



Use It or Lose It- Accelerating the Growth of Solar in Kentucky, Ohio, and West Virginia

Avery Spicka, May 2026

This document explains the federal tax credits for solar (and wind), including how they work and what types of projects still have time to qualify before they expire.¹ It highlights that some projects undertaken by some entities, including schools, municipalities, and nonprofit organizations, can still take advantage of the federal clean energy investment tax credits and save anywhere from 30 to 70% of total project costs. This document also examines two policy proposals in these three Appalachian states that can accelerate the growth of solar even after the federal tax credits expire, community solar and balcony solar.

What are the clean energy tax credits?

The Investment Tax Credit (ITC) allows qualifying solar (and wind) projects to receive between 30% and 70% of total costs back. This credit makes solar significantly more affordable and helps shorten payback periods for renewable projects. Clean energy tax credits have been around since 1978², and renewed multiple times since 2005 at the 30% level. The 2022 Inflation Reduction Act (IRA) was the latest piece of legislation to renew the tax credits. The IRA included bonuses that can increase the credits above 30% and one other novel feature: elective, or direct, pay. Elective pay allows entities like schools, churches, nonprofits, and municipalities—organizations that do not pay any taxes and thus cannot qualify for most traditional tax credits—to access clean energy tax credits by receiving money directly from the IRS rather than reducing taxes owed.

Last year, however, U.S. Congressional House Resolution 1 (the “One Big Beautiful Bill Act or OBBA”) shortened deadlines for accessing the ITC and some other IRA tax credits. The credit for residential solar expired in December 2025. Commercial solar projects can still access ITC tax credits by beginning construction or spending a portion of their budget by July 4, 2026, after which they have until the end of the year four years after the start of construction to begin operating. Commercial projects that do not meet the July 4th deadline must operate by December 31, 2027 to receive the tax credit.

Alongside shortening timelines, the OBBA also imposed prohibited foreign entity (PFE) restrictions at the beginning of 2026. Under the new PFE restrictions, all eligible projects or entities that are involved with

¹ The tax credit section of this document is adapted from Stephen Herzenberg and Avery Spicka, “Use It or Lose It: Why Pennsylvania Should Accelerate Solar Projects to Capture Federal Tax Credits,” Keystone Research Center, April 21, 2026; https://kestoneresearch.org/research_publication/use-it-or-lose-it-accelerating-solar-in-pennsylvania-resource-page/. That document focused on solar electricity because it is, far and away, the most rapidly growing source of renewable energy in Pennsylvania. Based on interviews with West Virginia renewable energy experts, we added some information on wind energy in West Virginia because it accounts for more electricity generation than solar and both sources of energy have grown rapidly in the state recently.

² “A Brief History of (ITC and PTC) Time”, Farmer Mac, Fall 2025. <https://www.farmermac.com/thefeed/a-brief-history-of-itc-and-ptc-time/>

adversary countries, particularly China, North Korea, Russia, or Iran, can lose access to the ITC as well as other IRA tax credits.

How does the Investment Tax Credit work?

Projects under 1 megawatt (MW), the standard term of measurement for bulk electricity, automatically receive the full 30% credit. Projects above 1 MW receive a 6% base credit, which increases to 30% if projects meet prevailing wage standards and utilize apprentices for at least 15% of the labor hours on a project. As noted, projects can also qualify for bonuses that bring the maximum tax credit up to 70% of project costs (Table 1)

Table 1: Additional Bonuses Available with the Solar Investment Tax Credit		
Credit Name	Amount	Qualifications
Energy Community	10%	<p>“Energy Community” is defined as:</p> <ul style="list-style-type: none"> • A brownfield site, or • A census tract with a closed coal mine or closed coal power plant, or • A metropolitan statistical area (MSA) or non-MSA: <ul style="list-style-type: none"> ○ with an economic dependence on coal, oil, or natural gas, and ○ a higher than average unemployment rate, or • An immediately adjoining census tract
Domestic Content	10%	<ul style="list-style-type: none"> • 100% of steel and iron used in the project is made in the United States • At least 45% (2026) or 55% (2027) of manufactured components are made in the United States
Low Income Community	10%	<ul style="list-style-type: none"> • Community has a poverty rate of at least 20% • Nonmetropolitan areas: Median income does not exceed 80% of state’s median income • Metropolitan areas: median income does not exceed 80% of the state’s median family income or the metropolitan area’s median family income
Low Income Economic Benefit Project	20% (replaces 10% low-income community bonus)	<p>Must provide at least 50% of the financial benefits of the electricity produced to:</p> <ul style="list-style-type: none"> • Households with incomes less than 200% of the poverty line • Households making less than 80% of the area’s median gross income
<p>Source: Andy Schell, “How The Federal Solar Tax Credit Works In 2026,” Paradise Energy Solutions https://www.paradis solarenergy.com/blog/how-does-the-solar-tax-credit-work/.</p>		

Table 2: Deadlines and Policies for Solar (and Wind) Projects

	Residential	Small Commercial	Large Commercial	Grid/Utility Scale
Power Range (AC)	<= 15 kW	➤ 15 – 250 kW	➤ 250kW	➤ 3 MW
Prevailing Wage & Apprenticeship Utilization Requirements to Receive 30% Tax Credit	No	No	Not up to 1 MW, yes above that level	Yes
OBBBA Tax Credit Deadlines and Conditions (these deadlines compare with the original IRA deadlines, which extended credits to 2034)	Had to be fully operational by December 31 st 2025, Residential solar can still access tax credits if owned by a commercial company that leases rooftops (or other area) from homeowners	<ul style="list-style-type: none"> Under construction by 7/4/26 by spending 5% of project costs or passing a Physical Work Test & in service by 12/31/30; or In service by 12/31/27 	<ul style="list-style-type: none"> Up to 1.5 MW same as previous column Above 1.5 MW, same as previous bullet except the 5% of total project costs option for being “under construction” was eliminated (so projects must pass the “Physical Work Test”) 	Same as the second bullet in the previous column
	Not applicable	Projects “under construction” (i.e., “safe harbored”) by December 31, 2025 are exempt from Prohibited Foreign Entity regulations; projects “safe harbored” by July 4, 2026 or operational by December 31, 2027 must comply with PFE regulations.		
Potential to access ITC for projects under development but not yet operational	(1) Potential exists if owned by a commercial company; residential solar installation has short timelines	(2) Potential exists for projects that already applied for interconnection and are in their utility’s interconnection queues		(3) Potential exists for some projects already in the PJM queue
Potential to access ITC for new projects		(4) Potential exists especially for customer generator projects where the customer has an established relationship with the utility and there is little need for interconnection upgrades	(5) Same as previous column up to roughly 500 kW to 750 kW. From 750 kW up, utility timelines for interconnection studies and approval, and permission to operate pose challenges.	Unlikely: new projects unlikely to meet either of the deadline options
* The physical work test requires that work has been performed on-site (e.g., racking installation, pouring foundations) or off-site (e.g., manufacturing custom components); plus the work must be “significant; (nor just planning, research, and obtaining permit); work performed by a contractor under a binding written contract also counts but work to produce items normally kept in a supplier’s inventory does not count.				
Source: Keystone Research Center based on review of the IRA and OBBBA; on interviews with industry experts; and on Andy Schell, “ How The Federal Solar Tax Credit Works In 2026 ,” Paradise Energy Solutions, https://www.paradisesolarenergy.com/blog/how-does-the-solar-tax-credit-work/ .				

The OBBBA provides several ways that projects not yet operational by the end of 2025 could qualify for the ITC before the solar and wind credits expire (Table 2).³ One way is for projects to be “under construction” by July 4th 2026 (or by the earlier date of December 31, 2025), and operational by four years after the end of the year in which they began construction. Small solar projects (under 1.5MW) could meet the “under construction” condition by spending 5% or more of the total project costs before July 4th 2026 or by passing a physical work test on the project. Solar projects above 1.5MW and all wind projects could only meet the under construction requirement by passing the physical work test to be exempt from the December 31st 2027 deadline.⁴ This physical work must be “of a significant nature;” it can be either on or off-site construction, but must include project-specific work and cannot include planning.⁵

Projects not “under construction” by the end of 2025 must also comply with the prohibited foreign entity restrictions introduced in the OBBBA.⁶ At least 40% of the value of their manufactured products used must not come from prohibited foreign entities, including businesses owned or affiliated with China, Iran, Russia and North Korea. The Trump administration released guidance regarding prohibited foreign entity restrictions in February 2026 clarifying how to calculate the percentage of the manufactured products from a prohibited foreign entity (PFE) (i.e., the “material assistance cost ratio”).⁷

What projects can still qualify?

There are potentially four categories of solar projects not yet operating that might still access the ITC. In rough order of the probability projects have of accessing the ITC, from most likely to least likely, these categories are:

- 1) **Some new small residential projects** owned by commercial companies that lease roof space or land from homeowners. Since the tax credit that homeowners themselves could access expired at the end of last year, 80% of residential solar in West Virginia has shifted to a leased model according to one major industry player. Similar shifts have likely occurred in the other states.
- 2) **Medium or large commercial projects** (including nonprofit and municipal) (up to 3 MW) **that applied for interconnection in the last year or two** (but are not yet operational) and in which the owner will consume a significant portion of the electricity generated.
- 3) **Grid-scale solar projects in the PJM queue** that already began construction to meet either the July 4, 2026 or December 31, 2025 deadlines (thereby securing four+ more years to become operational) or that are far enough along to become operational by December 31, 2027.
- 4) **New commercial projects under about 750 kW** that have not yet applied for interconnection and in which the owners will consume almost all of the electricity generated. Projects that don’t require significant interconnection upgrades are particularly likely to meet IRA timelines. Some larger projects that don’t require major interconnection investments may also have a chance to get under the wire although that is less certain

³ Andy Schell, “How The Federal Solar Tax Credit Works In 2026 ,” Paradise Energy Solutions, March 20th 2026. <https://www.paradisosolarenergy.com/blog/how-does-the-solar-tax-credit-work/>.

⁴ A project over 1.5 MW could qualify for the earlier (December 31st 2025) deadline and not be required to follow prohibited foreign entity (PFE) requirements by spending 5% or more on construction costs but still be required to pass the physical work test for the December 31st 2027 deadline.

⁵ Notice 2025-42, “Beginning of Construction Requirements for Purposes of the Termination of Clean Electricity Production Credits and Clean Electricity Investment Credits for Applicable Wind and Solar Facilities,” IRS. <https://www.irs.gov/pub/irs-drop/n-25-42.pdf>.

⁶ Andy Schell, “ How The Federal Solar Tax Credit Works In 2026 ,” Paradise Energy Solutions <https://www.paradisosolarenergy.com/blog/how-does-the-solar-tax-credit-work/>.

⁷ “New IRS Guidance Clarifies Material Assistance FEOC Requirements ,” Foley Hoag, February 19th 2026. <https://foleyhoag.com/news-and-insights/publications/alerts-and-updates/2026/february/new-irs-guidance-clarifies-material-assistance-feoc-requirements/>.

and varies by utility and based on the specifics of the project and the customer-utility relationship. In Ohio, if community solar (see below) passes this year, that could unleash a wave of small grid scale (or large commercial projects)—up to 10 MW or 20 MW on brownfield—that make a sprint to become operational by December 31, 2027.

We conclude that new grid scale projects not yet in the PJM queue could not meet either the July 4, 2026 or December 31, 2027 deadlines and conditions required to qualify for investment tax credits.

Another key point to keep in mind: across all segments of the market, the phaseout of federal clean energy tax credits may only cause a pause in the growth of solar capacity in the region. If electricity prices grow substantially in the next few years, they could offset the phaseout of tax credits and reduce the payback times for projects back to a few years in many cases. Having identified types of projects that might still be eligible for investment tax credits, the next section highlights policy recommendations and legislation that will allow solar to continue even after the federal clean energy tax credits expire.

Policy Recommendations

The shortening of the timelines for the IRA tax credits in the OBBBA will slow down the growth of solar electricity but need not reverse it. To limit this impact and sustain the momentum of the solar and renewable energy industries in Appalachia states should enact legislation to promote solar. Below we highlight two legislative options that Ohio, Kentucky, and West Virginia could advance. This list is not comprehensive; it highlights particular options surfaced by Solar United Neighbors in Ohio in interviews which could also make sense for Kentucky, West Virginia, and Pennsylvania.

Legalize Community Solar

Those renting, living in apartments, and who own homes unsuitable for solar electricity can still enjoy its benefits via community solar in states where it is legal. Community solar allows people to buy a share in or subscription to a solar array in exchange for credits on their electric bills (via virtual net metering). The community solar array would deliver electricity to the grid. Legislation allowing community solar has passed in 24 states but is currently illegal in Pennsylvania, Ohio, Kentucky, and West Virginia.

In Ohio, House Bill 303, which passed the State House in November 2025, and its State Senate companion bill, SB231, would legalize 1.5 GW of community solar as part of a community solar pilot program.⁸ If passed Ohio residents and businesses will have the option to subscribe to “community energy facilities” and receive bill credits for their proportional share of electricity generated.⁹ As noted, community energy facilities would be capped at 10 MW, or 20 MW for brownfield sites—small compared to most grid-scale solar- and be able bypass to PJM’s lengthy queue. The Senate version of the bill has bipartisan support in the Ohio Senate as well as the Ohio House, increasing the chances that it could become law by the end of this year and legislative session.

Legalize balcony (plug in) solar

⁸ Ohio House Bill 303, “Establish Community Energy Program and Pilot Program”, 136th General Assembly. <https://www.legislature.ohio.gov/legislation/136/hb303> and Ohio Senate Bill 303, “Establish Community Energy Program and Pilot Program”, 136th General Assembly. <https://legislature.ohio.gov/legislation/136/sb231>

⁹ The rest of this paragraph is based in part on Ryan Kennedy, “Ohio House passes 1.5 GW community energy pilot program,” *PV Magazine*, <https://pv-magazine-usa.com/2025/11/20/ohio-house-passes-1-5-gw-community-solar-pilot-program/>, November 20, 2025.

Balcony, or plug-in solar, provides another avenue for people renting, or living in homes unsuitable for rooftop solar, to utilize solar and save on their energy bills. Plug in solar systems, which range in size from 200 watts to up to a kilowatt, function like an appliance. Customers plug their solar arrays directly into a standard outlet and the electricity generated offsets the household's electricity usage. These sorts of systems are popular in Europe but have yet to take off in the United States, in large part because legislation has not caught up with this technology and customers are still required to apply for interconnection, which can take months and have high costs.¹⁰

Plug in solar is currently in a regulatory and legal grey area, but state legislatures have been active on the issue. So far, Utah, Maryland and Virginia have legalized plug in solar, and bills have been introduced in over half of US states.¹¹ Ohio HB 755 and SB 383 both legalize balcony solar in Ohio by clarifying that net metering systems do not include "portable solar generation devices"¹². Portable solar generation devices are exempt from interconnection requirements and can be up to 1.2 kW. Solar United Neighbors estimates that plug in solar would save the average Ohioan \$250 to \$280 a year and the average Kentuckian and West Virginian \$180 to \$250.¹³

Extend the deadlines for the IRA credits, including residential credits

State governments, industry leaders, and solar supporters should combine maximizing the drawdown of investment tax credits under OBBBA rules and timelines with advocacy for extending 2022 Inflation Reduction Act tax credits deadlines back to the original dates. While the original IRA passed with the votes of every single U.S. House and Senate Democrat and not a single House or Senate Republican, some bipartisan support exists for reversing renewable energy cuts in the OBBBA. Advocating for what they called "common-sense energy policy," Southeast Pennsylvania Republican Congressman Brian Fitzpatrick (PA-01) wrote a letter with 12 other U.S. House Republicans expressing concerns that the OBBBA, because of the tax credit changes and inclusion of the restrictive prohibited foreign entity requirements, "jeopardizes ongoing development, discourages long-term investment, and could significantly delay or cancel energy infrastructure projects across the country."¹⁴ Several Republican senators also expressed concerns about revoking the IRA tax credits in June 2025.¹⁵ A restoration of the original IRA tax credit deadlines should include extending the residential credit back to the end of 2032.

Given the potential for the makeup of the U.S. Congress to change in 2026, a second reversal for federal clean energy tax credits is not out of the question. The potential for legislation restoring incentives, including solar and wind, may grow if the economy stalls. Congressional restoration of the original IRA tax credit deadlines, including the residential solar tax credits, will ensure more Americans are able to access renewable energy and save on their energy bills. It will also help sustain the growth of investment, jobs, and the economy.

¹⁰ Alison F. Takemura, "Balcony solar is taking state legislatures by storm," Canary Media, February 26th 2026. <https://www.canarymedia.com/articles/solar/balcony-solar-taking-state-legislatures-by-storm>.

¹¹ Sarah Shemkus, "Where does balcony solar stand in your state?," Canary Media, April 7th 2026. <https://www.canarymedia.com/articles/solar/states-passing-balcony-solar-laws>.

¹² Ohio House Bill 755, "Regards Portable Solar Generation Devices", 136th General Assembly. <https://www.legislature.ohio.gov/legislation/136/hb755>

¹³ Solar United Neighbors, "Guide: What to know about plug-in solar," December 23, 2025; <https://solarunitedneighbors.org/resources/what-to-know-about-plug-in-solar/>.

¹⁴ "Fitzpatrick Continues Fighting for Key Reforms in Reconciliation Bill: Calls on Senate to Adopt Smart, Pro-Growth Energy Policy," Brian Fitzpatrick- United States Representative, June 6th 2025. <https://fitzpatrick.house.gov/2025/6/fitzpatrick-continues-fighting-for-key-reforms-in-reconciliation-bill-calls-on-senate-to-adopt-smart-pro-growth-energy-policy>.

¹⁵ Barbara Sprunt, "House GOP plan to gut green energy tax credits meets resistance in Senate," NPR, June 12th 2025; <https://www.npr.org/2025/06/12/g-s1-72209/senate-republican-green-energy-tax-credits>