects in the community. Such assessments may be part of [PE4 Action: Renewable Energy Feasibility Studies](#).

NYSERDA offers information about [ground source heat pumps](#) and may be available to offer technical and financial assistance. [NYSERDA Ground Source Heat Pump \(GSHP\) Rebate](#) is not available directly to building or site owners but local governments should work with [NYSERDA-approved designers and installers](#) who can take advantage of the rebate.

Local governments might also want to consult with [NY-GEO](#), a nonprofit trade association dedicated to promoting the use of ground-source heat pumps to heat and cool buildings in New York State. The members of NY-GEO include geo designers, installers, manufacturers, drillers consultants and distributors, interested in promoting the use of ground-source heat pumps to heat and cool buildings in New York State.

Points for Climate Smart Communities (CSC) action are awarded for installing geothermal technology at new or existing facilities owned by the local government. As long as the geothermal system is currently in use, the installation may have been completed at any time to be eligible for points. The system must be installed by a certified geothermal installer. Information on qualified installers is available via [NYSERDA's list of approved designers and installers](#), the [International Ground Source Heat Pump Association](#), and the [Geothermal Heat Pump Consortium](#).

In addition, for each installation, local governments must display signage describing the installation and must announce the installation(s) to help build awareness in the community of the benefits of geothermal technology. The signage can be a simple, low-cost poster that describes the technology and informs visitors to the facility that it is heated and cooled by a geothermal system. At minimum, a press release announcing the installation must be issued as part of the effort to educate the community about the local government's investment in renewable energy.

### C. Time frame, project costs, and resource needs

The time frame, project costs, and resource needs depend on whether the geothermal technology is implemented in a new or existing facility, and the size or output of the system. Local governments should work with their contractors or

consultants to develop an estimate for the additional cost and payback period for the proposed geothermal technology.

#### **D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?**

This action is applicable to any local government that owns and operates buildings. Departments of facilities or public works would likely implement this action.

#### **E. How to obtain points for this action**

Points for this action are tiered based on the number of geothermal installations at facilities owned by the local government and implemented in a manner consistent with the requirements described above.

	POSSIBLE POINTS
Install geothermal technology at 1 new or existing public facility	9
Install geothermal technology at 2 new or existing public facilities	14
Install geothermal technology at 3 new or existing public facilities	17
Install geothermal technology at 4 new or existing public facilities	19
Install geothermal technology at 5 new or existing public facilities	20

#### **F. What to submit**

Submit a brief description of the geothermal installation(s), including location, installation date, size, specification or purchase documents, and, if available, estimates of energy savings. Show that the installation is be actively in use at the time of application. Provide evidence that a qualified installer was employed, by referring to [NYSERDA's list of approved designers and installers](#), the [International Ground Source Heat Pump Association](#) or the [Geothermal Heat Pump Consortium](#).

For each installation, also submit one photograph of posted educational signage and a description of activities announcing the installation for public education.

All CSC action documentation is available for public viewing after an action is approved. Action submittals should not include any information or documents that are not intended to be viewed by the public.

#### **G. Links to additional resources or best practices**

- [NYSERDA Ground Source Heat Pump \(GSHP\) Rebate](#): This initiative only provides rebates to eligible GSHP designers and installers approved by NYSERDA. Funding is not available directly to building owners or site owners, but NYSERDA offers information about [ground source heat pumps](#) and has a list of [approved designers and installers](#).
- [US Department of Energy Geothermal Heat Pumps Fact Sheet](#)
- [US Department of Energy Geothermal Technologies Program](#)
- [National Groundwater Association Geothermal Heat Pump Consortium Case Studies](#)
- [International Ground Source Heat Pump Association Business Directory](#)
- [Geothermal Heat Pump Consortium Business Directory](#)

#### **H. Recertification requirements**

The recertification requirements are the same as the initial certification requirements.



## PE4 Action: Solar Energy Installation

9 Points

14 Points

17 Points

19 Points

20 Points

### A. Why is this action important?

By displacing energy from fossil fuel sources, the use of solar energy reduces air pollution and greenhouse gas (GHG) emissions. Solar photovoltaic (PV) panels transform solar radiation into electricity and are appropriate for many types of public facilities, including schools and public buildings. Solar hot water systems (also known as solar thermal systems) use roof-mounted solar collectors that rely on the sun's energy to produce hot water in buildings. When local governments install solar technologies, they increase the demand for renewable energy and set a positive example for residents and businesses in the community.

### B. How to implement this action

The first step is to perform a feasibility study and determine if solar hot water or solar photovoltaic technology is suitable for the local government and for the possible siting locations. Such assessments may be part of [PE4 Action: Renewable Energy Feasibility Studies](#).

If the study determines that solar technology is feasible, then the next step is to confirm the location on a new or existing public building or public property. Many local governments elect to install the solar technology on top of city hall or a similar prominent public building, to demonstrate to the public the government's commitment to energy conservation. Local governments should select and work with a NYSERDA approved contractor who can assist in determining the size of the system and how it will interact with the grid, particularly if the installation will produce a surplus of electricity for the building.

Consult the [NYSERDA NY-Sun Solar Guidebook for Local Governments](#) for guidance. If you have a question or need help with a chapter of the Guidebook, contact [solarhelp@nyserda.ny.gov](mailto:solarhelp@nyserda.ny.gov).

Local governments will want to analyze the costs and payback periods for such an installation and consider the co-benefits of the system, such as how it can be used as an example for other projects in the community. Maintenance, operation, public trust requirements and insurance should also be taken into consideration when developing and designing a solar system.

Local governments are advised to consult their municipal attorneys to ensure that all issues related to this use on public lands, including effects on resources held in the public trust are resolved.

Points for Climate Smart Communities (CSC) action are awarded for installing solar technology at new or existing facilities owned by the local government. As long as the system is currently in use, the installation may have been completed at any time to be eligible for points.

In addition, for each installation, local governments must display signage describing the installation and must announce the installation(s) to help build awareness in the community of the benefits of solar technology. The signage can be a simple, low-cost poster that describes the technology and informs visitors to the facility that it utilizes that technology. At minimum, a press release announcing the installation must be issued as part of the effort to educate the community about the local government's investment in renewable energy.

### C. Time frame, project costs, and resource needs

The time frame, project costs, and resource needs depend on whether the solar hot water or PV technology is implemented in a new or existing facility, and the size or output of the system.

#### **D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?**

This action is applicable to any local government that owns and operates buildings. Environmental departments, or departments of engineering, facilities, or public works would likely implement this action.

#### **E. How to obtain points for this action**

Points for this action are tiered based on the number of solar (PV or hot water) installations at facilities owned by the local government and implemented in a manner consistent with the requirements described above.

	POSSIBLE POINTS
Install solar technology at 1 new or existing public facility or public property	9
Install solar technology at 2 new or existing public facilities or public properties	14
Install solar technology at 3 new or existing public facilities or public properties	17
Install solar technology at 4 new or existing public facilities or public properties	19
Install solar technology at 5 new or existing public facilities or public properties	20

#### **F. What to submit**

Submit a brief description of the solar installation(s), including location, installation date, size, specification or purchase documents, and, if available, estimates of energy savings. Show that the installation is be actively in use at the time of application. Provide evidence that a qualified installer was employed.

For each installation, also submit one photograph of posted educational signage and a description of activities announcing the installation for public education.

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#### **G. Links to additional resources or best practices**

- [NYSERDA NY-Sun Solar Guidebook for Local Governments](#)
- [NYSERDA NY-Sun program](#)
- [NYSERDA Solar Hot Water \(Thermal\) System Installers](#)
- [US DOE Solar Water Heaters](#)
- [US DOE SunShot Initiative](#)
- [National Renewable Energy Laboratory US Department of Energy NREL Solar Research](#)
- [American Solar Energy Society](#)
- [Solar Electric Power Association](#)
- [NREL, State & Local Governments, State Solar Technical Assistance](#)
- [US EPA On-Site Renewable Energy Generation](#)
- [Western City, 10 Questions to Ask Before Installing Solar Power on Agency Facilities](#)

#### **H. Recertification requirements**

The recertification requirements are the same as the initial certification requirements.



## PE4 Action: Power Purchase Agreement for Renewables

9 Points

14 Points

17 Points

19 Points

20 Points

### A. Why is this action important?

Becoming a host site and entering into a long-term power purchase agreement (PPA) offers a way to invest in renewable energy without dealing with the financing, ownership, operation, and maintenance of a solar, PV, wind or other type of renewable energy system. Under a PPA, a third party, or the local utility, becomes the provider, and the local government agrees to purchase electricity from the provider. A PPA can expedite the installation process and reduces the risks and costs for the government around the implementation, operation, and maintenance of the system. Using renewable energy through a PPA also helps to increase the demand for renewable energy and supports the growth of local green jobs.

### B. How to implement this action

Prior to entering into a PPA, local governments should perform a feasibility study to determine which type of renewable energy is appropriate for the proposed site(s) and within the financial and policy constraints of the jurisdiction. If the government determines that a PPA is feasible, the local government in conjunction with the provider should determine the size of the system, location, and costs. Local governments may elect to host the installation on a new or existing building, and should consider installing the technology in a prominent location, such as city hall to utilize the installation as an educational opportunity.

Local governments should take the following factors into consideration when establishing a power purchase agreement:

- Length of agreement
- Pricing escalation rate
- Maintenance and repair costs
- Estimated output
- Production guarantees
- Insurance
- Public trust requirements

Points for this Climate Smart Communities (CSC) action are available for executing a PPA and providing public property for the renewable energy system. The renewable energy system must be actively in use to receive points for this action. Local governments can receive points for solar, wind, geothermal, small hydro, and wood pellet renewable energy, purchased through a power purchase agreement.

### C. Time frame, project costs, and resource needs

The time frame, project costs, and resource needs depend on whether the solar, PV, or wind system is implemented in a new or existing facility, and the size or output of the system.

### D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Applicable to any local government empowered to enter into long-term agreements with a power provider and owning property appropriate for hosting a renewable energy installation. Environmental departments, or departments of facilities or public works would likely implement this action.

## E. How to obtain points for this action

Points for this action are tiered based on the number of PPAs and renewable energy installations on property owned by the local government.

	POSSIBLE POINTS
Enter into a PPA and provide public property for 1 renewable energy system installation	9
Enter into PPA(s) and provide public property for 2 renewable energy system installations	14
Enter into PPA(s) and provide public property for 3 renewable energy system installations	17
Enter into PPA(s) and provide public property for 4 renewable energy system installations	19
Enter into PPA(s) and provide public property for 5 renewable energy system installations	20

## F. What to submit

Local governments should submit a copy of the power purchase agreements that outlines the duration of the contract, energy load and location of the system, and other relevant details. Show that the energy installation(s) are actively in use.

All CSC action documentation is available for public viewing after an action is approved. Action submittals should not include any information or documents that are not intended to be viewed by the public.

## G. Links to additional resources or best practices

- [US DOE NREL Power Purchase Agreement Checklist for State and Local Governments](#)
- [US DOE Solar Photovoltaic Financing: Deployment on Public Property by State and Local Governments](#)
- [US DOE SunShot Initiative](#)
- [US EPA Collaborative Procurement Initiative](#)

## H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.



## PE4 Action: Wind Energy Installation

9 Points

14 Points

17 Points

19 Points

20 Points

### A. Why is this action important?

By displacing energy from fossil fuel sources, the use of wind energy reduces air pollution and greenhouse gas (GHG) emissions. Small wind systems are suitable for a broad range of locations. They can generate up to 100 kilowatts of electricity via turbines mounted on 30- to 140-foot towers. Such turbines can be used in standalone applications or connected to the public energy grid. As the technology improves, wind power grows more viable, with systems that are quieter, more efficient, and less expensive. When local governments install wind technologies, they increase the demand for renewable energy and set a positive example for residents and businesses in the community.

### B. How to implement this action

The first step in this process is to perform a feasibility study to determine if a wind installation is appropriate for the jurisdiction and identified location(s). This feasibility study will consider possible locations, winds, costs, permitting and other restrictions, and other related factors to implementing the system. Such assessments may be part of implementing [PE4 Action: Renewable Energy Feasibility Studies](#).

If the study concludes that a wind installation is feasible, the local government will want to select a suitable site for the installation. This can be on a new or existing public building or public property. Many local governments elect to install the wind technology in a prominent location, to demonstrate to the public the government's commitment to renewable energy sources. Local governments should check if the incentives available through the [NYSERDA Small Wind Turbine Program](#) might apply to their project.

Local governments should select and work with a reputable contractor who can assist in determining the size of the system and how it will interact with the grid, particularly if the installation produces a surplus of electricity for the building or property. Find qualified installers on [NYSERDA's list of small wind turbine installers](#).

Maintenance, operation, public trust requirements and insurance should also be taken into consideration when planning the installation. Local governments are advised to consult their municipal attorneys to ensure that all issues related to this use on public lands, including effects on resources held in the public trust are resolved.

Points for Climate Smart Communities (CSC) action are awarded for installing wind technology at new or existing facilities owned by the local government. As long as the system is currently in use, the installation may have been completed at any time to be eligible for points.

In addition, for each installation, local governments must display signage describing the installation and must announce the installation(s) to help build awareness in the community of the benefits of wind technology. The signage can be a simple, low-cost poster that describes the technology and informs visitors to the facility that it utilizes that technology. At minimum, a press release announcing the installation must be issued as part of the effort to educate the community about the local government's investment in renewable energy.

### C. Time frame, project costs, and resource needs

The time frame, project costs, and resource needs depend on whether the wind technology is implemented in a new or existing facility, and the size or output of the system.

#### **D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?**

This action is applicable to any local government that owns and operates property where a wind installation is feasible. Environmental departments, or departments of facilities or public works would likely implement this action.

#### **E. How to obtain points for this action**

Points for this action are tiered based on the number of wind installations at facilities owned by the local government and implemented in a manner consistent with the requirements described above.

	POSSIBLE POINTS
Install wind energy system at 1 new or existing public facility or public property	9
Install wind energy systems at 2 new or existing public facilities or public properties	14
Install wind energy systems at 3 new or existing public facilities or public properties	17
Install wind energy systems at 4 new or existing public facilities or public properties	19
Install wind energy systems at 5 new or existing public facilities or public properties	20

#### **F. What to submit**

Submit a brief description of the wind installation(s), including location, installation date, size, specification or purchase documents, and, if available, estimates of energy savings. Show that the installation is be actively in use at the time of application. Provide evidence that a qualified installer was employed.

For each installation, also submit one photograph of posted educational signage and a description of activities announcing the installation for public education.

All CSC action documentation is available for public viewing after an action is approved. Action submittals should not include any information or documents that are not intended to be viewed by the public.

#### **G. Links to additional resources or best practices**

- [NYSERDA Small Wind Turbine Program](#)
- [NYSERDA Small Wind Turbine Installers](#)

#### **H. Recertification requirements**

The recertification requirements are the same as the initial certification requirements.



## PE4 Action: Wood Pellet Installation

6 Points

11 Points

14 Points

16 Points

17 Points

### A. Why is this action important?

For communities that do not have access to the natural gas grid, many buildings use fossil heating fuels, such as oil or propane, for space heating. These fuels are often expensive, unstable in pricing, and produce high levels of greenhouse gas (GHG) emissions. Biomass fuels can be a viable alternative that are local and renewable. Biomass is any biological material that can be used as fuel—including grass, corn, wood, and biogas as well as other forestry and agricultural residues. Wood pellets are a common type of biomass and are currently the only form of biomass recommended by NYSERDA for commercial and non-residential systems.

### B. How to implement this action

The first step in this process is to contact [NYSERDA's Renewable Heat NY](#) program to learn about any incentives or guidance the state has around wood pellet heating systems. This is an evolving technology and NYSERDA is conducting ongoing research.

A feasibility study is recommended to determine if a wood pellet heating installation is appropriate as an energy source for the local government's operations. This feasibility study should consider possible locations, available materials, proximity to the wood pellet source, costs, permitting and other restrictions, and other related factors to implementing the system. Local governments are advised to consult their municipal attorneys to ensure that all issues related to this use on public lands, including effects on resources held in the public trust are resolved. Such assessments may be part of implementing [PE4 Action: Renewable Energy Feasibility Studies](#).

If the study concludes that a wood pellet installation is feasible, the local government should select a suitable site for the installation along with a contractor to develop and implement the system.

**PLEASE NOTE: Bulk wood pellets in storage may release dangerous levels of carbon monoxide. Outdoor storage is strongly advised.** Under the Renewable Heat NY program, NYSERDA requires all bulk pellet storage to be located outside of the building, due to concerns regarding carbon monoxide exposure and the absence of a documented effective ventilation strategy for pellet storage. For more information from the New York State Department of Health, please see [Carbon Monoxide Hazards from Wood Pellet Storage](#).

Points for Climate Smart Communities (CSC) action are awarded for installing solar technology at new or existing facilities owned by the local government. As long as the system is currently in use, the installation may have been completed at any time to be eligible for points.

To be eligible for CSC points, for each installation, local governments must display signage describing the installation and must announce the installation(s) to help build awareness in the community of the benefits of wood pellet technology. The signage can be a simple, low-cost poster that describes the technology and informs visitors that the facility utilizes that technology. At minimum, a press release announcing the installation must be issued as part of the effort to educate the community about the local government's investment in renewable energy.

### C. Time frame, project costs, and resource needs

Installing a wood pellet system involves securing a source for the wood pellets and installing the system, which can take around two to three months. The costs depend on the price of the wood pellets at the time, and the price of the traditional

fuel source that would otherwise be used, such as heating oil or natural gas. In many cases, wood pellets can offer a significant saving over fossil heating fuels.

#### **D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?**

This action is applicable to any local government that owns and operates property where a wood pellet installation is feasible. Environmental departments, or departments of facilities or public works would likely implement this action.

#### **E. How to obtain points for this action**

Points for this action are tiered based on the number of wood pellet installations at facilities owned by the local government and implemented in a manner consistent with the requirements described above.

	POSSIBLE POINTS
Install a wood pellet heating system at 1 new or existing public facility or public property	6
Install wood pellet heating systems at 2 new or existing public facilities or public properties	11
Install wood pellet heating systems at 3 new or existing public facilities or public properties	14
Install wood pellet heating systems at 4 new or existing public facilities or public properties	16
Install wood pellet heating systems at 5 new or existing public facilities or public properties	17

#### **F. What to submit**

Submit a brief description of the wood pellet installation(s), including location, installation date, size, specification or purchase documents, and, if available, estimates of energy savings. Show that the installation is be actively in use at the time of application. Provide evidence that a qualified installer was employed.

For each installation, submit one photograph of posted educational signage and a description of activities announcing the installation for public education.

All CSC action documentation is available for public viewing after an action is approved. Action submittals should not include any information or documents that are not intended to be viewed by the public.

#### **G. Links to additional resources or best practices**

- [NYSERDA Renewable Heat NY](#) : This webpage describes the available incentives, as well as information on qualified installers/contractors.
- [Massachusetts Division of Energy Resources, Wood Pellet Heating Guidebook](#)
- [Biomass Energy Resource Center Case Studies](#)
- [US EPA Combined Heat and Power](#)
- [US EPA Biomass CHP Catalog of Technologies](#)

#### **H. Recertification requirements**

The recertification requirements are the same as the initial certification requirements.