

The Energy Tax Aspects of Washington, D.C. Area Buildings

By Charles Goulding, Jacob Goldman and Joseph Most

Charles Goulding, Jacob Goldman and Joseph Most discuss the potential for the Washington, D.C. area to be the country's leader in regard to energy-efficient building design due to the substantial tax incentives provided by the EPAct for designers of qualifying energy efficiency projects in government buildings

Code Sec. 179D, which was enacted by the Energy Policy Act (EPAct) of 2005,¹ provides substantial tax incentives for designers of qualifying energy efficiency projects in government buildings. Washington, D.C. is a particularly strong area for the EPAct designer benefit because it is structured around the huge federal government sector, housing each branch of the federal government, including virtually all government agencies. With an expanded federal government, the Washington area, including new facility construction and existing building renovations, has the potential to be the leading area in the country with regard to EPAct designer benefits. Since new federal buildings are required to be LEED certified and existing federal buildings have mandatory energy reduction targets, Washington, D.C. presents substantial EPAct tax deduction opportunities for the building design community.

EPAct Tax Deductions

Pursuant to Code Sec. 179D, building owners or tenants making qualifying energy-reducing investments

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can obtain immediate tax deductions of up to \$1.80 per square foot.

If the building project does not qualify for the maximum \$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.

EPAct Designer Benefits

As part of Code Sec. 179D, the designers, including architects and engineers, of government-owned building new construction or renovation projects, can claim the EPAct tax deduction. The intent with the Code Sec. 179D designer benefit is that the government property owner is supposed to receive the larger economic benefit, which is the permanent perpetual energy savings, and the private designer receives the onetime tax incentive for achieving the prescribed energy efficiency targets. The hope is that with the tax incentives in place for government building designers, the entire sector will become experts when it comes to energy-efficient building equipment and use their expertise in private building projects as well.

The Washington, D.C. Design Community

Washington, D.C. has a numerous government buildings including some very large ones. Chart 1 illustrates the potential EPAct tax deductions for some of the most well-known and largest government buildings in Washington, D.C.

Chart 1.

Property	Gross Square Footage	Lighting		HVAC Maximum Deduction	Building Envelope Maximum Deduction	Total
		Minimum Deduction	Maximum Deduction			
The Pentagon	6,500,000	\$ 1,950,000	\$ 3,900,000	\$ 3,900,000	\$ 3,900,000	\$ 11,700,000
Ronald Reagan Airport	3,100,000	\$ 930,000	\$ 1,860,000	\$ 1,860,000	\$ 1,860,000	\$ 5,580,000
Library of Congress	2,100,000	\$ 630,000	\$ 1,260,000	\$ 1,260,000	\$ 1,260,000	\$ 3,780,000
Forrestal Building	1,700,000	\$ 510,000	\$ 1,020,000	\$ 1,020,000	\$ 1,020,000	\$ 3,060,000
The Capitol Building	175,170	\$ 52,551	\$ 105,102	\$ 105,102	\$ 105,102	\$ 315,306
U.S. Treasury Building	120,000	\$ 36,000	\$ 72,000	\$ 72,000	\$ 72,000	\$ 216,000
FDA Building	102,000	\$ 30,600	\$ 61,200	\$ 61,200	\$ 61,200	\$ 183,600
The White House	55,000	\$ 16,500	\$ 33,000	\$ 33,000	\$ 33,000	\$ 99,000

The Washington, D.C. area employs a tremendous number of design professionals including architects, engineers, lighting designers and design and building contractors that support the government sector. In fact, many large national architecture and engineering firms have their national office and/or largest office in the Washington, D.C. area. All of these government building design firms have the opportunity to earn large EPAct tax deductions if their designs meet the Code Sec. 179D targets.

The Department of Energy's Forrestal Building has undergone as large of an energy efficiency transformation as any federal building in Washington, D.C. In 2007, the Forrestal Building became only the second federal building in the country to be awarded the energy star label. Some of the energy-efficient improvements made to the building in recent years include installing solar P.V. on a large portion of the building's roof, upgrading to highly efficient fluorescent and LED lighting, and installing automated HVAC control systems.² As can be seen in Chart 1, the EPAct tax deductions for the Forrestal Building design teams could be quite substantial.

LEED Certification Explained

LEED, which stands for Leadership in Energy and Environmental Design, is the fast growing marquee standard for sustainable buildings established by the U.S. Green Building Council (USGBC).³ Since the USGBC's introduction of LEED in 2000, the rating system has become the

national standard for green building certification; with more than 25,000 registered LEED buildings in the country.⁴ There are four LEED certification levels, with LEED platinum being the highest recognition. Energy efficiency accounts for a substantial percentage of the points required for LEED certification; therefore, it is probable that a LEED building will qualify for some level of EPAct tax deduction.

New Construction/Major Renovation LEED Mandates

Various federal government departments currently require all new and substantially improved government buildings to meet LEED certification requirements. In addition, starting in 2012 all Washington, D.C. commercial buildings 50,000 square feet or greater will have to meet or exceed LEED new construction 2.2 or LEED core and shell 2.0 standards. Post secondary educational facilities also have to meet these same standards.

In order to receive HVAC and building envelope EPAct deductions the building must be modeled using

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- ¹³ Guidelines 2.116.
- ¹⁴ Guidelines 2.117.
- ¹⁵ Guidelines 2.118.
- ¹⁶ Guidelines 2.119.
- ¹⁷ Guidelines 2.120.
- ¹⁸ Guidelines 2.132 – 2.145 discuss profit split mechanisms.
- ¹⁹ Guidelines 2.121. The Guidelines provide an example illustrating the application of the residual profit split in Annex II to Chapter II.
- ²⁰ Guidelines 2.132-2.145.
- ²¹ Guidelines 2.122.
- ²² Guidelines 2.123.
- ²³ Guidelines 2.124.
- ²⁴ Guidelines 1.16-1.32; as an analogy to the “profits to be split” under OECD guidance; see Code Sec. 994(a)(2), Reg. §1.994-1(c) (3) and Reg. §1.994-1(c)(6) as to determining combined taxable income in the DISC context; See Robert Feinschreiber, *Domestic International Sales Corporations*, PLI, 1978, Chapter 10.
- ²⁵ Guidelines 3.9-3.12, by analogy, see Robert Feinschreiber, *How to Aggregate DISC Sales to Make Effective Use of the Deferral*, 36 J. TAX'N 300 (1972).
- ²⁶ Guidelines 2.125.
- ²⁷ Guidelines 2.115 – 2.117.
- ²⁸ Guidelines 2.126.
- ²⁹ Guidelines 2.127.
- ³⁰ Guidelines 2.128.
- ³¹ Guidelines 2.129.
- ³² Guidelines 2.130.
- ³³ Guidelines 2.131.
- ³⁴ Annex III to Chapter II contains an example that illustrates differing measures of profits when the taxpayer applies a transactional profit split.
- ³⁵ Guidelines 2.132.
- ³⁶ Guidelines 2.115-1.117 address the consistency issues in determining the splitting factors.
- ³⁷ Guidelines 2.133.
- ³⁸ Guidelines 2.134.
- ³⁹ Guidelines 2.135.
- ⁴⁰ Guidelines 2.136.
- ⁴¹ Guidelines 2.145.
- ⁴² Guidelines 2.98.
- ⁴³ Guidelines 2.137.
- ⁴⁴ Chapter VI of these Guidelines provides guidance concerning the treatment of intangible property; see also, *Examples to Illustrate the Guidance on Intangible Property and Highly Uncertain Valuation*, Annex to Chapter VI.
- ⁴⁵ Guidelines 2.138.
- ⁴⁶ Guidelines 2.139.
- ⁴⁷ See Guidelines 6.27.
- ⁴⁸ Guidelines 2.140.
- ⁴⁹ Guidelines 2.141.
- ⁵⁰ Guidelines 2.116, 2.117 and 2.132.
- ⁵¹ Guidelines 2.142.
- ⁵² Guidelines 2.98.
- ⁵³ Guidelines 2.143.
- ⁵⁴ Guidelines 2.144.
- ⁵⁵ Guidelines 2.145.
- ⁵⁶ Guidelines 2.148.
- ⁵⁷ Guidelines 2.146.
- ⁵⁸ The aggregation is to be consistent with the aggregation principles of Guidelines 3.9–3.12.
- ⁵⁹ Guidelines 2.149.

Editors' Note

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referral service rather than a taxable direct-mail advertising service.

Your editors, **Robert Feinschreiber** and **Margaret Kent**, this month finish their examination of the 1998 proposed regulations that pertain to the allocation process affecting income earned by a taxpayer in a global securities dealing operation, focusing on profit split arrangements and whether or not they are the best transfer pricing methods.

Finally, we provide an overview of the OECD's reissued *Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations*, particularly as it elevated the viability of the transactional profit split method.

Each article is the responsibility of the author(s) and represents the views of the author(s) only. As editors, we welcome your suggestions and comments as to your corporate business tax concerns. Feel free to contact us at 305-361-5800 and to submit material to us at *multijur@aol.com*.

Best regards,

Robert Feinschreiber and Margaret Kent

D.C. Buildings

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IRS-approved modeling software.⁵ The tax advantage for LEED certified buildings is the fact that they are already modeled. Experienced tax experts with engineering backgrounds know how to convert an existing LEED model into a tax model.

Existing Federal Building Energy Reduction Targets

Section 431 of the Energy Independence and Security Act of 2007 set out a 10-year federal building energy reduction plan.⁶ The energy reduction goal for new and major renovation projects is approximately three percent each year until 2015, with the ending target being an overall 30-percent energy use reduction.

LEED Knowledge Transfer—Developing Modeling Expertise

The federal government LEED and energy reduction mandates are creating a large cadre of design professionals that are both experienced LEED professionals and building energy management experts. For example, Gensler, a leading national architecture firm, has over 400 LEED professionals in its Washington, D.C. office. The large and expanding cadre of LEED experienced engineers is resulting in huge increase in the number of design professionals who are familiar with building energy simulation modeling. This expanded modeling expertise is the key to securing the larger HVAC and building envelope Code Sec. 179D tax deductions where modeling in IRS-approved software is required. The focus on existing building energy reduction is expanding the number of design professionals who know how to make a building substantially more energy efficient, which is also important knowledge to transfer to the new building design process.

Parking Garages

Many Washington, D.C. buildings have large adjoining parking garages that can save substantial energy costs and generate large tax deductions by upgrading to energy-efficient fixtures. In Notice 2008-40 issued March 7, 2008, the IRS announced that parking garages are a property class that is specifically entitled to use the EPAct tax deductions.⁷ Also, parking garages are excluded from the tax bi-level switching requirement.⁸ Typical energy-efficient lighting technologies that meet the EPAct requirements include fluorescents, induction and LED lighting.

LED Lighting

For building interiors, the first major building category to move to LEDs was parking garages. Electricity costs for lighting is essentially the exclusive energy cost for garages, which often have high electricity costs due to 24-hour operation often required for security purposes. Now we are seeing the LED market quickly expand and the LED lighting industry is in position for broad expansion into the office building market.⁹

As indicated in a recent LED magazine article, "Dramatic improvements in commercially available LED performance in recent years, as well as significant cost reduction, has made it feasible to design LED lamps to offer comparable lumen output and to compete with other established lighting technologies on the basis of cost of ownership."¹⁰ The LED Industry has many major nationwide initiatives to accelerate LED installations and to spread the word about this most efficient lighting technology on the market.

Washington, D.C. Energy Benchmarking Law

Washington, D.C. is one of the five major U.S. jurisdictions to have recently enacted an energy benchmarking and disclosure law.¹¹ Starting in 2009, all district-owned buildings over 10,000-square feet are required to benchmark energy by using the EPA's portfolio manager. Also, starting in 2011 for buildings built before 2009 and, for those built after 2009, two years after building completion, all district-owned buildings are required to publicly disclose all energy benchmarking information. The D.C. benchmarking law also started to apply to privately owned buildings in 2010, and, by 2013, all privately owned buildings over 50,000-square feet will have to benchmark energy use and disclose the information.

When looking to lease a building, a prospective lessee in Washington, D.C. will now have building energy use available to factor into their decision making. In order to stay competitive in the lease market and to comply with energy reduction, benchmarking and disclosure requirements, an astute Washington, D.C. property owner should consider upgrading to energy-efficient building equipment and take advantage of the EPAct tax deductions supporting their investment.

Conclusion

The large concentration of government buildings with LEED and energy reduction mandates is greatly increasing the overall building design and skill set of the Washington, D.C. building design community. This is exactly the purpose of the Code Sec. 179D

designer benefit. Design professionals serving the government market are eligible for Code Sec. 179D designer tax incentives for achieving energy-efficient design and they can use their new found knowledge to improve design practices outside the D.C. area. They can also apply these same techniques to the private sector portions of their practice.

ENDNOTES

- 1 Energy Policy Act of 2005 (P.L. 109-58).
- 2 See Forrestal Building Energy Star Labeled Profile, www.energystar.gov/index.cfm?fuseaction=LABELED_BUILDINGS.showProfile&profile_id=1005028.
- 3 See Charles Goulding, Taylor Goulding and Amelia Aboff, *How LEED 2009 Expands EPAct Tax Savings Opportunities*, CORP. BUS. TAX'N MONTHLY, Sep. 2009, at 11.
- 4 U.S. Green Building Council, *LEED Registered Project Database*, Jul. 2010.
- 5 See Charles Goulding, Jacob Goldman and Kenneth Wood, *Tax Deductions for HVAC Efficiency*, BUILDING OPERATION MGMT., Apr. 2010, at 58.
- 6 Energy Independence and Security Act of 2007 (P.L. 110-140).
- 7 Notice 2008-40, IRB 2008-14, 725.
- 8 Charles R. Goulding, Peter Kelly and Taylor Goulding, *EPAct Tax Deductions for Parking Garage Lighting Projects Gain Wider Use*, PARKING PROFESSIONAL—INTERNATIONAL PARKING INSTITUTE (2008).
- 9 See Charles Goulding, Kenneth Wood and Raymond Kumar, *Optimizing the 3, 2, 1, L.E.D. Lighting Tax Deduction Countdown*, CORP. BUS. TAX'N MONTHLY, Jul. 2010, at 13.
- 10 *LED replacement lamp market to see high growth rates, says Strategies Unlimited*, LEDs MAGAZINE, Jun. 18, 2009. Available online at www.ledsmagazine.com/features/6/8/4.
- 11 See Charles Goulding, Jacob Goldman and Joseph Most, *Using EPAct Tax Incentives to Enhance New Mandatory Building Energy Disclosure Law Reporting Results*, CORP. BUS. TAX'N MONTHLY, Oct. 2010, at 11.

Allocation of Income

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- Those controlled taxpayers are incorporated in and operate in the United Kingdom, i.e., UKsub, and Japan, i.e., Jsub.
- Each participant employs marketers and traders, who