# Integrating Solar and EPAct Roof Tax Incentives

*By Charles R. Goulding, Jacob Goldman and Andrea Albanese*

Charles Goulding, Jacob Goldman and Andrea Albanese explain how building owners can greatly reduce energy costs by installing solar PV, energy-efficient lighting and natural gas heaters and taking advantage of available EPAct tax incentives.

Many tax advisors are familiar with the large tax incentives related to solar photovoltaic (PV), but they are unfamiliar with the large Energy Policy Act of 2005 (EPAct) tax incentives available for the concurrent roof replacements and upgrades typically required with a solar project. As roof-top solar PV prices continue to plunge, more property owners are interested in solar PV, particularly if they have a core corporate sustainability mission or are part of an industry supply chain that rewards sustainability. Tax advisors need to understand the EPAct roof tax incentive if they are going to accurately calculate the rate of return related to solar PV investment. Tax advisors also need to incorporate an economic benefit from possible added market share related to supplier sustainability programs.[1]

Pursuant to Code Sec. 179D, as enacted by the Energy Policy Act of 2005 (EPAct),[2] commercial property owners or primary designers in government projects 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 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; 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.

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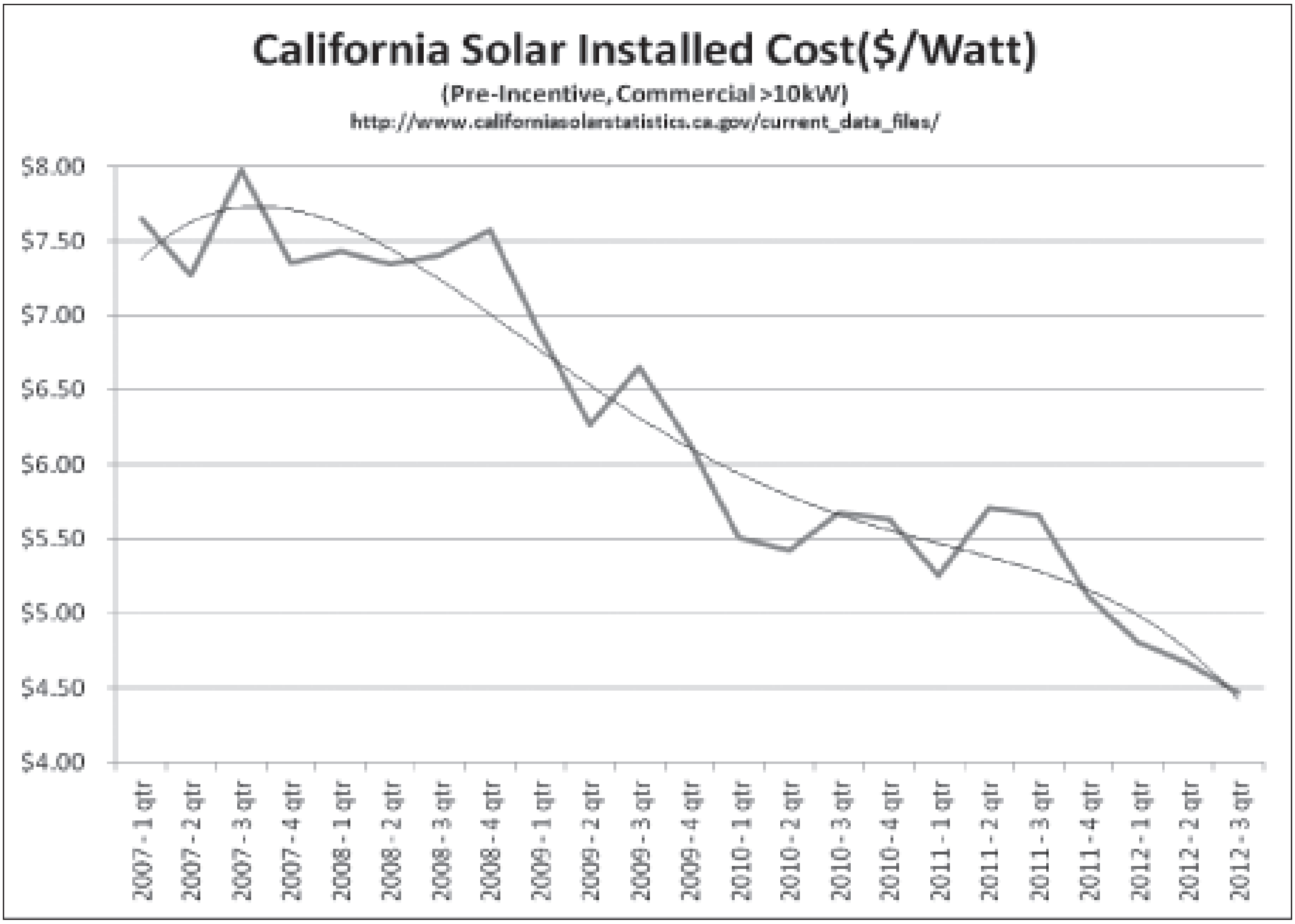
## Alternative Energy Tax Credits and Grants

There are multiple 30-percent or 10-percent tax credits available through the American Recovery and Reinvestment Act[3] to building owners for a variety of alternative energy measures, with varying credit termination dates. For example, the 30-percent solar tax credits expire January 1, 2017, as does the 10-percent Combined Heat and Power tax credit, while the 30-percent closed loop and open loop biomass credit expires January 1, 2014.

**Chart A: California Solar Installed Cost**




## Ideal Solar PV Candidate Is Ideal EPAct Roof Tax Deduction Candidate

Typically, the ideal solar PV properties are EPAct Roof incentive properties. Normally, the best building candidate for solar PV is a large warehouse or industrial building. These same buildings are often the best candidates for large $1.80-per-square-foot EPAct tax deductions.[4]

It is evident from Chart A that the price of commercial solar PV has been dropping. In fact, a 40-percent drop has been seen in just the last five years. The rate of decrease is even more pronounced over the last year.

With these recent decreases in solar PV prices, many warehouse owners are using the EPAct tax incentives to be fiscally and physically prepared for solar. Fiscally prepared means reducing current electricity and heating costs; physically prepared means making the necessary roof improvements to get the building "solar ready." In order to be "solar ready" the roof needs to be new and capable of holding the increased weight of the solar panel. This usually requires removing all old roof layers and laying down a new roof layer. In addition, it is important to confirm that the solar PV installation does not negate any roof warranties.

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## Catching up on Missed Deductions

In January 2011, the IRS released Rev. Proc. 2011-14,[5] which enables all property owners to catch up on any missing EPAct tax deductions and report them on their current tax return without having to file an amended tax return. Filing an amended return can be costly and inconvenient. The retroactive filing is accomplished by filing IRS Form 3115 with the building owner's current tax return. This change can be used proactively as a tax planning tool.

Building owners who missed one or more prior tax deductions can combine the missed project(s) with a new project and secure a much larger combined tax deduction. For example, presume a property owner installed energy-efficient lighting in a 200,000 square foot building for $100,000 in 2006 but missed the EPAct tax deduction. Now presume that, in 2012, this same owner has a new project involving natural gas heaters and some roof improvements for $260,000. Using Rev. Proc. 2011-14, this building owner may be eligible to deduct the entire $360,000 in 2012, $100,000 prior project plus $260,000 current project.

Warehouse and industrial building owners purchasing solar PV have unprecedented opportunities to reduce energy costs, particularly with energy-efficient lighting and natural gas heaters. Large EPAct tax incentives are available to support these pre-solar projects, but quick action is required as EPAct is due to expire December 31, 2013.[6]

## Endnotes

1 *See* Charles Goulding, Jacob Goldman and Christopher Winslow, *The EPAct and Alternative Energy Tax Aspects of Walmart's Supplier Sustainability Program*, Corp. Bus. Tax'n Monthly, Jun. 2011, at 13; Charles R. Goulding, Charles G. Goulding and Jennifer Pariante, *The Tax Aspects of the PepsiCo Sustainability Supply Chain*, Corp. Bus. Tax'n Monthly, Nov. 2012, at 15; and Charles R. Goulding, Raymond Kumar and Jonathan Saltzman, *The EPAct Tax Aspects of the U.S. Military Supply Chain*, Corp. Bus. Tax'n Monthly, Sep. 2012, at 23.

2 Energy Policy Act of 2005 (P.L. 109-58) ("EPAct").

3 American Recovery and Reinvestment Act of 2009 (P.L. 111-5).

4 *See* Charles R. Goulding and Charles G. Goulding, *Warehouses Cut Energy Bills and Taxes*, Bus. Operating Mgmt., July 2012, at 36.

5 Rev. Proc. 2011-14, IRB 2011-4, Jan. 10, 2011.

6 *Supra* note 4.