

Legislation Text

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DATE OF MEETING: 10/28/19

SUBJECT:

UPDATE ON YEAR FIVE RESULTS OF THE MUNICIPAL SOLAR PROJECT (PW 611)

CITY MANAGER RECOMMENDATION

For Informational Purposes Only

COMPLIANCE STATEMENTS

FY 2019-21 Council Priority Workplan Compliance Statement

Enhance Community Resilience (Item 202, "Develop long-term Environmental Stewardship Goals") is an adopted policy item contained in the FY 2019-21 Adopted City Council Priority Workplan, effective March 1, 2019.

CEQA Compliance Statement

This update is not a project and is for informational purposes only, and, therefore, does not require CEQA clearance. However, the original project (PW 611) was determined to be categorically exempt in accordance with Sections 15301 and 15303 of the CEQA Guidelines, on the basis that these projects are exterior alterations to existing structures and new accessory structures at existing sites.

BACKGROUND

Introduction:

The City of San Pablo, in partnership with the cities of El Cerrito, Albany, and Piedmont, was awarded a grant funded by the United States Environmental Protection Agency's (EPA) Climate Showcase Communities Program to establish the Small Cities Climate Action Partnership (SCCAP). As part of the SCCAP's municipal emissions reduction activities, the partnership worked with an independent solar consulting firm, Optony Inc., to evaluate the technical and economic feasibility of installing photovoltaic (PV) on all facilities in each city. On September 6, 2011, the City Council received the results of the study and adopted Resolution 2011-094 authorizing the City Manager to enter into a Cooperative Agreement with the other SCCAP cities to jointly solicit proposals for the procurement of municipal solar power.

In 2012, based on the findings from the solar feasibility report, the City Council approved the installation of a total of 325kW of solar PV power at three City sites:

- City Hall - 13831 San Pablo Avenue
- San Pablo Police Department - 13880 San Pablo Avenue
- Church Lane Senior Center - 1943 Church Lane

With estimated costs of \$1.78 million, the feasibility report demonstrated that solar at these sites would provide substantial utility bill savings over 30 years.

Construction on the Municipal Solar Project started in July 2013 and was completed in November 2014. The completed project installed 320kW solar PV power at a total cost of \$1.7 million dollars.

Solar Analysis Update:

Since the completion of the project, City staff has been monitoring the solar PV system to analyze if the project is meeting the intended outcomes. The project has been tracked according to the 2012-2013 baseline year. **Table 1** shows the baseline electricity consumption/costs and the projected PV production and cost savings for the project.

Table 1 - Municipal Solar Project Projected Outcomes

	Baseline/ Projected	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	Baseline Comparison	Previous Year Compariso n
Annual Usage (kWh)	626,872	667,114	695,421	690,018	703,498	700,121	90%	100%
Annual PV Generated (kWh)	437,244	428,340	423,167	431,050	438,395	408,360	93%	93%
Annual Savings (\$)	\$87,826	\$88,845	\$88,586	\$95,620	\$97,213	\$91,302	104%	93%

Findings:

After collecting five years of data, it was established that the Municipal Solar Project is saving more money than expected and within the margin of error for electricity production. If the current results are extrapolated over the 30-year lifetime of the project, this solar system is expected to provide over \$3 million dollars in cost savings for the City of San Pablo.

These amounts will change by a small amount once city staff move from the existing City Hall site (which has some solar) to the new City Hall site. The significant majority of the solar panels at the existing City Hall site are installed over the parking lot shared with Las Montañas Hispanic Foods Supermarket and will be unaffected by the move and ultimate demolition of the non-historic buildings on the existing site. The small number of panels that are currently installed on Building 5 will need to be removed prior to demolition and staff will make every effort to re-use the panels. The overall impact of the loss of those panels, if they cannot be re-used, would be less than 5% of the generation at the current City Hall site, which itself is relatively small portion of the overall City solar project.

FISCAL IMPACT

This is an informational item only - therefore there is no fiscal impact. The only fiscal impact is staff time to monitor the solar PV system and develop the annual update, which is approximately 20 hours per annum.

ATTACHMENT: Municipal Solar Project Update 2018-2019 Presentation