

QUANTUM TECHNOLOGIES

PRESS RELEASE

Quantum and Asola to Triple Plant Capacity for Solar Modules in Germany to Meet Increasing Demand

Irvine, CA – May 20, 2008 – Quantum Fuel Systems Technologies Worldwide, Inc. (NASDAQ: QTWW) today announced that its German solar partner, Asola Advanced and Automotive Solar Systems GmbH, is expanding its annual solar module manufacturing capacity to 45 MW (megawatts peak power), in response to increasing demand for photovoltaic power systems in Europe. Asola has successfully secured financing for this expansion, and plans to commission the new, state of the art facility by fall 2008.

Quantum holds a 25% stake in Asola, and has initiated discussions related to an expanded partnership. Quantum and Asola have entered into a long-term supply agreement with Ersol Solar Energy AG for the procurement of 155 MW of high-efficiency silicon photovoltaic solar cells, starting in 2008. Together with supply contracts with other major suppliers around the world (i.e. MOTECH, Sunergy and others), the Ersol agreement guarantees a steady supply of solar cells to Quantum and Asola, thereby avoiding any potential future disruptions due to crystalline silicon shortages, as have been recently experienced by the solar cell industry. Resulting sales from these supply agreements are anticipated to generate in excess of US \$600 million for Asola and Quantum.

"Electricity buy back guarantee programs continue to expand the market for high quality solar photovoltaic power systems in Europe", commented Alan P. Niedzwiecki, President and CEO of Quantum. "We are excited to be in this vibrant market place, and pleased by the customer-loyalty and appreciation for Asola's technology leadership, reliability and highest manufacturing quality."

"Asola is pleased to kick off this much needed expansion project in partnership with Quantum," said Asola's founder and CEO, Reinhard Wecker. "We are thankful to our bank, local and federal government agencies, key customers and suppliers for their collaboration and support for this project. Our expanded capacity will allow us to serve new and existing customers who are demanding increasing quantities of high quality solar photovoltaic products to ensure reliable electricity production during peak demand hours".

About Quantum:

Quantum Fuel Systems Technologies Worldwide, Inc., a fully integrated alternative energy company, is a leader in the development and production of advanced propulsion systems, energy storage technologies, and alternative fuel vehicles. Quantum's portfolio of technologies includes advanced lithium-ion battery systems, electronic controls, hybrid electric drive systems, hydrogen storage and metering systems and alternative fuel technologies that enable fuel efficient, low emission hybrid, plug-in hybrid electric, fuel cell, and alternative fuel vehicles. Quantum's powertrain engineering, system integration, vehicle manufacturing, and assembly capabilities provide fast-to-market solutions to support the production of hybrid and plug-in hybrid, hydrogen-powered hybrid, fuel cell, alternative fuel, and specialty vehicles, as well as modular, transportable hydrogen refueling stations.

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Quantum's customer base includes automotive OEMs, fleets, aerospace industry, military and other government entities, and other strategic alliance partners. Quantum has co-founded a "green American car company" called Fisker Automotive, Inc. Fisker Automotive will offer a range of environmentally friendly premium cars, incorporating Quantum's proprietary high-performance plug-in-hybrid electric vehicle architecture, known as "Q-Drive," into a unique chassis that will enable optimizing the performance and vehicle dynamics. "Fisker Karma" launched at the Detroit International Auto Show in January, 2008, incorporates an advanced solar-photovoltaic roof designed by Asola. More information is available at <http://www.fiskerautomotive.com>. More information can be found about Quantum's products and services at <http://www.qtw.com>.

About Asola:

Asola Advanced and Automotive Solar Systems GmbH produces and markets high-quality silicon-based photovoltaic modules that comprise 4, 5, 6, or 6+ mono-crystalline or polycrystalline silicon cells. Asola's technologies include high output and high efficiency flat modules for residential and industrial applications, specialized spherical modules for automotive applications and modules for various thin film technologies. More information can be found in www.asola-power.com.

Forward Looking Statements

Except for historical information, the statements, expectations, and assumptions contained in the foregoing press release are forward-looking statements. Such forward-looking statements include, but are not limited to, the Company's expectations regarding expected future revenues and operating results; future opportunities for Asola and Quantum; Asola's ability to secure solar cells and fulfill orders in the future; and other statements about the future expectations, beliefs, goals, plans, or prospects expressed by management. Such statements are subject to a number of risks and uncertainties, and actual results could differ materially from those discussed in any forward-looking statement. Factors that could cause actual results to differ materially from such forward-looking statements include, among other factors, Asola's ability to expand production, the overall expansion of the solar industry, and general economic conditions. Reference should also be made to the risk factors set forth from time to time in the Company's SEC reports, including but not limited to those contained in the section entitled "Risk Factors" in the Company's Annual Report on Form 10-K for the fiscal year ended April 30, 2008. The Company does not undertake to update or revise any of its forward-looking statements even if experience or future changes show that the indicated results or events will not be realized.

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