



## 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 study, and then develop a scope of work for the study. Renewable energy technologies may include wind, solar, biomass, geothermal, and related storage technologies, such as battery storage.

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.