

# ALLOCATED TAX CREDIT INVESTMENTS

GAAP Accounting Best Practices:  
Utilizing the Deferral Method to Recognize Renewable Energy Tax Credits





# ALLOCATED TAX CREDIT INVESTMENTS

## GAAP Accounting Best Practices: Utilizing the Deferral Method to Recognize Renewable Energy Tax Credits

Although economically accretive, allocated tax credit investments can have less than optimal — or, in some cases, adverse — accounting consequences, including below the line recognition of tax credit benefits and asset impairment due to basis reduction associated with the credit, which may create potential obstacles for investors; however, these negative accounting results can often be addressed by utilizing the deferral method, rather than the flowthrough method of recognizing renewable energy tax credit assets.

### TAX EQUITY BASICS — ALLOCATED TAX CREDITS

A tax credit is a type of tax incentive that can reduce a company's tax liability on a dollar-for-dollar basis. The U.S. government uses tax credits to incentivize certain types of projects that produce social, economic, or environmental benefits. Common tax credit projects include affordable housing, rehabilitation of historic properties, low-income census tract economic development, wind energy, and solar energy. For these projects, the tax credit is a valuable and important part of the project financing capital stack. Many project developers do not have enough tax liability to take advantage of the tax credits themselves, so the developer monetizes the tax credit by attracting a "tax equity" investor.

Tax equity is a term that is used to describe a passive ownership interest in a qualified project, where the investor receives a return based on cash flow from the project, and tax benefits. In such a transaction, a partnership is often formed among the parties to facilitate injection of investment capital and the allocation of tax attributes. The specifics of each partnership vary by project, tax credit type, and transaction structure.

In practice, a tax equity investment utilizes the same dollars that are earmarked to satisfy a company's estimated tax liability payments. Those funds are repurposed and then invested into qualified projects that generate tax credits, such as a solar farm or affordable housing project. The tax benefit attributes (tax credits and depreciation) from the project flow back to the

investor, eliminating a corresponding amount of tax liability. The investor typically also receives cash returns from the project for participating, thus earning them a rate of return on the same money that otherwise would have been wired to the government with no expectation for a return.

Returns on tax credit investment can vary widely depending on the program, the counterparties, and all standard risk factors associated with real estate or energy project underwriting. Generally speaking, after-tax returns to investors usually fall between 5% and 12% depending on the credit quality and other project risk characteristics — e.g., low income housing tax credit (LIHTC) projects tend to fall on the lower end of the yield scale (for various reasons beyond the scope of this paper), while utility-scale renewable energy projects fall in the middle and mid- to small-scale renewable energy projects drive the top of the yield scale.

## TAX CREDIT ACCOUNTING BEST PRACTICES & IRS GUIDANCE

IRS guidance with respect to tax credit programs varies significantly, with LIHTCs on one end of the scale and renewable energy tax credits (RETCs) on the other. LIHTC projects have special, clearly defined accounting rules and extensive, precise IRS guidance on all aspects of low-income housing transactions<sup>1</sup>, as detailed in Exhibit A; unfortunately there is little to no published IRS guidance specific to the renewable energy industry. Despite the RETC industry being an \$11 billion per year market, as compared to LIHTC's \$9 billion per

year. Accordingly, there are many questions regarding accounting best practices for RETC projects, which invariably affect the desirability and risk assessment of investment opportunities in the renewable energy market.

This whitepaper strives to uncover and capture the best practices and approaches for investors and third-party accounting firms considering allocated tax credit investment opportunities. Before considering ways to address the issue of accounting best practices, however, a more detailed discussion and understanding of the renewable energy industry generally is essential, including the tax incentives available and tax equity structures utilized for RETC projects.

## TAX INCENTIVES FOR RENEWABLE ENERGY INVESTMENTS

Federal tax incentives: Renewable energy projects may qualify for two types of tax credit (ITCs and PTCs) and depreciation incentives at the federal level:

- *Investment Tax Credit* — purchasers can take a tax credit equal to 30% of their basis in a new qualifying energy system. The ITC was enacted to serve as an incentive device to stimulate the purchase or modernization of certain kinds of productive assets by permitting a reduction in tax liability based on the taxpayer's qualified investment in certain kinds of property placed in service during the tax year.
- *Production Tax Credit* — available for certain partnership flip deals (explained in more detail

---

<sup>1</sup> Internal Revenue Code (IRC) §45. (Unless otherwise noted, all references herein are to the IRC.)

below), the PTC is a per-kilowatt-hour tax credit for electricity generated by qualified energy resources and sold by the taxpayer to an unrelated person during the taxable year. The period of the credit is generally for a 10-year period beginning on the date the facility was originally placed in service.<sup>2</sup>

- *Bonus Depreciation* — under 2017 tax reform, discussed in greater detail below, “qualified property” that is acquired and placed in service after September 27, 2017, and before January 1, 2023 is eligible for 100% bonus depreciation.<sup>3</sup>

- *Accelerated MACRS Depreciation* — businesses can depreciate renewable energy systems using a 5-year schedule (even though, e.g., the useful life of a solar system is 30–35 years).

## OTHER RENEWABLE ENERGY INVESTMENT FINANCIAL INCENTIVES

Additional programs are offered at the state, municipal, and utility levels in order to further incentivize local renewable energy investment.

Some states offer an additional tax credit, which usually “stack” with the federal ITC, meaning both state and federal tax credits apply to the full cost of installation. (Some states, utility companies, and municipalities offer cash rebates for solar installations, which may further offset the costs of installation but tend to reduce the return on federal/state ITCs because the rebate is applied first to the array cost before filing, thus they are generally disfavored by tax equity investors.)

Certain states also have performance standards for utilities, requiring power companies to either produce or purchase energy from renewable sources like solar power. In these states, utilities often use solar renewable energy credit (SREC) marketplaces to purchase solar power credits produced by homeowners who generate renewable energy, allowing for the sale of these credits to increase solar system income substantially, thereby reducing the time it takes for the system to offset the cost of installation.

### *Non-financial benefits to investing in ITC projects:*

In an increasingly climate-conscious political and social environment, investing in clean energy can have significant, wide-ranging benefits to a company from a public relations and global perspective.

Most renewable energy generation produces little to no global warming emissions nor emits air and water pollution akin to that associated with traditional energy production — wind, solar, and hydroelectric systems generate electricity with no associated air pollution emissions, and the air pollutants emitted by geothermal and biomass systems are generally much lower than those of coal- and natural gas-fired power plants. Further, wind and solar energy require essentially no water to operate and thus do not pollute water resources or strain supplies by competing with agriculture, drinking water, or other important water needs, and the water required for cooling at biomass and geothermal power plans would be reduced significantly in a future with high renewables.

---

<sup>2</sup> Internal Revenue Code (IRC) §45. (Unless otherwise noted, all references herein are to the IRC.)

<sup>3</sup> §168(k), as modified by the Tax Cuts & Jobs Act of 2017, Pub. L. No. 115-97, § 12001(b)(13), §13201, §13204.

Renewable energy sources are also essentially inexhaustible, so while a relatively small fraction of US electricity currently comes from these sources, studies have repeatedly shown that renewable energy can provide a significant share of future electricity needs, even after accounting for potential constraints.

The renewable energy industry also offers employment and other economic benefits. The industry is more labor intensive as compared to fossil fuel technologies, which means overall job creation and potential for

technology-driven higher-skilled, higher-wage opportunities. Renewable energy can also benefit local governments in form of property and income taxes and other payments from renewable energy project owners and create value for property owners (especially farmers and rural landowners) in the form of lease payments and royalties. Furthermore, while renewable facilities require upfront investments to build, they can then operate at very low cost and thus can help stabilize energy prices in the future.

## GAAP ACCOUNTING FOR ALLOCATED TAX CREDITS

If your company has made tax credit investments in the past, you likely need to keep the same methodology. If you have not, there are two ways a company can account for an allocated tax credit:

- *Flow through/tax reduction method*: the credit is viewed as a selective tax reduction that applies at the time of purchase and the income tax expenses for

that period are reduced by the credit. Companies that advocate this method believe the investment creates the credit.

- *Deferral/cost reduction method*: the credit is allocated to the accounting periods over which the asset is depreciated, with the key being the tax credit is taken to offset the related asset, thereby alleviating the equity method. Companies that advocate this method believe the asset creates the credit.

Investment tax credits accounted for by the deferral method: under the deferral method as established in paragraph 740-10-25-46, investment tax credits are viewed and accounted for as a reduction of the cost of the related asset (even though, for financial statement presentation, deferred investment tax credits may be reported as deferred income). Amounts received upon future recovery of the reduced cost of the asset for financial reporting will be less than the tax basis of the asset, and the difference will be tax deductible when the asset is recovered.<sup>4</sup>

The flow through method reflects the tax credits as expenses (non-asset purchases), thereby flowing directly to the income statement in the year of the purchase. An ITC can be recognized either by directly reducing income tax expense or by providing an offset to the accounting expense that provided the credit.

Under the cost reduction method, the credit is treated as part of the purchased asset, and thus the credit is amortized over the same accounting periods as the asset

---

<sup>4</sup> ASC 740-10-25-20 paragraph (f).

is depreciated. Here again, a company has two choices: it can deduct the credit from the asset base and calculate the depreciation expense on the net amount, or it can amortize the tax credit over the asset's serviceable life.

*Additional renewable energy-specific accounting considerations and challenges:*

- Project structuring and reporting are generally driven by tax considerations.
- Various unique accounting issues facing renewable energy companies, including, inter alia: significant government incentives; long term contracts for the sale of electricity; sale-leaseback structures (i.e., requirements to qualify for sale/operating lease treatment — see Exhibit B); obligations to remove plant and equipment at the end of contract; etc.
- Limited guidance regarding renewable energy deal structures/parameters — e.g., how long partner must retain partnership interest to respect entity/transaction form; acceptable allocation of non-ITC tax assets; etc.
- Financial reporting-related issues: project participants (developers; tax equity; etc.) may require GAAP basis financial statements; myriad potential consequences of and/or requirements attendant to particular financial statement/reporting approaches and tax treatment/positions.

## **BENEFITS OF UTILIZING THE DEFERRAL METHOD OF ACCOUNTING FOR RENEWABLE ENERGY INVESTMENTS**

The deferral method presents significant advantages to address some of the adverse accounting consequences inherent in renewable equity structures. Using the deferral method means that all investment activity (tax losses, credits, and amortization of investment) is reflected on a net basis in the income tax expense section of a company's income statement.

- Moving ITC investment-related items above the line means pre-tax earnings are not impacted by any ITC investment downside — e.g., renewable energy projects tend to generate losses during the first several years after placed in service.
- Pre-tax earnings impact under flow through method could/has deterred companies from investing in tax credit deals, despite attractive yield compared to alternative investments. (Because, for example, corporate executive compensation is often tied to pre-tax earnings.)

## **IMPACT OF TAX REFORM ON RETC PROJECTS**

The 2017 Tax Cuts & Jobs Act (TCJA) contained several important provisions affecting RETC investments, as outlined below.<sup>5</sup> The ITC for wind and solar projects is unaffected by the new bill, and the PTC retains its current phase-out period for wind projects that begin construction by the end of 2019, and current IRS guidelines that outline the requirements for starting construction remain in effect. Solar tax credits remain

---

<sup>5</sup> For a comprehensive overview of the 2017 TCJA's impact on the tax credit market generally, see *A Post-Tax Reform Primer on U.S. Tax Credits*, a 2018 Bloomberg Tax/Foss whitepaper collaboration.

at 30% for projects under construction by the end of 2019 with a gradual phase-down to 10% for projects that begin construction in 2020, 2021, or 2022.

*Corporate tax rate* — reduced from 35% to 21% starting in 2018.

*100% bonus depreciation* — as noted above, almost all investment property is eligible for a 100% bonus depreciation under the 2017 TCJA.

*Limitations on interest deductions* — starting in 2018, the TCJA limits the amount of interest that can be deducted in any year to 30% of a borrower's taxable income, increased for depreciation and amortization deductions for tax years that end before 2022.

- After 2022, depreciation and amortization deductions are required to be considered, which will have the effect of reducing taxable income and increasing the likelihood that the limitation will apply.
- Any interest that cannot be deducted on account of this limitation may be carried forward indefinitely to future taxable year

## FORECAST: ACCOUNTING FOR RENEWABLE ENERGY INVESTMENTS GOING FORWARD

Clear accounting guidance, rules, and best practices applicable to ITC projects could provide significant benefits to the renewable energy industry.<sup>6</sup> Lobbying efforts directed towards Congress have been successful, for example, in extending the ITC solar project subsidy in 2015 for an additional 5 years as part of a broader budget compromise, which extension was designed to

encourage large institutional investors to finance solar development. (The IRS subsequently acted to extend availability of the 30% ITC to solar developers who invested at least 5% of the total expected cost or started significant physical work on the project before the end of 2019, so long as the solar power generators are up and running by 2023.)

While FASB is a non-governmental entity, and thus directed lobbying is unlikely to have an impact, it has been responsive in the past, issuing detailed guidance for particular tax credit sectors—e.g., LIHTC. It would thus seem to befit the renewable industry to seek ITC-specific accounting best practices, which would improve consistency, certainty, and clarity of financial reporting of these investments.

## SAMPLE ACCOUNTING ENTRIES

See Exhibit C to review hypothetical GAAP accounting for a \$20M solar tax equity investment.

*Foss & Company*  
*Second Quarter, 2019*

For more information:  
visit: [www.fossandco.com](http://www.fossandco.com)  
email: [IR@fossandco.com](mailto:IR@fossandco.com)  
call: (415) 292-9800

<sup>6</sup> See, e.g., Karam Kang, *Policy Influence and Private Returns from Lobbying in the Energy Sector*, *The Review of Economic Studies* vol. 83, iss. 1, pp. 269–305 (Jan. 2016).

**EXHIBIT A - IRS ACCOUNTING GUIDANCE FOR LIHTC**

*Purpose:* Created to promote the rehabilitation and new construction of affordable low-income rental housing, the LIHTC program supports those working to develop housing for families, seniors, residents of public housing, those with special needs, and Section 8 tenants.

*Projects:* New construction or renovation projects that create affordable rental housing for people facing financial challenges in urban and rural areas; typical projects include apartment complexes, rental townhomes, mixed-income and mixed-use properties, supportive housing for those with special needs, and independent living facilities for seniors.

*Credits:* LIHTCs are claimed over a 10-year period but require compliance for a 15-year period (state housing agencies will also impose an “extended use period,” which requires the property to keep LIHTC restrictions in place for specified number of years after building is operational); two types:

- 9% tax credit — Covers new construction projects that use additional subsidies or rehab projects that include cost to acquire existing buildings; partnerships seeking allocation of 9% LIHTC must submit an application to state housing agency, which reserves a portion of total tax credits for partnerships with best applications.
- 4% tax credit — Supports new construction projects without any additional federal subsidies; to obtain this type of tax credit, a partnership must first apply for tax-exempt bonds to be issued on its behalf; allocation of bonds leads to a non-competitive application process for tax credits.

*Qualification:* Project must have specific proportion of units set aside for low-income households; rent limited to 30% of a household's qualifying income; households may earn a maximum of 60% of area median income for county in which located (as determined by Department of Housing and Urban Development); properties have minimum set-asides determining how many units must be rented to low-income households and income levels of those tenants.<sup>7</sup>

<sup>7</sup> §168(k), as modified by the Tax Cuts & Jobs Act of 2017, Pub. L. No. 115-97, § 12001(b)(13), §13201, §13204.



**EXHIBIT B - LEASE ISSUES**

*Long Term Contracts for the Sale of Electricity:* an arrangement contains a lease if all the following conditions are met —

- Specific property, plant, or equipment (PP&E) is identified — an asset is explicitly identified if the seller (lessor) is contractually obligated to use a specific asset to provide the goods or services requested by the purchaser (lessee).
- The fulfillment of the arrangement is dependent on the use of the identified PP&E — although PP&E may be explicitly identified in an arrangement, if the fulfillment of the arrangement is not dependent on the use of the specified PP&E, the arrangement is not a lease.
- The arrangement conveys to the purchaser (lessee) the right to use the identified PP&E — provides that an arrangement conveys the right to use PP&E if the purchaser (lessee) has the right to control the use of the specified PP&E. As provided in the third condition of that paragraph, control over the output of specified PP&E is sufficient to conclude that an arrangement is a lease, even if the party with control over the output does not operate, or direct the operation, of the specified PP&E.

*Sale-Leaseback Transactions:*

- If the transaction qualifies as a sale, then the Company would recognize a gain or loss for any difference between the sale price and the amount paid for constructing the project, which is subject to deferral; if the lease of the asset qualifies as an operating lease, then the asset and related obligation are not recorded in the Company's financial statements and instead the monthly lease payments are recorded as they come due.
- A sale-leaseback transaction that does not qualify for sale-leaseback accounting shall be accounted for as a financing. Under this method no gain is recognized, the asset remains recorded in the balance sheet and debt is reflected. If the sale-leaseback criteria are met, then the gain on the sale is generally deferred and recognized over the lease term. In evaluating the appropriate lease qualification of a property leaseback, the lease will be determined capital in nature if any one of the following criteria are met:
  - Present value of lease payments > than 90% of fair value;
  - Lease term is > 75% of economic life;
  - Bargain purchase option at conclusion of lease; or
  - Title transfers at conclusion of lease.

## EXHIBIT C - HYPOTHETICAL GAAP PRESENTATION FOR SAMPLE \$20 MILLION SOLAR TAX EQUITY INVESTMENT

| GAAP Entries (Deferral Method)   | 2019                     | 2020                     | 2021               | 2022               | 2023               | 2024                            |
|--|--------------------------|--------------------------|--------------------|--------------------|--------------------|---------------------------------|
| Dr. Partnership Investment<br>Cr. Cash   | 20,000,000<br>20,000,000 | -<br>-                   | -<br>-             | -<br>-             | -<br>-             | -<br>-                          |
| Dr. Income Tax Payable<br>Cr. Partnership Investment   | 16,949,153<br>16,949,153 | -<br>-                   | -<br>-             | -<br>-             | -<br>-             | -<br>-                          |
| Dr. Cash<br>Cr. Partnership Investment   | 239,407<br>239,407       | 478,814<br>478,814       | 478,814<br>478,814 | 478,814<br>478,814 | 478,814<br>478,814 | 399,012<br>399,012              |
| Dr. Income Tax Payable<br>Cr. Income Tax Expense   | 1,008,972<br>1,008,972   | 1,142,371<br>1,142,371   | -<br>-             | -<br>-             | -<br>-             | -<br>-                          |
| Dr. Income Tax Expense<br>Cr. Income Tax Payable   | -<br>-                   | -<br>-                   | 70,653<br>70,653   | 70,653<br>70,653   | 70,653<br>70,653   | 296,640<br>296,640              |
| Dr. Deferred Tax Asset/Liability<br>Cr. Deferred Tax Expense   | 770,689<br>770,689       | -<br>-                   | 70,653<br>70,653   | 70,653<br>70,653   | 70,653<br>70,653   | 159,725<br>159,725              |
| Dr. Deferred Tax Expense<br>Cr. Deferred Tax Asset/Liability   | -<br>-                   | 1,142,371<br>1,142,371   | -<br>-             | -<br>-             | -<br>-             | -<br>-                          |
| Dr. Cash<br>Cr. GAAP write off investment<br>Cr. GAAP Pre-tax earnings   | -<br>-<br>-              | -<br>-<br>-              | -<br>-<br>-        | -<br>-<br>-        | -<br>-<br>-        | 1,149,153<br>497,175<br>651,978 |
| Income Statement (Deferral Method)   | 2019                     | 2020                     | 2021               | 2022               | 2023               | 2024                            |
| <b>General Overhead</b><br>Gain/(Loss) on Exit   | -                        | -                        | -                  | -                  | -                  | 651,978                         |
| <b>Pretax Earnings "Above the Line"</b>  | -                        | -                        | -                  | -                  | -                  | 651,978                         |
| <b>Income Tax Provision</b><br>Federal Current Tax Benefit (Expense)<br>Federal Deferred Tax Benefit (Expense) | 1,008,972<br>770,689     | 1,142,371<br>(1,142,371) | (70,653)<br>70,653 | (70,653)<br>70,653 | (70,653)<br>70,653 | (296,640)<br>159,725            |
| <b>Total Tax Benefits (Expenses)<br/>"Below the Line"</b>  | 1,779,661                | -                        | -                  | -                  | -                  | (136,915)                       |
| <b>Net Income (Loss)</b>   | 1,779,661                | -                        | -                  | -                  | -                  | 515,063                         |

## EXHIBIT C - HYPOTHETICAL GAAP PRESENTATION FOR SAMPLE \$20 MILLION SOLAR TAX EQUITY INVESTMENT (CONT'D)

| Tax Capital Account      | 2019             | 2020           | 2021           | 2022           | 2023           | 2024        |
|--------------------------|------------------|----------------|----------------|----------------|----------------|-------------|
| <b>Beginning Balance</b> | -                | 6,481,388      | 562,712        | 420,339        | 277,966        | 135,593     |
| Contributions            | 20,000,000       | -              | -              | -              | -              | -           |
| ITC Basis Reduction      | (8,474,576)      | -              | -              | -              | -              | -           |
| Cash Distributions       | (239,407)        | (478,814)      | (478,814)      | (478,814)      | (478,814)      | (1,548,164) |
| Income/(Loss)            | (4,804,629)      | (5,439,863)    | 336,441        | 336,441        | 336,441        | 1,412,571   |
| <b>Ending Balance</b>    | <b>6,481,388</b> | <b>562,712</b> | <b>420,339</b> | <b>277,966</b> | <b>135,593</b> | <b>(0)</b>  |

  

| GAAP Investment Account            | 2019             | 2020             | 2021             | 2022             | 2023           | 2024        |
|------------------------------------|------------------|------------------|------------------|------------------|----------------|-------------|
| <b>Beginning Balance</b>           | -                | 2,811,441        | 2,332,627        | 1,853,814        | 1,375,000      | 896,186     |
| Contributions                      | 20,000,000       | -                | -                | -                | -              | -           |
| ITC Offset                         | (16,949,153)     | -                | -                | -                | -              | -           |
| Cash Distributions                 | (239,407)        | (478,814)        | (478,814)        | (478,814)        | (478,814)      | (1,548,164) |
| Distributions Recognized as Income | -                | -                | -                | -                | -              | 651,978     |
| <b>Ending Balance</b>              | <b>2,811,441</b> | <b>2,332,627</b> | <b>1,853,814</b> | <b>1,375,000</b> | <b>896,186</b> | <b>-</b>    |

  

| DTA / DTL Calculation on Partnership Investment | 2019             | 2020               | 2021             | 2022             | 2023           | 2024           |
|---|------------------|--------------------|------------------|------------------|----------------|----------------|
| <b>Tax Capital Account</b>                      | <b>6,481,388</b> | <b>562,712</b>     | <b>420,339</b>   | <b>277,966</b>   | <b>135,593</b> | <b>(0)</b>     |
| <b>GAAP Investment Account</b>                  | <b>2,811,441</b> | <b>2,332,627</b>   | <b>1,853,814</b> | <b>1,375,000</b> | <b>896,186</b> | <b>-</b>       |
| Excess (deficit)                                | 3,669,947        | (1,769,915)        | (1,433,475)      | (1,097,034)      | (760,593)      | (0)            |
| Effective Tax Rate                              | 21%              | 21%                | 21%              | 21%              | 21%            | 21%            |
| DTA (DTL)                                       | 770,689          | (371,682)          | (301,030)        | (230,377)        | (159,725)      | (0)            |
| <b>Current year increase (decrease)</b>         | <b>770,689</b>   | <b>(1,142,371)</b> | <b>70,653</b>    | <b>70,653</b>    | <b>70,653</b>  | <b>159,725</b> |

## EXHIBIT C - HYPOTHETICAL GAAP PRESENTATION FOR SAMPLE \$20 MILLION SOLAR TAX EQUITY INVESTMENT (CONT'D)

| Check: Running Balance |              |                |   |
|------------------------|--------------|----------------|---|
| Contributions          | (20,000,000) | (20,000,000)   |   |
| ITC                    | 16,949,153   | (3,050,847)    |   |
| Yr 1 Cash              | 239,407      | (2,811,441)    |   |
| Yr 2 Cash              | 478,814      | (2,332,627)    |   |
| Yr 3 Cash              | 478,814      | (1,853,814)    |   |
| Yr 4 Cash              | 478,814      | (1,375,000)    |   |
| Yr 5 Cash              | 478,814      | (896,186)      |   |
| Yr 6 Cash              | 399,012      | (497,175)      |   |
| Exit Cash              | 1,149,153    | <b>651,978</b> | <b>GAAP Pre Tax Earnings in Exit Year</b> |