The Energy Tax Aspects of Texas Warehouses

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With its strong economy and growing population coupled with NRG Energy's recent decision to delay its planned nuclear facilities, Texas will become ground zero for commercial building energy-efficiency investment and other forms of alternative energy investments. Now that the options are limited, the choices become clearer and Texas companies can use existing large tax incentives to act on the required energy reducing and alternative energy investments. Each of the four major Texas population centers has distinct facility characteristics and can customize the relevant incentives for their fact pattern.

The EPAct Tax Opportunities

EPAct

Pursuant to Energy Policy Act (EPAct) Section 179D, warehouses making qualifying energy-reducing investments in their 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 EPAct $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 (heating, ventilating, and air conditioning), 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. Warehouses that combine energy-efficient lighting and energy-efficient heaters have become, by far, the largest category of buildings qualifying for the $1.20 to $1.80 EPAct tax deductions. The following table illustrates the magnitude of potential EPAct tax benefits available at various square footage's:

Texas Warehouse Properties

Potential EPAct Tax Deductions

Sample Square Footage	EPAct Deduction $1.20/sq.Ft	EPAct Deduction $1.80/Sq.Ft
50,000	$60,000	$90,000
100,000	$120,000	$180,000
250,000	$300,000	$450,000
500,000	$600,000	$900,000
750,000	$900,000	$1,350,000
1,000,000	$1,200,000	$1,800,000

Alternative Energy Tax Credits and Grants

There are multiple 30% or 10% tax credits available for a variety of alternative energy measures with varying credit termination dates. For example, the 30% solar tax credit expires January 1st 2017 and the 10% Combined Power tax credit also expires January 1st, 2014. The 30% closed loop and open loop biomass credit expires January 1st, 2014.

All alternative measures that are eligible for the 30% and 10% tax credits are also eligible for equivalent cash grants for the three years staring January 1st 2009 and ending December 31st 2011.

Houston

Houston is geographically one of America's largest cities with a population of 2.1 million. The City has mix of office buildings and warehouse/ industrial buildings. The Houston office building market has high proportion of LEED buildings which are platformed for large EPAct tax savings since they already have a building energy simulation model that can be converted to an EPAct tax model[1]. The warehouse and industrial buildings are eligible for very large $1.20 to $1.80 EPAct tax deductions by combining energy-efficient lighting with energy-efficient heaters.[2] Once the Houston warehouse and industrial buildings upgrade to the highest EPAct levels they can trigger roof EPAct tax deductions and upgrade their roofs in preparation for solar P.V. The Port of Houston is already the nations number 1 port and tens of millions of new warehouse square footage is currently being added as result of the large increase in business anticipated from major deep water Panama Canal improvements currently in process.

San Antonio

San Antonio, with a population of 1.3 million is known as a hospitality and entertainment center. The city has a high portion of hotels and restaurants. Hotels are the most favored EPAct tax deduction category and get special privileges when installing energy-efficient lighting and central HVAC systems.[3] Restaurants and fast food franchises are ideal candidates for energy efficient LED lighting upgrades. [4]

Austin

Austin, with a population of 1.7 million, is re-known for its focus on energy-efficiency and sustainability. The city has one of the Nation's first and most comprehensive building energy benchmarking laws in the country. The Austin law has built in mechanism to mandate that lower quartile building energy efficiency performers must upgrade their buildings to higher energy-efficiency levels. As both a state capital and large state university center, the city is committed to continued commercial building energy reduction and alternatives energy investments in solar and wind.

Dallas/Fort Worth

Dallas/Fort Worth, with a combined population of 6.5 million, has the immense Dallas/Fort Worth Aerotropolis complex. The Aerotropolis is supported by a huge warehouse complex that is an ideal candidate for large Section 179D EPAct tax deductions in preparation for solar P.V.[5] The Dallas/Fort Worth area has an estimate 665 million square ft in warehouses. The potential EPAct tax benefits available for 665 million sq ft is presented below:

Property	Total Sq Ft	Lighting Maximum Deduction	HVAC Maximum Deduction	Building Envelope Maximum Deduction	Total
DFW Airport	62,981,346	$37,788,808	$37,788,808	$37,788,808	$113,366,423
East Dallas	36.448.533	$21,869,120	$21,869,120	$21,869,120	$65,607,359
Great SW/Arlington	82,934,996	$49,760,998	$49,760,998	$49,760,998	$149,282,993
N Fort Worth	61,943,565	$37,166,139	$37,166,139	$37,166,139	$111,498,417

Northeast Dallas	90,982,502	$54,589,501	$54,589,501	$54,589,501	$163,768,504
Northwest Dallas	92,918,094	$55,750,856	$55,750,856	$55,750,856	$167,252,569
South Dallas	48,994,881	$29,396,929	$29,396,929	$29,396,929	$88,190,786
S Fort Worth	70,477,010	$42,286,206	$42,286,206	$42,286,206	$126,858,618
South Stemmons	116,662,704	$69,997,622	$69,997,622	$69,997,622	$209,992,867
Total	**664,343,631**	**$199,303,089**	**$398,606,179**	**$398,606,179**	**$1,195,818,536**

Food Service

To sustain its large and growing population, Texas requires huge volumes of refrigerated food- processing facilities, refrigerated warehouse, and supermarkets. These facilities are ideal candidates for low wattage LED lighting that has superior performance abilities in refrigerated environments.[6] Many food supplies to large retailers are subject to supplier sustainability programs where they need to become more energy-efficient and utilize alternative energy to maintain and or increase their vendor market share America's largest food purchaser is Wal-Mart and the Wal-Mart system supplier sustainability program specifically addresses, building energy-efficiency and alternative energy.[7]

The Panama Canal

The Panama Canal is in the midst of major 5.25 billion dollar expansion, including the development of new ship channels and the widening and expansion of existing ship channels. Before this expansion, the majority of Asian imports had to go through the large California ports including Los Angeles and Long Beach. By going through the canal it will be a lot easier to serve major consumer markets in the U.S. Gulf and East coasts. The Panama Canal authority has developed strategic partnerships with major U.S. ports including Houston, aimed at expanding trade. In addition to the three major existing Texas container ports of Houston, Galveston, and Freeport, many Texas ports and their supporting facilities infrastructures will be expanding. Texas ports are already growing rapidly and it is predicted that they will grow, on average, by more than 40% percent between now and 2035.

The direct impact of the improved canal on the Texas warehouse market is described by the consulting firm of Cambridge Systematics, Inc. prepared for the Texas Department of Transportation Government and Business Enterprises Division where they state:

"Division and Warehouse Development around Port Areas Will Be Accelerated

Distribution centers and warehouses are often located in close proximity to intermodal ports and terminals, allowing shippers and carriers to serve regional and national markets more effectively. Major retailers, including Radio Shack, JC Penney, Wal-Mart, and Target have already invested in major distribution centers around the Port of Houston, and Houston was ranked as the second most 'logistics-friendly' metro area in the country, based on its strong transportation and distribution workforce, highway and rail infrastructure, water port access and air cargo facilities, and other factors."[8]

Conclusion

Texas confronts Texas-sized challenges in the energy area. However, Texas has the opportunity to implement Texas-size solutions, particularly since improved LED lighting and solar P.V. are ideal for the Texas building and temperature environment. Moreover, large tax incentives are available for all these energy reducing and energy generating measures.

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[1] See Charles Goulding, Taylor Goulding, and Amelia Aboff, *How LEED 2009 Expands EPAct Tax Savings Opportunites,* Corp. Bus. Tax'n Monthly, September 2009.

[2] See Charles Goulding, Jacob Goldman and Joseph Most, *Complete Warehouse Tax-Enhanced Energy-Efficient Design,* Corp. Bus. Tax'n Monthly, August 2010.

[3] See Charles Goulding, Jacob Goldman, and Raymond Kumar, *Advanced EPAct Tax Planning for Hotel Chains,* Corp. Bus. Tax'n Monthly, June 2010.

[4] See Charles Goulding, Kenneth Wood, Raymond Kumar, *Optimizing the 3, 2, 1 LED Lighting Tax Deduction Countdown,* Corp. Bus. Tax'n Monthly, July 2010

[5] See Charles R. Goulding and Charles G. Goulding. *The EPAct Tax Aspects of the Aerotropolis.* Google Knol, March 2011. http://knol.google.com/k/charles-goulding/the-epact-tax-aspects-of-the/1xedf26uc9hpj/10#

[6] See Charles Goulding and Spencer Marr. *The EPAct TAX Aspects of LED Lighting For Refrigerated Distribution Centers*, Google Knol, March 2011. http://knol.google.com/k/charles-goulding/the-epact-tax-aspects-of-led-lighting/1xedf26uc9hpj/13#

[7] Scheduled for Publishing: Charles Goulding, Jacob Goulding, and Christopher Winslow, *The EPAct and Alternative Energy Tax Aspects of Wal-Mart's Supplier Sustainability Program,* Corp. Bus. Tax'n Monthly.

[8] Cambridge Systematics, Inc., *Effects of the Panama Canal Expansion on Texas Ports and Highway Corridors,* Texas Department of Transportation Government and Business Enterprises Division, October 2006 at ES-7