## Technology Advisory

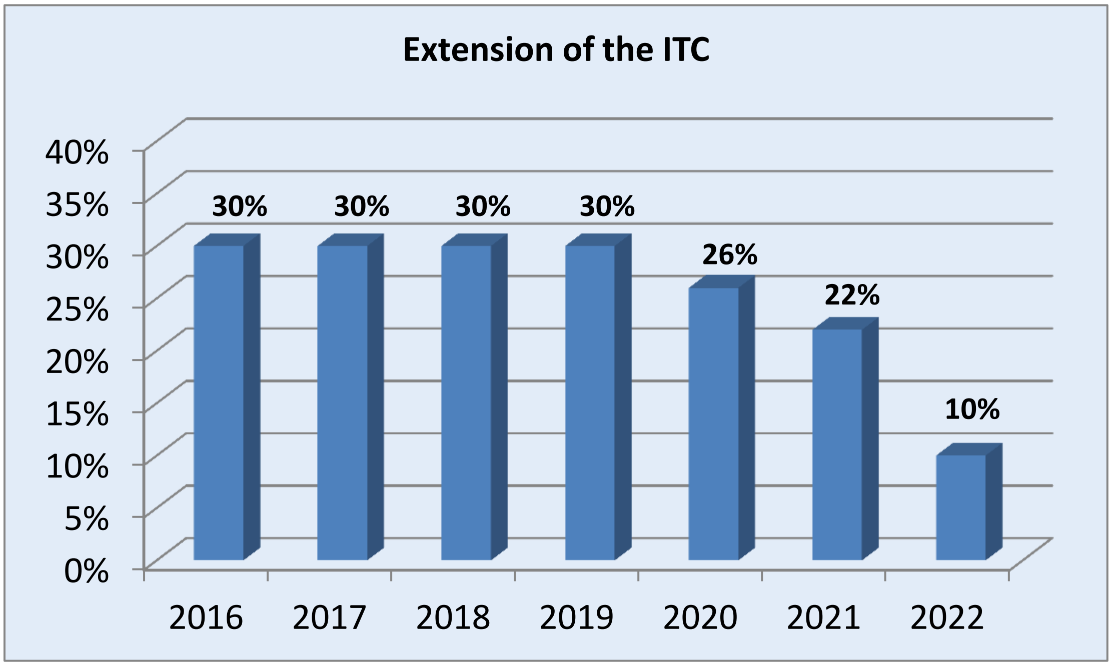
# Changes to Tax Code & Imposition of Solar Panel Tariffs Will Impact Co-op Solar Development Prospects

The extension of the Investment Tax Credit (ITC), the elimination of New Clean Renewable Energy Bonds (nCREBS), the expansion of bonus depreciation, and the imposition of solar tariffs will impact the costs of cooperative solar development.

### What has changed?

The recent comprehensive tax bill signed by the President eliminated nCREBS, which many electric cooperative used to finance renewable energy projects. nCREBS evolved from the original CREBS offered through the Treasury Dept. as a means to support renewable energy development by non-taxable entities. Further, while the tax bill expanded the amount of bonus depreciation that corporations can claim from 50 to 100 percent, this depreciation is on the much lower tax rate of 21percent versus 35 percent.

Not long after the signing of the tax bill, The Trump Administration also levied 30 percent tariffs on imported solar PV modules and cells after the first 2.5 GW. The tariffs went into effect on February 6, 2018. The tariffs will decline by 5 percent each year, ending at 15 percent in 2022. The tariffs apply to all countries, but they are particularly aimed at counterbalancing Chinese market share.



In late 2015, the ITC – an important financial incentive for solar projects that the co-ops monetized through creative financing vehicles like Inverted Leases and Tax Equity Flips – was extended until 2022. The credit remains at 30 percent through 2019, dropping to 26 percent in 2020, 22 percent in 2021, and then, for commercial and utility projects, the ITC will be reduced to 10 percent thereafter. The ITC rate was not altered by the recent tax bill, but the reduced corporate tax rate greatly diminishes the market demand for tax incentives and increases the difficulty of finding the financing for these projects.

## What is the impact on cooperatives?

Installation costs of solar systems are likely to continue to decrease somewhat as the industry continues to mature and prices for solar modules come down. This broader trend will continue to make solar power more affordable. However, the elimination of nCREBS and the imposition of solar tariffs will have some upward pressure on costs.

### Tax Reform

Because the majority of electric cooperatives are tax-exempt, nCREBS are often used as a low cost of debt to finance renewable energy projects. nCREBS deliver an incentive comparable to the ITC that is available to private developers and investor-owned utilities. The repeal of nCREBS only applies to bonds which would have been issued after January 1, 2018, so there is no impact on outstanding bonds.

Third party solar developers received a boost from the tax bill in the form of a doubling of bonus depreciation. This provision should eventually reduce solar PPA costs.

### Solar Tariffs

GTM Research estimates that the 30 percent tariff will reduce utility-scale solar deployments by 9 percent because solar modules would increase in cost by $0.10-0.15/watt. Because solar modules comprise around 30 percent of a small utility-scale project, the overall system cost would increase approximately 10 percent. However, co-op experience shows that the reduction in deployments may indeed be higher than GTM predicts as, historically, deployments increase rapidly the closer the cost of solar energy gets to conventional generation source costs.

### ITC Extension

The extension of the ITC in late 2015 means that co-ops can reap the benefits of lower overall system costs for solar. However, because the tax legislation reduced the overall tax rate for corporations, financiers may have less tax appetite for solar development. NRECA will continue to monitor the situation.

## What do cooperatives need to know or do about it?

### Tax Reform

The elimination of nCREBS means that co-ops will need to find alternative, and possibly more costly, financing mechanisms to deploy solar projects. Tax reform alone could increase the cost of a solar PV development by approximately 10 percent, thanks to the lower overall corporate tax rate of 21 percent.

### Solar Tariffs

The tariffs will impact solar installers and solar PV manufacturers. As a result, co-ops may see higher solar PV equipment costs, which would drive up the total cost of the project and the levelized cost of the energy being produced.

### ITC Extension

Electric cooperatives should be mindful of the decrease in the ITC starting in 2020. While solar PV modules may be coming down in cost, cooperatives should weigh these declines in cost against the ramp down of the ITC.

## Additional Resources

There are several organizations, including CFC, CoBank, NRCO, and NRTC, that are all able to assist co-ops in understanding the impacts of these changes and to help monetize the tax benefits of renewable installations.

Solar Cost and Finance Screening Tool: available for download on cooperative.com

For more detailed information about the ITC:

- Advisory: Solar ITC and Wind PTC Extension (January 2016)
- Advisory: Extension of the Solar and Wind ITC (April 2016)

## Contacts for Questions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