

# Tax Aspects of New Energy-Efficient Apartment Technology

*By Charles R. Goulding, Jonathan Saltzman and Andrea Albanese*

Charles R. Goulding, Jonathan Saltzman and Andrea Albanese discuss how apartment building owners can realize substantial energy and tax savings by installing new energy-saving technologies.

As of July 1, 2011, the nation's 366 metropolitan areas contained 261.1 million people—over 80 percent of this country's population.<sup>1</sup> With metro areas come apartment buildings; in New York City alone there are almost six million renters. New energy-efficient technologies are for the first time enabling apartment building owners to substantially reduce energy costs while generating large tax savings. Large square footage apartment buildings are excellent candidates for capturing energy and tax savings.

## Code Sec. 179D Tax Opportunities

Pursuant to Code Sec. 179D, enacted as part of the Energy Policy Act of 2005 (EPAAct),<sup>2</sup> commercial property owners making qualifying energy-reducing

**Charles R. Goulding**, Attorney/CPA, is the President of Energy Tax Savers, Inc., The EPAAct 179D Experts, an interdisciplinary tax and engineering firm that specializes in the energy-efficient aspects of buildings.

**Jonathan Saltzman** is a Tax Analyst with Energy Tax Savers, Inc., The EPAAct 179D Experts.

**Andrea Albanese** is an Analyst with Energy Tax Savers, Inc., The EPAAct 179D Experts.

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 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; heating, ventilating and air conditioning (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. Residential buildings four stories and above are eligible for Code Sec. 179D tax incentives.

## LED Lighting

With traditional apartment incandescent lighting slowly being phased out and federally banned, building owners with this out-dated lighting must look to an alternative. LED lighting has dropped dramatically in price as of late and offers immense energy savings and bulb life. As costs drop so does the payback period. Certain LED lighting projects have a payback period of only two years.<sup>3</sup> Excellent candidates for LEDs are corridor and lobby fixtures as both are on 24/7. Apartment buildings obtain special privileges under the EPAAct tax provisions in that living

space dormitories are not subject to the bi-level switching tax requirements. LED lighting projects could dramatically lower lighting energy costs and could generate up to \$0.60 per square foot in EAct tax incentives.<sup>4</sup>

## HVAC Retrofits

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HVAC is the largest apartment building energy user and presents the best opportunity for energy cost savings. New technologies in HVAC such as Variable Air-Flow units are enabling apartment owners to capture large energy and tax savings.<sup>5</sup> HVAC control projects can further reduce HVAC energy waste and typically have a payback of two to four years.<sup>6</sup> Apartment buildings with centralized HVAC obtain favorable tax treatment and often qualify for \$1.20- and \$1.80-per-square-foot tax deductions.

## Off-Peak Power

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Utility companies use a time-of-day pricing model. Energy is more expensive during peak hours and cheaper during off-peak hours. Apartment complexes can now take advantage of these price differences with technologies such as demand shifters and thermal storage. The “Demand Shifter from Demand Energy” model allows for buildings to purchase power at night, during the off-peak, and store it in batteries until it is used during the day.<sup>7</sup> Thermal storage is HVAC equipment that produces ice at night using the cheaper, off-peak rate, and then uses the ice during the day to cool the building. Thermal storage projects often qualify for the \$1.80-per-square-foot EAct tax deductions, particularly in New York and Florida.<sup>8</sup>

## Parking Garages

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Many apartment buildings have on-site parking garages. In parking garages the largest energy user is lighting, which is on 24/7. By retrofitting their parking garages with new LED technologies or other energy-efficient lighting, apartment building owners can now reduce energy costs while capturing large EAct tax incentives.<sup>9</sup>

## Benchmarking

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Many cities such as New York and Washington, D.C. have mandatory benchmarking laws. This requires building owners to perform a building energy benchmark once a year. Energy benchmarking can show building owners where they need to improve and can obtain tax incentives for doing so.<sup>10</sup>

## Conclusion

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New technologies make now the time for apartment building owners to retrofit their properties with energy-efficient lighting and HVAC. By lowering fixed costs, building owners will be able to reduce tenant costs, making their building more attractive and competitive.

### ENDNOTES

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- <sup>1</sup> Available online at [www.sacbee.com/2012/04/05/4393157/census-bureau-releases-population.html](http://www.sacbee.com/2012/04/05/4393157/census-bureau-releases-population.html).
- <sup>2</sup> Energy Policy Act of 2005 (P.L. 109-58) (“EAct”).
- <sup>3</sup> Available online at [www.portlandgeneral.com/business/energy\\_savings/small/ways\\_save/business\\_types/apartment\\_management/smart\\_investments.aspx](http://www.portlandgeneral.com/business/energy_savings/small/ways_save/business_types/apartment_management/smart_investments.aspx).
- <sup>4</sup> Charles R. Goulding, Raymond Kumar and Jennifer Pariente, *LED Lighting Can Play A Key Role In Securing EAct Tax Benefits*, IMARK NOW, Feb. 2012, at 62.
- <sup>5</sup> Charles R. Goulding, Andrea Albanese and Jacob Goldman, *New HVAC Hotel & Apartment Technology Obtains Large EAct Tax Incentives*, CORP. BUS. TAX’N MONTHLY, Aug. 2012, at 25.
- <sup>6</sup> Charles Goulding, Jacob Goldman and Taylor Goulding, *Upgrading to Energy Efficient Building Controls How to Monetize Vested EAct Section 179(D) Tax Deductions*, ETSI Publishing, Nov. 2009, [www.energytaxsavers.com/articles/Upgrading\\_to\\_Energy\\_Efficient\\_Building\\_Controls.pdf](http://www.energytaxsavers.com/articles/Upgrading_to_Energy_Efficient_Building_Controls.pdf).
- <sup>7</sup> Available online at [www.multiphousingnews.com/news/manhattan-developer-first-to-go-green-with-battery-storage-technology/1004052275.html?utm\\_source=WhatCountsEmail&utm\\_medium=Daily%20News&utm\\_campaign=Daily](http://www.multiphousingnews.com/news/manhattan-developer-first-to-go-green-with-battery-storage-technology/1004052275.html?utm_source=WhatCountsEmail&utm_medium=Daily%20News&utm_campaign=Daily).
- <sup>8</sup> Charles R. Goulding, Jacob Goldman and Taylor Goulding, *The Tax Aspects of Thermal Storage and Time-of-Day Pricing*, CORP. BUS. TAX’N MONTHLY, Nov. 2009, at 13.
- <sup>9</sup> Charles R. Goulding, Jacob Goldman and D. Malcolm Thomas, *Multiple Lighting Technologies Drive Large EAct Tax Deductions for Parking Garages*, INTL PARKING INSTITUTE, Aug. 2010, at 22.
- <sup>10</sup> Charles R. Goulding, Jacob Goldman and Joseph Most, *Using EAct Incentives to Enhance New Mandatory Building Energy Disclosure Requirements*, CORP. BUS. TAX’N MONTHLY, Oct. 2010, at 11.

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