

# Sierra Nevada Conservancy Performance Measures Description

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## Kilowatts of Renewable Energy Production Capacity Maintained or Created

### Purpose

The purpose of this Performance Measure (PM) is to measure the amount, in kilowatts, of renewable energy produced as a result of a project. This PM is based on the California Energy Commission's (CEC's) standards for renewable energy eligibility and includes energy generation capacity from biomass, wind, solar, small hydroelectric and other qualifying sources.

### Likely Project Categories

This PM would likely be applicable for projects in the following categories:

- Acquisition projects
- Site improvement/restoration

### Guidance on Applying this PM to Your Project

The following is a recommended approach to collecting data and reporting on this PM. If your project requires unique steps or considerations, please discuss them with your SNC project manager.

- Data collection: Data for this PM should be collected from the project's as-built engineering plans for the facility or through contracts with forestry suppliers to deliver biomass at a specific rate.
- Analysis: For a biomass project, the grantee should show how biomass delivery rates convert to energy production capacity. The recommended equation for making this calculation is shown below, but alternatives exist and can be discussed with your SNC project manager.

$$(\text{Biomass Tons}) \times (5040 \text{ Kwh/Ton}) \times (33\%) = \text{Capacity (Kwh)}$$

This equation is based on the biomass delivered, times the average energy content of wood, times an average powerplant efficiency factor. If your energy content or powerplant efficiency are different than these values, they should be adjusted.

- **Reporting:** Report the data collected/calculated above as well as:
  - a. Copies of as-built engineering plans to verify the capacity generated.
  - b. Copies of legal contracts describing delivery rates of biomass that can sustain the renewable energy capacity declared.

### **Other**

Projects should qualify for renewable energy generation capacity under the definitions provided in Chapter II of the most current edition of the California Energy Commission's Renewables Portfolio Standard Eligibility Guidebook. This guidebook is available at:

California Energy Commission (CEC) 2008. Renewables Portfolio Standard Eligibility Guidebook. Third Edition. January 2008. Sacramento, CA.  
<http://www.energy.ca.gov/renewables/documents/index.html#rps>.

Reporting this performance measure will require very little effort from the grantee. It is expected that reporting the project will require much less than 40 hours of grantee time. Once engineering plans are available, no specific technical expertise is needed to report the data. Reporting for biomass projects will be more complex than other project varieties, because some calculations are necessary to convert biomass delivery rates to energy capacity. However, even biomass projects should not require more than 40 hours to report all necessary information.