



Solar LLC Project/ Englewood Case Study

Here's the opportunity ~ A federal income tax credit is available as an incentive to purchase solar (and other renewable energy) systems and to make certain energy efficiency improvements. The tax credit is equal to 30% of the amount invested, so it is like getting a solar system at 70% of its sticker cost—if you can take the tax credit. Congregations, and other non-profits, cannot. They are exempt from paying income tax, so they have no tax liability for the credit to reduce.

However, they can partner with someone who is eligible for the tax credit. There is a class of investors, called tax equity investors, looking for opportunities to reduce the taxes they owe on certain income-producing activities of their own. They can get the tax credit for your solar system by investing in it through a limited liability company (LLC) formed to purchase the solar array. So long as certain conditions are met, the federal government approves it because the LLC gets more renewable energy installed, which is the point of the credit.

This arrangement benefits both partners. Immediately the congregation gets a larger system than it can afford on its own. The investors recoup what they invest in the system and gain a substantial return on investment within the first year. At an agreed upon time, usually in five to eight years, the congregation and the investor settle any remaining claims according to the LLC agreement, the LLC is dissolved, and the congregation takes full ownership of the system.

Example: Englewood Church Solar, LLC

Englewood Christian Church in Indianapolis is one of six congregations on whose behalf the not-for-profit [Hoosier Interfaith Power & Light](#) (H-IPL) applied for an Indiana Office of Economic Development (OED) grant in the amount of \$150,000 in mid-November 2012. The grant was approved in December 2012 and the funds were divided equally among the six congregations.

In order to apply, each congregation had previously secured bids from solar contractors to install solar systems on their roof.

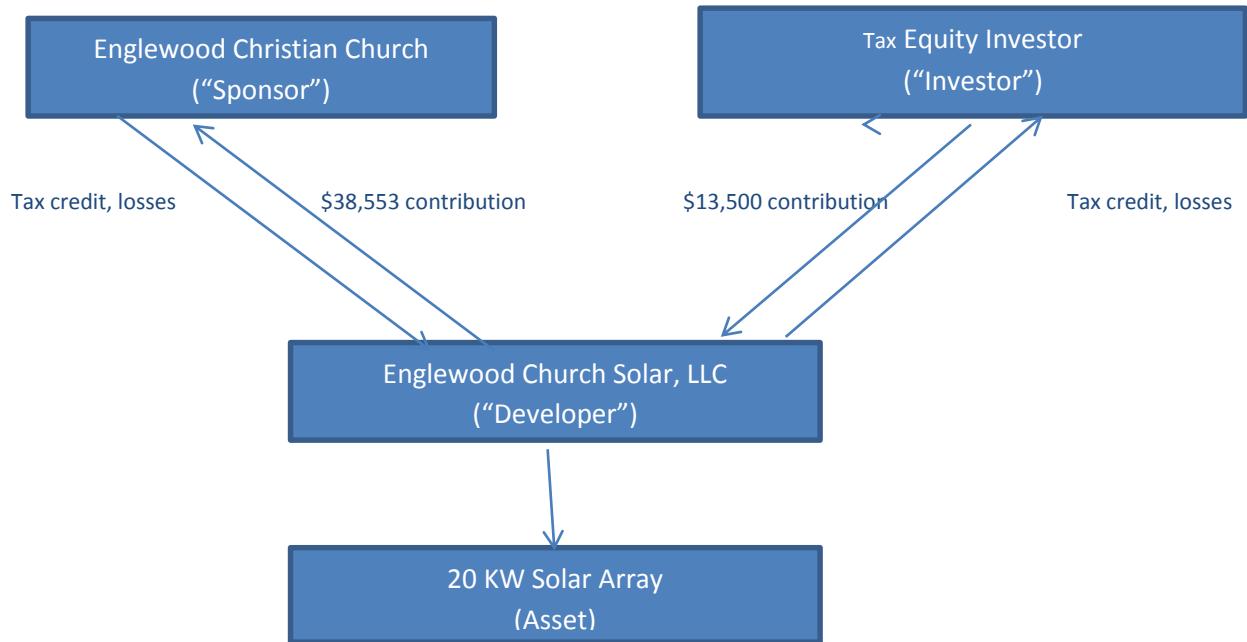
Managing this process for the Englewood Christian Church was Joe Bowling, a member of the congregation and also the co-director of the [Englewood Community Development Corporation](#), an outgrowth of the church. On the church's behalf, Bowling negotiated a price of \$2.50 a watt with solar contractor [Johnson Melloh](#). At that price, the church was able to afford a solar system with a 15,000 watt (15 kilowatt) nameplate capacity—enough to replace approximately 10% of its annual electrical use. The funds available to pay for this system were \$37,500—the result of combining the OED grant amount (\$25,000) with a \$4,000 rebate from ECC's electric utility provider, Indianapolis Power & Light (IPL), and \$8,500 in donations from congregants.

Bowling knew more was possible if congregations could utilize the 30% tax credit. Fortunately, through his long experience as a community development professional, he was familiar with tax credit financing models that non-profits use to finance affordable housing and historic property developments. He also knew that wind and solar developers often partnered with tax equity investors to finance commercial-scale renewable energy projects through a limited liability company (LLC). He figured that Englewood could adapt that LLC structure to fund an expansion of its solar system. So in January 2013, Bowling sought legal advice on setting up an LLC.

Legal considerations. Bowling consulted [Gareth Kuhl](#), founding partner of Kuhl & Grant LLP in Indianapolis. They had worked together on a number of projects for the Englewood Community Development Corporation. Kuhl's law practice focuses on affordable housing and economic development utilizing tax incentives. From the first, Bowling and Kuhl focused on creating an LLC model for solar and other renewable energy purchases that can be replicated with minor modifications by other congregations and non-profit organizations. Englewood Church Solar, LLC would provide the proof of concept.

Kuhl structured Englewood Church Solar, LLC as a joint venture partnership between the congregation and a tax equity investor who was yet to be recruited. The chart below shows how this relationship is structured.

Englewood Church Solar, LLC – Entity Diagram



The operating agreement for this LLC was based on a model popular with large-scale solar developers with insufficient taxable income to take the credit themselves. The operating agreement defines the financial arrangements and exchanges between partners in accordance to tax law. It also sets rules for running the company, appointing a manager, record keeping and accounting, and eventually dissolving the LLC. The details are specific to Englewood Church Solar, LLC but the underlying partnership model can be used, with the help of a lawyer and accountant, by other congregations.

Accounting considerations: Passive activity rules. Tax equity investing is not for everybody, but it is well worth it for the right person or organization. The renewable energy tax credit can only be applied to income derived from passive activity, which the [Internal Revenue Code](#) defines as “any activity **(A)** which involves the conduct of any trade or business, and **(B)** in which the taxpayer does not materially participate.”

Rental income is the classic example of passive income. It flows in on a regular basis with minimal involvement from the owner (by contrast to earned income from a job or trade, which is considered active income) and requires less than 500 hours of the investor’s time per year.

Though it sounds as though it would count, the IRS does not treat portfolio income—income from investments, dividends, interest, capital gains, annuities, and royalties—as income from passive activity.

Congregations may include among their members people who fit this description, who will step forward. In addition, Bowling recommends working with an accounting firm to identify and evaluate potential tax equity investors. As tax professionals, CPAs can identify clients with passive income and acquaint them with the opportunity to reduce their taxes. This is an important service for both the investor and the congregation.

What you cannot do is advertise for investors or issue a prospectus offering to sell unit shares as a publicly traded company would. That is because, as a private company, an LLC is not under the regulation of the Securities & Exchange Committee (SEC) which vets stock offerings for the protection of investors. Instead, the accounting firm evaluates the value proposition of the LLC and advises potential investors on whether it is a good fit for their specific financial situation.

Accounting considerations: Depreciation. There are other tax implications to consider. The partners jointly own the LLC; the LLC owns the PV system. The system produces electricity which is valued at the utility billing rate (10 cents/kwh in this case) and is considered revenue. If revenue exceeds the LLC's operating expenses (the cost of property insurance and tax return preparation, in this case), the net operating income is taxable.

However, like all business equipment, the PV system loses value over time; as it depreciates, a portion of the original cost can be deducted from taxable income each year as a business expense. There are a number of commonly accepted depreciation methods. The double declining balance method was adopted in this case. It results in greater depreciation expense in each of the early years of the PV system's life and progressively smaller depreciation expense in following years. (With a bonus depreciation schedule that Englewood did not use, up to 80% of the asset cost can be recovered in the first year.) If the depreciation expense exceeds taxable income in a given year, it generates a loss for the LLC that passes through to the investor (because the congregation cannot use it) and can be taken as a deduction on his income tax. If cumulative losses were to exceed the cost basis of the PV system, the excess amount could not be deducted until after the investor exits from the LLC.

Benefits and risks for the investor. LLC status addresses some typical concerns about risk that congregation boards and potential investors are likely to have. Limited liability is fundamental to the concept of a “limited liability company” or LLC. According to an [online legal dictionary](#), “The primary advantage of an LLC is that its owners, known as members, have ‘limited liability’, meaning that, under most circumstances, they are not personally liable for the debts and

liabilities of the LLC.” Thus it protects all members from the consequences of common business hazards such as going bankrupt or being sued for personal injury.

A solar LLC is extremely unlikely ever to face either bankruptcy or law suits, but it does involve investment risks. The LLC is a private company and there is no public market for its shares. In addition, the operating agreement for the Englewood Church Solar, LLC contains significant restrictions on its members’ rights to transfer or redeem shares (called “units”) or to terminate their association with the LLC before the agreed-upon date. That is because the holding period to qualify for the full tax credit on the solar system is five years. If the investor ends his association with the LLC before that time, he would have to refund part of the tax credit upon which the ROI is calculated and file an amended tax return for the year(s) in which he took the credit.

That risk is the flip-side of the primary financial benefit to the investor. [Internal Revenue Code Section 48](#) permits the full amount of the energy tax credit to be taken the year the solar array is placed in service (assuming that there is enough tax liability for the credit to cover in that year. If not, any excess credit rolls over to subsequent years.) As shown below, this enabled the investor to take an immediate credit larger than the amount of his capital contribution as a reward for investing in the solar LLC.

The Englewood project costs eligible for the energy credit were \$52,053:

Investor’s Capital Contribution (5 kw)	\$13,500
ECC’s Capital Contribution (15 kw)	<u>\$38,553</u>
<i>Total</i>	\$52,053

Based on that total capital investment, the value of the 30% tax credit was \$15,616. By the terms of the LLC operating agreement, the investor was eligible to take 99% of the credit, or \$15,460. When combined with a tax deduction generated by accelerated depreciation that flowed through to the investor and reduced his taxes, he received the following immediate return on investment:

Pre-Tax Equivalent Rate of Return	55.01%
After-Tax Internal Rate of Return	31.14%

(Caution: This summary is based on a specific set of circumstances, and it is for the purpose of illustration only. It does not guarantee that every investor in every solar LLC would achieve the same return on investment.)

This is a very good return on investment (ROI). However, expect a potential investor to compare it to the ROI that might be realized by investing the same amount of money in more liquid assets like stocks and bonds which can appreciate in value over the same holding period and which can be sold if the investor needs to raise cash.

Benefits and risks for the congregation. By comparison, the LLC poses less of an investment risk for the congregation. The solar system is purchased up front with the initial capital contributions of both partners and installed on congregation property. The energy it produces is consumed by the congregation. The LLC operating agreement permits the congregation to buy out the investor's share of the system at an agreed future date for a minimal sum. The worst-case scenario for the congregation is that the investor might pull out of the LLC early and trigger the buy-out provisions before the system is fully depreciated. This would oblige the congregation to buy out the investor's share at the then-current fair market value of the system components—which would mean, at a higher price than anticipated. However, the risk shifts to the investor if, by an agreed upon date, he has not exercised this option. In that case, he must make an additional capital contribution, which would yield little return on investment once the initial tax credits are exhausted.

Some congregations may worry about the implications of sharing ownership of an asset with an outside entity. Bowling replies, “The LLC you'd create would ONLY own the solar equipment on your roof and only for a limited period of time.” The LLC's ownership of the solar system would not create a lien on the building or any legal claim to any other property owned by the congregation, nor would it create any obligation to outside investors that are not specified in the LLC operating agreement and agreed to in advance by the congregation. In all practicality, the congregation can plan to buy out the investor after five or six years and become the sole owner of the system.

In addition, having an ownership interest in the LLC, which is a taxable entity, should not jeopardize the congregation's tax exempt status. Non-profits form for-profit subsidiaries frequently. Tax-exempt 501(c)(3) organizations such as universities and research labs form for-profit subsidiaries to commercialize and market products resulting from their discoveries. Reorganizing hospitals spin off units as for-profit specialized service providers. The test is whether the subsidiary performs a legitimate business function different from the core mission of its exempt parent. Energy generation is that business function in the case of a solar LLC.

Control issues may concern some boards, but the congregation has the means to remain in control of its asset. To return to our case study, the operating agreement governing the Englewood Church Solar, LLC provides that the members will jointly choose a Managing or

General Partner responsible for such services as property management, record-keeping and supervising the LLC's annual tax return. Not surprisingly, the investor agreed that ECC the Managing Partner for the LLC. The rules for passive activity mandate minimal involvement on the part of the investor.

Results. In June 2013, Bowling engaged the services of a CPA firm—[Katz, Sapper and Miller](#) of Indianapolis—to do the financial modeling on investment in the Englewood Church Solar, LLC and explain it to potential investors. By early December, they found the right person. The investor not only had qualified passive income but he wanted to create a memorial tribute for his recently deceased wife who was an ardent environmentalist. The operating agreement was signed and the system purchased in time for the investor to apply the tax credit to 2013 taxes.

In recognition of the larger order, ECC's contractor Johnson Melloh honored its original quote of \$2.50 per watt for the first 15 kilowatts and gave a further discount for the last 5 kilowatts, with a cost of only \$2.27 per watt. Before the end of the year, the 20 kw system was registered with the utility as a net metering customer and began to generate electricity.

ECC is a physically large building with approximately 40,000 sq. ft. under its roof. In addition to providing space for worship services, it houses offices, meeting space for various community groups, and a full-time day care center serving 100 children. Given the sun exposure typical for Indianapolis, a 20 kw system will generate 25,455 kilowatt hours of energy a year—about 15% of ECC's current annual consumption. At ten cents per kilowatt hour, this will cut their utility bill by \$2,546 in the first year. It will save progressively more as time goes on. Electricity rates are expected to rise by 32% locally in the coming decade. Thus ECC has locked in a fixed price for 15% (or more, depending on further energy efficiency improvements) of their electrical consumption going forward.

Lessons learned. The LLC formation process that ECC and its partners pioneered took a year to work out, but other congregations can follow the steps and form an LLC much more quickly. Here are key take-away points:

- The combined one-time legal and accounting fees to set up the LLC are about \$5,000. After that, there are annual accounting fees which will probably range between \$750 and \$1,400, depending on what your CPA charges.
- Larger projects are better able to absorb these legal and accounting costs, spreading them out so that the investor gets a better return on each dollar invested and the congregation saves more than it spends to acquire the savings. Bowling suggests that

you aim for a \$75,000 installation or larger—that is, one that costs about 50% more than ECC's, with investor(s) contributing approximately one-third.

- Larger projects also get better pricing from the contractor.
- The LLC legal structure can accommodate multiple investors rather than just a single investor. It is easier to work with one investor, but larger projects may require more investors.
- Work with a CPA firm in your vicinity to identify potential tax equity investors.
- Likely prospects as tax equity investors include [banks](#) (especially those with a Community Reinvestment (CRA) division), real estate investment firms, and wealthy individuals whose holdings include rental property. Members of your own congregation may fall into these categories and so possess added motivation to invest in your Creation Care mission.

It is essential to remember that the solar LLC described above is a working model, not a cookie cutter. That said, ECC is willing to share working documents with serious inquirers. The operating agreement and financial modeling will need to be tailored to the unique needs and situations of each congregation and investor (whether a member of the congregation or a tax equity investor). Return on investment will depend on the system size, number of investors, the amount of their contributions, their tax bracket, the desired payback period, and many other factors.