The tax system often is used to provide incentives for particular types of investments the government wants to encourage. These incentives raise tax planning issues that go well beyond those involved in general structural, choice-of-entity, and other financing considerations, and create the potential for significant economic benefit. The available incentives also have been subject to frequent changes as federal and state energy policies have evolved. The following discussion is only a general summary and is current as of March 30, 2010. Please contact one of the attorneys listed above for answers to your specific legal questions and to check on any changes that may have occurred since the date of this publication.

**FEDERAL INCOME TAX ISSUES**

I. The Production Tax Credit. Section 45 of the Internal Revenue Code of 1986, as amended (the “Code”), provides a credit against federal income tax for electricity produced from certain renewable resources, including certain open- and closed-loop biomass. This credit is known as the production tax credit (the “PTC”).

A. Requirements for Claiming the Credit. The PTC for open-loop and closed-loop biomass facilities applies to electricity that is (1) produced at a qualified facility during the 10-year period that begins on the date the facility was originally placed in service and (2) sold to an unrelated person during the taxable year. Each of the following requirements must be satisfied for a taxpayer to claim the PTC:

1. **Produced by the Taxpayer.** The electricity must be produced by the taxpayer seeking to claim the PTC. If more than one person has an ownership interest in a facility, production from the facility is allocated among the owners in proportion to their respective ownership interests in gross sales from the facility. A partnership (including a limited liability company (“LLC”) that is treated as a partnership) is treated as one person for purposes of this rule, which means that individual partners are not treated as owning separate, undivided portions of a facility that is owned by a partnership.

2. **Qualified Energy Resources.** The electricity must be produced from qualified open-loop or closed-loop biomass. Open-loop biomass includes (a) agricultural livestock waste nutrients and (b) solid, nonhazardous, cellulosic waste material, or any lignin material derived from (i) mill and harvesting residues, precommercial thinnings, slash, and brush; (ii) certain solid wood waste materials; and (iii) agriculture sources, including orchard tree crops, vineyard, grain, legumes, sugar, and other crop byproducts or residues. Open-loop biomass does not include closed-loop biomass or biomass co-fired with more fossil fuel than is required for startup and flame stabilization. Closed-loop biomass is defined as any organic material from a plant that is planted exclusively to be used at a qualified facility to produce electricity.

3. **Qualified Facility.** The electricity must be produced by a biomass facility that is located in the United States and is owned (or, in the case of certain facilities, leased or operated) by the taxpayer claiming the PTC. A closed-loop biomass facility generally must be placed in service after December 31, 1992 and before January 1, 2014. An open-loop biomass facility that uses agricultural livestock waste nutrients generally must be placed in service after October 22, 2004 and before January 1, 2014 and must have a nameplate capacity rating of at least 150 kilowatts. An open-loop biomass facility that does not use agricultural livestock waste nutrients generally must be placed in service before January 1, 2014. A qualified facility generally includes a new unit placed in service after October 3, 2008 in connection with a qualified open-loop or closed-loop facility, but only to the extent of the increased amount of electricity produced at the facility by reason of the new unit. A facility generally is considered to be “placed in service” for purposes of these rules when the facility is placed in a condition or state of readiness and is available to produce electricity.
4. **Sold by the Taxpayer.** The electricity must be sold by the taxpayer claiming the PTC to an unrelated person during the taxable year.

5. **No Advance Approval Required.** There is no advance approval requirement for claiming the PTC. A taxpayer that is entitled to the credit simply reports it on the appropriate form attached to the taxpayer’s federal income tax return.

B. **Calculation of the PTC.** The PTC for closed-loop biomass for any taxable year during the credit period generally is equal to 1.5 cents, adjusted for inflation, multiplied by the number of qualified kilowatt hours of electricity produced and sold by the taxpayer during the year. The PTC for open-loop biomass generally is half of the PTC available for closed-loop biomass. For electricity produced and sold during 2009, the inflation-adjusted PTC amounts were 2.1 cents per kilowatt hour for closed-loop biomass and 1.1 cents per kilowatt hour for open-loop biomass. The inflation-adjusted amounts for 2010 have not yet been released.

C. **Reduction for Government Financing.** The amount of the PTC is reduced for facilities financed in whole or in part with certain government grants, proceeds of tax-exempt bonds, subsidized energy financing (financing provided under a federal, state, or local program designed to provide subsidized financing for energy conservation projects), or other tax credits. The IRS has ruled that certain state tax credits do not reduce the PTC.

D. **Nonrefundable Credit.** The PTC is a “nonrefundable” credit. If a taxpayer entitled to the PTC does not have sufficient income tax liability to use the entire credit for a particular year, the taxpayer is not entitled to a refund of federal income tax because of any excess credit. Any unused portion of the credit generally may first be carried back one tax year and then be carried forward 20 tax years from the year the credit arose.

E. **Sunset Date.** To qualify for the PTC, a biomass facility must be originally placed in service before January 1, 2014. Proposals to extend PTC sunset dates are a matter of frequent discussion, and it is possible that the sunset date could be extended beyond January 1, 2014 by future legislation.

II. **The Investment Tax Credit.** Sections 46 and 48 of the Code allow the owner of a qualified open-loop or closed-loop biomass facility that is placed in service on or after January 1, 2009 and before January 1, 2014 to elect to claim the investment tax credit (the “ITC”) in lieu of the PTC. The ITC is a one-time credit against income tax that is based on the amount invested in a facility rather than on the amount of electricity produced and sold. The amount of the ITC for a biomass facility, whether open-loop or closed-loop, is 30 percent of the tax basis (generally the cost) of the qualifying property.

A. **Requirements for Claiming the ITC.** The ITC applies only to “energy property,” which is defined in the case of a biomass facility to include only property that meets the following requirements:

1. **Biomass Equipment.** The property must be equipment that is used to produce electricity from open-loop or closed-loop biomass. The property must be (1) tangible personal property or (2) other tangible property (not including a building or its structural components) that is an integral part of the biomass facility.

2. **Depreciable or Amortizable.** The property must be eligible for depreciation or amortization deductions for federal income tax purposes.
3. **Qualified Facility.** The property must be part of a qualified facility that is located in the United States, owned by the taxpayer, and originally placed in service on or after January 1, 2009 and before January 1, 2014.

4. **No PTC Allowed.** The property cannot be part of a facility for which the PTC has been allowed.

5. **Irrevocable Election.** The owner of the property must make an irrevocable election to claim the ITC rather than the PTC.

### B. **Progress Expenditure Rules.**

In certain circumstances involving qualified energy property with a normal construction period of more than two years, a taxpayer may be entitled to claim the ITC with respect to progress expenditures in tax years before the property is placed in service.

### C. **Basis Reduction.**

The tax basis of property with respect to which the ITC is claimed is reduced for all tax purposes (including depreciation and calculating gain from a sale) by one-half of the amount of the credit. Thus, the tax basis of the qualifying components of a biomass facility with respect to which the ITC is claimed generally will be 85 percent of the cost of those components.

### D. **Recapture of the Credit.**

The ITC is subject to recapture if, within five years after a facility is placed in service, the taxpayer sells or otherwise disposes of the energy property or stops using it in a manner that qualifies for the credit. The amount of recapture depends on when during the five-year period the property is disposed of or ceases to be used in a qualifying manner.

### E. **No Cutback for Government Financing.**

The ITC, unlike the PTC, generally is not reduced with respect to facilities that are financed in whole or in part with the proceeds of tax-exempt bonds, subsidized energy financing, or other forms of government-supported financing.

### F. **Nonrefundable Credit.**

The ITC, like the PTC, is a nonrefundable credit. If a taxpayer entitled to the ITC does not have sufficient income tax liability to use the entire credit for a particular year, the taxpayer is not entitled to a refund of federal income tax on account of the credit. Any unused portion of the credit generally may first be carried back one tax year and then be carried forward 20 tax years from the year the credit arose.

### G. **Sunset Date.**

To qualify for the ITC, an open-loop or a closed-loop biomass facility must be placed in service before January 1, 2014.

### III. **U.S. Treasury Department Grants.**

The American Recovery and Reinvestment Act of 2009 allows the owner of a qualified biomass facility that is eligible for the ITC (including by reason of an election to claim the ITC rather than the PTC) to elect to receive a grant from the U.S. Treasury Department in lieu of claiming the ITC or the PTC with respect to the facility. The grant generally is designed to function in the same manner as the ITC for which the owner of a qualified project otherwise would have been eligible.

#### A. **Qualification for Grant.**

To qualify for a grant, a biomass project must (i) meet the qualification requirements for the ITC and (ii) be placed in service during 2009 or 2010 or, if construction is begun in 2009 or 2010, be placed in service on or before January 1, 2014.

#### B. **Disqualified Persons.**

A grant may not be paid with respect to a project if certain persons own an equity or profit interest in the project, either directly or indirectly, through a pass-through entity, such as a
partnership. Disqualified persons include, among others, federal, state, and local governments; certain tax-exempt organizations; cooperative electric companies; Indian tribal governments; and certain foreign persons.

C. Amount of Grant. Like the ITC, the amount of the grant generally is 30 percent of the tax basis (generally the cost) of qualifying property.

D. Excluded from Income. A grant generally is not included in the taxable income of the recipient for federal tax purposes. An exception applies to certain lease transactions. Treatment of the grant for state income tax purposes varies from state to state.

E. Basis Reduction. The tax basis of the property is reduced by one-half of the amount of the grant, in the same manner as if the ITC were claimed. An exception applies to certain lease transactions.

F. Recapture. A grant generally is subject to recapture if, within five years after a facility is placed in service, the recipient stops using it in a manner that qualifies for the grant, or sells or otherwise disposes of the property to a person who would not have been eligible for the grant if that person had originally placed the property in service.

G. No ITC or PTC Allowed. No ITC or PTC may be claimed with respect to property for which a grant has been claimed.

H. Timing of Payment. The U.S. Treasury Department is required to pay a grant to a qualifying project owner within 60 days after the date the project owner applies for payment or the date the facility is placed in service, whichever is later.

I. Application Deadline. An application for the grant must be filed before October 1, 2011.

IV. Depreciation. In addition to tax credits or grant payments, biomass facilities also can generate significant tax losses that can be valuable to owners with other sources of taxable income that can be offset by the losses.

A. MACRS Depreciation. Qualifying components of biomass facilities are eligible for greatly accelerated depreciation deductions under the modified accelerated cost recovery system ("MACRS").

B. Bonus Depreciation. An owner of qualifying property placed in service in 2009 is entitled to deduct 50 percent of the adjusted basis of the property in 2009. The remaining 50 percent of the adjusted basis of the property is depreciated over the regular tax depreciation schedule. Proposals to extend the sunset date have been discussed, and it is possible that the sunset date could be extended beyond 2009.

V. Monetizing Federal Income Tax Benefits; Ownership Structuring Issues. A taxpayer that has little or no need for tax credits or losses (e.g., because it has little or no taxable income) may nevertheless be able to obtain the benefit of various tax incentives by entering into an arrangement with an investor that can use credits, losses, or both. For example, a taxpayer could enter into a partnership with an investor that is willing to contribute cash to help finance a biomass facility. The partnership could then operate the facility, and, within certain limits, the tax credits and losses could be allocated to the partner that can use them. In the alternative, a taxpayer could develop a facility, place it in service, sell it to an investor, and then lease it back from the investor. This second alternative, known as a “sale-leaseback,” is available with respect to the ITC and the grant but generally is not available with respect to the PTC. These and other potential techniques for “monetizing” tax credits and losses involve risk and require careful tax planning. These considerations should be taken into account
in the very early stages of a project, including when choosing the type of entity that will own a facility and the various financing alternatives available. The grant in lieu of the ITC provides a new financing option for developers of biomass facilities to consider. Even developers that opt for the grant, however, may still desire to involve tax-motivated investors to take advantage of the accelerated depreciation and other tax benefits associated with a project. A comparison of the economic benefits of the PTC, the ITC, and the grants requires, among other considerations, careful financial modeling of the projected costs and output of each specific project and of the full array of potential tax and financing implications. This should include careful consideration of any limitations that may apply to a particular owner's ability to claim the available tax benefits, such as alternative minimum tax liability, at-risk limitations, and passive activity limitations.

STATE AND LOCAL TAX ISSUES

In addition to federal income tax issues, construction and operation of biomass facilities also raise numerous state and local tax issues that should be carefully examined. Following is a general description of the types of issues that may arise, with selected examples. Developers and investors should be careful to obtain very current information about state tax in general, and state tax incentives in particular. The economic downturn has caused many states to revisit tax incentives previously offered to businesses, including renewable energy businesses. States are generally narrowing their incentives, either by interpreting existing law narrowly or by legislative change, sometimes with retroactive effect.

VI. Net Income Tax States. The vast majority of states impose a net income tax. States generally base their income tax system on the federal system, and many states have adopted relatively uniform rules governing division of the tax base and computation of taxable income. Despite these similarities, however, each state’s tax system is different and must be separately analyzed.

A. Nexus, Business Structure, and Apportionment. Siting a biomass project in a state will generally create “nexus” with the state and will generally allow the state to tax the income of the company that owns or operates the project. Less substantial activities, such as consulting, may create nexus with a state as well.

One of the most important decisions affecting state taxation is the type of legal entity used when starting a new project. Choices may include corporations (including S corporations and C corporations), LLCs, and limited partnerships. The decision can affect:

- Whether tax is imposed directly on the project company or on its owners; and
- Whether taxable income (or loss) is determined on a stand-alone basis, or whether state tax will be measured by combining or consolidating the income of affiliates, including the parent company.

States generally measure the taxable income of a company by allocation and apportionment. In western states, including California, Idaho, Montana, and Utah, the company’s overall business income from all sources is apportioned to the state based on the company’s property, payroll, and sales within the state. However, reflecting a national trend, Oregon’s apportionment is now based entirely on sales. For purposes of apportioning sales of electricity among different states, some states, such as California, source the sale based on where the majority of income-producing activity related to the sale occurs. Other states may use different sourcing rules. Oregon, however, takes the position that sales of electricity are sourced to the state where delivery occurs.
The choice-of-entity and apportionment rules can sometimes produce surprising results: if the company or group as a whole has taxable income, the company may owe tax to a state even if the activities in that state are not profitable on a stand-alone basis.

**B. Income Tax Incentives.** Some income tax states offer incentives, such as Oregon’s per-ton credit for the production or collection of biomass used for biofuel, in order to promote the development of biomass and other alternative energy projects. It is important to understand the nature of each incentive, as there is considerable variation among the states. Also, as noted above, some state incentives may reduce the amount of the federal incentives available for the project.

For example, Oregon has adopted a business energy tax credit (the “BETC”). The BETC program allows an Oregon taxpayer that owns and operates a qualifying renewable energy facility, including a biomass facility, to claim a credit against Oregon income tax to offset the eligible costs of construction of the project. Legislation passed in 2007 extended the BETC to power projects that generate electricity from biomass. A separate 2007 bill substantially increased the amount of the credit. Under the 2007 law, the amount of the credit is 50 percent of the eligible costs, up to a maximum total credit amount of $10 million (formerly $3.5 million). The total credit amount is claimed over five years, and unused credits may be carried forward for up to eight years. A developer may sell the BETC outright, at a discount established by the state and recalculated quarterly. Certain other incentives, including federal grants and potentially including the federal grant in lieu of the ITC, may reduce the amount of the BETC. Legislation and administrative rules adopted in late 2009 and early 2010 impose statewide caps on the BETC for renewable energy projects, including biomass projects, and give broad discretion to the Oregon Department of Energy to attach conditions and restrictions on individual projects. In addition, a recent increase in the discounted price that must be paid for the BETC likely will make it more difficult to sell the BETC.

**VII. Sales and Use Taxes.** Nearly all states impose a sales tax. In most states, the tax is imposed only on sales of tangible personal property. Some states also impose use tax on sales of certain kinds of services. In addition, some states impose a transfer tax on the sale (and sometimes the lease) of real property.

**A. Purchase or Use of Equipment.** Most states’ sales and use taxes will apply to the purchase or use of equipment within those states.

**B. Generally No Sales or Use Tax on Sales of Power.** Most states that impose sales and use taxes do not impose those taxes on sales or use of electricity.

**C. Sales Tax Incentives.** Some states have adopted exemptions for the purchase of machinery and equipment used to produce electricity from certain renewable resources. For instance, Washington has adopted a sales and use tax incentive for certain alternative energy generation equipment, including machinery and equipment used in generating electricity from biomass. The incentive is a 100 percent exemption from July 1, 2009 through June 30, 2011 and a 75 percent rebate from July 1, 2011 through June 30, 2013. However, the Washington legislature, like many state legislatures, is considering substantial changes to, and limitations on, this sales tax incentive and also is considering substantial changes to the tax system as a whole.

**VIII. Property Tax.** Virtually all states impose a property tax that is assessed annually and is measured, in some fashion, by the value of real property. Most states also tax tangible personal property that is used for business purposes. Intangible property is taxable in some states if the owner is centrally assessed, as discussed below.
A. **“Central” or “State” Assessment Likely.** In many western states, such as Oregon, a company that produces electricity is “centrally assessed” for property tax purposes. Central assessment means that the taxable value of the property is determined by the state revenue authority rather than by the county assessor’s office. In Washington, central or local assessment depends in part on whether the company’s property crosses county lines. In California, the facility’s output is a factor in determining whether central assessment applies.

B. **Valuation.** States generally accept the three traditional valuation methods for electricity generation property (the cost approach, income approach, and comparable sales approach). However, if the property is centrally assessed, the state taxing authority may also be authorized to determine value by combining the property with other facilities owned or used by the same company. In that case, the taxing authority may aggregate property within and without the state, determine the value of the entire “unit,” and allocate some portion of the unit value to the taxing state by means of a formula. Determining the correct value of a particular project is a matter of frequent controversy.

C. **Property Tax Reporting.** States typically require owners of centrally assessed property to file annual returns reporting the value of their property. It is good practice to consult a valuation expert before filing the first return with respect to the property, in order to accurately communicate on the return items that could result in tax savings in future years.

D. **Rollback Penalties in Farm and Timber Use Areas.** Many states impose property tax penalties when land that is used for farming or timber is dedicated to a different use. In addition to those penalties, property taxes may increase prospectively after the change of use. This issue may arise during the siting process. It is best to address this issue as part of financial modeling.

E. **Property Tax Incentives.** As part of due diligence in constructing or acquiring a biomass facility, it is worthwhile to inquire whether any property tax incentives are available. Property tax incentives can be particularly advantageous because property tax liability typically applies throughout the life of the project. In contrast to income tax, property tax is often highest in the early years before the project is profitable. For example, in Oregon it may be possible to obtain a temporary property tax exemption under the state Enterprise Zone Program or the Strategic Investment Program. The Enterprise Zone Program typically offers an exemption for three to five years, but in rural areas the exemption period may be as long as 15 years. To qualify, state law requires that the company increase its permanent, full-time employment within the zone by at least 10 percent. (Note that one employee may satisfy the minimum hiring requirement if the company has not previously operated within the zone.) Other requirements, such as minimum capital investment size, may apply. The Strategic Investment Program statutes offer a partial exemption for 15 years, with a fee payable to the county and other potential conditions. Negotiations for benefits under both the Enterprise Zone and Strategic Investment Programs generally occur at the county level, sometimes with participation of cities.

IX. **Excise Taxes.** When considering operation of a biomass facility, state and local excise taxes also should be taken into account.

A. **Washington Public Utility Tax.** The state of Washington and a number of municipalities within Washington impose a public utility tax (“PUT”) on the privilege of engaging in certain utility businesses within the state and those localities. The state PUT is imposed at a rate of 3.873 percent of gross income derived from certain enumerated public service businesses, including the light and power business. The “light and power business” is defined for purposes of the state PUT as “the business of operating a plant or system for the generation, production or distribution of electrical energy for hire or sale and/or the wheeling of electricity for
others.” The state PUT is intended to apply only to revenues derived from the retail sale of electricity to consumers. Accordingly, deductions in computing gross revenues may be allowed for revenues derived from the sale of electricity for resale, among other deductions. The Washington business and occupation tax may also apply, depending on the specific activities that the business conducts. Cities and towns also may impose a local PUT or a local business and occupation tax, or in some circumstances, both. Local rates can be substantial.

B. Other State and Local Excise Taxes. Other states and localities may impose other kinds of excise taxes. For example, some California cities impose gross receipts taxes for the privilege of doing business in the locality. California imposes a fee based on gross receipts for the privilege of doing business as an LLC. All potentially applicable taxes, including state and local excise taxes, should be carefully analyzed in determining the costs and benefits of operating a biomass facility.