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Polar Power Launches New Line of Mobile Electric Vehicle Chargers

GARDENA, CA, May 10, 2023 (GLOBE NEWSWIRE) -- Polar Power Inc. (“Polar” or the “Company”) (NASDAQ: POLA), a global provider of prime, backup and solar hybrid DC power solutions, today announced it is now taking advance orders for its new line of mobile Combined Charging System (“CCS”) Electric Vehicle (“EV”) chargers, which are expected to be available before the end of the first quarter of 2024. Mobile EV chargers are used for emergency roadside service providing a fast-charging solution for EVs that have run out of charge before reaching a stationary charging facility. The goal is not to fully charge the vehicle but place a sufficient charge allowing the vehicle to proceed to the nearest charging station; this being analogous to the can of gasoline provided to stranded motorists.

Polar is currently upgrading its mobile CHAdeMO EV chargers to the universal CCS standard to meet the larger market opportunity. Because of the supply chain shortages and long delivery of engines and electronics, Polar is taking orders for shipments starting in the first quarter of 2024.

Since 2011 Polar has sold its CHAdeMO chargers to most of the major U.S. automakers for fast charging their EVs during field testing. The performance advantage Polar provided to mobile EV charging was a significant reduction in the charging system's size, weight, fuel consumption (for both the charger and vehicle transporting the charger), and system cost. Using the Polar system, a complete charging system can be deployed on the back of a small pickup truck relative to alternative solutions requiring a large trailer towed by a truck or tractor/trailer. The Polar mobile EV charger technology is DC based and is less than half the weight and size of an AC generator coupled to an AC to DC charger.

The other alternate solution to an EV running out of power on the road is a flatbed truck to transport the vehicle to the nearest charging station. This is a cumbersome solution requiring a considerable time to load the EV, transport it, and unload it at the charging station. In aggregate, this can take hours and to exacerbate the situation, in many cities, there is a long wait for flatbed truck availability. Using a mobile EV charger allows a small van or pickup truck to perform a 15-to-30-minute charge (about the same time required to only load the vehicle on to the flatbed truck) allowing the motorist to drive to a charging station, which is a substantially more elegant and cost-effective solution. In fact, the Polar EV chargers are small enough to be installed on tow trucks / wreckers or on a small pickup or van. Polar expects this will substantially accelerate the establishments of fleets to serve the fast-growing EV market.

The first sizes to ship will be 15 kW and 30 kW using either propane, natural gas, or diesel. Polar's next generation of DC alternators, its 9000 series, is in test with 50 kW charging output. These chargers are expected to be available in the second quarter of 2024.

Mr. Arthur D. Sams, CEO of the Company, comments, "There is a large number of gas stations in our cities and highways with short lines where it takes only minutes to refuel yet there are still a substantial number of drivers that run out of fuel," said Polar Power CEO Arthur Sams. "I am intimately familiar with the challenges as an EV owner myself for the past 8 years and I know that keeping a charge in your vehicle requires an extra effort. There have been many times that I arrived at the charging station with less than 5 miles of charge remaining in the vehicle and I expect this is a familiar comment from many EV owners".

"One factor causing EVs to run out of charge is commonly referred to as phantom discharge or vampire drain; EV owners can experience continued battery discharge while the vehicle is parked. My EV loses up to 10 miles a day while my car is parked at the airport, so I must make sure there is sufficient charge to manage the time away from the vehicle and the charge needed to get home. The factors causing phantom discharge vary from EV to EV, including preconditioning and temperature regulation of the battery and cabin interior, security cameras, charging the onboard 12 Vdc battery, and miscellaneous apps. As soon as I figure out the setting to reduce my phantom discharges, a software update comes along and seems to switch them on again. In addition to the EV owners' needs for mobile charging there are the needs of EV manufacturers, transportation logistics, and dealer sales lots. When the automotive manufacturing plant ships an EV there can be problems with dead batteries due to long storage and transportation time, mobile chargers are needed at the docks, storage yards, and the dealerships. Fleet vehicle operators need mobile chargers to maintain and service their fleet.

Mr. Sams concluded, "Many EV owners are burdened with range anxiety, and we can provide a cost-effective and easily accessible solution to give owners greater comfort through emergency on-road charging solutions using our power technology platform. The incumbent solution frequently leads to bad experiences for EV owners who have faced very long waits for a flatbed truck to haul their EV to a charging station, keeping in mind that most EVs are not even towable with standard tow trucks. Overall, we see this as a substantial market opportunity for us by providing the enabling technology to solve this real-world problem that will only become more prevalent with the proliferation of EVs.

We believe supplying each city in the USA with just one mobile EV charger represents a huge market potential."

About Polar Power, Inc.

Gardena, California-based Polar Power, Inc. (NASDAQ: POLA) designs, manufactures, and sells direct current, or DC, power systems, lithium battery powered hybrid solar systems for applications in the telecommunications market and, in other markets, including military, electric vehicle charging, cogeneration, distributed power, and uninterruptable power supply. Within the telecommunications market, Polar's systems provide reliable and low-cost energy for applications for off-grid and bad-grid applications with critical power needs that cannot be without power in the event of utility grid failure. For more information, please visit www.polarpower.com or follow us on www.linkedin.com/company/polar-power-inc/.

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This news release contains certain statements of a forward-looking nature relating to future events or future business performance. Forward-looking statements can be identified by the words "expects," "anticipates," "believes," "intends," "estimates," "plans," "will," "outlook" and

similar expressions. Forward-looking statements are based on management's current plans, estimates, assumptions and projections, and speak only as of the date they are made. With the exception of historical information, the matters discussed in this press release including, without limitation, Polar's expectation that its new line of electric vehicle chargers including those of sizes 15 kW, 30 kW, and 50 kW using either propane, natural gas, or diesel will be available in the year 2024 are forward-looking statements and considerations that involve a number of risks and uncertainties. The actual future results of Polar could differ from those statements. Factors that could cause or contribute to such differences include, but are not limited to, adverse domestic and foreign economic and market conditions, including demand for mobile EV chargers; trade tariffs on raw materials; changes in domestic and foreign governmental regulations and policies; the impact of inflation and changing prices on raw materials; supply chain constraints causing significant delays in sourcing raw materials; labor shortages as a result of the pandemic, low unemployment rates, or other factors limiting the availability of qualified workers; and other events, factors and risks. It undertakes no obligation to update any forward-looking statement in light of new information or future events, except as otherwise required by law. Forward-looking statements involve inherent risks and uncertainties, most of which are difficult to predict and are generally beyond Polar's control. Actual results or outcomes may differ materially from those implied by the forward-looking statements as a result of the impact of a number of factors, many of which are discussed in more detail in Polar's reports filed with the Securities and Exchange Commission.

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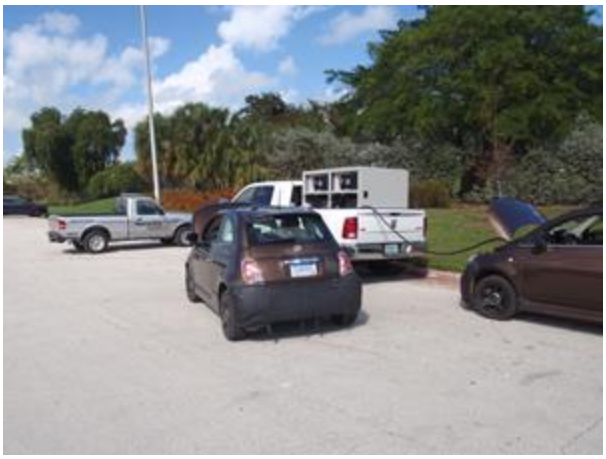

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