

Comprehensive Energy Cost Reduction and Tax Savings for the Logistics Industry

By Charles R. Goulding, Andrea Albanese and Raymond Kumar

Charles R. Goulding, Andrea Albanese and Raymond Kumar discuss potential EAct tax deductions available for some of America's largest logistics companies for energy-efficient building improvements.

The UPS television commercials accompanied by a fun logistics jingle have engagingly presented the core processes related to package and product delivery. America's leading logistics companies are the arteries of commerce that maintain the constant flow of goods from production to end uses.

Logistics companies consume tremendous amounts of fuel for air and truck fleets and for their cavernous warehouse properties. New technologies are enabling logistics companies to change fuel sources and greatly reduce operating costs. Logistics companies that want to maintain market share with America's largest companies need to regularly reduce energy use.

Code Sec. 179D Tax Opportunities

Pursuant to Code Sec. 179D, as enacted by the Energy Policy Act of 2005 (EAct),¹ warehouse and distribution center building owners or tenants making qualifying energy-reducing investments in their

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new or existing locations can obtain immediate tax deductions of up to \$1.80 per square foot.

If the building project doesn't qualify for the maximum Code Sec. 179D \$1.80 per square foot immediate tax deduction, there are tax deductions of up to \$0.60 per square foot for each of the three major building subsystems: lighting, HVAC and the building envelope. The building envelope is every item on the building's exterior perimeter that touches the outside world including roof, walls, insulation, doors, windows and foundation.

Table 1 below illustrates the potential EAct tax deductions available for some of America's largest logistics companies with energy-efficient building improvements.

Air Fleets

New fuel-efficient aircraft use substantially less fuel than current aircraft. The Boeing 787 Dreamliner uses 20-percent less fuel and produces 20-percent less emissions than the average similar-sized aircraft.²

In 2011, FedEx achieved a 13.8-percent reduction in aircraft emissions. As of May 2012, Fed Ex operates 660 aircraft and was committed to purchase 28 more through 2013. The company recently announced their initiatives in efficiency which include reducing flights and frequencies.

Table 1. Largest Logistics Companies

Property	Total Square Footage	Lighting		HVAC Maximum Deduction	Building Envelope Maximum Deduction	Maximum Total
		Minimum Deduction	Maximum Deduction			
Exel Logistics	86,000,000	\$ 25,800,000	\$ 51,600,000	\$ 51,600,000	\$ 51,600,000	\$ 154,800,000
United Parcel Service Inc.	66,535,500	\$ 19,960,650	\$ 39,921,300	\$ 39,921,300	\$ 39,921,300	\$ 119,763,900
Amazon	40,638,000	\$ 12,191,400	\$ 24,382,800	\$ 24,382,800	\$ 24,382,800	\$ 73,148,400
Fed Ex Corporation	23,702,000	\$ 7,110,600	\$ 14,221,200	\$ 14,221,200	\$ 14,221,200	\$ 42,663,600
APL Logistics	15,800,000	\$ 4,740,000	\$ 9,480,000	\$ 9,480,000	\$ 9,480,000	\$ 28,440,000
CEVA Logistics	8,000,000	\$ 2,400,000	\$ 4,800,000	\$ 4,800,000	\$ 4,800,000	\$ 14,400,000
J.B. Hunt	2,422,000	\$ 726,600	\$ 1,453,200	\$ 1,453,200	\$ 1,453,200	\$ 4,359,600
Bowman Logistics	1,762,200	\$ 528,660	\$ 1,057,320	\$ 1,057,320	\$ 1,057,320	\$ 3,171,960
Total:	234,803,220	\$ 70,440,966	\$ 140,881,932	\$ 140,881,932	\$ 140,881,932	\$ 422,645,796

Over the next few years FedEx will purchase 19 Boeing 767 planes to replace their current MD10s and A31-200s. They will also purchase 27 Boeing 767-300 freight planes. With 30 percent more fuel efficiency than their current planes, FedEx can expect a 20-percent reduction in operating costs.³

FedEx also delayed the delivery of its 777 freight aircraft. This is expected to result in lower overall costs and investment, a better utilization of their MD-11 fleet for international flights and significant long-term fleet efficiency.

In addition to fuel efficiency in aircraft, the aircraft hangers have been installing energy-efficient lighting to reduce operating costs.⁴

In 2011, FedEx installed a green roof at its 175,000 square foot O'Hare International Airport cargo facility. They also have a 145,000 square foot hangar at Memphis International Airport and a 114,000 square foot hangar at Chattanooga Airport.

UPS operates a fleet of over 560 aircraft. The company's Worldport aircraft hub, at 5.2 million square feet, is located in the Louisville International airport. UPS also operates air hubs in Connecticut, California, Pennsylvania and Illinois as well as a 535,000 square foot sorting facility at Memphis International Airport.⁵

UPS's 3.7 million square foot logistics campus is also located in Louisville, Kentucky. Logistics facilities, especially near major airports as such, have very large square footage and are often able to obtain large EPAct deductions.⁶

Truck Fleets

Truck fuel cost has also drastically improved from a combination of efficiency, new fuel sources including Compressed Natural Gas (CNG) and new technologies such as idling reduction.

Idling reduction involves the installation of a technology or device that allows main engines to refrain from unnecessary long periods of idling using an alternative technology. These devices can be installed on buses, trucks, cars, marine vessels and equipment. This idling reduction technology is also designed to provide heat, AC and electricity while in parked or idling, which would normally require the operation of the main engine.⁷

Compressed natural gas, liquefied natural gas (LNG) and other alternative fuels are becoming more widely used in the commercial aspect. Companies like UPS, FedEx, PepsiCo, Frito-Lay, AT&T and Waste Management have been integrating natural gas vehicles into their fleets. UPS operates 1,100 natural gas trucks, Frito-Lay added 67 trucks fueled by CNG to their fleet, and FedEx operates 58 trucks fueled by natural gas.

UPS has begun using prototype vans that have achieved a 40-percent increase in fuel efficiency compared to their traditional vans. The company expects to use these vans on a wider scale and for high-mileage routes by 2013.⁸

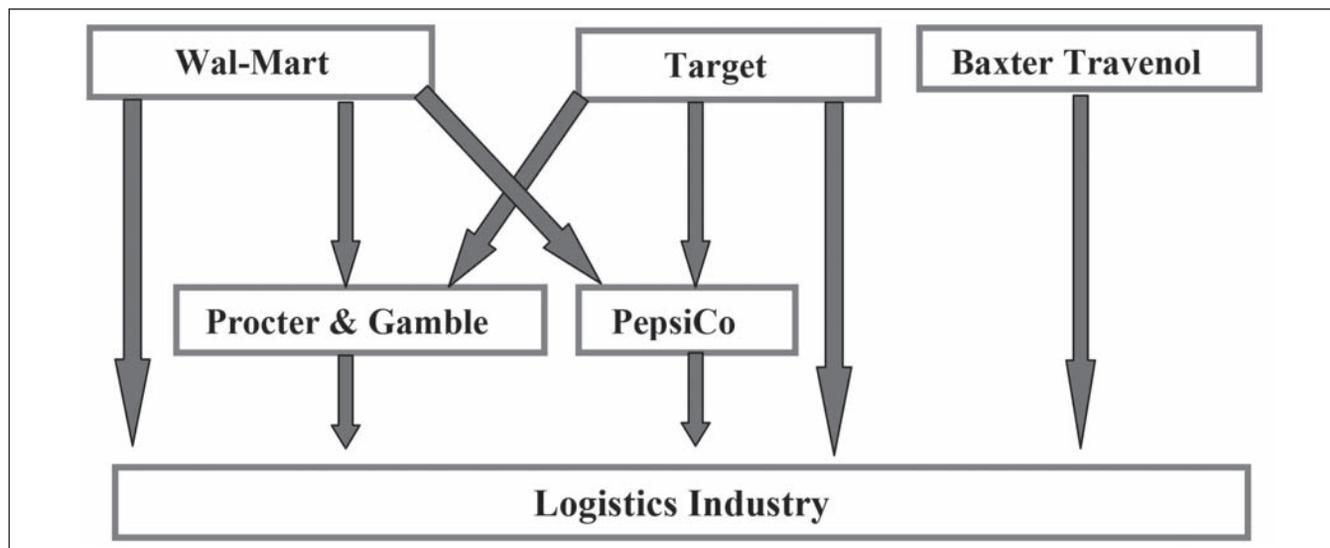
FedEx has taken fuel-efficient initiatives for their truck fleet. The company has increased its green fleet by 18 percent, including 364 hybrid-electric vehicles and 118 electric vehicles. "FedEx expects that over 35% of its U.S. pick-up and delivery fleet will be equipped with 11,000 such vehicles by the end of 2013."⁹

These initiatives bring truck distribution centers closer to achieving the available EPAct tax incentives.¹⁰

Major Purchaser Supply Chain Sustainability Programs

Many purchasers of logistics services are driving energy-efficiency initiatives throughout their supply

Table 2.



and encouraging logistics companies to reduce energy costs and emissions.

Table 2 presents some of the major supply chain programs impacting the logistics industry.¹¹

Conclusion

Perhaps more than any other industry, the logistics industry understands what it means to reduce fuel costs. The large logistics companies also have huge facilities where major energy-cost savings and large E Pact tax savings are readily achievable.

ENDNOTES

- ¹ Energy Policy Act of 2005 (P.L. 109-58) ("E Pact").
- ² Boeing 787 Dreamliner, *Program Fact Sheet*. Accessed at www.boeing.com/commercial/787family/programfacts.html.
- ³ Zacks.com, *FedEx Seeks Sustainable Transport—Analyst Blog*, NASDAQ, Aug. 21, 2012. Accessed at <http://community.nasdaq.com/News/2012-08/fedex-seeks-sustainable-transport-analyst-blog.aspx?storyid=165792#.ULjv3Wfy8sR>.
- ⁴ Kenneth Wood, Jennifer Pariente and Andrea Albanese, *Hangars Generate the Largest E Pact Opportunities*, CORP. BUS. TAX'N MONTHLY, Mar. 2013, at 11.
- ⁵ United Parcel Service, Inc. (2012). 10-K Annual Report 2012. Retrieved from NASDAQ website www.nasdaq.com/symbol/ups/sec-filings#.UTTtWFTdvcU4.

⁶ Charles R. Goulding and Charles G. Goulding, *The E Pact Tax Aspects of the Aerotropolis*, Apr. 2011, available from <http://energytaxsavers.wordpress.com/article/the-epact-tax-aspects-of-the-1xedf26uc9hpj-10/>.

⁷ U.S. Environmental Protection Agency, *SmartWay Technology Program, Verified Idling Reduction Technologies*. Accessed at www.epa.gov/smartway/technology/idling.htm.

⁸ *UPS Introduces 40% More Fuel-Efficient Vans*, ENVIRONMENTAL LEADER, June 22, 2012. Accessed at www.environmentalleader.com/2012/06/22/ups-composite-body-vans-40-more-fuel-efficient/.

⁹ Zacks.com, *FedEx Seeks Sustainable Transport—Analyst Blog*, NASDAQ, Aug. 21, 2012. Accessed at <http://community.nasdaq.com/News/2012-08/fedex-seeks-sustainable-transport-analyst-blog.aspx?storyid=165792#.ULjv3Wfy8sR>.

¹⁰ Charles Goulding, Jacob Goldman and Joseph Most, *Energy Tax Aspects of Truck Distribution Centers*, CORP. BUS. TAX'N MONTHLY, Sep. 2010, at 11.

¹¹ Charles Goulding, Jacob Goldman and Christopher Winslow, *The E Pact and Alternative Energy Tax Aspects of Walmart's Supplier Sustainability Program*, CORP. BUS. TAX'N MONTHLY, June 2011, at 13; Charles R. Goulding, Andressa Bonafe and Raymond Kumar, *The Tax Aspects of Target's Corporate Responsibility Program*, CORP. BUS. TAX'N MONTHLY, Aug. 2013, at 11; Charles R. Goulding, Jennifer Pariente and Charles G. Goulding, *The Tax Aspects of the Baxter International Medical Device Sustainability Supply Chain*, CORP. BUS. TAX'N MONTHLY, Nov. 2012, at 11; Charles R. Goulding, Charles G. Goulding and Andressa Bonafe, *The Tax Aspects of the Procter & Gamble Sustainability Program*, CORP. BUS. TAX'N MONTHLY, June 2013, at 13; and Charles R. Goulding, Charles G. Goulding and Jennifer Pariente, *The Tax Aspects of the PepsiCo Sustainability Supply Chain*, CORP. BUS. TAX'N MONTHLY, Nov. 2012, at 15.

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