



**CITY OF SAN DIEGO**  
**PURCHASING & CONTRACTING DEPT.**  
1200 Third Avenue, Suite 200  
San Diego, CA 92101-4195

**REQUEST FOR INFORMATION (RFI) COVER SHEET**  
**PROGRAM(S) TO MEET CITY'S 100% RENEWABLE ENERGY GOALS**  
**ADDENDUM B**

**Subject:** Solutions to Support the City of San Diego's Goal of 100% Renewable Energy

**Date Issued:** September 23, 2016

**Response Date and Time (Closing Date):** October 28, 2016 at 3:00 p.m.

**Questions/Comments Due Date:** October 5, 2016 at 5:00 p.m.

**City Contact Name and Information:** Maureen Medvedyev, Principal  
Procurement Specialist, Mmedvedyev@sandiego.gov

**Respondent's Information:**


**Respondent Name:** Envision Solar International, Inc.

**Address:** 5660 Eastgate Drive, San Diego, CA 92121

**Telephone No. and E-Mail Address:** (858) 790-8140 / andy.ike@envisionsolar.com

**Website:** www.envisionsolar.com

**Authorized Representative Name and Title:** Andy Ike, Sales Manager

**Representative's Original Signature:** 

**Date Signed:** October 28, 2016

**TO BE CONSIDERED, RESPONDENT MUST :**

- 1) Provide all requested information identified in this Cover Sheet.
- 2) Submit all requested information described in the RFI.
- 3) Submit all requested information on or before the Closing Date.



RESPONSE TO THE CITY OF SAN DIEGO (RFI)

PROGRAM(S) TO MEET CITY'S 100% RENEWABLE ENERGY GOALS

ISSUED: September 23, 2016

RESPONSE DUE DATE: October 28, 2016



## **Table of Contents**

<b>Envision Solar Description</b>	<b>3 - 5</b>
<b>Envision Solar Products</b>	<b>5 - 13</b>
<b>Envision Solar Experience</b>	<b>14 - 17</b>
<b>Request for Information Question Responses (I.D)</b>	<b>18 - 34</b>
<b>Envision Solar Primary Contact</b>	<b>35</b>
<b>Appendix A - EV ARC™ Price Guide</b>	
<b>Appendix B - Solar Tree® Price Guide</b>	
<b>Appendix C – State of California Department of General Services Contract for EV ARC™</b>	
<b>Appendix D –EV ARC™ Location Selection and Prep Guide</b>	



## **Envision Solar Description**

**Envision Solar International, Inc. (Envision Solar)** is a San Diego based sustainable technology innovation company. Envision Solar distinguishes itself with unique and advanced renewably energized electric vehicle (EV) charging, media and branding and energy security systems. Our highly valuable and diverse product portfolio is based upon our patented EV ARC™ and Solar Tree® product lines. All of our products can be enhanced with EnvisionTrak™ patented solar tracking, ARC Technology™ energy storage, SunCharge™ Electric Vehicle Charging Stations and digital advertising packages.

### **Solar 3.0**

Envision Solar is unique amongst solar companies in our pursuit of the next level of solar's evolution – what we refer to as Solar 3.0. While other solar companies focus almost entirely on competing with Utilities to produce cheap electricity (which we applaud) Envision Solar creates intelligent, patented products which use solar power to enable services and amenities which would otherwise not be available to the constituency. While it is true that a happy coincidental by product is a lifetime of free energy the real and immediate value created by our products is that we are able to deliver vital and exciting services and amenities to locations and in circumstances where the traditional electrical grid is either not available or too expensive to deliver. Our products make it possible to offer EV charging where it is too expensive or time consuming to deliver access to the grid. We provide DC fast charging in locations that do not have sufficient electrical circuit to support rapid charging. Our combination of solar generation and local storage enables us to continue to offer vital electrical energy even during a black out or other grid interruption. Because our products can be “islanded” (isolated from the grid) they offer the fastest, most scalable, most reliable



## ENVISION SOLAR / CITY OF SAN DIEGO REQUEST FOR INFORMATION: PROGRAM(S) TO MEET CITY'S 100% RENEWABLE ENERGY GOALS

and most cost effective means of delivering vital and exciting services and amenities to San Diegans. Because all the energy we produce is clean, green and sustainable future generations of San Diegans will breath more easily whilst enjoying access to exciting new experiences like “driving on sunshine” and never worrying about interruptions to power where our products are deployed.

At Envision Solar, we create unique products that bring value to three specific verticals: electric vehicle (EV) charging, media and branding systems and energy security. We chose these verticals because they are each experiencing rapid growth, have massive opportunities for scale and can benefit significantly from the introduction of intelligently engineered solar powered products. We’ve ensured that our products can simultaneously be rapidly deployed, offer meaningful financial returns and improve the environment. The growth rates in the EV charging infrastructure, outdoor media platforms and solar energy production are staggering. The amounts spent over the next few years will be in the multiples of billions and we believe that we have the most elegant and robust products in the industry to serve this growth.

We invent, engineer and manufacture products in our San Diego facility where our team of combat veterans, disabled workers and other valuable team members proudly integrate the highest quality components into our Made in America products. Our vision, experience and commitment to the environment and design has made us the market leader.



## **Envision Solar Products**

### **EV ARC™**



Envision Solar's patented EV ARC™ is the world's only transportable, solar powered EV charging station. Delivered to one's location complete and ready to charge EVs, it usually does not require any permits, civil engineering or planning, foundations, trenching or electrical connections. Each EV ARC™ can deliver up to 220 e-miles in a day, while charging up to three EVs simultaneously. Equipped with on-board battery storage, it will charge EVs day or night. During a black out or other grid failure, you can use the energy produced by the EV ARC™ to keep other vital infrastructure up and running. If you want to change your charging location, the EV ARC™ is transportable and can be easily moved to a new location within minutes.





## ENVISION SOLAR / CITY OF SAN DIEGO REQUEST FOR INFORMATION: PROGRAM(S) TO MEET CITY'S 100% RENEWABLE ENERGY GOALS



The EV ARC™ is an electrical grid independent system, which has numerous long term and short term benefits for the City of San Diego:

- Provides 100% renewable electricity, helping to contribute to the City's 100% renewable electricity goal by 2035
- Avoid the standard installation process usually involved with getting EV charging up and going at your location, i.e. no permitting, no zoning, no electrical upgrades, no digging/trenching, etc.
- Protect the City of San Diego's electric bill from being impacted by EV charging, which is important to consider when factoring in rising electricity costs in conjunction with the rapidly growing number of EVs in San Diego
- Makes unit transportable so you can move it to another location if needed
- EV ARC™ is scalable so the City's EV charging capabilities can grow at whatever speed is needed
- SDG&E Approves of the use of EV ARC™ product and is a customer of Envision Solar
- SDGE can, at any time, grid tie EV ARC™ to take advantage of the on-board storage for grid balancing
- Each EV ARC™ can be equipped with an Emergency Power panel which will deliver E Power during a grid interruption to first responders or any party the City designates



## ENVISION SOLAR / CITY OF SAN DIEGO REQUEST FOR INFORMATION: PROGRAM(S) TO MEET CITY'S 100% RENEWABLE ENERGY GOALS

In June 2015, the State of California's Department of General Services awarded Envision Solar contract #1-15-61-16 to supply EV ARC™ products to State of California Departments and other state / local governmental agencies or entities. This allows public entities within California like the City of San Diego to purchase EV ARC™ without having to go through the standard bidding process while simultaneously receiving specially discounted pricing.



Arriving on a trailer and deployed within minutes, the EV ARC™ is a highly visible sustainability product that is ideal for any charging usage situation, whether for public use, City of San Diego employee use and/or City of San Diego fleet vehicle use. Below are some data points of the EV ARC™ and its key features:

- Contract with State of California DGS (Contract #1-15-61-16) allows for bypass of standard bidding process to allow for accelerated purchase – Please see Appendix C
- Patented EnvisionTrak™ technology reorients solar array throughout the day so it's always pointed in the most optimal direction for solar collection (increases efficiency by up to 25% compared to fixed solar array)
- Can be utilized as a source of emergency power in the event of a blackout/electrical outage





## ENVISION SOLAR / CITY OF SAN DIEGO REQUEST FOR INFORMATION: PROGRAM(S) TO MEET CITY'S 100% RENEWABLE ENERGY GOALS

- Battery storage so users can charge at night or when the sun is not shining due to inclement weather
- Delivers up to 220 e-miles in a day and can charge up to 3 EVs simultaneously
- Fits within standard legal sized parking space (unit measures 18X17.5 ft and has zero negative impact on existing parking layout because vehicles park on its ballast pad)
- ADA compliant
- Able to be configured with most quality Level 1 or Level 2 EVSE
- Real time data - Web based reporting
- 100% made in the USA at our facilities in San Diego, California
- Can be grid tied

## EV ARC™ Specifications



EV ARC™ 3

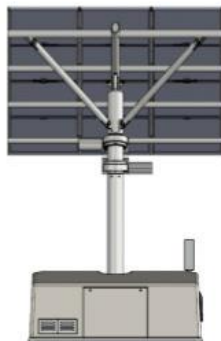
EV ARC™ 4

Solar Array Power <sup>1</sup>	kW	3.4	4.1
Max Daily EV Range (Solar) <sup>2</sup>	e-miles	100	120
Canopy Dimensions (L x W)	ft	22 x 9.9	20.5 x 10.5
Max Height	ft	13.3	13
Min Clearance	ft	7.6	7.7
Total Battery Storage	kWh	24 or 30	
Reserve EV Range (Battery) <sup>3</sup>	e-miles	64 or 80	
Operating Temperature <sup>4</sup>	°C (°F)	-20 to 50 (-4 to 122)	
Max Wind Load	mph	110	
Basepad Footprint (L x W)	ft	18 x 7.5	
Weight <sup>5</sup>	lbs	Less than 8000	
Surface Loading <sup>6</sup>	psf	5	
Max Total EV Charger Power <sup>7</sup>	kW	4.2	
Max EV Charger Circuits <sup>8</sup>	ports	1 (L2 J1772); 2 (L1 J1772); 3 (L1 Outlets)	
EV Charger Types	n/a	Basic and Networked Options Available	
Standard Shipping Method	n/a	Custom ARC Mobility™ Trailer	
XFMR Shipping Size (L x W x H) <sup>9</sup>	ft	24 x 7.5 x 7.5	
Major Component Ratings <sup>10</sup>	UL 94 V-0 (Battery); UL 1741, CSA C22.2 No.107.1 (Inverter and Charge Controller); UL 1778 Annex FF (Inverter); UL 1703, IEC 61215, IEC 61730 (Solar Panels); UL 2594, UL 2231 (EVCS)		

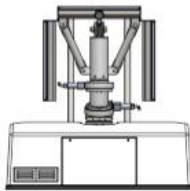
### References:

- 1 Actual nameplate output may vary by +/- 5% based on panel availability
- 2 Range will vary based on local conditions
- 3 Range assuming 25°C
- 4 Cold weather package allows for operation to -40°C
- 5 Exact weight varies based on EV ARC model
- 6 Load calculated by weight distributed over 8, 8in x 24in anti-skidpads
- 7 Actual total output power depends on EV and EVCS (3.3 to 3.8kW common for L2 charging)
- 8 Power may be reduced based on number of circuits, EV models, and EVCS types
- 9 Enables domestic and international shipping on a standard flatbed trailer or shipping container
- 10 Subset of ratings are listed; additional listings furnished upon request

Standard  
Deployed



Transformer (XFMR)  
Stowed





## Solar Tree®



Envision Solar's Solar Tree® arrays are the highest quality, fastest deployed and most attractive turnkey photovoltaic parking shade systems in the industry. A Solar Tree® structure shades six to eight standard car parking spaces and simultaneously produces enough clean energy to deliver up to 700 e-miles or power six family homes per day. The energy produced can be used to reduce utility bills, charge EVs and be stored for use in an emergency. Solar Tree® products consist of a 35' by 35' square, PV canopy mounted atop a single column. There is a 12' standard minimum clearance from the lowest point on the array even when it is tracking the sun. Solar Tree® arrays are the ideal combination of form, function and sustainability.



## ENVISION SOLAR / CITY OF SAN DIEGO REQUEST FOR INFORMATION: PROGRAM(S) TO MEET CITY'S 100% RENEWABLE ENERGY GOALS



Our latest Solar Tree® product is our most efficient and modern version to date. Utilizing everything we have learned deploying Solar Tree® structures since 2006, we have created a rapidly deployable product, which we deliver to each site as a kit of parts. It is straightforward to erect and will survive hurricane force winds, hail, snow and earthquakes. Equipped with EnvisionTrak™, our patented tracking solution, it will follow the sun creating a visually stunning effect, while generating up to 25% more electricity than a fixed structure. Use the power to reduce your utility bills and when equipped with onboard storage, it will keep your business running during a grid failure. Five times larger than the EV ARC™ but based on the same technology, our Solar Tree® products can provide DC fast charging in locations where it would otherwise be impossible.

Solar Tree® is also available in a DCFC (DC Fast Charger) model, which is the most sustainable and rapidly deployed DC Fast Charger available today. Solar Tree® DCFC delivers up to 700 e-miles per day, without connecting to the grid. "Islanded" installations require no trenching and the only site disturbance is the installation of a pre-engineered foundation. Solar Tree® DCFC can be deployed anywhere there is a requirement for DC fast charging and it is especially compelling when the grid is either hard or expensive to access. EVs will be able to charge within a few days of the product's arrival on site and unlike with a grid-tied DC fast charging station, there are no utility bills, peak usage charges or black outs. Solar Tree® DCFC can also be connected to the grid to convert a low kilowatt circuit into a high kW circuit which can provide DCFC. This greatly reduces circuit upgrade costs while utilizing the grid as a backup and augmentary source of power to the primary solar generation.





Below are some data points of the Solar Tree® and its key features:

- Patented EnvisionTrak™ technology reorients the solar array throughout the day so it's always pointed in the most optimal direction for solar collection (increases efficiency by up to 25% compared to stationary solar array)
- Can be utilized as a source of emergency power in the event of a blackout/electrical outage
- Delivers up to 700 e-miles per day and can charge up to 6 EVs simultaneously
- 35'x35' solar array can shade 6 to 8 parking spaces while having a safe minimum clearance of 12'
- Real time data - Web based reporting
- 100% made in the USA, at our facilities in San Diego, California





# ENVISION SOLAR / CITY OF SAN DIEGO REQUEST FOR INFORMATION: PROGRAM(S) TO MEET CITY'S 100% RENEWABLE ENERGY GOALS

## Solar Tree® Specifications



		ST-17-208	ST-17-480	ST-24-208	ST-22-480
Solar Array Power <sup>1</sup>	kW	17.1	17.1	24.2	22.8
Annual Energy Production <sup>2</sup>	MWh	37	37	44	42
Number of Parallel Inverters	n/a	2	1	2	1
Number of Panels	n/a	60	60	70	66
String Configuration (Panels - MPPT1/MPPT2)	n/a	12 - 2/1; 1/1	12 - 3/2	7 - 3/2; 3/2	11 - 3/3
Max Output Current Per Inverter	A	27.7	21	33.3	27.3
Grid Connection	VAC	208 / 240	480 Delta +N	208 / 240	480 Delta +N
Inverter CEC Efficiency	%	96.5%	96.5%	96.5%	96.5%
Auxiliary Input Circuit (Tracking & Lights)	VAC	120 @ 10A	120 @ 10A	120 @ 10A	120 @ 10A
A - Canopy Dimensions (L x W)	ft	33.7 x 33.7		36 x 36	
B - Canopy Footprint w/ Tracking (L x W)	ft	36.5 x 36.5		38.7 x 38.7	
C - Max Canopy Height	ft	Footing + 24.3		Footing + 24.7	
D - Min Canopy Clearance	ft	Footing + 11.9		Footing + 11.5	
Operating Temperature	°C (°F)	-40 to 60 (-40 to 140)		-40 to 60 (-40 to 140)	
Standard Overturning Moment <sup>3,4</sup>	kip-ft	75		90	
Standard Static Weight	lbs	15,000		16,000	
Communications Architecture	n/a	Ethernet (Standalone) or Ethernet + Modbus RS485 (Master/Drone)			
Remote Monitoring	n/a	Yes - With Site Provided Internet Connection			
Tracking System	n/a	Patented EnvisionTrak™			
Lighting	n/a	Symmetric Indirect Canopy Downlights - 4000K White LEDs @ 11,000 Lumens			
EV Charging	n/a	Basic and Networked Options Available			
EV Charger Circuits	n/a	Per Grid Circuit Availability			
Standard Shipping Method	n/a	2 Flatbed Trucks			
Assembly Tools	n/a	Assembly Kit Included; Additional Heavy Lift Equipment Required			
Major Component Ratings Test, Certs, Listings	n/a	Available with Component Documentation			

Notes: 1 Actual nameplate output may vary by +/- 5% based on panel availability

2 Energy production estimate for San Diego, CA with EnvisionTrak™. Specific production will vary based on deployed location.

3 Moment calculated at column base flange using design wind load of 150mph. Local load combinations will be evaluated as needed.

4 Reference base flange detail for anchor positions

### SOLAR TREE® DESIGN







## **Envision Solar Experience**

Founded in 2006, Envision Solar has become the renewable energy powered charging station provider of choice for numerous government entities as well as a wide and diverse range of Fortune 500 companies. Envision is the only company which offers transportable renewably energized EV charging stations. With its easily recognizable product lines, EV ARC™ and Solar Tree®, Envision Solar takes pride in providing innovative and iconic sustainable energy solutions to customers seeking value and versatility.

### **EV ARC™ Governmental Deployments**

- **Caltrans – California Department of Transportation – Total of 17 EV ARC™ deployed to date**
  - District 3 – Sacramento/Maryville
    - 1 EV ARC™ at Caltrans Headquarters in Sacramento
    - 1 EV ARC™ at Division of Equipment in Sacramento
    - 1 EV ARC™ at Gold Valley Facilities in Rancho Cordova
    - 1 EV ARC™ at Elkmont Way Facilities in Elk Grove
  - District 6 – Fresno/Bakersfield
    - 1 EV ARC™ at District 6 Headquarters in Fresno
    - 1 EV ARC™ at District 6 Maintenance Facilities in Fresno
  - District 7 – Los Angeles/Ventura
    - 1 EV ARC™ at Maintenance Facilities in Baldwin Park
  - District 8 – San Bernardino/Riverside
    - 1 EV ARC™ at Maintenance Facilities in Bloomington



## ENVISION SOLAR / CITY OF SAN DIEGO REQUEST FOR INFORMATION: PROGRAM(S) TO MEET CITY'S 100% RENEWABLE ENERGY GOALS

- District 10 – Stockton
  - 1 EV ARC™ at District 10 Headquarters in Stockton
  - 1 EV ARC™ at District 10 Headquarters Maintenance Facilities in Stockton
  - 1 EV ARC™ at Waterfront Construction Facilities in Stockton
- District 11 – San Diego
  - 1 EV ARC™ at District 11 Headquarters in San Diego
  - 1 EV ARC™ at Transit Maintenance Center in San Diego
  - 1 EV ARC™ at Maintenance Facilities in El Cajon
- District 12 – Orange
  - 1 EV ARC™ at District 12 Headquarters in Irvine
  - 1 EV ARC™ at Maintenance Facilities in Huntington Beach
  - 1 EV ARC™ at Maintenance Facilities in Tustin
- **DGS – California Department of General Services – 1 EV ARC™ deployed to date**
  - 1 EV ARC™ at Department of General Services Headquarters in Sacramento
- **OIG – California Office of the Inspector General – 2 EV ARC™ deployed to date**
  - 2 EV ARC™ at Office of the Inspector General Headquarters in Sacramento
- **CSUEB – California State University, East Bay – 2 EV ARC™ deployed to date**
  - 2 EV ARC™ at Lot J
- **City of Shasta Lake – 1 EV ARC™ deployed to date**
  - 1 EV ARC™ at Shasta Dam Blvd.



## ENVISION SOLAR / CITY OF SAN DIEGO REQUEST FOR INFORMATION: PROGRAM(S) TO MEET CITY'S 100% RENEWABLE ENERGY GOALS

- **City of New York – 1 EV ARC™ deployed to date (Recent RFP specified EV ARC™ for much larger roll-out)**
  - 1 EV ARC™ at New York City Hall
- **US Department of Energy – 2 EV ARC™ deployed to date**
  - 2 EV ARC™ at Fallon, Nevada Test Site
- **US Virgin Islands Department of Property and Procurement – 1 EV ARC™ deployed to date**
  - 1 EV ARC™ at St. Croix Headquarters
- **City of Boulder – 2 EV ARC™ deployed to date**
  - 2 EV ARC™ at 2 City Public Parking Lots

### EV ARC™ Enterprise Deployments

- **Google – Total of 22 EV ARC™ deployed to date across Mountain View, California and Alameda, California facilities**
- **Genentech – 1 EV ARC™ deployed to date at South San Francisco offices**
- **Johnson & Johnson – 1 EV ARC™ deployed to date at La Jolla offices**
- **Carleton Management – 4 EV ARC™ deployed to date at 4 different locations throughout San Diego County**

### Solar Tree® Governmental Deployments

- **Naval Base San Diego – Total of 8 Solar Tree® deployed to date**



### Solar Tree® Enterprise Deployments

- **University of California at San Diego – Total of 43 Solar Tree® deployed to date**
  - 28 Solar Tree® at Hopkins Drive Parking Structure
  - 15 Solar Tree® at Gilman Drive Parking Structure
- **San Diego Gas & Electric – Total of 6 Solar Tree® deployed to date at SDG&E Energy Innovation Center**
- **Fremont Cadillac – 1 Solar Tree® deployed to date**
- **Kyocera Parking lot in San Diego – Total of 25 Solar Tree®**
- **International Brotherhood of Electrical Workers – 1 Solar Tree®**
- **Multiple other deployments across the USA**



## **Request for Information Question Responses (I.D)**

1. Please provide a detailed description of the concept (project or program) you are submitting for consideration. Where not otherwise addressed below, please include discussions such as feasibility, impact/benefits, timeframe, costs and examples of similar successes.
  - a. The “Envision Solar Products” section goes in to detail on the description of our products and their impact/benefits as well as our wide range of similar success stories that we’ve had in working with government institutions like the City of San Diego. Both the Solar Tree® and the EV ARC™ are ideal products for the City of San Diego to reach their 100% renewable energy goals not just because of thier ability to provide clean renewable electricity to EVs in San Diego but also because they are highly scalable solutions. The EV ARC™ in particular would provide flexibility, scalability and rapid deployment for the City both now and moving forward.
  - b. *“Envision’s EV ARCs enable us to dynamically scale our charging needs and most importantly to ensure that our electric vehicles are 100 percent emissions free! The speed and ease of the environmental impact-free installation was also a big benefit for us, and saved us a lot of time and financial resources that would have been spent on bringing electrical power to our desired location.”* – Derrick Lobo, Manager of Parking and Transportation Services at California State University, East Bay. It’s testimonies like this from our past customers that make us proudly claim that the EV ARC™ is not just the most environmentally friendly solution for EV charging but also the fastest, simplest and most scalable solution on the market.



## ENVISION SOLAR / CITY OF SAN DIEGO REQUEST FOR INFORMATION: PROGRAM(S) TO MEET CITY'S 100% RENEWABLE ENERGY GOALS

In June 2015, the State of California Department of General Services awarded Envision Solar with a mandatory state contract to supply the EV ARC™ to other state / local public entities like the City of San Diego, allowing for these entities to purchase the EV ARC™ without having to go through the standard open bidding process that is customary for public institutions while simultaneously offering these entities specially negotiated discount pricing. This showcases that the State of California believes that this is an ideal EV charging solution for entities within their jurisdiction, primarily due to the fact that it produces 100% clean, renewable energy while simultaneously being a true turn-key solution for EV charging that requires no construction, electrical work or environmental impact during installation. Purchasing EV ARC™ off the Department of General Services Contract would significantly speed up the purchasing process just as it has for our numerous other State of California Governmental clients like Caltrans, DGS, OIG, etc. The installation of an EV ARC™ at under 10 minutes is the fastest deployed EV charging station available in the world today. According to many State and Municipal departments, traditional grid tied EV charging stations can take a minimum of 2 months and an average of 9 months from project conception.

All of our EV ARC™ and Solar Tree® products are made to order and are manufactured within our facilities located at 5660 Eastgate Drive right here in San Diego. The products are manufactured and assembled by our team of skilled combat veterans, disabled workers and other high quality individuals. When purchasing off the DGS State Contract, we guarantee delivery within 90-days upon receipt of order and there is no additional charge for shipping, which is a cost savings of \$2,500 per EV ARC™.

Once manufacturing of the EV ARC™ has been completed, it is delivered to your location by our customized ARC Mobility™





## ENVISION SOLAR / CITY OF SAN DIEGO REQUEST FOR INFORMATION: PROGRAM(S) TO MEET CITY'S 100% RENEWABLE ENERGY GOALS

trailer, which tows the EV ARC™. The EV ARC™ is then lowered in to your desired parking spot by hydraulic controls. This process usually takes no more than 10 minutes upon arrival. The EV ARC™ arrives fully assembled and ready to charge EVs so there is absolutely additional work on the installation and assembly side of the deployment.

The Solar Tree® is manufactured within 90-days and is then delivered to your site as a kit of parts with instructions. It is very straight forward to assemble for contractors and is usually up and running within a week upon arrival. The Solar Tree®, much like the EV ARC™, brings the concept of “Solar 3.0” to life but on a much larger scale. Both EV ARC™ and Solar Tree® would allow the City of San Diego to provide 100% renewable electricity at absolutely any location, whether that was a busy downtown parking lot or a more remote, hard to reach location.

2. The City is interested in how recommendations will fit into CAP efforts. For each proposed project or program, identify which goals of the CAP and objectives referenced in section I.C will be achieved, and how they will be achieved.
  - a. Thanks to the EV ARC™ being a fully solar-powered unit that is completely independent from the electrical grid, it provides EVs with 100% renewable electricity, which would help with the City reaching its 2035 goal. EV ARC™ have a minimum lifespan of 25 years as they are built with weather resistant, marine grade materials. With EV sales continuing to grow, a wide deployment of EV ARC™ across the City of San Diego would allow citizens, visitors, and city employees to drive on nothing but sunshine. As of 2016, approximately 64% of electricity created by San Diego Gas & Electric (SDG&E) was not renewably based, meaning that the majority of EVs that plug in to a grid-tied EVSE station here in San Diego are still being powered by the burning of fossil fuels. By plugging in to an EV ARC™, these



## ENVISION SOLAR / CITY OF SAN DIEGO REQUEST FOR INFORMATION: PROGRAM(S) TO MEET CITY'S 100% RENEWABLE ENERGY GOALS

vehicles would be turned in to “true” zero emissions vehicles, running on nothing but 100% clean renewable electricity from the sun.

- b. In addition to producing 100% renewable electricity from the solar array, the EV ARC™ would also store this energy within the lithium ion batteries that are stored within the base enclosure of the unit. While most solar systems are restricted to activity only during daylight hours, the EV ARC™ is an extremely reliable source of renewable electricity that allows EVs to charge day or night, rain or sun, sunny or cloud. This is clean, renewable energy that the City of San Diego would own and could be utilized not just for EV charging, but also would be on hand as a source of emergency power for disaster preparedness situations, acting as a standalone solar generator. Whether it was an earthquake, fire, hurricane or something else, this energy could be available to use to run power to vital infrastructure during these natural disasters and could help to save City of San Diego citizens' lives one day. With the City of San Diego increasing their use of electric vehicles as part of their municipal fleet, it could also keep these city vehicles moving during these time periods as well. Thanks to the EV ARC™ being a transportable unit, you would also be able to move the unit to a different location that needed power in these most extreme of circumstances. In the event of a longer term black-out any vehicle using EV ARC™ to re-charge will still be operational while grid tied charging stations will be inoperable.

The Solar Tree®, much like the EV ARC™, brings the concept of “Solar 3.0” to life but on a much larger scale. Both EV ARC™ and Solar Tree® would allow the City of San Diego to provide 100% renewable electricity at absolutely any location, whether that was a busy downtown parking lot or a more remote, hard to reach location.



## ENVISION SOLAR / CITY OF SAN DIEGO REQUEST FOR INFORMATION: PROGRAM(S) TO MEET CITY'S 100% RENEWABLE ENERGY GOALS

- c. Envision Solar is a San Diego based company so by purchasing EV ARC™, you would be directly impacting local economic development that would create additional green jobs right here in San Diego.
3. Does the project or program support the City's renewable energy goals? How?
  - a. Yes, the EV ARC™ and Solar Tree® produces 100% renewable electricity thanks to it being a fully solar powered unit. The electricity that is created is then utilized by electric vehicles within the City of San Diego, which will help the City to reach its goal of eliminating half of all greenhouse gas emissions by 2035. Transportation accounts for 40% of California's GHG emissions and the generation of electricity accounts for about 30%. Vehicles charged by EV ARC™ are essentially reducing by 70% the GHGs associated with their activities.
4. What are the specific technologies and estimated costs required to implement recommendations, and what might be appropriate funding mechanisms? Identify parties that may incur the costs (e.g., City, residents, businesses...etc.).
  - a. The EV ARC™ is available in 2 different base models: EV ARC™ 3 (which comes equipped with a 3.4 kW solar array) and EV ARC™ 4 (which comes with a 4.1 kW solar array). The EV ARC™ 3 is priced at \$46,550 and the EV ARC™ 4 is priced at \$58,647. The difference in price relates to the quality of the photovoltaic (PV) panels, with the EV ARC™ 4 having higher quality solar panels, which allows for it to collect the solar energy more efficiently than the EV ARC™ 3.



## ENVISION SOLAR / CITY OF SAN DIEGO REQUEST FOR INFORMATION: PROGRAM(S) TO MEET CITY'S 100% RENEWABLE ENERGY GOALS

Both the EV ARC™ 3 and EV ARC™ 4 come standard equipped with 24 kWh of lithium ion battery storage within the base enclosure of the unit. We also have the ability to incorporate additional battery storage as well, where we can upgrade the lithium ion battery storage to 30 kWh (\$5,011 additional added to base model cost) or to 36 kWh to have approximately 96 e-miles on hand (\$10,022 additional added to base model cost).

Once the base model and battery storage has been chosen, you then select which type of electric vehicle supply equipment (EVSE) you would like the EV ARC™ equipped with. The EV ARC™ is “charger agnostic” and we are able to equip it with most quality brands of Level 1 or Level 2 EVSE, whether that was a networked (“smart”) charging station or a non-networked (“dumb”) charging station. We also have the ability to incorporate Level 1 charging outlets, where EV drivers can utilize their own EVSE equipment that any EV comes supplied with. The EVSE you select is an additional fee that is added on to the base price of the EV ARC™ and usually ranges from approximately \$1,000 to \$9,000 depending on the type of EVSE. Generally speaking, the networked charging stations are significantly more expensive than non-networked charging stations.

In addition to being able to choose the wattage of the solar array as well as the EVSE, there are a wide range of customizable features / add-on's that we can incorporate on an EV ARC™ for the City of San Diego, such as:

- E-Bike Conversion – Converts EV ARC™ to an E-Bike Recharging System. \$8,700



## ENVISION SOLAR / CITY OF SAN DIEGO REQUEST FOR INFORMATION: PROGRAM(S) TO MEET CITY'S 100% RENEWABLE ENERGY GOALS



- Time Controlled Charging- Allows customer to place time limits on charging. \$450
- Column Mounted Color Status Light- Displays charge availability. \$928
- AC and USB Outlets- Allows users to charge 110v and USB devices. \$408
- Bench Seating- Seating for 2 built in to enclosure. \$1,495
- Bumper stops- Prevents collisions with upright column (set of 3). \$365
- 47" Digital Screen- Allows customer to deliver digital content wirelessly to a digital screen. \$14,975



- 60" Digital Screen- Allows customer to deliver digital content wirelessly to a digital screen. \$16,975
- Custom Paint and Branding- \$1,875 and up



## ENVISION SOLAR / CITY OF SAN DIEGO REQUEST FOR INFORMATION: PROGRAM(S) TO MEET CITY'S 100% RENEWABLE ENERGY GOALS

- Grid Connect- Requires 240v grid input. Allows EV ARC to connect to grid for back-up EV charging and grid return of excess electricity generated. \$1,430
- Transformer ARC™ Upgrade- Enables EV ARC™ to collapse for overseas shipping and for lower clearances. \$1,900
- ARC Mobility™ Trailer- Hydraulic lift trailer system for gooseneck bed mounted ball hitch. Utilized to move EV ARC™ between locations. \$36,599

We also offer a wide range of services associated with the EV ARC™ such as:

- Delivery- \$2,500 for each EV ARC™ (when not purchasing off California DGS contract). Discounts on delivery are incorporated on orders of 10 EV ARC™ or more.
- Relocation- Hourly relocation timeline charges begin from Envision Solar offices at 5660 Eastgate Drive, San Diego, CA 92121 to pick up and move to new destination location. Customer not billed for return trip to Envision Solar offices. \$250 per hour.
- Annual Operation and Maintenance Plan- Includes PV cleaning, grease slew drives, calibration of EnvisionTrak™, check battery charging systems, settings, performance of inverter, inspection of structure and confirmed operation of EV charger. 1<sup>st</sup> 12 months of O&M is included in purchased price. \$647.50 per year.
- Operation and Maintenance and Repair (regular hours)- Monday – Friday, 8 AM to 5 PM. \$160 per hour.
- Operation and Maintenance and Repair (weekend, holidays, after hours)- Monday – Friday, 5 PM to 8 AM. Saturday, Sunday and Holidays. \$240 per hour.
- Garage Roof Assembly / Delivery- Rental of all additional trucks, forklifts. Includes shipping 3 assemblers during normal working hours. \$4,714





- b. The Solar Tree® is available in 2 different base models: HVLC (High Value, Lost Cost) and DCFC (DC Fast Charger). The Solar Tree® HVLC comes in a 17 kW solar array model (\$103,856 per unit) and a 24 kW solar array model (\$138,022 per unit). The Solar Tree® DCFC comes in a 17 kW solar array model (\$213,856 per unit) and a 24 kW solar array model (\$248,022 per unit). The difference in price relates to the quality of the photovoltaic (PV) panels, with the 24 kW array models having higher quality solar panels, which allows for it to collect the solar energy more efficiently than the 17 kW array models.

The HVLC Solar Tree® is a grid-tied unit with the option of providing any level of EV charging desired in addition to providing electricity generation to a facility. Designed with energy augmentation in mind, the HVLC offers every EV charging option in a grid-dependent system. Each DCFC Solar Tree® comes standard with 130 kWh of Lithium Ion battery storage built into an 8.5' tapered column. An additional 70 kWh can be added in increments of 1 kWh, increasing the total amount of storage to 200 kWh (up to 800 e-miles of travel). Pricing includes one (1) DC Fast Charging plug.

Once the base model (and battery storage if applicable) has been chosen, you then select which type of electric vehicle supply equipment (EVSE) you would like the Solar Tree® equipped with. The Solar Tree® is "charger agnostic" and we are able to equip it with most quality brands of Level 1 or Level 2 EVSE, whether that was a networked ("smart") charging station or a non-networked ("dumb") charging station. We also have the ability to incorporate Level 1 charging outlets, where EV drivers can utilize their own EVSE equipment that any EV comes supplied with. The EVSE you select is an additional fee that is added on to the base price of the Solar Tree® and usually ranges from approximately \$1,000 to \$9,000 depending on the type of EVSE. Generally speaking, the networked



## ENVISION SOLAR / CITY OF SAN DIEGO REQUEST FOR INFORMATION: PROGRAM(S) TO MEET CITY'S 100% RENEWABLE ENERGY GOALS

charging stations are significantly more expensive than non-networked charging stations.

In addition to being able to choose the wattage of the solar array as well as the EVSE, there are a wide range of customizable features / add-on's that we can incorporate on an Solar Tree® for the City of San Diego, such as:

- Time Controlled Charging- Allows customer to place time limits on charging. \$450
- AC and USB Outlets- Allows users to charge 110v and USB devices. \$408
- 47" Digital Screen- Allows customer to deliver digital content wirelessly to a digital screen. \$14,975
- 60" Digital Screen- Allows customer to deliver digital content wirelessly to a digital screen. \$16,975
- Custom Paint and Branding- \$1,875 and up

We also offer a wide range of services associated with the EV ARC™ such as:

- Annual Operation and Maintenance Plan- Includes PV cleaning, grease slew drives, calibration of EnvisionTrak™, check battery charging systems, settings, performance of inverter, inspection of structure and confirmed operation of EV charger. 1<sup>st</sup> 12 months of O&M is included in purchased price. \$647.50 per year.
- Operation and Maintenance and Repair (regular hours)- Monday – Friday, 8 AM to 5 PM. \$160 per hour.
- Operation and Maintenance and Repair (weekend, holidays, after hours)- Monday – Friday, 5 PM to 8 AM. Saturday, Sunday and Holidays. \$240 per hour.

- c. With regards to funding mechanisms, there are different angles that can be looked at as possibilities for funding the deployment of EV ARC™ and Solar Tree® across the City of San Diego.



## ENVISION SOLAR / CITY OF SAN DIEGO REQUEST FOR INFORMATION: PROGRAM(S) TO MEET CITY'S 100% RENEWABLE ENERGY GOALS

In the most traditional of options, this could be incorporated as a Capital Project as part of a plan laid out by the City of San Diego Planning Department as part of their Annual Budget. The cost of the project could be split across multiple different departments that this would impact, including (but not limited to) Transportation & Storm Water, Real Estate Assets, Public Works, Planning, Parking, Fleet Operations, and Economic Development to name just a few of the departments that this project could potentially have an impact on.

The cost of deploying EV ARC™ and Solar Tree® across the City of San Diego could also be made up by charging people who utilize the EV ARC™ and Solar Tree® for the EV charging service. This is a common tactic of many cities across the United States who have implemented EV charging for public use on a municipal level. There are numerous reputable EVSE manufactures who have created networked (“smart”) charging stations that incorporate pay station capabilities. These EVSE manufactures have their own individual networks where you can arrange for the funds that are generated from the EV charging service to be routed directly back to the City of San Diego, helping to recoup the cost of the equipment over an extended period of time.

5. What is an estimated timeframe for implementation of projects or programs submitted, and what are the factors that may contribute to accelerating or slowing the implementation timeline?
  - a. As described earlier, the EV ARC™ is available for purchase via DGS Contract #1-15-61-16, which allows public entities like the City of San Diego to bypass the standard bidding process usually involved with purchasing equipment like the EV ARC™. This same contract also guarantees that we will deliver the products within 90-days from receipt of order. Once the EV ARC™ have been manufactured, we would be able to deliver them swiftly to your specified locations due to us being located



## ENVISION SOLAR / CITY OF SAN DIEGO REQUEST FOR INFORMATION: PROGRAM(S) TO MEET CITY'S 100% RENEWABLE ENERGY GOALS

within the City of San Diego. Upon arriving at these locations, we would be able to have the EV ARC™ within your specified parking spots and ready to charge EVs within approximately 10 minutes upon arrival.

- b. If EV ARC™ were not purchased off the DGS Contract then the standard bidding process would definitively slow down this timeline. Once the order was received, the EV ARC™ would still be able to be manufactured within 90-days from receipt of order. The Solar Tree® is usually able to be manufactured within 90-days from receipt of order as well.
6. Who are potential participants in the implementation and operation of the proposed projects or programs?

- a. Envision Solar would be responsible for the deployment / implementation of EV ARC™ throughout the City of San Diego. Envision Solar would handle the manufacturing and delivery of EV ARC™ to the City of San Diego's specified locations. Operation and maintenance of the EV ARC™ is included within the 1<sup>st</sup> year of purchase. While the EV ARC™ is an extremely low maintenance product with an expected lifespan of approximately 25 years, we would recommend that the City of San Diego purchase the annual Operation and Maintenance plan outlined earlier in order to minimize hourly maintenance fees going forward.

If the City of San Diego chose to incorporate pay stations on EV ARC™ to help with covering the cost of the equipment, this would be implemented by one of the EVSE network providers who handle EVSE financial transactions.

- b. Envision Solar would handle the manufacturing and delivery of Solar Tree® to the City of San Diego's specified locations. however, the City of San Diego would be responsible for hiring a contractor for the installation of the units throughout the City. Operation and maintenance of the Solar Tree® is included



## ENVISION SOLAR / CITY OF SAN DIEGO REQUEST FOR INFORMATION: PROGRAM(S) TO MEET CITY'S 100% RENEWABLE ENERGY GOALS

within the 1<sup>st</sup> year of purchase. While the Solar Tree® is an extremely low maintenance product with an expected lifespan of approximately 25 years, we would recommend that the City of San Diego purchase the annual Operation and Maintenance plan outlined earlier in order to minimize hourly maintenance fees going forward.

If the City of San Diego chose to incorporate pay stations on EV ARC™ and/or Solar Tree® to help with covering the cost of the equipment, this would be implemented by one of the EVSE network providers who handle EVSE financial transactions.

7. How is the specific project or program new or different than what the City is currently doing, and how can it potentially be integrated with existing or future projects or programs?

- a. The EV ARC™ is the world's only solar transportable EV charging station with patented sun-tracking capabilities so there is nothing else like this product out there on the market. To the best of our knowledge, this would be the first off-grid EV charging station that the City of San Diego deployed and would also be the first City owned EV charging station that provided 100% renewable electricity to EVs.

With the EV ARC™ fitting within a standard legal sized parking space, all it needs is consistent sunlight and it can then be incorporated within any existing or new parking setup. Another fantastic feature of the EV ARC™ is its mobility, which would allow the City of San Diego to move EV ARC™ to different parking locations if the location was deemed less than ideal after the initial deployment. The EV ARC™ is also ADA compliant so it is a perfect solution to provide EV charging for the disabled and handicap population who purchase EVs. Overall, the EV ARC™ would provide the City of San Diego a



## ENVISION SOLAR / CITY OF SAN DIEGO REQUEST FOR INFORMATION: PROGRAM(S) TO MEET CITY'S 100% RENEWABLE ENERGY GOALS

tremendous amount of flexibility in their municipal parking planning efforts both now and going forward. Parks or other more remote locations which do not have sufficient circuit to support EV charging could be easily serviced by EV ARC™ products.

The Solar Tree®, much like the EV ARC™, brings the concept of “Solar 3.0” to life but on a much larger scale. Both EV ARC™ and Solar Tree® would allow the City of San Diego to provide 100% renewable electricity at absolutely any location, whether that was a busy downtown parking lot or a more remote, hard to reach location.

8. What are potential obstacles to implementation, including compliance requirements, regulatory barriers, technological or market feasibility, financing limitations and/or other parameters? Identify potential solutions for each.

- a. Though 95% of the EV ARC™ units we have deployed generate more energy than they dispense, in 5% of our deployed cases the solar and battery energy combination can be exhausted during a particular day due to very high usage or very poor weather conditions. In the 5% cases data shows us that the introduction of a second unit at those locations would solve the overutilization issue. EV ARC™ is the only EV charging solution on the market which allows for rapid and pain free scaling. In any location where the utilization exceeds a single unit's capacity a second unit can be deployed to solve the problem in less than 10 minutes.

Additionally we can engineer individual units for specific use cases such as equipping additional battery storage within the EV ARC™. As previously mentioned, the EV ARC™ comes





## ENVISION SOLAR / CITY OF SAN DIEGO REQUEST FOR INFORMATION: PROGRAM(S) TO MEET CITY'S 100% RENEWABLE ENERGY GOALS

standard equipped with 24 kWh of battery storage, however, we can upgrade this storage to either 30 kWh or 36 kWh.

We can also upgrade the PV panels from a 3.4 kW array to a 4.3 kW or 5.4kW arrays (in extreme cases), which would allow for the EV ARC™ to collect solar energy more efficiently and therefore refill the batteries quicker so that it has more energy on hand for less than ideal solar collection periods.

In addition, all of our EV ARC™ come equipped with our patented EnvisionTrak™ tracking technology that was referenced prior. EnvisionTrak™ causes the array to reorient throughout the day so that it's always pointed in the most optimal direction for solar collection. This helps to increase the solar collection efficiency by approximately 20-25% compared to a fixed / stationary solar array.

The Solar Tree®, much like the EV ARC™, brings the concept of "Solar 3.0" to life but on a much larger scale. Both EV ARC™ and Solar Tree® would allow the City of San Diego to provide 100% renewable electricity at absolutely any location, whether that was a busy downtown parking lot or a more remote, hard to reach location.

- b. Prior to an order being placed, it is helpful if we are able to fully understand the projected EV charging usage situation for each individual location. Some of the items to be considered are:
  - i. Will the charging situation be for public use? For city employee use? For city fleet vehicle use?
  - ii. What are the hours that the EV ARC™ will be made available for EV charging?
  - iii. Are there specific types / brands of EV that will be charging via the EV ARC™?



## ENVISION SOLAR / CITY OF SAN DIEGO REQUEST FOR INFORMATION: PROGRAM(S) TO MEET CITY'S 100% RENEWABLE ENERGY GOALS

EV ARC™ and Solar Tree® units are custom built for individual clients in order to meet the energy needs of each of their unique deployment locations. A consultative meeting is helpful to discuss these items prior to an order being placed.

- c. All EV ARC™ and Solar Tree® are equipped with our patented EnvisionTrak® technology which will follow the sun throughout the day. This means the solar array will move to maintain the best incidence angle with the sun. As a result, there are minimal spatial requirements around a parking space that must be met to guarantee uninterrupted operation at peak performance (cannot be placed adjacent to a wall for example). Additionally, for EV ARC™, the delivery truck and ARC Mobility trailer require space to maneuver during deployment. Therefore, it is important to ensure the surrounding area also provides enough space for delivery.

Prior to EV ARC™ being deployed, we send our clients a Location Selection Prep Guide which is meant to confirm the final location is compatible with the EV ARC™ station's operation and deployment. Google Maps does not always provide the most up to date imaging of a location so we rely on an in person survey of the parking space and surrounding area. We have included a copy of this document as one of the appendices.

- 9. What are the estimated results of the proposed concept(s), including the potential for greenhouse gas emissions reductions, numbers of residents and/or businesses accessing the program, economic impacts,...etc.?
  - a. If deployed on a wide enough scale, the EV ARC™ and Solar Tree® have the potential to significantly help the City of San Diego in reaching their 2035 goal of eliminating half of all of their greenhouse gas emissions. Below is a chart that



## ENVISION SOLAR / CITY OF SAN DIEGO REQUEST FOR INFORMATION: PROGRAM(S) TO MEET CITY'S 100% RENEWABLE ENERGY GOALS

showcases the amount of gasoline each individual EV ARC™ and Solar Tree® unit would displace as well as the Co2 emissions that would be displaced as well:

EV ARC™ Model	kWh's Produced Daily	Miles/Day	Miles/Year	Gasoline Displaced (gallons)	Co2 Emissions Displaced over gasoline (metric tons)	Co2 Emissions Displaced Over Grid (metric tons)
3.4	24	120	43,800	1,856	16.5	7.45
4.1	30	150	54,750	2,320	20.6	9.31

Solar Tree® Model	kWhs Produced Daily	Miles/ Day	Miles/ Year	Gasoline Displaced (Gallons)	Co2 Emissions Displaced Over Gasoline (Metric Tons)	Co2 Emissions Displaced Over Grid (Metric Tons)
HVLC	153.9	615.6	224,694	9521	84.7	38.20
DCFC	178.2	712.8	260,172	11024	98.1	44.23

10. Include any other comments that you would like to offer that were not previously addressed.

- a. The EV ARC™ requires absolutely no connection to the electrical grid. In addition, it does not require any bolts / fasteners to the ground since the EV ARC™ is engineered as a fully ballasted system that is held in place by the 7,000-pound steel base plate. This allows most public entities and enterprises who deploy the EV ARC™ to not have to apply for any permits from city institutions.



## **Envision Solar Primary Contact**

Andy Ike

Sales Manager

5660 Eastgate Drive

San Diego, CA 92121

Office: (858) 790-8140

Cell: (908) 625-8557

E-Mail: [andy.ike@envisionsolar.com](mailto:andy.ike@envisionsolar.com)

# PRICE GUIDE



## 2016 EV ARC

### *Basic Unit*

Item	Description	Price
EV ARC base unit	3.3 kW array	\$46,550
PV Upgrade	Increase solar generation from 3.3 kW to 4.2 kW	\$11,917
Inverter Upgrade	Required when PV upgrade is selected	\$300
ARC Mobility Trailer - Short	Hydraulic lift and trailer system to fit on a standard truck with 11k pd. Ball mount towing capacity. (recommended for in town transportation)	\$34,549
ARC Mobility Trailer - Long	Hydraulic lift trailer system for gooseneck bed mounted ball hitch. (recommended for highway transportation)	\$36,599
E Bike Conversion	Converts EV ARC to an E Bike Recharging System	\$8,700
Transformer Upgrade	Enables EV ARC to collapse for over seas shipping/lower clearance	\$1,900
Transformer ARC Kit	single action hydraulic ram, upper connector assembly, lower connector assembly, stabilizing bars, stabilizing connectors.	\$2,248
- Electric/Hydraulic Power Pack	Required for lowering/raising top arm of Transformer ARC	\$2,932
- Hydraulic Hoses & Connectors	Required for lowering/raising top arm of Transformer ARC	\$295



## ***EV Charging Stations***

<b>Item</b>	<b>Description</b>	<b>Price</b>
Basic Charger	single level 2 non networked charger	\$1,800
Blink Pedestal	single level 2 smart/networked charger	\$4,400
Schneider Evlink	dual plug derated level 2 smart/networked charger	\$3,400
ChargePoint - CT 4013	single level 2 smart/networked charger	\$6,021
ChargePoint - CT 4023	dual plug derated level 2 smart/networked charger	\$7,899
Custom EV Charging Outlets	Available in 120V or 240V configurations (limit of 1 per order)	\$975

## ***Optional Features***

<b>Item</b>	<b>Description</b>	<b>Price</b>
Timer Controlled Charging	Allows customer to place time limits on charging	\$450
Column Mounted Color Status Lights	Displays charge availability	\$928
AC and USB Outlets	Allows users to charge 110v and USB device	\$408
Bench Seating	Seating for 2 built into enclosure	\$1,495
Bumper Stops	Prevents collision with upright column (set of 3)	\$365
47" Digital Screen	Allows customer to deliver digital content wirelessly to a digital screen	\$14,975
60" Digital Screen	Allows customer to deliver digital content wirelessly to a digital screen	\$16,975
Custom Paint and Branding	Choose a custom paint scheme and logos	\$1875 + up
Grid Connect	Requires 240V grid input. Allows EV ARC to connect to grid for back up EV charging and grid return of excess electricity generation.	\$1,430



## Services

Item	Description	Price
Local Delivery	100 mile radius of Envision Solar facilities in San Diego, CA	\$2,500
Shipping and Handling (Non Local)	Deliveries outside of 100 mile radius of Envision Solar facilities in San Diego, CA	\$2,500 + X per mile
Flatbed Shipping	Required when Transporter ARC is containerized or shipped out of state	per quote
Relocation	Hourly relocation timeline charges begin from Envision Solar in San Diego, CA to pick up and new destination location. Customer not billed for return trip to San Diego.	\$250/hour
O&M Plan	Includes PV cleaning, Grease Slew Drives, Calibration of EnvisionTrak, check battery charging systems, settings, performance of inverter, inspection of structure and confirmed operation of EV charger. 1st 12 months of O&M is included in purchase price.	\$647.50
OM&Repair - Regular Hours	M-F 8:00 AM - 5:00 PM	\$160/hour
OM& Repair - Weekend, Holidays, After Hours	M-F 5:00 PM - 8:00 AM, Sat, Sun, Holidays	\$240/hour
Garage roof assembly/delivery	rental of all additional trucks, forklifts. Includes shipping 3 assemblers during normal working hours. Price is valid for San Diego service only.	\$4,714
Transformer ARC Training	Technician will instruct proper collapsing/opening procedures at customer location	\$1,160 + travel
Blink Network Services	First 12 months of service included in EV ARC purchase price. Annual subscription per plug	\$270
Chargepoint Network Services	First 12 months of service included in EV ARC purchase price. Annual subscription per plug	\$270
ARC Upgrade Fee	Upgrade any components after ARC complete/delivered	item cost + labor
Restocking Fee	Trade in of ARC for different model within the 1st year of purchase	20% retail original retail value

\* Custom EV Charging hardware not listed may be installed if desired. Prices for units other than those listed above will be based on manufacturer pricing.

\*\* Networked EV Charging hardware may have additional networking fees. See Services section for details.



# PRICE GUIDE



## 2016 Solar Tree

### ***HVLC - High Value Low Cost***

Item	Description	1st Unit	2nd Unit	3rd unit
HVLC 17.1 kW	Basic center pole design with 17.1 kW array (35' x 35') - EnvisionTrak included	\$103,856	\$97,856	\$92,856
HVLC 24 kW	Basic center pole design with 24 kW array (37' x 37') - EnvisionTrak included	\$138,022	\$132,022	\$127,022

*The HVLC iSolar Tree is a grid-tied unit with the option of providing any level of EV charging desired in addition to providing electricity generation to a facility. Designed with energy augmentation in mind, the HVLC offers every EV charging option in a grid-dependent system.*

### ***DCFC - DC Fast Charger***

Item	Description	1st Unit	2nd Unit	3rd unit
DCFC 17.1 kW	130 kWh of standard internal storage with a 17.1 kW array (35' x 35') - EnvisionTrak included. May be configured either as an off grid solution or grid integrated.	\$213,856	\$207,856	\$202,856
DCFC 24 kW	130 kWh of standard internal storage with a 24 kW array (37' x 37') - EnvisionTrak included. May be configured either as an off grid solution or grid integrated.	\$248,022	\$242,022	\$237,022

*Each DCFC Solar Tree comes standard with 130 kWh of Lithium Ion battery storage built into an 8.5' tapered column. An additional 70 kWh can be added in increments of 1 kWh, increasing the total amount of storage to 200 kWh (up to 800 e miles of travel). Pricing includes one (1) DC Fast Charging plug.*



## EV Charging Stations

Item	Description	Price
Basic Charger	non networked single plug	\$1,800
Blink Pedestal	single level 2 smart/networked charger	\$4,400
Schneider Evlink	dual plug derated level 2 smart/networked charger	\$3,400
ChargePoint - CT 4013	single level 2 smart/networked charger	\$6,021
ChargePoint - CT 4023	dual plug derated level 2 smart/networked charger	\$7,899
Custom EV Charging Outlets	Available in 120V or 240V configurations (limit of 1 per order)	\$975

*\* Custom EV Charging hardware not listed may be installed if desired. Prices for units other than those listed above will be based on manufacturer pricing.*

*\*\* Networked EV Charging hardware may have additional networking fees. See Services section for details.*

## Optional Features

Item	Description	Price
Timer Controlled Charging	Allows customer to place time limits on charging	\$450
AC and USB Outlets	Allows users to charge 110v and USB device	\$408
47" Digital Screen	Allows customer to deliver digital content wirelessly to a digital screen	\$14,975
60" Digital Screen	Allows customer to deliver digital content wirelessly to a digital screen	\$16,975
Custom Paint and Branding	Choose a custom paint scheme and logos	\$1875 + up
LED Lighting	Column and array integrated lighting	\$1,500

## Services

Item	Description	Price
Delivery (CA)	CA deliveries	per quote
Shipping and Handling (outside CA)	Deliveries to the lower 48 states, excluding CA.	per quote
O&M Plan	Includes PV cleaning, Grease Slew Drives, Calibration of EnvisionTrak, check battery charging systems, settings, performance of inverter, inspection of structure and confirmed operation of EV charger. First 12 months of O&M is included in purchase price, additional coverage available for purchase.	\$647.50
OM&Repair - Regular Hours	M-F 8:00 AM - 5:00 PM	\$160/hour
OM& Repair - Weekend, Holidays, After Hours	M-F 5:00 PM - 8:00 AM, Sat, Sun, Holidays	\$240/hour
Blink Network Services	First 12 months of service included in EV ARC purchase price. Annual subscription per plug, billed annually.	\$270/year
Chargepoint Network Services	First 12 months of service included in EV ARC purchase price. Annual subscription per plug, billed annually.	\$270/year



Department of General Services  
Procurement Division  
707 Third Street, 2<sup>nd</sup> Floor  
West Sacramento, CA 95605-2811

State of California  
**CONTRACT USER INSTRUCTIONS**  
\*\*\*\*MANDATORY\*\*\*\*

CONTRACT NUMBER:	1-15-61-16
DESCRIPTION:	<b>MOBILE SOLAR PANEL ELECTRIC VEHICLE CHARGER SYSTEM</b>
CONTRACTOR(S):	ENVISION SOLAR INT'L INC.
CONTRACT TERM:	06/12/15 through 06/11/16
STATE CONTRACT ADMINISTRATOR:	Dion Campos (916) 375-4478 Dion.Campos@dgs.ca.gov

The contract user instructions, products, and pricing are included herein. All purchase documents issued under this contract incorporate the contract terms and applicable California General Provisions.

\_\_\_\_\_  
Dion Campos, Contract Administrator

Date: \_\_\_\_\_



**Contract (Mandatory) 1-15-61-16**  
**Contract User Instructions**

**1. SCOPE**

The State's contract with Envision Solar International Inc. (Envision) (contractor) provides Mobile Solar Panel Electric Vehicle Charger Systems at contracted pricing to the State of California and local governmental agencies in accordance with the requirements of Contract # 1-15-61-16. The contractor shall supply the entire portfolio of products as identified in the contract and will be the primary point of contact for data collection, reporting, and distribution of Mobile Solar Panel Electric Vehicle Charger (MSP-EVC) to the State.

The contract term is for one (1) year with an option to extend the contract for two (2) extensions for one (1) year(s) or portion thereof. The terms, conditions, and prices for the contract extension option shall be by mutual agreement between the contractor and the State. If a mutual agreement cannot be met the contract may be terminated at the end of the current contract term.

**A. GS\$Mart**

The State reserves the right to select the form of payment for all procurements, be it either an outright purchase with payment rendered directly by the State, or a financing/lease-purchase or operating lease via the State Financial Marketplace (GS \$Mart and/or Lease \$Mart). If payment is via the financial marketplace, the Supplier will invoice the State and the State will approve the invoice and the selected Lender/Lessor for all product listed on the State's procurement document will pay the supplier on behalf of the State.

**B. Pricing Structure and Contract Terms**

There are two (2) options available when using this Contract that determines the actual cost. See Attachment A, Contract Price Worksheet for all direct options for procuring a MSP-EVC system, and in accordance with Attachment B, the State of California Bid Specification Number 6116-3098 dated 4/29/15. Read the following 2 options for a clear understanding:

**Option 1** – This option is to procure a MSP-EVC system is a complete TURNKEY system with the following elements:

1.0 Hardware - Contractor shall provide an MSP-EVC system, Smart Charger & all installation hardware. Hardware shall come with one (1) year manufacturer's warranty on all system components after installation/upgrade, commencing on the date of acceptance.

1.1 Remote Monitoring & Management Services (RMMS) - Wireless 3G CDMA/EVDO router on the Verizon Network. The networked Inverter can be accessed remotely over the web. Provides real time status of PV, battery charge and inverter operation. The RMMS includes the Verizon network cellular wireless plan and remote tracking subscription based services. The user agency authorized agent contact information will be required at time of purchase for registration and renewal purposes after initial 12 months.

1.2 Maintenance Services Plan (MSP) - PV Panel Cleaning, Grease slow drives & checks calibration of Envision Trak, Check battery charging systems, Check settings and performance of inverter. Inspect and confirm operation of Electric Vehicle (EV) charger. Check overall condition of structure.

RMMS and MSP are included for the first (1<sup>st</sup>) twelve (12) months and shall commence on the system delivery and acceptance date. After the initial 12 months of RMMS and MSP, and in order to maintain MSP-EVC system functionality, the user agency is required register and renews its subscription purchase for an additional 12 months of services from Envision.

**Option 2** – This option is to procure a MSP-EVC system with a different EV charger utilizing the State's current Electric Vehicle Supply Equipment (EVSE) Charger Contracts to provide the appropriate substitute EV charger. The following rules apply for this option:

## Contract (Mandatory) 1-15-61-16

### Contract User Instructions

2.0 Users of Option 2 must first issue a Purchase Order (PO) STD. 65 to the appropriate EVSE Charger Contractor using any of the States EVSE Charger Contractor(s) (See 2.1 or 2.2 Charger Contracts listed below). For delivery compliance use the Shipment lines to determine where the items ordered are to be sent. Clearly spell out the delivery address location for Envision. User shall make sure that the EVSE charger Contractor knows that the substitute charger will be sent to Envision for integration into the MSP-EVC system.

Users of this option 2 shall then issue a PO to Envision for the EV Arc unit and any other options you select. Be sure to provide Envision with a copy of the States EVSE Charger PO so they can properly accept and integrate your substitute EV Charger into a MSP EVC system.

#### 2.1 Basic Chargers: (Mandatory Contracts)

-14-61-13A, EV Connect Inc. : <a href="https://www.bidsync.com/DPX?ac=agencycontview&amp;contid=108500">https://www.bidsync.com/DPX?ac=agencycontview&amp;contid=108500</a>
1-14-61-13B, Pacific Lighting Mgmt. Inc.: <a href="https://www.bidsync.com/DPX?ac=agencycontview&amp;contid=108501">https://www.bidsync.com/DPX?ac=agencycontview&amp;contid=108501</a>
1-14-61-13C, BTC Power Inc.: <a href="https://www.bidsync.com/DPX?ac=agencycontview&amp;contid=112621">https://www.bidsync.com/DPX?ac=agencycontview&amp;contid=112621</a>

#### 2.2 Smart Chargers: (Non- Mandatory Contracts)

1-14-61-14A, : <a href="https://www.bidsync.com/DPX?ac=agencycontview&amp;contid=111660">https://www.bidsync.com/DPX?ac=agencycontview&amp;contid=111660</a>
1-14-61-14B: <a href="https://www.bidsync.com/DPX?ac=agencycontview&amp;contid=111677">https://www.bidsync.com/DPX?ac=agencycontview&amp;contid=111677</a>
1-14-61-14C: <a href="https://www.bidsync.com/DPX?ac=agencycontview&amp;contid=111661">https://www.bidsync.com/DPX?ac=agencycontview&amp;contid=111661</a>
1-14-61-14D: <a href="https://www.bidsync.com/DPX?ac=agencycontview&amp;contid=111721">https://www.bidsync.com/DPX?ac=agencycontview&amp;contid=111721</a>
1-14-61-14E: <a href="https://www.bidsync.com/DPX?ac=agencycontview&amp;contid=111678">https://www.bidsync.com/DPX?ac=agencycontview&amp;contid=111678</a>
1-14-61-14F: <a href="https://www.bidsync.com/DPX?ac=agencycontview&amp;contid=111716">https://www.bidsync.com/DPX?ac=agencycontview&amp;contid=111716</a>
1-14-61-14G: <a href="https://www.bidsync.com/DPX?ac=agencycontview&amp;contid=111742">https://www.bidsync.com/DPX?ac=agencycontview&amp;contid=111742</a>
1-14-61-14H: <a href="https://www.bidsync.com/DPX?ac=agencycontview&amp;contid=111751">https://www.bidsync.com/DPX?ac=agencycontview&amp;contid=111751</a>

#### C. Contract Items Description

Core items are identified as high-use line items that may be commonly purchased by the State. These items are available for purchase by ordering agencies at a fixed contract price.

#### D. Non-Core Catalog

The Contractor has created a catalog of non-core goods and/or services. Non-Core items such as catalog items are identified as items that may not be ordered on a regular basis. The California Department of General Services (State) Fixed Core and Fixed Non-Core Discount Pricing are as follows for core and non-core items.

## **Contract (Mandatory) 1-15-61-16**

### **Contract User Instructions**

- **Non-Core Items**: Are defined as all items that are similar and relative to any core option shall be made available in the contractor's commercially available catalog. This Catalog shall be called the State Non-Core Catalog limited to items not included as part of the Core Line Items. Acceptable examples: Signs, AC and USB Outlets, Branding packages, etc...
- **Non-Core Catalog Discount Percentage**: Items shall be available for purchase by ordering agencies at Ten (10) Percent (%) discount off Catalog line item list prices. The contractor's 10% discount off list price (see Attachment A1, Option 1 MSP Pricing, Non-Core Catalog section) will be applicable to all Non-Core Catalog Items purchased by the State from the Contractor's catalog, except those listed as Core Items.
- **Specifications**: All products listed on Attachment A, Contract Pricing, products must conform to the State of California Bid Specification Number 6116-3098 dated 4/29/15, Attachment B.

## **2. CONTRACT USAGE/RULES**

### **A. State Departments**

- The use of this contract is mandatory for all State of California departments. Ordering departments must adhere to all applicable State laws, regulations, policies, best practices, and purchasing authority requirements, e.g. California Codes, Code of Regulations, State Administrative Manual, Management Memos, and State Contracting Manual Volume 2 and 3, as applicable.
- Prior to placing orders against this contract, departments must have been granted non-IT purchasing authority by the Department of General Services, Procurement Division (DGS/PD) for the use of this statewide contract. The department's current purchasing authority number must be entered in the appropriate location on each purchase document. Departments that have not been granted purchasing authority by DGS/PD for the use of the State's statewide contracts may access the Purchasing Authority Application at <http://www.dgs.ca.gov/pd/Resources/publications/SCM2.aspx> or may contact DGS/PD's Purchasing Authority Management Section by e-mail at [pams@dgs.ca.gov](mailto:pams@dgs.ca.gov).
- Departments must have a Department of General Services (DGS) agency billing code prior to placing orders against this contract. Ordering departments may contact their Purchasing Authority contact or their department's fiscal office to obtain this information.

### **B. Local Governmental Agencies**

- Local governmental agency use of this contract is optional.
- For all local government agency transactions issued against the contract the Contractor is required to remit the DGS/PD an Incentive Fee of an amount equal to 1% of the total purchase order amount excluding taxes and freight.
- Local government agencies are defined as "any city, county, city and county, district or other governmental body or corporation, including the California State Universities (CSU) and University of California (UC) systems, K-12 schools and community colleges", empowered to expend public funds for the acquisition of products, per Public Contract Code Chapter 2, Paragraph 10298 (a) (b). While the State makes this contract available to local governmental agencies, each local governmental agency should determine whether this contract is consistent with its procurement policies and regulations.

**Contract (Mandatory) 1-15-61-16**  
**Contract User Instructions**

- Local governmental agencies shall have the same rights and privileges as the State under the terms of this contract. Any agencies desiring to participate shall be required to adhere to the same responsibilities as do State agencies and have no authority to amend, modify or change any condition of the contract.
- Local governmental agencies must have a DGS agency billing code prior to placing orders against this contract. DGS agency billing codes may be obtained by emailing the DGS billing code contact with the following information:

Local Governmental Agency	Contact Name	Facsimile number and e-mail address
Telephone Number	Mailing Address	DGS Bill Code Contact: <a href="mailto:Marilyn.ebert@dgs.ca.gov">Marilyn.ebert@dgs.ca.gov</a>

- C. Unless otherwise specified within this document, the term “ordering agencies” will refer to all State departments and/or local governmental agencies eligible to utilize this contract. Ordering and/or usage instructions exclusive to State departments or local governmental agencies shall be identified within each article.

**3. DGS ADMINISTRATIVE FEES**

A. State Departments

The DGS will bill each State department an administrative fee for use of this statewide contract. The administrative fee should NOT be included in the order total, nor remitted before an invoice is received from DGS.

Current fees are available online in the Procurement Division Price Book located at:  
<http://www.dgs.ca.gov/ofs/Resources/Pricebook.aspx>. (Click on “Purchasing” under Procurement Division.)

B. Local Governmental

For all local government agency transactions issued against the contract the Contractor is required to remit the DGS/PD an Incentive Fee of an amount equal to 1% of the total purchase order amount excluding taxes and freight. This Incentive Fee shall not be included in the agency's purchase price, nor invoiced or charged to the purchasing entity. All prices quoted to local governmental agency customers shall reflect State contract pricing, including any and all applicable discounts, and shall include no other add-on fees.

**4. SB/DVBE OFF-RAMP PROVISION**

There is no SB/DVBE off ramp associated with this contract.

**5. PROBLEM RESOLUTION/SUPPLIER PERFORMANCE**

Ordering agencies and/or contractors shall inform the State Contract Administrator of any technical or contractual difficulties encountered during contract performance in a timely manner. This includes and is not limited to informal disputes, supplier performance, outstanding deliveries, etc.

For contractor performance issues, ordering agencies must submit a completed [Supplier Performance Report](#) via email or facsimile to the State Contract Administrator identified in Article 29 (Contract Administration). The ordering agency should include all relevant information and/or documentation (i.e. Purchase documents).

**Contract (Mandatory) 1-15-61-16**  
**Contract User Instructions**

**6. CUSTOMER SERVICE**

The Contractor will have a customer service unit that is dedicated to this contract. The customer service unit provides office and personnel resources for responding to inquiries, including telephone and email coverage weekdays during the hours of 8:00 a.m. - 5:00 p.m., PT.

The customer service unit shall be staffed with individuals that:

- Are trained in the requirements of this contract;
- Have the authority to take administrative action to correct problems that may occur; and
- Are designated for training and general customer service follow-up.

The Contractor's customer service unit shall respond to all customer inquiries within one (1) business day of initial contact.

Contact	Phone	Email
David Greenfader	(310) 961-4669 or (866) 746-0514	<a href="mailto:david.greenfader@envisionsolar.com">david.greenfader@envisionsolar.com</a>

**7. Ordering Procedure (State and Local Government Departments)**

**A. Purchase Documents**

State departments must use the Purchasing Authority Purchase Order (Std. 65) for purchase execution. An electronic version of the Std. 65 is available at the Office of State Publishing web site: <http://www.dgs.ca.gov/pd/Forms.aspx> (select Standard Forms).

All Purchasing Authority Purchase Orders (Std. 65) must contain the following:

- Agency Order Number (Purchase Order Number)
- Ordering Agency Name
- Agency Billing Code
- Purchasing Authority Number
- Leveraged Procurement Number (Contract Number)
- Supplier Information (Contact Name, Address, Phone Number, Fax Number, E-mail)
- Line Item number
- Quantity
- Unit of Measure
- Commodity Code Number
- Product Description
- Unit Price
- Extension Price

**B. Blanket Orders**

The use of blanket orders against this statewide contract is not allowed.

**Contract (Mandatory) 1-15-61-16**  
**Contract User Instructions**

C. American Recovery and Reinvestment Act (ARRA) - Supplemental Terms and Conditions

Ordering departments executing purchases using ARRA funding must attach the ARRA Supplemental Terms and Conditions document to their individual purchase documents. Departments are reminded that these terms and conditions supplement, but do not replace, standard State terms and conditions associated with this leveraged procurement agreement.

- [ARRA Supplemental Terms and Conditions](#)

Note: Additional information regarding ARRA is available by clicking here to access the email broadcast dated 08/10/09, titled [Supplemental Terms and Conditions for Contracts Funded by the American Recovery and Reinvestment Act](#).

D. Local Governmental Agencies

Local governmental agencies may use their own purchase document for purchase execution. The purchase documents must include the same data elements as listed above (Exception: Purchasing Authority Number is used by State departments only).

E. Documentation

All ordering agencies will submit a copy of executed purchase documents to:

DGS - Procurement Division (IMS# Z-1)  
Attn: Data Entry Unit  
707 Third Street, 2<sup>nd</sup> Floor, MS 2-212  
West Sacramento, CA 95605-2811

F. Minimum Order

The minimum order shall be one Solar Charging System. Additional Accessories and Services may be purchased as separate orders as long as a system has been purchased from this contract.

G. Ordering Methods

Ordering agencies are to submit appropriate purchase documents directly to the contractor(s) via one of the following ordering methods. The contractor's Order Placement Information is as follows:

ORDER PLACEMENT INFORMATION		
U.S. Mail	Facsimile	Email
Envision Solar Int'l Inc. Attn: David Greenfader 9270 Trade Place San Diego, CA 92126 (310)961-4669 (866)746-0514	(858) 799-4593	<a href="mailto:david.greenfader@envisionsolar.com">david.greenfader@envisionsolar.com</a>

Note: When using any of the ordering methods specified above, all State departments must conform to proper State procedures.



**Contract (Mandatory) 1-15-61-16**  
**Contract User Instructions**

**8. ORDER RECEIPT CONFIRMATION**

The Contractor will provide ordering agencies with an order receipt confirmation, via e-mail or facsimile, within 48 hours of receipt of purchase document. The Order Receipt Confirmation shall include the following information:

- Ordering Agency Name
- Agency Order Number (Purchase Order Number)
- Purchase Order Total Cost
- Anticipated Delivery Date

**9. TECHNICAL SUPPORT**

The contractor shall provide technical support for any equipment supplied. The contractor shall respond to requests for technical support within eight (8) working hours of request. The request may be a documented phone call. When requested, on-site technical support shall be provided within three (3) working days.

**10. OUT OF STOCK REMEDY**

Bidder must describe processing of out-of-stock items which have been back ordered and what communication is provided to the ordering agencies once the agency requests a back order (i.e. updates/status). Under no circumstance is the contractor permitted to make substitutions with non-contract items or unauthorized products without the approval of the PO. Upon receipt of order acknowledgment identifying out of stock items, the ordering agencies shall have the following options:

- Request back order; or
- Cancel the item from the order with no penalty.

**11. DISCONTINUED ITEM REMEDY**

Upon receipt of order acknowledgment identifying discontinued items, the ordering agencies shall have the following options:

- Amend purchase document to reflect State-approved substitute item (per Article 14, Product Substitutions/Discontinued Items)
- Cancel the item from the order.

Under no circumstance is the Contractor permitted to make substitutions with non-contract items or unauthorized products without approval from the CA.

**12. PRODUCT RECALL PROCEDURES**

The contractor shall provide recall notification, regardless of level, in writing to the PO and each applicable ordering agency through the most expedient method possible. The notices, at a minimum, shall include a complete product description and/or identification, contract number, delivery order number and disposition instructions.

The contractor shall pick up, test, destroy or return recalled products to the manufacturer at no expense to the ordering agency. The contractor shall issue replacement of product or credit for any product removed or recalled. Each ordering agency shall have the option of accepting either replacement product or credit in exchange for recalled/removed products.

**Contract (Mandatory) 1-15-61-16**  
**Contract User Instructions**

**13. HARDWARE**

The bidder shall provide all EVSE hardware per Specification 6116-3098. Hardware shall come with one (1) year manufacturer's warranty on all system components after installation/upgrade, commencing on the date of acceptance.

**14. NETWORK SERVICES**

Remote Monitoring and Management System (RMMS) - EV ARC Services. Each EV ARC™ unit is equipped with Wireless communications & 24/7 State-of-Health monitoring. Each EV ARC™ unit is equipped with a wireless 3G CDMA/EVDO router on the cellular network. The Inverter is networked and can be accessed remotely over the web. This provides "state of health" monitoring of the battery charging system, providing real-time status of PV, battery charge, and inverter operation.

EnvisionTrak™: Exclusive & Patented Sun-Tracking Technology is a networked system and can be accessed and controlled remotely over the web. Upon purchase, client will be provided with a log in and instructions for how to use the solar tracking controls. This system will allow purchaser to view or manage information about the tracking system remotely, and allow us to see the canopy's position in real time, send commands to the controller, and generates warnings, alerts, and notifications of system operation. Nearly all troubleshooting (if needed) can be done remotely. **(Service is included in the unit price for the 1st twelve [12] months).** The Contractor supplied smart charger(s) shall meet the following requirements:

- Network ready (cellular, Wi-Fi, Ethernet, and/or Zigbee)
- Remote management (i.e. access control, charger status, set pricing, collect fees, reservations, track usage, software/firmware upgrade, etc.)
- Utilizes open source protocol communications (such as Open Charge Point Protocol (OCPP)) and/or provide open connectors to OCPP or similar.
- Service will be included in the unit price for twelve months from date of delivery.
- Additional service can be purchased as a subscription after the twelve month period.

**15. REPAIR SERVICES**

The Contractor will repair the equipment damage due to external causes including accident, abuse, vandalism, flood, fire, and misuse.

- The Contractor shall provide corrective services Monday through Friday during normal business hours (8:00 AM – 5:00 PM Pacific Time) to customers during the contract period. The contractor will not be scheduled to work on State holidays.
- The Contractor shall respond to the ordering agency's representative within one (1) business day during normal business operation hours via e-mail or phone when a non-functioning or faulty station is reported; response shall include the expected time station will be available for use.
- For station issues that require onsite diagnostic the Contractor shall notify the ordering agency representative within two (2) business days to schedule repairs. Repairs will be scheduled during normal business operation hours unless otherwise agreed to by both parties.
- The Contractor shall initiate on-site repair or replacement services and have the system repaired or replaced within ten (10) business days from acknowledgement of request.

## **Contract (Mandatory) 1-15-61-16**

### **Contract User Instructions**

- Technical support shall assist ordering agency with station issues (how to guidance, screen errors, system errors, troubleshoot various other problems, request repairs and/or questions pertaining to but not limited to the use and functionality of the charging station)
- The Contractor may provide multiple service options to both customers and administrators to resolve any charger and system service related issues.
- All service related information and instructions shall be clearly posted on all EVSE stations and/or posted near stations and easily visible to users.

Repairs may be conducted by a third party without voiding the warranty.

#### **16. OPERATIONS & MAINTENANCE**

Contractor will provide Maintenance services with the goal of preventing equipment failure before it occurs. This service is included in the unit price for the first twelve months from the date of delivery. Planned maintenance service costs quoted on Attachment A, Pricing Worksheet shall include all labor, supplies and consumables, to ensure that the device will operate within the OEM's specifications. Hardware that may need to be replaced shall be discussed with the ordering agency for approval and validation of product costs. Qualified trained technicians will perform all contracted maintenance. A planned Maintenance service log will be maintained for each system.

- Monitoring & Operations Plan:

Wireless communications and 24/7 State-of-Health monitoring. Each EV ARC unit is equipped with a wireless 3G CDMA/EVDO router on a network. The Inverter is networked and can be accessed remotely over the web. The service will provide real-time status of PV, battery charge, and inverter operation.

- Exclusive & Patented Sun-Tracking Technology:

EnvisionTrak patented sun-tracking technology is a networked system and can be accessed and controlled remotely over the web. Upon purchase, users will be provided with a log in and instructions to how to use the Sun Tracking controls. This system will allow purchaser to view or manage information about the tracking system remotely, and allow us to see the canopy's position in real time, send commands to the controller, and generates warnings, alerts, and notifications of system operation.

Maintenance Service activities shall include but not be limited to partial or complete overhauls at specified periods, cleaning, worn part replacement, and lubrication.

User agencies may elect to purchase the Operations & Maintenance agreement at any time during the warranty period. User agencies may also purchase Operations & Maintenance agreement after the warranty expires. No less than thirty (30) days after the expiration of the warranty, the Contractor may charge a repair services hourly rate to bring the device's performance level up to standard. Maintenance may be conducted by third party contractors without voiding the warranty.

#### **17. DELIVERY**

Delivery for orders placed against this contract shall be in accordance with the following:

- A. Locations

The entrance and access area shall be clear of obstacles and must accommodate the height and size of the MSP-EVC delivery in a commercially reasonable manner. Deliveries are to be made (statewide) to the location(s) specified on the individual PO, which may include, but not limited to parking structures, roofless parking garages, parking lots, and rural locations.

**Contract (Mandatory) 1-15-61-16**  
**Contract User Instructions**

**B. Schedule**

Delivery of ordered product shall be completed in full within ninety (90) days after receipt of an order (ARO) of fifty units (50) or less. Delivery time may change for quantities of more than fifty per order. Since receiving hours for each ordering agency will vary by facility, it will be the Contractor's responsibility to check with each facility for their specific delivery hours before delivery occurs. The Contractor must notify the ordering agency within 24 hours of scheduled delivery time, if delivery cannot be made within the time frame specified on the Order Receipt Confirmation.

Contractor is requested to make deliveries in Los Angeles County, Orange County, San Bernardino Metropolitan Area, and San Diego Metropolitan Area during off-peak hours. Off-peak hours are Monday through Friday, 10:00 AM to 4:00 PM unless otherwise specified by user agency.

**C. Security Requirements**

Deliveries may be made to locations inside secure institutional grounds (such as the California State Prisons) that require prior clearances to be made for delivery drivers. Since security clearance procedures for each facility may vary, it will be the Contractor's responsibility for contacting the secure location for security clearance procedures, hours of operation for deliveries and service, dress code, and other rules of delivery.

**D. Delivery Requirements**

In accordance with paragraph 15 of the General Provisions entitled "Delivery", the Contractor shall strictly adhere to the delivery terms and completion schedule as specified in the PO. Failure to comply with the delivery requirements, as stated, may be considered a breach of contract and subject the Contractor to General Provisions 26, entitled "Rights and Remedies of the State for Default

**18. FREE ON BOARD (F.O.B.) DESTINATION**

All prices are F.O.B. destination; freight prepaid by the contractor, to the ordering organization's receiving point. Responsibility and liability for loss or damage for all orders will remain with the contractor until final inspection and acceptance, when all responsibility will pass to the ordering organization, except the responsibility for latent defects, fraud, and the warranty obligations.

**19. RELOCATION TRANSPORTATION SERVICES**

Services include relocating unit from original destination to another location. NOTE: An hourly relocation timeline charge begins from Envision Solar in San Diego CA to pick up and new destination location.

**20. SHIPPED ORDERS**

All shipments must comply with General Provisions (rev 06/08/2010); Paragraph 12 entitled "Packing and Shipment". The General Provisions are available at:  
<http://www.documents.dgs.ca.gov/pd/modellang/GPnonIT060810.pdf>.

**21. PACKAGING, PACKING AND MARKING**

All shipments must comply with General Provisions (rev 06/08/2010); Paragraph 12 entitled "Packing and Shipment". The General Provisions are available at:  
<http://www.documents.dgs.ca.gov/pd/modellang/GPnonIT060810.pdf>.

**22. INSTALLATION**

Envision will install charger unit selected either from Option 1 or 2 into the MSP-EVC system prior to delivery. Installation service includes but is not limited to landing, securing all hardware, connecting and commissioning the unit. Installation fee is included in the unit price.

**Contract (Mandatory) 1-15-61-16**  
**Contract User Instructions**

**23. INSPECTION AND ACCEPTANCE**

Shall be in accordance with General Provisions Non-IT (rev 06/08/2010), Paragraph 17 entitled "Inspection, Acceptance and Rejection" unless otherwise noted in the agency's Statement of Work (SOW) The General Provisions are available at: <http://www.documents.dgs.ca.gov/pd/modellang/gpnonit060810.pdf>. If the State does not provide such notice of rejection within thirty (30) days, unless otherwise specified in the SOW, of delivery, such Goods and services will be deemed to have been accepted.

**24. CONTRACT ADMINISTRATION**

Both the State and the contractor have assigned contract administrators as the single points of contact for problem resolution and related contract issues.

<b>Administrator Information</b>	<b>DGS/PD (State Contract Administrator)</b>	<b>Envision Solar Int'l Inc. (Contractor)</b>
<b>Contact Name:</b>	Dion Campos	David Greenfader
<b>Telephone:</b>	(916) 375-4478	(310) 961-4669
<b>Email:</b>	Dion.Campos@dgs.ca.gov	David.greenfader@envisionsolar.com
<b>Address:</b>	DGS/Procurement Division Attn: Dion Campos 707 Third Street, 2 <sup>nd</sup> Floor, MS 201 West Sacramento, CA 95605	Envision Solar Int'l Inc. Attn: David Greenfader 9270 Trade Place San Diego, CA 92126

**25. INVOICING REQUIREMENTS**

The Contractor is to render invoices as instructed on individual orders. The Contractor's invoice must include at a minimum:

- Contractor's name, address and telephone number
- Leveraged Procurement Number (Contract Number)
- Agency Order Number (Purchase Order Number)
- Item and commodity code number
- Quantity purchased
- Contract price and extension
- State sales and/or use tax
- Prompt payment discounts/cash discounts, if applicable
- Totals for each order

**26. PAYMENT**

A. Terms

Payment terms for this contract are net forty-five (45) days. Payment will be made in accordance with the provisions of the California Prompt Payment Act, Government Code Section 927, et seq. Unless expressly exempted by statute, the Act requires State departments to pay properly submitted, undisputed invoices not more than forty- five (45) days after the date of acceptance of goods, performance of services, or receipt of an undisputed invoice, whichever is later.

B. CAL-Card Use

Use of the CAL-Card for payment of invoices is not allowed under this statewide contract.

**Contract (Mandatory) 1-15-61-16**  
**Contract User Instructions**

C. Payee Data Record

Each State accounting office must have a copy of the Payee Data Record (Std. 204) in order to process payments. State departments should forward a copy of the Std. 204 to their accounting office(s). Without the Std. 204, payment may be unnecessarily delayed. State departments should contact the contractor for copies of the Payee Data Record.

**27. PAYMENT PROCESSING**

Envision agreed that any Smart charger provider will have the ability, experience and responsibility to provide payment processing in accordance with the State's requirements for payment collection and processing. The charger contractor shall select one of the following payment processing methods:

**Option 1:**

The Contractor shall meet the State's requirements for payment collection and processing. The Contractor shall offer the following payment processing procedure.

- A. The Contractor will establish and maintain separate bank accounts for any funds collected under any user of this Contract.
- B. All deposits will be made to the State's central depository zero balance bank account. Deposit instructions and account information will be provided by the Ordering Agency.
- C. The Contractor will deposit receipts to the State at intervals of no more than 10 calendar days. Transaction data for each receipt will be provided to the Ordering Agency.
- D. The Contractor will invoice Ordering Agencies monthly in arrears for service fees.
- E. Deposits shall not be net of the Contractor's service fees.
- F. Deposits shall be net of credits and chargebacks (i.e., money credited to a customer as a result of a disputed charge). The Contractor does not have the authority to debit money from the Ordering Agency's account.
- G. The Contractor shall resolve payment card questions and chargebacks.

**Option 2:**

The Contractor's point-of-sale system must be certified to one or both of the State's EPAY Master Service Agreement contractors for card processing. Deposits will be made by the EPAY contractor.

Business Name: Elavon, Inc. Contact Person: Bridget Stover Telephone: (916) 498-3443 Cell: (916) 801-0853 Fax: (865) 498-3813 Email: <a href="mailto:bridget.stover@elavon.com">bridget.stover@elavon.com</a> MSA <a href="http://www.documents.dgs.ca.gov/pd/masters/pay/fd/5-10-99-02.pdf">http://www.documents.dgs.ca.gov/pd/masters/pay/fd/5-10-99-02.pdf</a> Web link: <a href="http://www.documents.dgs.ca.gov/pd/masters/EPAY/Elavon/Elavon_Main.pdf">http://www.documents.dgs.ca.gov/pd/masters/EPAY/Elavon/Elavon_Main.pdf</a>	Business Name: First Data Merchant Services Contact Person: Laurie Filshteyn Telephone: (415) 884-2787 Alternate Phone Number: (877) 278-3901 (8:30 am to 6:30 pm e.t) Fax: (402) 916-6093 Email: <a href="mailto:laurie.filshteyn@firstdata.com">laurie.filshteyn@firstdata.com</a> MSA 5-10-99-01 Web link: <a href="http://www.documents.dgs.ca.gov/pd/masters/epay/fd/5-10-99-01.pdf">http://www.documents.dgs.ca.gov/pd/masters/epay/fd/5-10-99-01.pdf</a>
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**Contract (Mandatory) 1-15-61-16**  
**Contract User Instructions**

**28. CALIFORNIA SELLER'S PERMIT**

The California seller permit number for the contractor is listed below. State departments can verify that permits are currently valid at the following website: [www.boe.ca.gov](http://www.boe.ca.gov). State departments must adhere to the file documentation required identified in the State Contracting Manual Volume 2 & Volume 3, as applicable.

Contractor Name	Seller Permit #
Envision Solar International Inc.	SR FH102-144216

**29. WARRANTY**

See Manufacturer Warranty List, Attachment C.

The Contractor must honor all manufacturers' warranties and guarantees for a period of one (1) year from the date of acceptance on all products offered as part of this contract. The Contractor warrants that all equipment furnished under this solicitation will be new, of good material and workmanship, and agrees to replace promptly any part or parts which by reason of defective material or workmanship shall fail under normal use, free of negligence or accident.

**30. MATERIAL SAFETY DATA SHEET**

Products that contain hazardous chemicals as defined by California Code of Regulations, Title 8, §339, shall comply with the requirements of Title 8 of the California Code of Regulations including §340, Material Safety Data Sheets (MSDS). The Contractor must provide a MSDS with all legally required special handling, and packaging documentation, to the Ordering Agency upon delivery of products containing hazardous materials. This information shall also be provided by facsimile or e-mail to any Ordering Agency upon written request.

**31. ATTACHMENTS**

Attachment A1, Option 1 Contract MSP Pricing  
Attachment A2, Option 2 Contract MSP Pricing  
Attachment B, Specification 6116-3098  
Attachment B1, MSP Series 4 Assembly Specification  
Attachment B2, MSP 3.1 Assembly Specification  
Attachment C, Manufacturer Warranty List  
Attachment D, Non-Core Catalog Price Book  
Attachment E, Supplier Performance Report  
Attachment F, Envision Std.204

\*\*\*\*\*

April 6, 2016

**Emailed**

Mr. David Greenfader  
Envision Solar Int'l Inc.  
9270 Trade Place  
San Diego, CA 92126

Subject: Contract Number 1-15-61-16, Award Notification

Dear Mr. Greenfader

We are pleased to extend your Contract 1-15-61-16 for one (1) additional year. The contract has an estimated value of \$16,427,225.00, although there is no actual guaranteed dollar value. Contract information is as follows:

**MOBILE SOLAR PANEL ELECTRIC VEHICLE CHARGER SYSTEM**

**Contract No.: 1-15-61-16**

**Effective: 06/12/15 through 06/12/17**

The contract extension consists of your acceptance letter, and current awarded contract.

The Contract User Instructions have been posted on the Department of General Services eProcurement system at <https://www.caleprocure.ca.gov/pages/LPASearch/lpa-search.aspx>. A copy of this notification is being sent to you so that you will know the exact information which has been transmitted to the departments.

In accordance with the State's general provisions, Article #35 entitled News Releases, the Contractor shall not publish or use any information concerning this Statewide Contract in any format or media for advertising or publicity without prior written consent from the State's Contract Administrator.

If you have any questions regarding this contract, please contact Dion Campos at (916) 375-4478.

Sincerely,



Dion Campos  
SR, EDP Acquisitions Specialist Technical  
Contracts Management Unit 2

CORE ITEMS - Solar Systems "EV ARC 2, 3 & 4" with Smart Chargers									
Contract Line Item # (CLIN)	Item Description	UNSPS C	Manufacturer Name	Manufacturer Model No.	Unit of Measure	Qty in Unit of Measure	List Price/MSRP	Contract Discount	Contract Unit Price
1A	EV ARC 2 - 2.5 kW DC - 9 PV Panels - Solar System with Chargepoint CT4013-GW1, single level-2 smart/networked charging station.	7E+07	Envision Solar	EV ARC 2 (CP CT4013-GW1)	Each	1	\$47,571.00	2.00%	\$ 46,620.00
1B	EV ARC 3 - 3.3 kW DC - 12 PV Panels - Solar System with Chargepoint CT4013-GW1, single level-2 smart/networked charging station.	7E+07	Envision Solar	EV ARC 3 (CP CT4013-GW1)	Each	1	\$52,571.00	2.00%	\$ 51,520.00
1C	EV ARC 4 - 4.1 kW DC - 12 PV Panels Solar System with Chargepoint CT4013-GW1, single level-2 smart/networked charging station.	7E+07	Envision Solar	EV ARC 4 (CP CT4013-GW1)	Each	1	\$62,571.00	2.00%	\$ 61,320.00
1D	EV ARC 2 - 2.5 kW DC - 9 PV Panels - Solar System with Chargepoint CT4023-GW1, dual-plug derated level-2 smart/networked charging station.	7E+07	Envision Solar	EV ARC 2 (CP CT4023-GW1)	Each	1	\$49,449.00	2.00%	\$ 48,460.00
1E	EV ARC 3 - 3.3 kW DC - 12 PV Panels - Solar System with Chargepoint CT4023-GW1, dual-plug derated level-2 smart/networked charging station.	7E+07	Envision Solar	EV ARC 3 (CP CT4023-GW1)	Each	1	\$54,449.00	2.00%	\$ 53,360.00
1F	EV ARC 4 - 4.1 kW DC - 12 PV Panels Solar System with Chargepoint CT4023-GW1, dual-plug derated level-2 smart/networked charging station.	7E+07	Envision Solar	EV ARC 4 (CP CT4023-GW1)	Each	1	\$64,449.00	2.00%	\$ 63,160.00
1G	EV ARC 2 - 2.5 kW DC - 9 PV Panels - Solar System with Schneider Evlink dual-plug derated level-2 smart/networked charging station.	7E+07	Envision Solar	EV ARC 2 (EVLink dual L1)	Each	1	\$48,250.00	2.00%	\$ 47,285.00
1H	EV ARC 3 - 3.3 kW DC - 12 PV Panels - Solar System with Schneider Evlink dual-plug derated level-2 smart/networked charging station.	7E+07	Envision Solar	EV ARC 3 (EV Link dual L1)	Each	1	\$49,950.00	2.00%	\$ 48,951.00
1I	EV ARC 4 - 4.1 kW DC - 12 PV Panels Solar System with Schneider Evlink dual-plug derated level-2 smart/networked charging station.	7E+07	Envision Solar	EV ARC 4 (EV Link dual L1)	Each	1	\$59,950.00	2.00%	\$ 58,751.00
1J	EV ARC 2 - 2.5 kW DC - 9 PV panel Solar System with Blink Pedestal single level-2 smart/networked charging station.	7E+07	Envision Solar	EV ARC 2 Blink L2 Pedestal	Each	1	\$45,950.00	2.00%	\$ 45,031.00
1K	EV ARC 3 - 3.3 kW DC - 12 PV panel Solar System with Blink Pedestal single level-2 smart/networked charging station.	7E+07	Envision Solar	EV ARC 3 (Blink L2 Pedestal)	Each	1	\$50,950.00	2.00%	\$ 49,931.00
1L	EV ARC 4 - 4.1 kW DC - 12 PV panel Solar System with Blink Pedestal single level-2 smart/networked charging station.	7E+07	Envision Solar	EV ARC 4 (Blink L2 Pedestal)	Each	1	\$60,950.00	2.00%	\$ 59,731.00
CORE ITEM - ACCESSORIES									

Contract Line Item # (CLIN)	Item Description	UNSPS C	Manufacturer Name	Manufacturer Model No.	Unit of Measure	Qty in Unit of Measure	List Price/MSRP	Contract Discount	Contract Unit Price
1M	standard truck with 11k pd. Ball mount towing capacity. (recommended for in town transportation)	7E+07	Envision Solar	AM-1	Each	1	\$22,375.00	2.00%	\$ 21,927.00
1N	system for gooseneck bed mounted ball hitch. (recommended for highway transportation)	7E+07	Envision Solar	AM-2	Each	1	\$25,035.00	2.00%	\$ 24,534.00
1O	30kWh	7E+07	Envision Solar	ABP	Each	1	\$5,011.00	2.00%	\$ 4,911.00
1P	AC and USB Outlets- allows users to charge 120V and USB device e.g. cell phone, laptop, wheelchair	7E+07	Envision Solar	GB1	Each	1	\$644.00	10.09%	\$ 579.00

CORE - ITEM NETWORK SERVICES

Contract Line Item # (CLIN)	Item Description	UNSPS C	Manufacturer Name	Unit of Measure	Qty in Unit of Measure	List Price/MSRP	Contract Discount	Contract Unit Price
1Q	Services. Each EV ARC™ unit is equipped with Wireless communications & 24/7 State-of-Health monitoring. Each EV ARC™ unit is equipped with a wireless 3G CDMA/EVDO router on the cellular network. The Inverter is networked and can be accessed remotely over the web. This provides “state of health” monitoring of the battery charging system, providing real-time status of PV, battery charge, and inverter operation. EnvisionTrak™: Exclusive & Patented Sun-Tracking Technology is a networked system and can be accessed and controlled remotely over the web. Upon purchase, client will be provided with a log in and instructions for how to use the solar tracking controls. This system will allow purchaser to view or manage information about the tracking system remotely, and allow us to see the canopy’s position in real time, send commands to the controller, and generates warnings, alerts, and	7E+07	Envision Solar	Annually	1	\$360.00	0.00%	\$ 360.00
1R	Network Services for Chargepoint enabled smart charging equipment (EVSE). <b>First 12 months of service is included in EV ARC purchase price. Annual subscription cost per plug.</b>	7E+07	Envision Solar	Annually (per plug)	1	\$270.00	0.00%	\$ 270.00
1S	Network Services for Blink enabled smart charging equipment (EVSE). <b>First 12 months of service included in EV ARC purchase price. Annual subscription cost per plug.</b>	7E+07	Envision Solar	Annually (per plug)	1	\$270.00	0.00%	\$ 270.00

CORE - ITEM OPERATIONS, MAINTENANCE & REPAIR SERVICES

Contract Line Item # (CLIN)	Item Description	UNSPS C	Manufacturer Name	Unit of Measure	Qty in Unit of Measure	List Price/MS RP	Contract Discount	Contract Unit Price
IT	During Weekend, Holidays, and After Regular Business Hours	7E+07	Envision Solar	Hourly	1	\$240.00	10.00%	\$216.00
1U	During Regular Business Hours (M-F 8:00AM - 5:00PM)	7E+07	Envision Solar	Hourly	1	\$160.00	10.00%	\$144.00
1V	Slew drives, Check Calibration of Envision Trak, Check Battery Charging Systems, Settings, Performance of Inverter, Overall Condition of Structure and Inspect & Confirm Operation of EV Charger. <b>(Service is included for the 1st twelve months)</b>	7E+07	Envision Solar	Annually	1	\$647.50	10.00%	\$582.75
1W	Relocation Transportation Services: Services include relocating unit from original destination to another location. NOTE: An hourly relocation timeline charges begins from Envision Solar in San Diego CA to pickup and new destination location.	7E+07	Envision Solar	Hourly	1	\$250.00	10.00%	\$225.00
NON-CORE ITEM CATALOG DISCOUNTS								
Item Description		Contract Discount %						
Contractor's Catalog - Non-Core Items		10%						

CORE ITEMS - SOLAR SYSTEMS "EV ARC 2,3 & 4" WITHOUT CHARGERS					
Contract Line Item # (CLIN)	Item Description	UNSPSC	Manufacturer Name	SKU or Item No.	Unit of Measure
2A	EV ARC 2- 2.5 kW DC -9 PV Panels- Solar System	72153701	Envision Solar	2	Each
2B	EV ARC 3- 3.3 kW DC-12 PV Panels Solar System	72153701	Envision Solar	3	Each
2C	EV ARC 4- 4.1 kW DC-12 PV Panels Solar System	72153701	Envision Solar	4	Each
CORE ITEMS - NETWORK SERVICES					
Contract Line Item # (CLIN)	Item Description	UNSPSC	Manufacturer Name	Unit of Measure	
2D	Remote Monitoring and Management System (RMMS)- EV ARC Services. Each EV ARC™ unit is equipped with Wireless communications & 24/7 State-of-Health monitoring. Each EV ARC™ unit is equipped with a wireless 3G CDMA/EVDO router on the cellular network. The Inverter is networked and can be accessed remotely over the web. This provides “state of health” monitoring of the battery charging system, providing real-time status of PV, battery charge, and inverter operation. EnvisionTrak™: Exclusive & Patented Sun-Tracking Technology is a networked system and can be accessed and controlled remotely over the web. Upon purchase, client will be provided with a log in and instructions for how to use the solar tracking controls. This system will allow purchaser to view or manage information about the tracking system remotely, and allow us to see the canopy’s position in real time, send commands to the controller, and generates warnings, alerts, and notifications of system operation. Nearly all troubleshooting (if needed) can be done remotely.	72153701	Envision Solar	Annually	
CORE - ITEM OPERATIONS, MAINTENANCE & REPAIR SERVICES					
Contract Line Item # (CLIN)	Item Description	UNSPSC	Manufacturer Name	Unit of Measure	
2E	During Weekend, Holidays, and After Regular Business Hours	72153701	Envision Solar	Hourly	
2F	During Regular Business Hours (M-F 8:00AM - 5:00PM)	72153701	Envision Solar	Hourly	
2G	Operations & Maintenance: Plan includes PV Panel Cleaning, Grease Slew drives, Check Calibration of Envision Trak, Check Battery Charging Systems, Settings, Performance of Inverter, Overall Condition of Structure and Inspect & Confirm Operation of EV Charger. <b>(Service is included for the 1st twelve months)</b>	72153701	Envision Solar	Annually	
2H	Relocation Transportation Services: Services include relocating unit from original destination to another location. NOTE: An hourly relocation timeline charges begins from Envision Solar in San Diego CA to pickup and new destination location.	72153701	Envision Solar	Hourly	



OPTION 2

Contract Unit Price
\$ 41,650.00
\$ 46,550.00
\$ 56,350.00
Contract Unit Price
\$ 360.00
Contract Unit Price (Qty. 1-5)
\$ 216.00
\$ 144.00
\$ 582.75
\$ 225.00

ATTACHMENT A



# **EV ARC™ LOCATION SELECTION AND PREP GUIDE**

## OVERVIEW

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An EV ARC™ station complete with EnvisionTrak® will follow the sun through the day. This means the solar array will move to maintain the best incidence angle with the sun. As a result, there are spatial requirements around a parking space that must be met to guarantee uninterrupted operation at peak performance. Additionally the delivery truck and ARC Mobility trailer require space to maneuver during deployment. Therefore it is important to ensure the surrounding area also provides enough space for delivery.

This document is meant to confirm the final location is compatible with the EV ARC™ station's operation and deployment. Google Maps does not always provide the most up to date imaging of a location so we rely on an in person survey of the parking space and surrounding area. **You, as the CUSTOMER are responsible for Sections 1 and 3.** Envision Solar will complete *Section 2*.

### SECTION 1 – PARKING SPACE INITIAL EVALUATION (To Be Completed by CUSTOMER)

---

Potential parking spaces must pass all of the following requirements. Initial in each blank to confirm item is met or completed. Email all required information and a copy of this sheet to ***support@envisionsolar.com***.

1. Use **Figures 1 through 3** to confirm there are no PERMANENT stationary objects (i.e. trees, walls, fences, light posts) within the required **KEEP OUT ZONES** at each potential parking space. \_\_\_\_\_
2. Confirm enclosure door access area (**Figure 1**) will not be not blocked by a barrier (i.e. wall, fence, or tall plant). Curbs and small plants are OKAY. Door access requires at least 2 feet of space. \_\_\_\_\_
3. Provide photos of each potential parking space and the immediate surrounding area. \_\_\_\_\_
4. Provide descriptions and photos of any nearby permanent stationary objects above 13ft that are outside of the **KEEP OUT ZONES**. If area is clear please write NONE. If more space is required please detail in your email.
5. Provide North oriented Google Maps image(s) of parking area(s) and label the exact potential space position(s). \_\_\_\_\_
6. Note any clearance issues at parking lot entrances. Minimum required clearance is 14.5ft. \_\_\_\_\_
7. Ensure wheel stops are removed from the potential parking space. \_\_\_\_\_
8. Sign below to confirm all requirements and tasks have been met or completed.

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Location Address

Signature

Date

### SECTION 2 – PARKING SPACE REVIEW AND ACCEPTANCE (To Be Completed By ENVISION SOLAR)

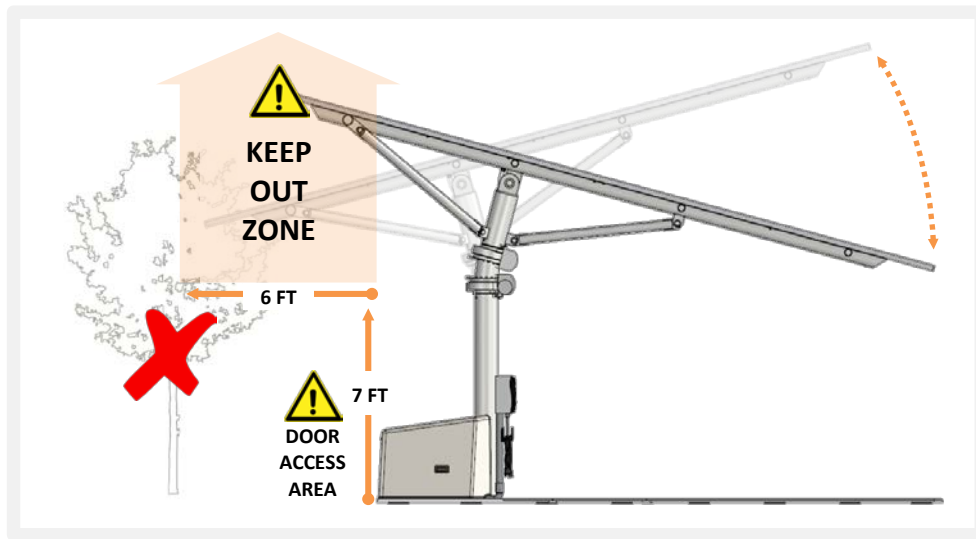
---

1. Review all provided photos to confirm space is free of any possible interferences. \_\_\_\_\_
2. Complete shading study if required based on locations of objects above 13ft and Google Maps images. \_\_\_\_\_
3. Confirm parking area will be navigable for truck and trailer. \_\_\_\_\_
4. Sign below to confirm parking space is acceptable.

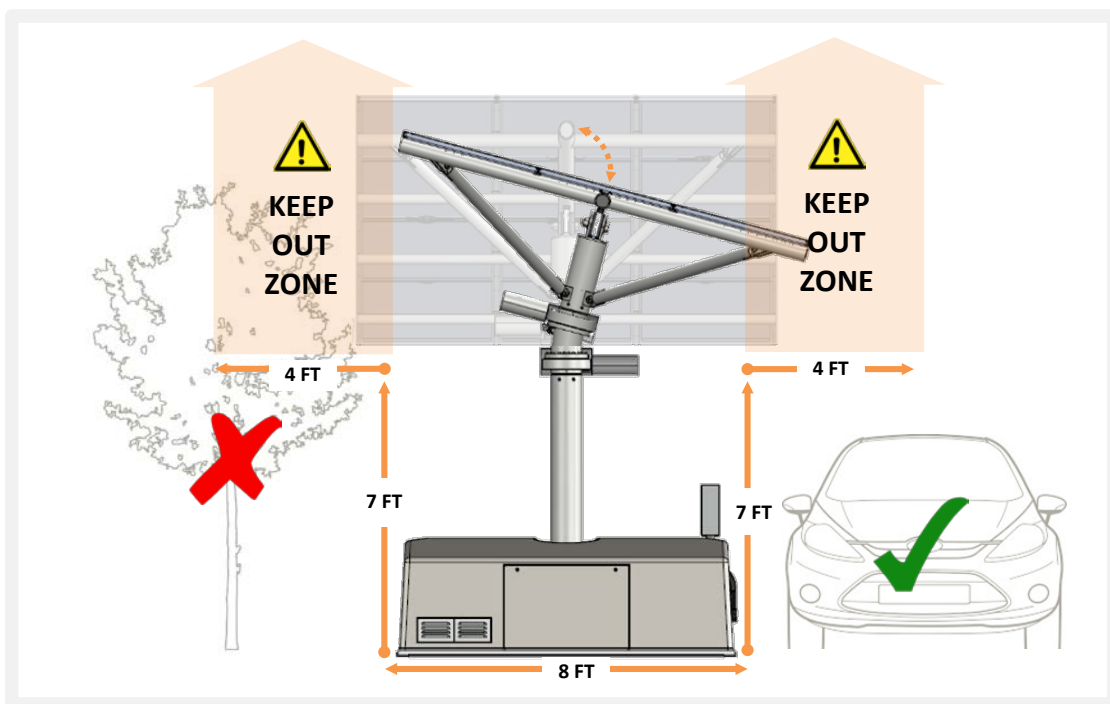
---

Signature

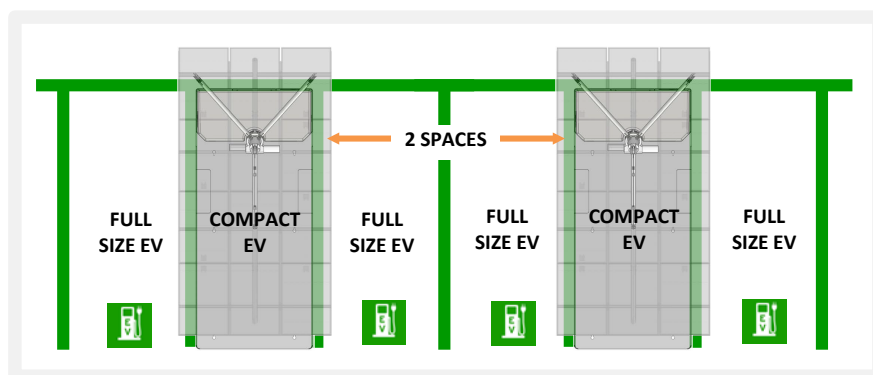
Date



**Figure 1 (Side View) – Aft Keep Out Detail (Fore and Aft Tracking Range)**



**Figure 2 (Back View) – Side Keep Out Detail (Fore and Side Tracking Range)**

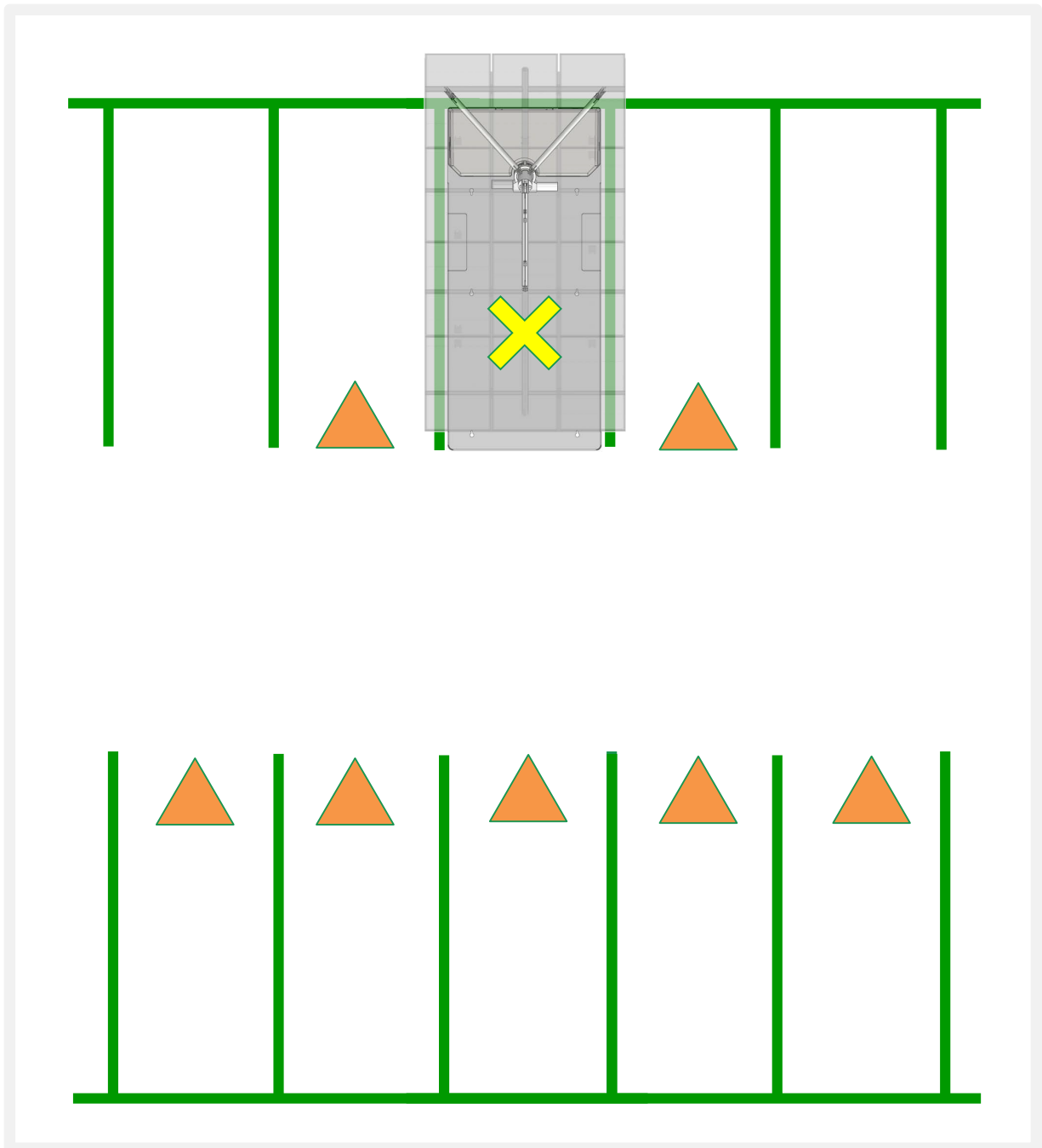


**Figure 3 (Top View) – Multi-Unit Positioning and Suggested Space Designation**

### SECTION 3 – PARKING AREA PREP (To Be Completed by CUSTOMER At Least 24 HOURS Prior to Delivery)

Initial each blank to confirm item is complete and email a photo of the prepped location with a copy of this sheet to [support@envisionsolar.com](mailto:support@envisionsolar.com).

1. Spray paint an X on the chosen parking space. Please use a light or flourecent colored construction paint. Cones have a tendency to move on their own, so please use a semi-permanent alternative if paint is not an option. \_\_\_\_\_
2. Block off the surrounding parking spaces according to cones (triangles) shown in **Figure 4**. \_\_\_\_\_



**Figure 4 – Top View Parking Area Preparation Detail**