FACT SHEET

COMPANY NAME	Envision Solar International, Inc.
OWNERSHIP	Public company (Nasdaq: EVSI, EVSIW)
DATE FOUNDED	2006
HEADQUARTERS	5660 Eastgate Drive San Diego, CA (858) 799-4583
OFFICERS	Desmond Wheatley, President, CEO Katherine McDermott, Chief Financial Officer Bryan Kennard, Chief Applications Engineer Andy Ike, Sales Manager Rick Assman, Production Manager Erick Castro, Fabrication Manager
BOARD OF DIRECTORS	Desmond Wheatley, Chairman of the Board Tony Posawatz, President & CEO of Invictus iCAR LLC (innovation Consulting Advisory Resources) Bob Schweitzer, Chairman of the Board at PetMeds (NASDAQ:PET) Peter W. Davidson, Co-founder and CEO of the Aligned Intermediary
COMPANY DESCRIPTION	Envision Solar International, Inc. invents, designs, engineers, and sells solar-powered patented infrastructure products for electric vehicle (EV) charging, energy security, and outdoor media industries. Based in San Diego, California, all of the company's products are made in America and manufactured by mission-driven team members, including combat veterans, individuals with disabilities and other underserved demographics. Envision Solar is listed on Nasdaq under the symbol EVSI and EVSIW. Its solar-powered EV chargers are sold in 90 municipalities in 20 states and 4 nations.
KEY U.S. DISTRIBUTION	Envision Solar's products are purchased and used by major brands, organizations, institutions, city and government agencies including Google, Dell, Cadillac, State of California, City of New York, McDonald's, BMW, GM, Kohl's, Dell, University of California, United States Navy,

Johnson & Johnson, Fiat, Honda, United States Virgin Islands, Caltrans, Brotherhood of Electrical Workers, Sempra Energy Utility, and many more.

PRODUCTS

The patented **EV ARC™ 2020** (Electric Vehicle Autonomous Renewable Charger), is the world's first transportable, solar-powered, EV charging station that operates completely off the power grid. EV ARC™ 2020 generates and stores enough electricity to power up to 225 miles of electric driving each day at up to 28 miles of range per hour. The product fits in a standard parking space and can be deployed in minutes, moved to a new location and requires zero construction or permitting to install. The solar panel canopy tracks the sun and provides EV charging and emergency power during grid failure.

EV ARC™ 2020 units are deployed alone in a parking space and can charge as many as six vehicles at the same time, at a reduced charging rate. Typically, they are deployed with Level II chargers which add 15 - 30 miles of charging per hour to any EV.

The patented **EV ARC™ 2020 DC Fast Charging** system is a 50KW DC is made up of four EV ARC™ 2020 units interconnected to provide up to 1,200 miles of electric driving in a day, or up to 200 miles of added range in an hour of charging to a single vehicle. The DC Fast Charger also features the EnvisionTrak™ patented sun tracking canopy and emergency plug-in sockets.

The patented **SOLAR TREE®** is a larger format solar-powered EV charger for medium and heavy duty EV charging but unlike the EV ARC™, is not transportable. The SOLAR TREE®, features a large sun-tracking solar canopy under which trucks or at least eight cars can charge. The single center column features digital advertising screens, WiFi or 5G plugin, emergency power plug-in and can be customized for metered charging or security camera monitoring.

The patent pending **EV STANDARD™** transforms a traditional streetlight into a Level II EV charger. The EV STANDARD™ utilizes the existing grid-generated power of an urban streetlamp and adds a combination of solar, light-wind generation and on-board battery storage to charge at any curbside.

The **UAV ARC™** (Unmanned Aerial Vehicle Autonomous Renewable Charger) is a patent-pending off-grid recharger for drones. These solar- and wind-powered units can be deployed on flat roofs in cities, remote terrain or maritime environments to create a fueling and information-sharing network for long distance drone travel.

EV LEVELS OF CHARGING

Level 1 equipment provides charging through a 120 volt, alternating-current (AC) plug, requires a dedicated circuit and takes approximately 8 - 12 hours to charge a fully depleted car battery. Generally, Level 1 refers to a standard household outlet.

Level 2 equipment charges through a 240V, AC plug and requires installation of charging equipment. These units require a dedicated 40-amp circuit and generally takes 4 - 6 hours to charge a fully depleted

vehicle battery. Charging time can increase in cold temperatures. Level 2 chargers are usually found in residential settings, public parking areas, places of employment and commercial settings.

Level 3 equipment with CHAdeMO technology (DC fast charging), charges through a 480V, direct-current (DC) plug. Most Level 3 chargers provide an 80% charge in 30 minutes. Cold weather can extend the time required to charge. This type of Level 3 equipment is not compatible with all vehicles, and the charge itself is not accepted by all vehicles. Although there is no industry standard for this level of charging, Level 3 chargers are being deployed across the U.S. in public or commercial settings.

INDUSTRY DIFFERENTIATION

Envision's products sidestep a need for contractors, engineers, consultants, building department permits, trenching, laying of concrete and wiring, as well as delays caused by these time-worn civil engineering approaches. Envision Solar provides 100% renewable technology by replacing the traditional grid-tied energy infrastructure with 100% free, nature-generated power products for EVs, outdoor marketing and street lighting.

MONIKERS

"Drive on Sunshine"

"Thrive on Sunshine"

"Survive on Sunshine"

"The Future of Fuel"

HASHTAGS

#DriveOnSunshine

#ThriveOnSunshine

#SurviveOnSunshine

#EnvisionSolar

#EVARC™

#EVSI

HISTORICAL MOMENTS

Envision Solar made history the week of September 15, 2019 when two of its EV ARC™ HP DC Fast-Charging stations were installed at the Camp Roberts Rest Area on U.S. California Highway 101. They were the first solar-powered EV charging stations installed for the public on a U.S. highway. The stations are free to the public and also provide emergency responder plug-ins to be used during a power outage. The installation is a public/private collaboration between the Monterey Bay Air Resources District (MBARD), the California Department of Transportation (Caltrans), and is part of former Governor Jerry Brown's Caltrans "30 - 30: Zero Emission Vehicle Implementation Plan."

FACTOIDS

The grid, with its dependence on fossil fuels, and its many points of energy transfer, leaves a population vulnerable to attack and breakdown. Though EVs are growing in usage, the chargers on the market are dependent on the grid to power them.

In the case of an emergency or a downed grid, EVs cannot operate, nor can water or gasoline be pumped. Solar-powered energy is available 24/7 through EV ARC™'s during any emergency.

By 2018, 22 vehicle makers and 41 individual models of plug-in electric cars and sport utility vehicles were on the market.

To date, more than one million plug-in EVs have been sold in the United States.
Nearly seven years from the introduction of the first mass-marketed plug-in vehicles, cumulative sales reached 500,000 in September 2016. Cumulative EV sales topped one million just two years later.

In December 2018 there were nearly 50,000 plug-in EVs sold, capturing 3% of the total light-duty vehicle sales in that month.

To fuel the fast-growing number of plug-in EVs, the number of EV charging units grew from about 3,000 in 2011 to over 61,000 in 2018. California is home to 32.5% of all EV charging units nationwide; the most in any U.S. state." [1]

There were 208,000 new registrations for EVs in the U.S. in 2018, more than double the number filed in 2017. More than 350,000 new EVs are forecasted to be sold in the U.S. in 2020. [2]

The number of EVs on the road around the world are forecasted to hit 125 million by 2030, the International Energy Agency forecasts. [3]

According to the International Energy Agency's recently released Global EV Outlook, worldwide EV sales exceeded 5.1 million in 2018, marking an increase of 63% (or 2 million units) from the previous year.

The People's Republic of China is the world's largest electric car market, followed by Europe and the U.S. Around 45% of EV's on the road in 2018 were located in China — for a total of 2.3 million — compared to 39% in 2017. Europe accounted for 24% of the global fleet last year, while the U.S. represented 22%." [4]

---

1 https://www.tdworld.com/electrification/lessons-be-learned-more-1-million-plug-evs-sold-us#targetText=Cumulative%20sales%20topped%20one%20million,to%20over%2061%2C000%20in%202018

2 https://techcrunch.com/2019/04/15/new-registrations-for-electric-vehicles-doubled-in-u-s-since-last-year/

3 https://www.cnbc.com/2018/05/30/electric-vehicles-will-grow-from-3-million-to-125-million-by-2030-iea.html

4 https://www.greentechmedia.com/squared/electric-avenue/6-stats-on-the-state-of-the-global-ev-sector

Backgrounder

Every day we are reminded about the damaged state of our planet's environment. We have known about it for decades; but, up until recently, the conversation has been faint and considered fringe, at best. Big business and politics cast doubts on what is causing global warming, but no one is denying that seas and temperatures are rising and fire storms rage at amplitudes never seen in history. Some climate forecasters predict that if we don't change the way we live our highly urbanized lives, in only 40 years the Southern Hemisphere will be uninhabitable. In particular, the transportation industry, along with electricity generation, has created 70% of greenhouse gasses that are gnawing away at our atmosphere. Though the automotive industry has made great strides to move away from combustible engines to electric, the grid, which is powered by fossil fuels, is still used to charge electric vehicles – an absurd irony.

Environmental activism began in 1962 when conservationist Rachael Carlson began raising awareness and writing books about the adverse effects of pesticide use. Shortly thereafter, in 1970, Earth Day was born. Fast-forward to 2019, 16-year-old environmental activist Greta Thunberg is on the world stage, meeting with presidents and igniting powerful global awareness campaigns. The U.N. now hosts climate change meetings and provides education.

Envision began as a service company, making and manufacturing bespoke solar charging canopies for parking lots, which required heavy construction to install. Energy pioneer Desmond Wheatley came on board as a consultant and re-focused on scalability and the creation of actual products. He developed products that were easy to purchase and install by eliminating the costliest aspect- construction. With those changes on the drawing board, he became the CEO. For the mission driven entrepreneur, who has spent a career in shipbuilding, energy and security infrastructure, communications, and finance, the re-creation of Envision Solar is the perfect nexus of his professional expertise and personal philosophies.

Envision is a renewable power generation force. They are impacting the energy-making sector with innovations that can be used individually, professionally and in civil engineering applications. Since the creation of the EV ARC™ (Electric Vehicle Autonomous Renewable Charger), Envision has sped up the solar-charging process with the creation of the EV ARC™ 2020 DC Fast Charger. Moving into the media sector, Envision then developed the SOLAR TREE®, a multi-vehicle solar-powered EV charger with advertising opportunities built in. For civil engineers, Envision then created the EV STANDARD™ that uses the base of a traditional streetlight and transforms it into a solar and wind-powered Level II EV charger. Big thinkers,

Envision is on a mission to make 100% free EV charging possible at every curbside. To power the future of long-distance drone transport, the most recent product addition is the UAV ARC™

(Unmanned Aerial Vehicle Autonomous Renewable Charger) that can be deployed on city roofs, remote terrain, or maritime environments; a solar powered fueling and information-sharing network.

“I’ve always been the guy driven to make the impossible possible,” says Wheatley. “I will stop at nothing to defy the experts. We did that by side-stepping a 100-year-old entrenched parking lot construction industry with a brand-new technology that most people didn’t understand, and even fewer believed could work.”

At a 2012 meeting at the Google headquarters, Wheatley was invited to test his stand-alone EV chargers for some tech unicorn feedback. It was here that he hatched the first solar-powered charger. The entrepreneur with enough moxie to light up a city walked across the room to the white board and scratched out a design that not only eradicated any modicum of construction to install, but now allows EVs to “drive on sunshine.” This became the first EV ARC™ and Wheatley still has the hand drawing, the basic blueprint of the units now at private corporations from Cadillac to Kohls, Dell to Google, on U.S. Navy bases and in 90 municipalities in 20 states as well as four nations, with New York City being their largest client. The newest version of the EV ARC™ just made its U.S. highway debut in September 2019 for the traveling public to use on California’s 101 Highway.

In April 2019, Envision Solar became a public company on the Nasdaq exchange (EVSI, EVSIW), a sign that Wall Street and mainstream America are starting to understand that protecting our home, the environment, is becoming a capitalist opportunity.

---

[1] https://www.marketsandmarkets.com/Market-Reports/green-technology-and-sustainability-market-224421448.html

Desmond Wheatley | President, CEO, Chairman of the Board

Scotland-born Desmond Wheatley is a visionary who has spent the past two decades in cutting-edge technology from telecom and energy to security systems. As CEO and Chairman of the Board of San Diego-based Envision Solar International, Inc. (EVSI, EVSIW), he now sits at the head of the global energy table, bringing 100% renewable energy to the electric vehicle (EV), civil engineering and outdoor advertising sectors. His expertise includes visioning, positioning, scaling, growing and operating companies with game-changing technologies and introducing them to the masses. A true energy pioneer, Wheatley has created scalable renewable energy products that have resulted in impressive revenue growth: 366% in 2018 alone.

Wheatley is marrying green technology with capitalism by engaging the imagination and dollars of the investment community. In April 2019, he brought Envision Solar to Nasdaq with their first-to-market, solar-powered EV changer technology, leading the way in four countries, 90 municipalities, and 20 U.S. states, including New York and California. He currently has two solar power patents pending, one for a continually reorienting solar panel and the other, a self-contained renewable battery charger.

A mission-driven entrepreneur who is passionate about contributing to the health of our planet, Wheatley is working to educate consumers on the usage of EVs. As a former Merchant Marine with no formal college education, he is now at the forefront of one of the most significant and rapidly growing industries. “When I go to work each day, I know I am making a positive global impact on how we live and do business. It is my greatest hope that our work helps to turn around the damage we’ve done and make the planet a place where our kids feel confident about their future and can thrive.”

From Europe to the Middle East, Wheatley has made a professional impact globally with companies ranging from start-ups to publicly traded companies. He has founded, funded and operated four profitable start-up companies and provided M&A strategic consulting services. Over the course of his career, he has raised commitments of over $500M in debt and equity.

Wheatley joined Envision Solar in 2010 as a consultant, he then moved into the role of CEO the following year and became the Chairman of the Board in 2016.

Prior to his current post, Wheatley was a founding partner in the international consulting practice Crichton Hill LLC. He was also CEO of iAxis FZ LLC, a Dubai-based alternative energy and

technology systems integration company with customers in the Middle East and the U.S. After moving back to the U.S., he held various senior management positions at San Diego-based

Kratos Defense and Security Solutions, fka Wireless Facilities. Previously, he was President of Engineered Network Solutions (ENS), the largest independent security and energy management systems integrator in the U.S., providing services to municipalities and Fortune 500 companies. Wheatley has held other senior management positions in the cellular and broadband wireless industries, deploying infrastructure, while also lobbying in Washington, D.C. on behalf of major wireless service providers.

A man on a mission, Wheatley is very focused on being an exemplary global citizen. “I can only hope that others will make their contributions; it’s the only responsible thing to do - we have no other place in the universe to live, but on Planet Earth right now. As wonderful as EVs are for the environment, it makes no sense to charge them off the fossil-fueled grid, which is predominantly how it works until we invented the world’s only transportable solar-powered EV charging station that allows us to literally ‘Drive On Sunshine.’ This is the future of fuel.”

In his spare time, Wheatley never misses his daily run and has a penchant for open ocean swimming. He is inspired by history and has an insatiable desire to learn by delving into the psyches and strategies of great thinkers, such as Winston Churchill. Wheatley lives in San Diego, California with his wife, two children, two dogs, two snakes, two cats - and two EV’s.

# # #