



Enova Systems Announces 327% Growth in Gross Profit and 151% Growth in Revenues in 2010

Also Announces Production Intent Hybrid Battery Supply from LGCP

TORRANCE, CA April 1, 2011 – Enova Systems, Inc. (NYSE AMEX: ENA and AIM: ENV and ENVS), a leading developer of proprietary hybrid electric and all-electric drive systems and drive system components for the emerging green commercial vehicle market, announces revenues and gross margin growth for Q4 2010 and for the 2010 year. Additionally the company highlights a production intent battery supply from Compact Power Inc., a subsidiary of LG Chem.

GROWTH HIGHLIGHTS:

- \$3.7M in revenue for Q4 2010, up more than 151% over the same period in 2009
- 20.4% gross margin for Q4 2010 with gross profit up 327% over the same period in 2009 result as one of the best quarters on record for Enova
- Annual revenue growth from \$5.6M in 2009 to \$8.6M in 2010, a 52% increase
- Overall annual gross margin increase from 10.8% in 2009 to 16.5% in 2010
- Moved from an overall gross margin loss of 74.1% in 2006 to 16.5% positive gross margin in 2010

Enova President and CEO Mike Staran stated “2010 resulted in quarter after quarter positive gross margin growth, responsible cash management and core customer growth. Exciting partnerships with companies like LG Chemical further confirm our technology and allow us to penetrate incremental opportunities within the expanding market.”

CUSTOMER HIGHLIGHTS:

Bolstering Q4 2010 performance, Enova shipped the following to meet increasing demand:

- Charge-depleting plug-in hybrid school bus systems delivered to Navistar
- Full EV drive systems and other system components delivered to Smith US (SEV)
- Pre-transmission sets delivered to First Auto Works (FAW)
- Full EV drive systems and other system components delivered to Freightliner Custom Chassis (FCCC)

Expecting to further drive revenues, Enova will continue to ship systems to fill incremental Navistar, SEV, FAW, and FCCC orders. Additional customer highlights include:

- **FIRST AUTO WORKS (FAW)** collaborated with Enova to develop a biaxial parallel hybrid power platform capable of idling starting/stopping, low-speed electric drive, separate drive, combined drive and regenerative braking. This platform will be used to power FAW's 11-meter and 12-meter hybrid power buses operating in Changchun, Dalian and Kunming, China.
- **SMITH ELECTRIC VEHICLES (SEV)** and Enova continue to penetrate the US market. SEV supplies vehicles for Frito Lay, Staples, Coke, PG&E and AT&T. SEV has been awarded \$32 million by the U.S Department of Energy to develop and produce all-electric parcel delivery.
- **NAVISTAR** and Enova continue to lead the hybrid school bus market. Despite a sluggish economy and delayed volume growth, Navistar is growing its market share. Demand for non-plug-in hybrid school buses is expected to increase with the emergence of capable charge-sustaining batteries. This new battery technology also positions Enova to aggressively pursue the retro-fit market.
- **FREIGHTLINER CUSTOM CHASSIS CORPORATION (FCCC)**, a key Enova customer, maintains an 80% market share in the pickup and delivery sector, making them the segment leader. This sector includes UPS, Federal Express and other national fleet operators. FCCC's electric vehicles employ Enova's MT-EV chassis, with a durable frame and a GVWR of 14,000 to 19,500 lbs. capable of handling heavy payloads. FCCC is in the final phase of delivering initial vehicles to top fleet operators.

- **GENERAL SERVICES ADMINISTRATION (GSA)** recently extended a key Enova contract for another year to supply all-electric step vans to the Federal government. Smith Electric Vehicles' Newton, and all-electric medium and heavy duty truck, presents an additional opportunity to penetrate the GSA fleet market. Another major Enova customer, Navistar continues its exclusive GSA contract to supply hybrid school buses.
- **US AIR FORCE & HAWAII CENTER FOR ADVANCED TRANSPORTATION TECHNOLOGIES (HCATT)** has awarded Enova a contract to integrate a hydrogen fuel cell powered electric runway sweeper for use at the joint Pearl Harbor-Hickam Air Force base in Honolulu. A portion of the project was completed in Q4 2010 and the remainder of this \$1M+ contract is expected to be completed in 2011. Enova is conducting other high level government briefings on the benefits and value of its engineering and product capabilities.

TECHNOLOGY HIGHLIGHTS:

- **OMNI INVERTER:** Power-source agnostic, Enova's new Omni-series inverter offers increased flexibility and ease-of-integration. With plug-and-play connectivity, it is compatible with a wide range of vehicle drive systems and motors, and can be configured for HEV, PHEV and EV applications.
- **OMNI CHARGER:** Enova launched plans to develop and validate its next-generation of power electronics with the new Omni-series 10kVA power on-board charger for hybrid-electric and all-electric vehicles. The new Omni-series charger also offers increased flexibility, ease-of-integration and compatibility with a wide range of vehicle platforms.
- **LGCPi Battery Supply:** Enova Systems announces a partnership with LGCPi, the North American subsidiary of LG Chem Ltd.. LGCPi intends to produce and supply power-oriented battery packs on Enova's charge-sustaining post-transmission hybrid systems. LG Chem clients include General Motors Co., Volvo AB, Ford Motor Co., Renault, Eaton, Navistar and China's Chongqing Changan Automobile Co. The company's EV battery business is expected to generate \$901 million in sales by 2013. Combined with Enova's new Omni inverter, the LGCPi packs will provide Enova's customers with the most advanced and robust medium duty truck and bus hybrid systems available. The combined technologies will also offer strong value and performance to the end user.
- **BATTERIES:** Enova continues to mature its long-standing relationship with Valence on energy-oriented battery packs, as well as evaluate technologies offered by A123, Samsung/Bosch and Dow Kokam.
- **REMY:** Enova and Remy have executed a letter of intent to develop a new electric drive system based on Enova's next generation Omni controller and Remy HVH250 motor. Remy is North America's largest independent manufacturer of advanced electric propulsion motors. Remy's patented design and assembly technology have been in production since 2006 and are currently powering vehicles around the world.

OTHER INDUSTRY ACTIVITIES:

Overall, the hybrid electric and all-electric commercial vehicle industry has experienced an active growth in demand and activity. Record Q4 results demonstrate that Enova benefits directly from this positive industry trending.

- Smith US raises \$58M in March 2011 for the production of EV fleets
- Remy recently filed for an IPO in March 2011 for up to \$100 million

Enova maintains a visible presence in the forefront of a growing industry with ongoing appearances and speaking engagements by company executives at leading industry events such as the NTEA Work Truck show, the upcoming EDTA conference on April 19-21 and key US Military/Government conferences.

About Enova:

Enova Systems (<http://www.enovasytems.com>) is a leading supplier of efficient, environmentally friendly digital power components and systems products. The Company's core competencies are focused on the development and commercialization of power management and conversion systems for mobile applications. Enova applies unique 'enabling technologies' in the areas of alternative energy propulsion systems for light and heavy-duty vehicles as well as power conditioning and management systems for distributed generation systems. The Company develops, designs and produces non-invasive drive systems and related components for electric, hybrid-electric, and fuel cell powered vehicles in both the "new" and "retrofit" vehicle sales market. For further information, contact Enova Systems directly, or visit its Web site at <http://www.enovasytems.com>.

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Additional Information:

This news release contains forward-looking statements relating to Enova Systems and its products that are intended to be covered by the safe harbor for forward-looking statements provided by the Private Securities Litigation Reform Act of 1995. Forward-looking statements are statements that are not historical facts. These statements can be identified by the use of forward-looking terminology such as “believe,” “expect,” “may,” “will,” “should,” “could,” “project,” “plan,” “seek,” “intend,” or “anticipate” or the negative thereof or comparable terminology and statements about industry trends and Enova’s future performance, operations and products. These forward-looking statements are subject to and qualified by certain risks and uncertainties. These and other risks and uncertainties are detailed from time to time in Enova Systems’ periodic filings with the Securities and Exchange Commission, including but not limited to Enova’s annual report on Form 10-K for the year ended December 31, 2010.