

# Frequently Asked Questions

Recurrent Energy's solar energy system at San Francisco's Sunset Reservoir



RECURRENT  
ENERGY

## PROJECT DESCRIPTION

**What is the significance of this solar energy project?**

The City of San Francisco has decided to locate a 5 megawatt (MW) solar photovoltaic (PV) system located on top of the north basin of Sunset Reservoir, the City's largest reservoir. Upon completion in 2010, with nearly 25,000 solar panels installed covering an area the size of 12 football fields, the Sunset Reservoir Solar Project will be California's largest solar PV system and the nation's largest municipal solar project. With this installation, the total municipal solar generation in San Francisco will more than triple from the current 2 MW to 7 MW. Over the 25-year life of the project, the system will reduce carbon emissions by more than 109,000 metric tons, equivalent to taking more than 1,000 typical San Francisco residences off the grid. By hosting a system of this size — the fifth largest of its type in

the U.S. — the City of San Francisco establishes itself as a national leader in PV implementation.

**Who will use this electricity?**

The solar power system is a public power project, so electricity will be provided to SFPUC and distributed to San Francisco municipal users like the General Hospital, San Francisco International Airport, the Port of San Francisco, Muni light rail, and city schools.

**Why was this location selected?**

This location was chosen because it is one of the largest reservoirs and rooftops owned by the City. The recent seismic upgrade of the roof over the Sunset Reservoir's north basin makes it strong enough for the installation of solar panels. While located in the Sunset district, the solar resource is still very good, on average only 15% lower than the sunniest areas of the City.



*Aerial view of Sunset Reservoir with digital rendering of solar array*

**What is Recurrent Energy's role in the project?**

Recurrent Energy will lease the site from the City and will be the owner and operator the solar power system. Recurrent Energy will sell electricity generated by the system to SFPUC. The City will receive clean solar power with no upfront cost, operating expense, or maintenance burden.

**Why doesn't the City own the system?**

If San Francisco were to build or purchase the system outright, it would not be able to take advantage of substantial incentives offered by the federal government. Under the current incentive structure, it costs significantly less for a municipality to partner with a private company than to own a solar power project independently.

**INSTALLATION & SUSTAINABILITY**

**How many new green jobs will be created?**

Local San Francisco-based companies including Bass Electric have been chosen by Recurrent Energy for installation and have indicated that they plan to hire over 71 people, including electricians, laborers and operators. In addition to receiving skill

training on the job, the apprentices and journeyman are provided trade related classroom training to ensure true craftsmanship. All of these new jobs will be at prevailing wage. San Francisco workforce development program First Source will be utilized, providing green jobs for San Francisco residents. A minimum of 21 hires will be conducted through the City of San Francisco's CityBuild Initiative, which will include active recruitment from economically disadvantaged neighborhoods in San Francisco.

**What will the project look like?**

The solar modules are unobtrusive and sit near

the surface of the reservoir roof. From most sides of the reservoir, they will not be visible and they will not obstruct any views. Project renderings can be seen below and on the preceding page.

**Does this project help San Francisco meet greenhouse gas or renewable goals?**

The project conforms to City policy objectives on Greenhouse Gas Reduction. San Francisco City Resolution 158-02, 2002 sets a citywide goal of 20% below 1990 levels of Greenhouse Gasses by 2012. The City will receive all Renewable Energy Credits (RECs) generated by this project. According to national data provided by the U.S. EPA, the solar

energy system is expected to reduce carbon emissions by more than 109,000 metric tons. This is equivalent to removing more than 740 automobiles from operation or preserving over 30 acres of forest from deforestation.

**Why does the system need to be located within the city?**

The City needs electricity generated inside San Francisco. Starting in 1998, the City made efforts to shutter old polluting power plants within San Francisco. In 2006, Hunter's Point power plant was permanently closed and subsequently demolished. The Potrero Hill power plant was also under discussion for closure, but the California Independent System Operator (Cal-ISO) has determined that the Potrero Hills power plant cannot be decommissioned until new transmission or generation is added within San Francisco. This project will add much needed generation within the City of San Francisco.

**Are there other reasons why the City is doing this?**

The project will also support San Francisco Mayor Newsom's Executive Directive 05-107: Municipal Rooftops for Municipal Solar, 2005. This directive sets a commitment to increasing

the pace of municipal solar development. Moreover, this project supports Mayor Newsom's Clean Energy, Clean Air Policy requiring all city government power to come from clean renewable sources by 2010.

**Why was Recurrent Energy chosen?**

The project was competitively bid in the spring of 2008. Recurrent Energy was selected based on lowest cost. Recurrent Energy has strong financing and development relationships in place, thanks in part to recent successful solar projects in Northern California. These relationships enable the company to develop large-scale projects such as Sunset Reservoir much more efficiently and economically than local utilities or municipalities.

**Sunset Reservoir Solar Project Advocates:**

- > Mayor Gavin Newsom
- > Carmen Chu, Supervisor - District 4, Sunset/Parkside District
- > Supervisors Michela Alioto-Pier, David Chiu, Bevan Dufty, Sean Elsbernd, Eric Mar, and Sophie Maxwell
- > A. Philip Randolph Institute
- > Apollo Alliance
- > Brightline Defense
- > Dogpatch Neighborhood Association
- > Ella Baker Center for Human Rights
- > Green for All
- > Greenlining Institute
- > IBEW
- > Luminalt
- > Presidio School of Management
- > San Francisco Community Power
- > Sierra Club
- > Southeast Jobs Coalition
- > StrateGen
- > Union of Concerned Scientists
- > Visitacion Valley Job Net
- > Vote Solar



*Simulated view of solar array from Quintara Street near 26th Avenue*