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NEWS RELEASE

ODIS Inc, the U.S. Affiliate of OPEL Solar, Proves a New Laser Device Using POET Monolithic Optoelectronic Fabrication Technology

Shelton, Ct. April 20, 2011 – OPEL Solar International Inc. (“OPEL” or “the Company”) announced today that its U.S. affiliate company, OPEL Defense Integrated Systems (“ODIS”) has demonstrated laser operation for the first time in a new integrated device as part of its Planar Optoelectronic Technology (“POET”) process.

POET creates high-performance devices by fusing light and electronics together on a single chip. Specifically, POET is a semiconductor-manufacturing technology that enables the monolithic fabrication of integrated circuit (“IC”) chips containing both electronic and optical elements. By offering components with dramatically lowered cost, together with increased speed, density, and reliability, POET could potentially allow ODIS to fundamentally alter the landscape for a broad range of applications, such as tablet computers and smartphones.

Based on a proprietary Group III-V materials structure, the pulsed vertical cavity surface-emitting laser (VCSEL) operates at 980nm with a 12µm diameter vertical cavity surface and an output power of 1.7mW. In tandem with ODIS’ previously-announced integrated detector - a heterostructure field effect transistor (HFET) device - the laser enables inter-circuit optical connections between electronic devices for on-chip applications.

“This has proven, for the first time, an end-to-end technology for on-chip integration of photonic circuits can manipulate light signals on the same semiconductor framework as electronic signals,” noted Leon M. Pierhal, CEO of OPEL. “This technology has the potential to overcome the constraints of copper interconnects in silicon-based chips, and it further validates the years of development invested in ODIS, as reflected in the potential market applications for POET technology, as well as its overall importance to our stakeholders.”

Pierhal continued, “Let us keep in mind that this is the baseline laser that will serve as the foundation device from which greater enhancements are projected and in the process of development.”

ODIS has also proven numerous other optoelectronic devices, including HFETs, optical thyristors, oscillators, and super-radiant light emitting devices, all able to be monolithically fabricated via the POET process. These devices are currently being validated for scale-up by a third-party fabrication facility.

The POET platform is also the basis for other ODIS projects, under various governmental agency grants, to provide next-generation optoelectronic devices. These include optical code division multiple access (OCDMA) devices for avionics systems, combined RF/optical phased arrays, optoelectronic directional couplers, and ultra-low-power random access memory (RAM).

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About OPEL Solar International Inc., OPEL Solar, Inc. and ODIS Inc.

With operations in Shelton, CT and head office in Toronto, Ontario, Canada, the Company, through OPEL, Inc., designs, manufactures and markets high-concentration photovoltaic panels and dual- and

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single-axis trackers for related CPV and PV systems for energy applications worldwide. The Company, through ODIS Inc., a U.S. company, designs III-V semiconductor devices for military, industrial and commercial applications, including infrared sensor arrays and ultra-low-power random access memory. The Company has 35 patents issued and 12 patents pending in PV systems technologies and for its semiconductor POET process, which enables the monolithic fabrication of integrated circuits containing both electronic and optical elements, with potential high-speed and power-efficient applications in devices such as servers, tablet computers and smartphones. OPEL's common shares trade on the TSX Venture Exchange under the symbol "OPL". For more information about OPEL, please visit the Company's website at www.opelinc.com.

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ON BEHALF OF THE BOARD OF DIRECTORS



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Such forward-looking information or statements are based on a number of risks, uncertainties and assumptions which may cause actual results or other expectations to differ materially from those anticipated and which may prove to be incorrect.

Although OPEL believes that the expectations reflected in the forward-looking information or statements are reasonable, prospective investors in OPEL's securities should not place undue reliance on forward-looking statements because OPEL can provide no assurance that such expectations will prove to be correct. Forward-looking information and statements contained in this news release are as of the date of this news release and OPEL assumes no obligation to update or revise this forward-looking information and statements except as required by law."