Solar Pre-Screen Assessment for

Cabrillo College

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- DRAFT -

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Site Portfolio Summary

Site			Utility		Solar		Financial			Technical				
ID	Site Name	Feasibility Rank	Rate Tariff	Annual Electricity Usage (kWh)	Proposed PV Size (kW)	Proposed System Size Production (kWh)	PV System Cost Range	1st Year Avoided Cost	Payback Period (yrs)	Shading	Geotech	Structural	Electrical	Enviro
CC01	Aptos Campus	A	E20	6,500,000	3825	5,200,000	$11,474,807 - $13,387,275	$1,073,877	11 - 12	Low	Low	Low	Medium	None
CC02	Watsonville Campus Old	A	A1P	19,500	11	15,600	$32,183 - $37,546	$4,014	8 - 9	Low	Low	Low	Low	None
CC03	Watsonville Campus Solari	A	HA10S	450,500	144	213,091	$432,000 - $504,000	$45,208	10 - 11	Low	Low	Low	Low	None

Technical Evaluation Key

Shading

None	No shading issues
Low	Some minor shading issue, possibly avoided by tree trimming
Medium	Significant shading issues
High	Unavoidable shading issues

Geotechnical

None	Confirmed no geotechnical issues
Low	Possible minor issues that need additional investigation
Medium	Possible significant issues that need additional investigation
High	Known issues or high likelihood for potential issues impacting system costs

Structural

None	New roof, less than 2 years and can handle solar PV system
Low	Roof age is unknown or not verified
Medium	Roof is in poor condition or over 10 years old
High	Roof is older than 20 years, or needs repairs/upgrades to host solar system

Electrical

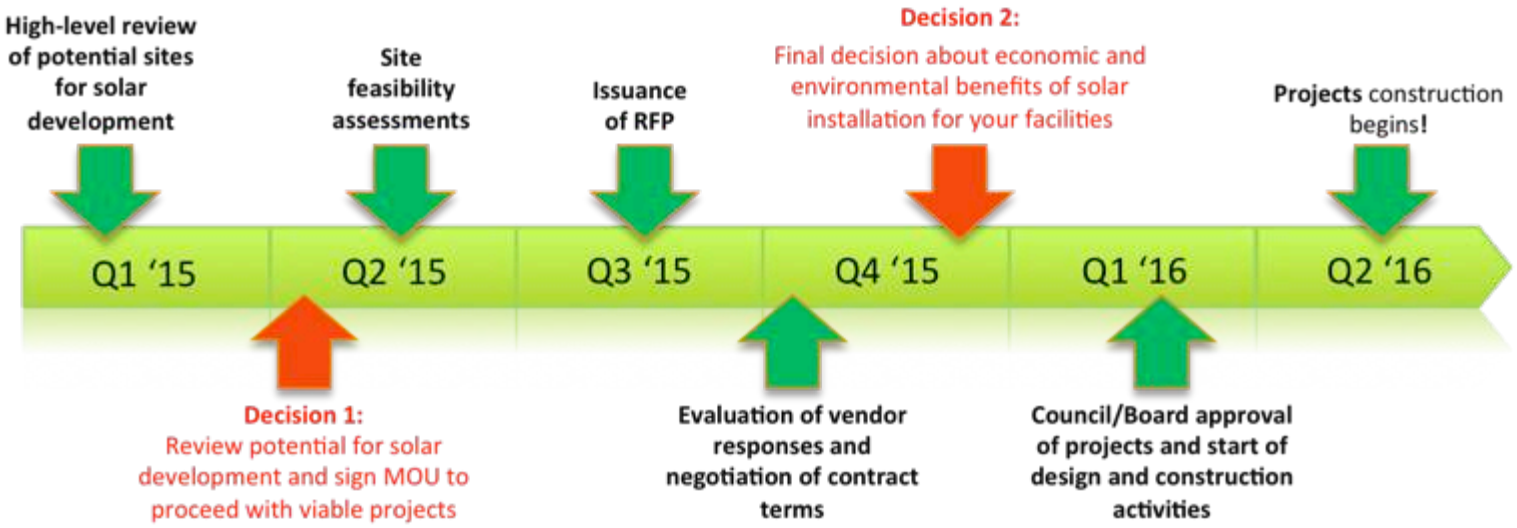
None	Electrical equipment has been inspected and does not require upgrades
Low	Further review of electrical system needed
Medium	Some electrical upgrades needed
High	Significant upgrades needed

Environmental

None	Categorical exemption can be applied
Low	Initial study may be required
Medium	Potential issues have been identified that would require mitigation
High	Full EIR needed with potential for significant issues

Next Steps

Optony encourages Cabrillo College to continue its consideration of solar by reviewing this report and determining if the preliminary findings warrant further pursuit of solar procurement for each site. Once a decision is made to move forward, a signed Memorandum of Understanding (MOU) is required from the County to perform investment-grade feasibilty assessments for selected sites. The SEED team will follow-up with the College to help determine the best solar options to pursue. Utility bill data and a walkthrough of the sites will be necessary for analysis. The information from the feasibility assessment will be used to obtain bid proposals from solar vendors through a group Request for Proposal (RFP). The Monterey Bay SEED Fund program timeline is featured below.



Solar PV System Designs by Site

CC01: Aptos Campus (Main)

Site Address: 6500 Soquel Drive, Aptos, CA
Site Usage: 6,500,000 kWh

Max PV size (as shown):	7,310 kW DC	**Max Production:**	9,934,428 kWh
Proposed PV size:	3,825 kW DC	**Proposed Production:**	5,200,000 kWh

Site Considerations

There is some shading from trees and rooftop equipment. Trees may need to be trimmed, removed or relocated for carports. Roof structure and electrical capacity should be properly evaluated in investment-grade feasibility assessment, to ensure installation capacity. A ground mount solar installation will require tree removal and ground clearing on the north campus open field.

Electrical was given “Medium” ranking, because it is recommended that additional electrical meter(s) be added to campus to maximize financial savings. There is an additional fee from PG&E for this service, but the benefit is more than likely to offset the cost.

CC02: Watsonville Campus (old)

Site Address: 310 & 318 Union St., Watsonville, CA
Site usage: 19,500 kWh

Max PV size (as shown):	122 kW DC	**Max Production:**	177,995 kWh
Proposed PV size:	11 kW DC	**Proposed Production:**	15,600 kWh

Site Considerations

There is possible shading from vegetation and nearby poles. Trees could require regular trimming to maximize electricity production. Solar PV system will need to be installed around rooftop obstacles. Excess electricity production could be used to offset usage at site CC03: Watsonville Campus (Solari) through PG&E's aggregated net metering program (NEMA).

CC03: Watsonville Campus (Solari)

Site Address: 328 Union St., Watsonville, CA
Site usage: 450,500 kWh

Max PV size (as shown):	144 kW DC	**Max Production:**	213,091 kWh
Proposed PV size:	144 kW DC	**Proposed Production:**	213,091 kWh

Site Considerations

There is some tree shading to consider for carports. Trees may need to be trimmed regularly to maximize electricity production. Rooftop equipment will also cause some shading, and will need to be avoided for solar system construction. Additional meter offset can be provided by excess generated electricity at site CC02: Watsonville Campus (old) through PG&E's aggregated net metering program (NEMA).

About Optony Inc.

Optony Inc. is a global research and consulting services firm focused on enabling government and commercial organizations to bridge the gap between clean energy goals and real-world results. Optony's core services offer a systematic approach to planning, implementing, and managing commercial and utility-grade renewable power systems, while simultaneously navigating the dramatic and rapid changes in the solar industry; from emerging technologies and system designs to government incentives and private/public financing options. Leveraging our independence, domain expertise and unique market position, our clients are empowered to make informed decisions that reduce risk, optimize operations, and deliver the greatest long-term return on their solar investments.

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