Maximizing Renewable Energy Financing with Taxable Municipal Bonds and IRA Credits

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The Inflation Reduction Act of 2022 (IRA) incentivizes investment in clean energy projects by offering income tax credits for entities seeking to finance facilities that produce or use certain clean energy resources. Tax-exempt municipal bonds are issued by states, local governments, and other governmental entities to benefit the public, for instance, by funding energy-efficient improvements to existing structures. Such tax-exempt municipal bonds allow the interest income derived therefrom to be exempt from federal and potentially state income taxes. Alternatively, taxable municipal bonds frequently involve projects that do not qualify for tax-exempt status under Section 103 of the Internal Revenue Code,[1] generally offering higher yields but subjecting the interest income to taxes.

By introducing new incentives and enhancing existing tax credits, the IRA expands opportunities for entities involved in renewable energy development, particularly in how they can leverage both taxable and tax-exempt municipal bonds. For stakeholders, including state and local governments, public utilities, developers, and investors, the IRA offers new strategies to lower the costs of clean energy projects through a combination of tax credits and bond financing. In this article, we explore how the IRA impacts municipal bond financing, the types of tax credits available, and the key opportunities and considerations when evaluating the use of taxable and tax-exempt bonds.

IRA Incentives

The IRA brings significant updates to two critical tax credits for renewable energy projects:

Investment Tax Credit (ITC)

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The ITC establishes a one-time federal income tax credit for certain energy properties based on a percentage of the cost of installing energy-generating systems, with solar projects having historically been the primary beneficiary.[2] The IRA extends the ITC to a broader range of clean energy technologies, allowing projects involving energy storage and other advanced technologies, such as hydrogen production facilities and carbon capture systems, among others, to qualify. The base amount of the ITC is 6% of the total investment in qualified energy property in service for that taxable year, which is increased to 30% provided that prevailing wage and apprenticeship standards are met. Moreover, bonus credits are available if the qualified energy project complies with the domestic content requirements or is located within an energy community.

Production Tax Credit (PTC)

Traditionally available for renewable energy sources such as wind, the PTC offers a per-kilowatt-hour federal income tax credit for energy produced by eligible projects over a 10-year period from the date the facility is placed in service.[3] The IRA extends the PTC to new types of energy production, including solar (which was previously eligible only for the ITC). The base amount of the PTC for a taxable year is 0.3 cents or 0.6 cents per-kilowatt-hour depending on the type of renewable energy production.[4] If prevailing wage and apprenticeship requirements are met, these amounts are increased to 1.5 cents or 3 cents per-kilowatt-hour, respectively. Like the ITC, bonus credits are also available under the PTC.

One of the most significant changes the IRA introduces is the shift to technology-neutral tax credits at the end of 2024.[5] This shift means that projects will no longer be constrained by the type of energy they produce; instead, the credits will be available to any technology that achieves zero or near-zero emissions as measured by the Department of Energy's Greenhouse gases, Regulated Emissions, and Energy use in Technologies (GREET) model. While this will simplify the eligibility criteria for developers and financiers of renewable projects, those technologies that do not achieve zero or near-zero emissions will no longer qualify for the historic ITC and

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PTC. Importantly, even if qualified facilities do not begin physical construction prior to January 1, 2025, there is a safe harbor that allows the taxpayer to claim either historic credit if (a) the taxpayer pays 5% of the total cost of construction prior to the deadline and (b) continually advances the project construction thereafter.

IRA Incentives Applicable to Tax-Exempt Bonds

Tax-exempt municipal bonds have historically offered a key advantage to issuers by reducing financing costs through lower interest rates, given that bondholders may not pay federal and/or state taxes on the interest income. Traditionally, tax credit financing provided bondholders with a federal income tax credit *instead of* conventional interest payments on the bonds, which allowed issuers to offer zero or low-cost financing for certain property or projects. The IRA now allows certain clean energy tax credits to be used *in combination with* tax-exempt municipal bonds, presenting an exciting opportunity for entities financing clean energy projects to take advantage of both tax-exempt interest income and tax credits, which can increase the profitability of these projects and lower initial capital expenditures.

The IRA's new direct pay option (also called elective pay) enables tax-exempt entities for the first time to receive tax credits as direct payments by filing a tax return and receiving a tax refund. This allows tax-exempt issuers to finance clean energy projects at a low cost and simultaneously benefit from the IRA incentives without needing private investors to monetize the credits.[6] When used in combination with tax-exempt bond financing, the direct pay option can reduce the equity needed to cover clean energy projects and increase the projects' profitability, easing the difficulty of securing debt financing in clean energy projects for all stakeholders involved.

While combining tax credits and tax-exempt bonds may increase the viability and attractiveness of clean energy projects, it may also require complex legal and financial considerations to understand the interplay between these incentives and how to appropriately utilize and execute them. For example, to prohibit issuers of municipal bonds from doubly receiving tax advantages (through

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tax-exempt income from interest on bonds and the new IRA tax credits operating as a tax refund), the IRA reduces clean energy tax credits like the PTC and ITC for tax-exempt bonds by up to 15% for construction projects beginning after August 16, 2022 (e.g., from 30% to 25.5% in the case of the ITC). This 15% reduction presents a major shift from the pre-IRA 50% credit reduction for tax-exempt bonds, resulting in up to 35% more tax credit realization.[7]

IRA Incentives Applicable to Taxable Bonds

Taxable municipal bonds are poised to play an increasingly important role in financing renewable energy projects under the IRA. In contrast to tax-exempt bonds, taxable bonds do not trigger the 15% reduction in IRA tax credit value, which allows project sponsors to leverage the ITC and PTC fully, without any reduction, likely because taxable bonds are not in danger of receiving a double benefit from the utilization of tax credits. By fully utilizing the IRA tax credit value, taxable bonds are an attractive option for clean energy projects where maximizing credit value is critical to the financing structure. While taxable bonds do not offer the tax-exempt interest advantage, they provide greater flexibility in how the proceeds can be used. Taxable bonds are not constrained by the IRS restrictions that limit the use of tax-exempt bonds for projects with private involvement, making them ideal for public-private partnerships or projects with a strong private sector component, as well as for financing a wider range of renewable projects.[8]

There are other unique advantages associated with using taxable municipal bonds to finance renewable energy projects under the IRA. Taxable entities may utilize the IRA's new transferability provisions to sell all or part of their ITC or PTC to unrelated parties, which helps provide additional liquidity by allowing project developers to monetize tax credits, inject funds into the project, and reduce the need for complex tax-equity financing structures.[9] In return, purchasers—typically investors or financial institutions—can reduce their tax liabilities, creating a more liquid market for renewable energy credits and further incentivizing investment in clean energy projects. Additionally, taxable municipal bonds offer higher yields than tax-exempt bonds, attracting a

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broader range of investors, including foreign investors and institutional investors who are not concerned with the tax-free nature of interest income, which can increase the pool of available capital for renewable energy projects.

While the use of taxable bonds may result in a higher cost of borrowing for the issuer when compared to tax-exempt bonds, the combination of full tax credit eligibility and the ability to sell credits can help offset these higher costs, making taxable bonds a financially viable option for many renewable energy projects. The full PTC or ITC tax credit eligibility versus the 15% reduction in tax credit value is only one factor that state and local governments should consider when deciding between taxable and tax-exempt bond financing, and, ultimately, decision makers should determine whether this reduction is material enough to warrant using taxable bonds to finance clean energy projects.

Key Takeaways

The IRA has fundamentally altered the landscape for financing renewable energy projects in the United States. The ability to combine tax credits with both taxable and tax-exempt municipal bonds opens up new possibilities for lowering the cost of capital and expanding the range of eligible projects. As developers, municipalities, and investors consider their financing options, understanding the interplay between these bonds and the IRA's incentives will be crucial to maximizing the benefits and driving down the cost of clean energy projects. By navigating these opportunities carefully, stakeholders can position themselves to take full advantage of the IRA's provisions and help accelerate the transition to a clean energy future.

To learn more about financing or investing in clean energy projects with municipal bonds, please contact the authors or any attorney with Frost Brown Todd's Public Finance and Tax practice groups.

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[1]Any references to "Internal Revenue Code" or "Section" shall mean that section of the Internal Revenue Code of 1986, as amended.

[2] I.R.C. § 48 (as amended as of Aug. 16, 2022).

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[3] I.R.C. § 45 (as amended as of Aug. 16, 2022).

[4] The base amount of the PTC is 0.3 cents per kWh on the sale of electricity produced from open-loop biomass, landfill gas, trash, qualified hydropower, and marine and hydrokinetic renewable energy. The base amount of the PTC is 0.6 cents per kWh on the sale of electricity produced from the qualified energy resources of wind, closed-loop biomass, geothermal energy and solar energy.

[5] The PTC and ITC will be replaced by their technology-neutral counterparts, the Section 45Y Clean Electricity Production Credit ("CEPC") and the Section 48E Clean Energy Investment Credit ("CEIC"), respectively.

[6] 26 U.S. Code § 6417. Applicable entities include tax-exempt organizations, states and political subdivisions such as local governments, Indian tribal governments, Alaska Native Corporations, the Tennessee Valley Authority, rural electric cooperatives, U.S. territories and their political subdivisions, and agencies and instrumentalities of state, local, tribal and U.S. territorial governments.

[7] The reduction is determined by applying the lesser of 15% or a fraction, with the sum of tax-exempt bond proceeds as the numerator and the aggregate additions to the capital account for the qualified facility for the taxable year and all prior taxable years as the denominator.

[8] Municipal bonds are taxable under the Code if they are private activity bonds, means that either of the following tests are met: (a) the "private business tests" (i.e., the bonds are used to finance property used by an individual or entity in a private business and the debt service is derived or secured by a private source of payment or security) or (b) the "private loan test" (i.e., a state or local entity may loan no more than the lesser of 5% of the bond proceeds or five million dollars to a non-governmental entity or individual). *See* I.R.C. §103; *and see* I.R.C. §141.

[9] 26 U.S. Code § 6418.

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