



## Tax Equity

Renewable Energy (RE) equipment is expensive. To encourage its use, different jurisdictions offer different types of incentives. The United States Federal Government has taken the route of **tax incentives**. These currently take the following forms:

1. accelerating depreciation so as to reduce taxable income, and
2. providing credits against the taxes themselves.

The existing US incentive system is primarily useful to electric utilities with pre-existing fossil fuel generation facilities, as it allows them to offset their current taxable income with investments in fossil-free generation. This, however, does not encourage the scope and scale of change needed to decarbonize the electricity generation sector. Investors committed to climate change mitigation have therefore begun to use partnerships with developers to encourage faster growth of the industry. These are called **Tax-Equity Partnerships**.

### Types of Tax Incentives

**Accelerated Depreciation:** The IRS allows depreciation of RE equipment to qualify for Modified Accelerated Cost Recovery System (MACRS). This is an accelerated form of depreciation which fully depreciates the asset for tax purposes over 5 years. The equipment is expected to last much longer (the design life of a wind turbine, for example, is upwards of 20 years). Accelerated depreciation reduces the taxpayer's aggregate amount of taxable income.

**Production Tax Credits (PTCs):** Typically used for wind, geothermal and biomass energy. PTCs allow an inflation-adjusted annual credit per kilowatt-hour (kWh) of electricity produced by qualifying projects in the first 10 years of project operation.

**Investment Tax Credits (ITC):** Typically used for solar energy. They allow a tax credit equal to a percentage of the construction costs of a solar project.

### Tax Equity Partnerships

A Tax-Equity Partnership ("**Partnership**") usually involves shared ownership in a RE project by the project's developer and a Limited Partner with taxable business income. The developer is usually called the project **Sponsor**, and the Limited Partner is called the Tax Equity **Investor**. The Sponsor contributes the project. The Investor contributes cash. The Partnership is usually formed as, or just before, the project begins construction.

The partners share the ownership of the project. The partnership agreement is written so that the different benefits are distributed to the partner who can best use them. The majority of the tax incentives devolve to the Investor, which reduces their tax bill. A substantial amount of the cash generated by the project (post-expenses) devolves to the Sponsor as revenue.

To make sure the tax benefits flow to the Investor, the Investor usually owns 99% of the project until those benefits have been fully generated by the project. At that time, the ownership of the project typically **flips** so that the Sponsor becomes the majority partner.



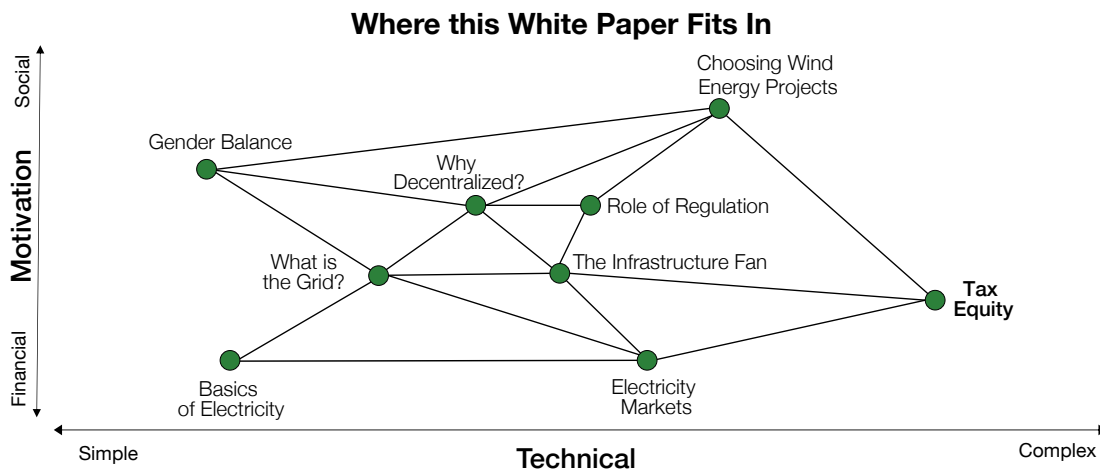
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## Who Can Use Tax Credits

The Investor's tax-status will determine if and how the Investor can use the tax benefits. Corporate taxpayers can take the tax benefits against other income. Individual taxpayers are generally limited by the active, passive and portfolio income limitations. For this reason, Investor Partners are usually corporate taxpayers.

## References and Further Reading

- [1] Cornell Law School Dictionary, "Accelerated Depreciation": [https://www.law.cornell.edu/wex/accelerated\\_depreciation](https://www.law.cornell.edu/wex/accelerated_depreciation).
- [2] United States Internal Revenue Service (IRS), "Figuring Depreciation Under MACRS", [https://www.irs.gov/publications/p946#en\\_US\\_2019\\_publink1000107507](https://www.irs.gov/publications/p946#en_US_2019_publink1000107507).
- [3] Database of State Incentives for Renewables & Efficiency, DSIRE: <https://www.dsireusa.org/>.



**About Treehouse Investments:** Treehouse Investments is a minority-owned firm dedicated to addressing climate change. We are a family business, founded by a family from Puerto Rico. We target direct investments in both publicly traded and private entities. Our focus areas fall under the broad description of decentralized infrastructure: companies and projects that contribute to building sustainable and resilient energy, water, and waste systems.