EXECUTIVE SUMMARY

The U.S. government encourages investment in new solar equipment by offering tax credits, accelerated depreciation allowances, cash payments in lieu of tax credits, loan guarantees, low-interest loans and grants. Homeowners installing solar equipment qualify potentially for a tax credit. Businesses qualify potentially for both a tax credit or the cash equivalent and the ability to deduct most of the equipment cost on an accelerated basis. For businesses, the tax benefits are worth as much as 56 percent to 59 percent of the cost of the equipment. For homeowners, the tax benefits are worth 30 percent.

The **SEIA Guide to Federal Tax Incentives for Solar Energy** provides detailed information about the potential tax benefits and more limited information about the other federal incentives. Key considerations in calculating the tax benefits for any given solar project include:

- What types of solar equipment are "eligible property";
- The amount of the incentives;
- What must happen before a solar project is considered "placed in service," which is important because the tax benefits are claimed starting in the year that equipment goes into service;
- Timing issues arising because the tax credits and some depreciation benefits are not permanent;
- The ownership, financing and offtake arrangements for the project, which are important because the tax benefits can only be claimed by the owner, and some financing and offtake arrangements can lead to a reduction in tax benefits; and
- The effect of rebates, state tax credits and other subsidies on the federal tax benefits.

The *Guide* distinguishes between projects that a solar company or other business puts to business use and projects that an individual puts to personal use. The former are referred to as commercial projects and the latter as residential projects. Examples of commercial projects are a utility-scale solar array that a solar company uses to sell electricity to a utility and a rooftop solar system that a solar company owns and leases to a homeowner on whose roof the system is mounted. An example of a residential project is a rooftop solar system that a homeowner has acquired by direct purchase.

Most solar companies are not in a position to use the tax benefits directly and must enter into transactions to "monetize" the tax benefits, or convert them into cash that can be used to help pay the project cost. There are many misconceptions in the market about who is an appropriate counterparty for such a monetization transaction. For example, passive loss and at-risk rules in the U.S. tax code make it hard for individuals or smaller corporations to use the tax subsidies. They are not usually an appropriate counterparty.

Care must be exercised when entering into transactions with schools, municipal utilities, some electric cooperatives, government agencies, charities and other tax-exempt organizations. Solar equipment cannot be leased to such entities and still qualify for the full tax benefits. However, a developer can sign a power contract to supply electricity to such an entity. Care should be taken to make sure that what looks in form like a power contract is in fact one in substance. The IRS has rules for treating some arrangements as leases even though they are documented to look like power contracts.

Commercial projects that qualify for a tax credit had the option during the period 2009 through 2011 to forego the tax credit and receive the cash value from the U.S. Treasury instead. This option to trade in tax credits for cash was a temporary measure meant to help keep renewable energy development on track during a period when the economy was expected to remain weak. The option remains available through December 2016 for projects that were considered under construction by December 31, 2011.

There may be tradeoffs for solar companies that take advantage of tax-exempt financing. It will adversely affect the depreciation that can be claimed on a commercial project.

This manual is organized in six sections. The first section covers general project issues, as well as issues that are unique to the tax credit for commercial projects. The second section covers issues specific to the tax credit for residential projects.

At the end of these first two sections, the guide provides workbook examples for calculating the value of the commercial and residential tax credits under different project conditions.

The remaining sections address tax credit bonds, loan guarantees, low-interest loans and grants that may be available for some types of commercial solar projects through U.S. government agencies, a tax credit that encourages construction of new factories to make solar energy equipment and other components for renewable energy projects, and state tax considerations.

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