

**Energy and Climate Solutions White Paper:  
Solar, Wind, and Energy Storage Incentives  
in the Inflation Reduction Act of 2022**

August 2023

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## Summary and Overview

*This white paper overviews provisions in the Inflation Reduction Act of 2022 (“IRA”) and associated implementation guidance in effect as of the date reflected that provide tax credits and incentives for solar, wind, and energy storage technologies.<sup>1</sup> Principally, the IRA extended, expanded, and/or newly authorized two buckets of tax credits: (1) energy generation tax credits, and (2) advanced manufacturing tax credits applicable to these industries. In addition, the IRA authorized and appropriated funds for grant, loan, and other forms of financial assistance for research, development, deployment, and increased access to these technologies for low- and moderate-income individuals. In addition to energy generation tax credits, the IRA newly authorized the Advanced Manufacturing Production credit (“45X”) and renewed the existing Section 48C (“48C”) credit for advanced manufacturing facilities.*

*The IRA created a temporary extension and expansion of the existing Section 48 investment tax credit (“ITC”) and Section 45 production tax credit (“PTC”) that are designed to phase down beginning January 1, 2025, and transition over into a new technology-neutral ITC and PTC regime (Sections 48E and 45Y, respectively) that is authorized to sunset no earlier than 2034 and is pegged to national emissions targets. Among other things, the IRA extends the current ITC and PTC framework for qualified facilities that begin construction before January 1, 2025, via a new “base” and “bonus” credit structure; this “base” and “bonus” credit structure will apply to the new technology-neutral regime as well. The ITC (and in the future, the tech-neutral ITC) now provides an enhanced 30% ITC credit to facilities with a maximum net output of less than 1 MW (AC) and includes stand-alone energy storage as eligible under that provision. The IRA restores the PTC for solar energy facilities, which were last eligible for the PTC in 2006.*

*In particular, Wilson Sonsini analyzes specific elements of the ITC and PTC, including direct pay and transferability, domestic content, wage and apprenticeship requirements, energy communities, and low-income communities, and provides examples to illustrate these credits in practice as they are understood currently. Finally, Wilson Sonsini provides a high-level overview of other forms of federal financial assistance applicable to these technologies as authorized under the IRA.*

## Key Takeaways

- **Direct Pay and Transferability Regime:** The IRA introduced a “direct pay” and a “transferability” regime. Modeled off of the previous Treasury grant-in-lieu-of-tax credit program authorized under Section 1603 of the *American Recovery and Reinvestment Act of 2009*, the direct pay regime allows certain entities, including tax-exempt entities, state and political subdivisions, and Indian tribal governments (among others) to receive a refund in the amount of the ITC—previously, these entities had no way of directly monetizing federal tax credits. Taxpaying entities cannot receive direct payment for the ITC or PTC (but can do so for 45X, as discussed further herein). The transferability regime broadly allows taxpayers to transfer all (or certain portions) of the above credits, on a year-by-year basis. The transfer of the credits is not treated as taxable income to the transferor or as a deductible expense to the transferee. Transferability does not apply to non-credit tax benefits, such as bonus and accelerated depreciation. As such, traditional tax equity players may continue to find existing tax-equity structures, including the flip partnership structure and sale leaseback arrangements, to be viable means of monetizing such tax benefits. The ability to sell tax credits on a tax-free basis will potentially also provide entirely new commercial models, including

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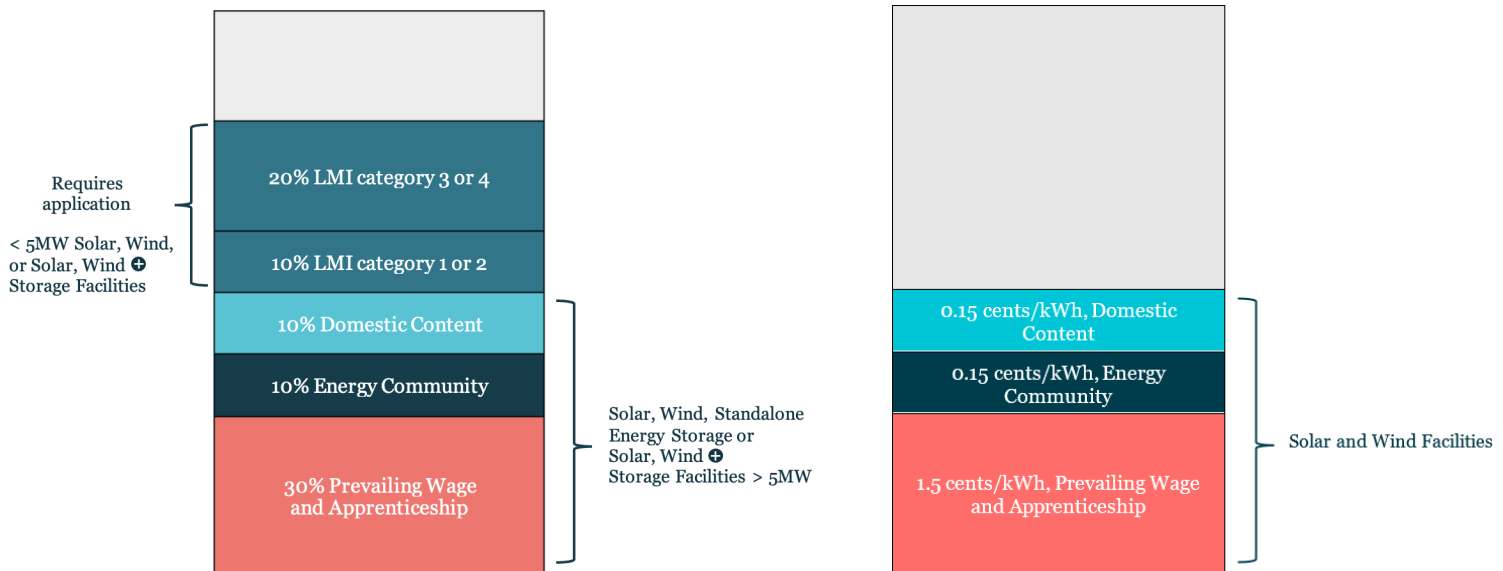
<sup>1</sup> This white paper does not contain review of tax credits and incentives available directly to individuals or households.

certain leasing, financing, and service contract models, that allow the benefit of the credit to inure to the developer.

- Maximum Current and Tech-Neutral ITC Credit:** For stand-alone energy storage projects, utility-scale wind and solar projects, and utility-scale wind and solar + battery energy storage system (“BESS”) projects, the maximum stacked ITC credit is **50 percent** and for certain smaller solar and wind projects (which can include storage, but not standalone storage), the maximum stacked ITC credit is **70 percent**. This represents a significant increase in the available federal tax credits available to these projects as compared with prior law. Below, the new “base” and “bonus” credit structure is depicted for the ITC and PTC:

**The New ITC Bonus Credit Stack**

**The New PTC Bonus Credit Stack**



## Implementation Tracker

**IRA Implementation Tracker:** The IRA was passed approximately one-year ago, and since that time, the IRS and Treasury have provided certain proposed, temporary, and final regulations, as well as other forms of guidance, on the below topics. We have provided an “**Overall Implementation Status**” to reflect what guidance has been issued as of the date of this publication and indicate what is further expected at this time. This tracker excludes notices requesting comments. Unless noted otherwise, in general, taxpayers may rely on issued temporary guidance from the IRS, even though future, final regulations will be issued that may contradict old, temporary guidance or regulations. At the time final regulations are issued, those regulations will control. Please consult Wilson Sonsini regarding specific questions of applicability of interim or temporary guidance. All guidance below is hyperlinked for convenience.

- **Guidance applicable to Code Sections 48, 45, 48E, and 45Y (ITC/PTC)**
  - **Prevailing wage and apprenticeship bonus credit**
    - Overall Implementation Status: Initial guidance released, awaiting proposed regulations or other guidance beyond the initial guidance.
      - [Notice 2022-61](#) (Initial Guidance, November 29, 2022)
  - **Domestic content bonus credit**
    - Overall Implementation Status: Initial guidance released, awaiting proposed regulations beyond this initial guidance.
      - [Notice 2023-38](#) (Initial Guidance, May 12, 2023)
  - **Energy communities bonus credit**
    - Overall Implementation Status: Initial guidance released April 4, 2023, Notices issued for certain tax years, proposed regulations forthcoming.
      - [Notice 2023-45](#) (Update to Notice 2023-29 for certain special rules on beginning of construction, brownfield site safe harbor for projects with nameplate capacity not greater than 5 MW AC, and other matters, June 15, 2023)
      - [Notice 2023-47](#) (Published list of information taxpayers may use to meet certain requirements under the Statistical Area Category or Coal Closure Category, described further herein, June 15, 2023). Applicable Appendices listed below:
        - [Appendix 1](#): Additional MSAs and non-MSAs that meet Fossil Fuel Employment Threshold and not included in Appendix B to Notice 2023-29.
        - [Appendix 2](#): MSAs and non-MSAs that qualify as energy communities in 2023 by meeting the Fossil Fuel Employment threshold and unemployment rate requirement for calendar year 2022.
        - [Appendix 3](#): Additional census tracts that have ever had, since December 31, 1999, a closed coal mine or have ever had, since December 31, 2009, a retired coal-fired electric generating unit, and directly adjoining tracts that were not included in Appendix C to Notice 2023-29.

- [Notice 2023-29](#) (Initial Guidance, April 4, 2023), proposed regulations forthcoming.
  - [Appendix A](#): Treasury/IRS-defined MSAs and non-MSAs for IRA Energy Community Tax Credit Bonus.
  - [Appendix B](#): MSAs and non-MSAs that meet the Fossil Fuel Employment threshold (unemployment rate requirement yet to be determined).
  - [Appendix C](#): Census tracts that have ever had, since December 31, 1999, a closed coal mine or have ever had, since December 31, 2009, a retired coal-fired electric generating unit, and directly adjoining tracts.
- **Low-income bonus credit allocation and associated application**
  - Overall Implementation Status: Final regulations issued. It is possible further guidance will be issued in the future based on the type and volume of applications for allocations IRS receives in the first round.
    - [Department of Energy Low-Income Communities Credit Program Guidance Page](#)
    - [Final Regulations](#), 88 FR 55,506 (August 10, 2023)
    - [Revenue Procedure 2023-27](#) (August 10, 2023)
    - [Notice 2023-17](#) (Initial Guidance, February 13, 2023)
    - [Proposed Rulemaking](#), 88 FR 35,719 (Proposed Rules, May 31, 2023)
- **Guidance applicable to advanced manufacturing credits**
  - **48C qualifying advanced energy project credit allocation program**
    - Overall Implementation Update: Initial and clarifying guidance released for 40% of the 48C program's \$10 billion total of programmatic funds. Further guidance anticipated for future application rounds for the remaining \$6 billion.
      - [Notice 2023-44](#) (Additional Guidance, clarifying and modifying Notice 2023-18, 2023-10 I.R.B. 508, May 31, 2023)
      - [Notice 2023-18](#) (Initial Guidance, February 13, 2023)
  - **45X Advanced manufacturing tax credit**
    - Overall Implementation Update: Guidance still forthcoming.
- **Cross-cutting guidance**
  - **Transferability and elective pay**
    - Overall Implementation Update: Proposed regulations issued for transferability, direct pay, pre-filing registration requirements, and specific applications for the Advanced Manufacturing Investment Credit. Comment period is open. Final regulations forthcoming.
      - [Proposed Regulation](#), Section 6417, Elective Pay, 88 FR 40,528 (June 21, 2023)
      - [Proposed Regulation](#), Section 6418, Transfer of Certain Credits, 88 FR 40,496 (June 21, 2023)

- [Proposed Regulation](#), Elective Payment of Advanced Manufacturing Investment Credit, 88 FR 40,123 (June 21, 2023)
- [Proposed Regulation](#): Pre-Filing Registration Requirements for Certain Tax Credit Elections, 88 FR 40,086 (June 21, 2023)

## Analysis

### I. Section 48 ITC and Section 45 PTC Extension (“Current ITC/PTC Regime”) and Technology-Neutral Section 48E ITC and 45Y PTC (“Technology-Neutral ITC/PTC Regime”)

#### A. Overview

**Previous Law:** Before the passage of the IRA, the PTC provided for a federal tax credit for electricity produced from authorized renewable generation resources and sold to unrelated third parties for a 10-year period after the property was placed in service; solar facilities were not eligible under the PTC, and furthermore, the PTC was set to phase down entirely for projects beginning construction after December 31, 2021 and provide only a phased-down credit amount for wind projects that began construction after 2016 and before the end of 2021. The ITC provided for a federal tax credit based on the cost of certain energy property, and standalone storage was not an eligible technology. Only taxpaying entities were able to successfully use or monetize these credits and there was no “transferability” regime to facilitate whole or partial tax credit sales.

**Now Under the IRA:** As a threshold matter, we will note where the Current ITC/PTC Regime and Technology-Neutral ITC/PTC Regime differ, but unless otherwise noted, in general, the substantive bonus credits and other provisions of law apply equally to both regimes.

- **Current ITC/PTC Regime and Technology-Neutral ITC/PTC Regime Timelines and Transition:** This Section 48 ITC extension is effective for property placed in service after December 31, 2022, and phases out for solar, energy storage and wind property for which beginning of construction occurs after December 31, 2024. In short, the Current ITC/PTC Regime’s relevant timeframe for solar and wind is 2022-2024. Consequently, for solar, wind, and energy storage projects beginning construction January 1, 2025 and after, the regular ITC under Section 48 will phase down to a 2% base credit (10% if prevailing wage and apprenticeship requirements are met) and the 30% credit will move over to the new technology-neutral ITC under Section 48E. Equally, the PTC will phase out in 2024 for wind and solar projects, and for projects beginning construction on January 1, 2025 and after, the technology-neutral PTC will apply.
- **Solar Projects Can Choose Between ITC and PTC:** Taxpayers can now use *either* the PTC or the ITC for solar projects (but not both for the same project) after December 31, 2021.
- **Offshore Wind:** Offshore wind facilities are now eligible for the full PTC.
- **“Base” and “Bonus” Structure Replaces Previous “Phase Down” Structure:** As noted, both the ITC and PTC are now subject to a “base” and “bonus” credit structure, which is generally equivalent in form between the two credits. This “base” and “bonus” credit structure replaces the prior “phase down” credit structure, in which the applicable credit rate depends on the year the property has begun construction and is placed in service. This system is designed to incentivize certain activities in, and use of labor and materials sourced from, the United States.
- **Applicable “Base” and “Bonus” Rates:** The base credit amount for the ITC is 6% of qualified project costs, which increases to 30% if prevailing wage and

apprenticeship requirements are satisfied or deemed satisfied, as discussed further herein. The maximum ITC rate depends on technology and on whether the taxpayer successfully applies for and receives an allocation for low-income projects, discussed further herein; but as noted, for utility-scale wind, solar, and energy storage projects, the maximum ITC rate is 50%, and for wind, solar, or wind/solar + storage projects under 5 MW, the maximum ITC rate is 70%. Taxpayers are now eligible for a PTC at 1.5 cents/kWh, adjusted for inflation, if labor and wage requirements are satisfied; otherwise, base PTC of 0.3 cents/kWh applies. The maximum PTC rate is 1.8 cents/kWh, adjusted for inflation, if other bonus credit requirements are satisfied.

Additional bonus credits applicable to both the Current and Technology-Neutral ITC/PTC Regimes are available as follows:

- **Domestic Content (10%):** Additional 10% bonus credit is available if both the domestic content requirements discussed further herein, and the prevailing wage/apprenticeship requirements are met (2% if only the domestic content requirement is met). To be clear, the prevailing wage and apprenticeship requirements are a *prerequisite* to unlock the 30% rate for projects with a BOC date on or after January 29, 2023. If an eligible entity meets (or is deemed to have met as a result of BOC date) the prevailing wage and apprenticeship requirements *plus* domestic content, an eligible entity can unlock another 10% (for a maximum credit of 40%). Conversely, if an eligible entity *just* meets domestic content without the prevailing wage and apprenticeship requirements, a 6% base rate plus 2% for an effective total of 8% is available. Please note that all smaller projects of less than 1 MW do not need to demonstrate compliance with prevailing wage to obtain the 30% rate, but these projects must meet domestic content requirements to unlock this additional 10% adder. Finally, if a taxpayer does not meet the domestic content requirements, direct pay (for eligible entities) will be limited to 90% of the allowable credit amount for projects with a BOC date in 2024. With respect to the Section 48E tech-neutral ITC and the Section 45Y tech-neutral PTC, direct payment is reduced to 90% in 2024, 85% in 2025, and 0% thereafter.<sup>2</sup>
- **Energy Community (10%):** Additional 10% bonus credit for building a facility in a designated “energy community” discussed further herein so long as prevailing wage/apprenticeship requirements are met (2% if only the energy community requirement is met).

Further, wind, solar, and wind/solar + storage projects under 5 MW that successfully apply for and receive an allocation are eligible for another 10-20% **ITC-only** bonus credits:

- **Low-Income Solar and Wind and Solar/Wind + Storage:** An additional 10% bonus credit for building a qualifying solar or wind facility (with output of less than 5MW) in certain low-income communities or 20% if located in certain qualified low-income residential buildings or benefit projects. In addition, such projects must apply for and receive an allocation of the Environmental Justice Solar and Wind Capacity Limitation. Unlike other bonus credits available to the ITC, this is a “capped” or “allocated” bonus credit that requires an application and

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<sup>2</sup> Please note that the Section 48 ITC for projects beginning construction in 2025 and later is phased down to only 10%; generally, the IRA transitions to the technology-neutral ITC beginning in 2025, where taxpayers will be eligible for a similar regime of base and bonus credits.



must be approved. Together, these bonus credits provide up to a **50% percent** ITC if prevailing wage and apprenticeship (with the carve-out for projects with earlier BOC dates, as discussed further herein) and domestic content requirements are met, and the project is in an “energy community.” A **60-70 percent** ITC is potentially available for solar or wind + storage projects placed into service in certain low-income communities, federally funded housing, and low-income benefit projects. Equally, the maximum PTC rate is **1.8 cents/kWh**. These same bonus credits are applicable to Sections 45Y and 48E, the tech-neutral PTC and ITC, respectively. **Table 1** summarizes the applicable bonus credits and other key features of the bill for easy reference.

Wind, Solar, and Energy Storage Tax Credits Under Current and Technology-Neutral ITC/PTC Regimes			
<b>Credit, Technology, Applicable Timeframes</b>	<p>Current PTC Regime: Section 45 PTC (Wind, Solar)</p> <p><b>Applicable Years:</b> 2022-2024</p>	<p>Current ITC Regime: Section 48 ITC (Wind, Solar, Energy Storage (standalone or charged by ITC property))</p> <p><b>Applicable Years:</b> 2022-2024</p>	<p>Technology-Neutral ITC/PTC Regime: Sections 45Y PTC or Section 48E ITC (any clean energy generating facility with greenhouse gas emissions rate not greater than zero; standalone storage may elect 48E ITC whether or not charged by ITC property)</p> <p><b>Applicable Years:</b> 2025-2034 (or beyond)</p>
<b>Credit Amount</b>	<p>Up to 1.8 cents/kWh, adjusted for inflation; BOC must be prior to 1/1/2025</p>	<p>30% of the basis of energy property if wage and apprenticeship requirements are met; up to 70% for satisfying other bonus credit requirements; BOC must be prior to 1/1/25</p>	<p>ITC/PTC rate structure unchanged from Current ITC/PTC Regime; phase down of tech-neutral provisions begins in 2034 at the earliest (phase-down pegged to country-wide emissions targets)</p>
<b>Wage and Apprenticeship Requirements</b>	<p>Facilities with a BOC date prior to 1/29/23 and systems under 1 MW deemed met</p>	<p>Facilities with a BOC date prior to 1/29/23 and systems under 1 MW deemed met</p>	<p>No change from Current ITC/PTC Regime</p>

	Must meet wage and apprenticeship requirements to qualify for 1.5 cents/kWh	Must meet wage and apprenticeship requirements to qualify for 30% ITC	
<b>Bonus Credits</b>	Additional 10% if placed in service after 12/31/22 for: <ul style="list-style-type: none"> <li>• Domestic content</li> <li>• Energy communities</li> <li>• <u>Note</u>: Small wind facilities may apply for the LMI bonus credit, but <b>only</b> as ITC projects</li> </ul>	Additional 10% if placed in service after 12/31/22 for: <ul style="list-style-type: none"> <li>• Domestic content</li> <li>• Energy communities</li> <li>• Low-Income community or on Tribal land and less than 5 MW, subject to 1.8 GW annual allocation (not available for standalone storage)</li> </ul>	No change from Current ITC/PTC Regime
<b>Direct Pay</b>	Only for eligible tax-exempt entities	Only for eligible tax-exempt entities	No change from Current ITC/PTC Regime
<b>Transferability</b>	Yes, for taxable years beginning after 2022	Yes, for taxable years beginning after 2022	No change from Current ITC/PTC Regime

- **Tax-Exempt Bonds:** Further, in the case of energy property financed using tax-exempt bonds that has its BOC after the date of enactment of the IRA, the credits will be proportionately reduced based on a fraction where the numerator is the proceeds of a tax-exempt obligation, and the denominator is the total amount expended on the project, provided that the reduction is limited to 15%.

**Energy Storage Provisions:**

- **New Standalone Energy Storage ITC:** Energy storage property is now eligible for the Current and Technology-Neutral ITC. The ITC extension for stand-alone

storage is effective for projects placed in service beginning January 1, 2023.<sup>3</sup> Whether standalone or connected to another ITC-eligible property, energy storage property follows the same phase-down transition to the Technology-Neutral ITC regime. Further, the expanded ITC benefits for energy storage property can apply to modifications to *existing* property, but only to the extent of the costs of such modifications (i.e., no ITC benefits for existing energy storage properties that have already been placed into service).

- **Election Out of Public Utility Property:** Specific to energy storage properties, the IRA provides an election out of the Code Section 50(d)(2) “public utility property” limitation for larger energy storage facilities with capacity in excess of 500 kilowatt hours. Existing law greatly limits ITC eligibility for public utility property (i.e., property used predominantly in the trade or business of furnishing or selling electrical energy if the rates have been established or approved by a state or political subdivision thereof, by any agency or instrumentality of the United States, or by a public service or public utility commission or other similar body of any state or political subdivision thereof). Further, the IRA extends the existing safe harbor under Code Section 7701(e) to energy storage facilities, which generally means that the operation of such facility is treated as a service contract, and not as a lease, for tax purposes, so long as the requirements of the service contract safe harbor are satisfied. This will allow taxpaying entities to enter into commercial arrangements with tax-exempt entities without losing ITC benefits under existing law, which generally prohibits leasing ITC-eligible property to tax-exempt entities.
- **Broad Definition of Energy Storage:** The definition in the IRA of “energy storage technology” is broad and not limited to lithium-ion batteries. Instead, the definition includes property that receives, stores, and delivers energy for conversion to electricity (or, in the case of hydrogen, which stores energy), and has a nameplate capacity of at least 5 kilowatt hours. This definition therefore can encompass older technologies like pumped storage hydropower. The definition further includes thermal energy storage property, which is defined as a system that is directly connected to heating, ventilation, or air conditioning systems, removes heat from or adds heat to a storage medium for subsequent use, and provides energy for heating or cooling of the interior of a residential or commercial building. The statute further clarifies that energy storage property that was placed into service before the date of enactment of the IRA, and which has a capacity of less than 5 kilowatt hours, but that is *modified* to a nameplate capacity of more than 5 kilowatt hours, is eligible for the credit (but only to the extent of the costs of modification).

**Interconnection Property:** In addition, the IRA allows an ITC for expenditures paid or incurred for interconnection property in connection with the installation of energy property that has a maximum output of less than 5 megawatts (this excludes microgrid controllers). The IRA provides additional detail on what qualifies as interconnection property, but generally includes additions, modifications, or upgrades to a transmission

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<sup>3</sup> For awareness, for solar projects beginning construction in 2020 or 2021 and placed in service in 2020 or 2021, the existing 26% credit remains available. For solar projects placed in service in 2022, regardless of the beginning of construction date, the credit is increased to 30%. This is a special “donut hole” or targeted expansion just for solar, but the stand-alone storage credit does not take effect until 2023, meaning that it is not available for a project placed into service in 2022.

or distribution system that is required at or beyond interconnection in order to accommodate interconnection.

## B. Examples

**Standalone Energy Storage:** If a taxpayer were to begin construction on a 200 MW lithium-ion BESS in southern California in November 2023 and place that property into service in July 2024, the taxpayer would initially be eligible for a 6% base ITC. If the taxpayer hired mechanics and laborers to construct the battery and paid those mechanics and laborers at or above a prevailing wage and utilized the appropriate number of apprentices and paid such apprentices at least the applicable apprentice wage rate, as determined by IRS guidance as applied to the southern California region, the taxpayer would be eligible for a 30% ITC. If the taxpayer satisfied the requirements of the domestic content bonus credit, the ITC rate would be 40%. If the storage property were located in a designated energy community, for example a current Brownfield site as defined by the EPA, the ITC rate would be 50%.

However, assuming the same facts as above, but a BOC date in January 2023 and prior to January 29, 2023, the same result occurs except that the eligible entity is not required to show compliance with prevailing wage and apprenticeship requirements because these are grandfathered in. As noted, the same result would occur for projects of 1 MW or less because those projects do not need to demonstrate compliance with prevailing wage and apprenticeship requirements. This project is not eligible for the low-income bonus credits because it is utility-scale (i.e., above 5 MW) and because it is standalone energy storage.

**Utility-Scale Wind or Solar + Storage:** If a taxpayer were to begin construction under the same fact pattern as above, but as a variance, the BESS is charged by a 200 MW utility-scale wind or solar facility, the taxpayer would have the option to elect *either* the ITC or PTC on the wind or solar facility, but *only* elect the ITC on the storage facility. The taxpayer cannot elect the PTC (in its current or technology-neutral form) on the BESS. Thus, here, utility-scale BESS are treated as separate property and only eligible for the ITC. Finally, this system, too, is not eligible for the low-income bonus credits, but only because it is a utility-scale system. The same system, not exceeding 5 MW, could apply for an allocation of the low-income bonus credits if it met the requisite criteria.

## C. Direct Pay and Transferability

As an initial matter, please see Wilson Sonsini's Direct Pay and Transferability White Paper for further detail on direct pay and transferability. The link to our client alert on the IRS proposed regulations for direct pay and transferability is [here](#).

The IRA provides two new ways to monetize the tax credits: a "direct pay" regime that allows certain entities to receive a refund in the amount of the tax credits and a "transferability" regime that allows project owners to transfer the credits to other taxpayers for cash payments.

The direct pay regime allows certain entities, including tax-exempt entities, state and political subdivisions, and Indian tribal governments (among others) to receive a refund in the amount of the credits. Taxpaying entities cannot receive direct payment of any of the credits discussed herein, with the exception of 45X, discussed more below.

**Direct Pay:** The proposed regulations provide a broad prohibition on direct pay for partnership structures. The co-ownership alternatives proposed by the IRS, including the ability to elect out of Subchapter K or to own property as tenants in common, are of limited utility. Code Section 761(a) has numerous requirements, including, importantly, that the

property in question not be used in an active trade or business and that any co-owner separately contract for the related output, making it unworkable for most projects that would be of use to tax-exempt and governmental entities. Similarly, there are inefficiencies when dealing with undivided interests, including that any offtake arrangements would have to be separately contracted for each such interest or involve a contract trust.

The proposed regulations also prohibit direct pay for ITCs passed through by lessors to lessees in Code Section 50(d)(4)/Section 48(d) lease pass-through structures. This ban is significant, as it removes the ability of tax-exempt and governmental entities to take advantage of direct pay through inverted leases. With partnership structures also prohibited for direct pay transactions, there are limited avenues (e.g., sale-leaseback) for applicable entities to work with taxpayers to develop and invest in renewable energy projects. The proposed regulations' prohibition on so-called "chaining" of credits applies not just to the three specified instances (former Code Section 48(d), Code Section 45Q(f)(3), and Code Section 6418), but also to any applicable credit "otherwise not determined with respect to the applicable entity or electing taxpayer." This raises the possibility of additional, unmentioned instances of perceived chaining being disallowed as well.

**Transferability:** The transferability regime broadly allows taxpayers to transfer all (or any portion) of the following credits: Section 45 PTC, Section 48 ITC, Section 45Y ITC, Section 45E ITC, Section 45X, Section 48C. The transfer must be solely for cash, and the cash is not treated either as income to the transferor or as a deduction to the transferee of the tax credit. If elected, the transferability regime would make the transferee responsible for any disallowance or reduction of the credit by the IRS at a later date. If the credit ultimately allowed to the transferee is less than the credit claimed, the transferee is subject to tax on such difference and must also pay a 20% penalty on the difference. Further, if the transferor disposes of the property during the ITC recapture period, the transferee must recalculate its tax liability for all years in which it claimed the ITC and inform the transferor of the recapture amount for purposes of recalculating the basis of the ITC property. Essentially, unlike the direct pay system in the IRA, the transferability regime is a market-based system under which project owners can incentivize credit buyers to purchase tax credits by offering to sell the credit for a discount. Taxpayers may begin transferring eligible tax credits 180 days after enactment of the IRA (approximately February 12, 2023).

A credit can only be "transferred" (i.e., sold or assigned) once and may not be sold again by the buyer who acquires them. While tax credits may still be sold either in whole or part as a general matter, bonus credits may not be severed from the base credit amount for purposes of transferability or direct pay.

The proposed regulations clarify that recapture risk lies with the transferee (buyer). The recapture rules apply to the ITC, ensuring that if a project is sold or suffers a casualty event within the first five years after the project is placed in service, a portion of the ITC is repaid (100 percent in year 1, 80 percent in year 2, 60 percent in year 3, 40 percent in year 4, and 20 percent in year 5). Additional penalties may apply as well. However, there is no prohibition under Code Section 6418 for an eligible taxpayer and a transferee taxpayer to contract between themselves for indemnification of the transferee taxpayer in the event of a recapture event. Transferees of credits are not subject to recapture risk if a partner sells its interest in a transferor taxpayer that would otherwise cause recapture, however the selling partner will be liable to the IRS for recapture.

Prior to filing an election to transfer credits, sellers will be required to perform a number of tasks, including providing documentation attesting to compliance with various requirements such as prevailing wage and apprenticeship and other applicable bonus credits, documentation underpinning operations of the project, registration, and more. Failure to execute these requirements precisely could jeopardize the transfer of the tax credit.

The passive loss rules in Code Section 469 have typically prevented almost all high-net-worth individuals (and funds composed of groups of the same) from investing in tax equity arrangements. The proposed rules' position that Code Section 469 does not prevent transferors from transferring credits may open up the tax equity market to investors who were previously hampered by their lack of passive income arising from the conduct of a trade or business. This raises many commercial and tax questions that will need further consideration. However, the proposed regulations' position that transferees are fully subject to Code Section 469 effectively means that an individual, estate, trust, or personal service corporation, in each case, without passive income will be unable to purchase eligible credits.

For projects that have been or will be placed into service in 2023, sellers have until October 2024, or the extended tax return filing deadline, to elect to transfer the credit. Due to timing mismatches of when credit sales may take place, sellers may consider investigating short term financial products to bridge any associated gaps.

To utilize either the direct pay or transferability regime, entities must complete a mandatory pre-filing registration process.

#### **D. Domestic Content**

As an initial matter, please see Wilson Sonsini's separate Domestic Content White Paper for further detail on the domestic content adder. The link to our client alert on the IRS' preliminary guidance on domestic content is [here](#).

To obtain the domestic content adder (or to avoid a reduction in the context of direct pay), an eligible entity must ensure that 100% of any steel or iron or 40% (increasing to 55% over time) of manufactured products that are part of the project at the time of completion were produced in the United States. Steel or iron that is a structural component of the facility must specifically be produced entirely in the United States. For purposes of the reduction to direct payments, exceptions will be allowed if the inclusion of steel, iron, or manufactured products produced in the United States increase the overall costs of construction of qualified facilities by more than 25 percent, or those same products are not reasonably available or of satisfactory quality.<sup>4</sup> Further guidance will need to be issued with respect to these exceptions. Taxpayers must certify to the IRS that any steel, iron, or manufactured product that is a component of the facility was produced in the United States, applying the "Buy America" rules in 49 C.F.R. Section 661.

For manufactured products, the requirement of "manufactured in the United States," is deemed to be met if not less than the adjusted percentage of the total cost of the components and subcomponents of the project is attributable to components that are mined, produced, or manufactured in the United States. The adjusted percentages are:

- 40 percent for projects BOC before 2025

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<sup>4</sup>Note that these exceptions only apply for purposes of direct pay and do not apply to the adder.

- 45 percent for projects BOC in 2025
- 50 percent for projects BOC in 2026
- 55 percent thereafter<sup>5</sup>

The formula provided by the IRS (in Notice 2023-38) to calculate qualifying domestic costs for manufactured components is based on the manufacturer's costs to produce such components (rather than the amount paid to purchase the completed component). This could make it difficult for project sponsors to comply with IRS rules and compel them to request detailed cost segregation information from manufacturers. The notice also provides details on the adjusted content percentages over time, rules for retrofitted facilities, a non-exhaustive categorization of applicable project components for wind and solar, safe harbor classification, certification, and recordkeeping requirements.

### **E. Prevailing Wage and Apprenticeship Requirements**

Generally speaking, to qualify for the 30% ITC rate or 1.5 cents/kWh PTC rate, the qualified energy property must be constructed using laborers and mechanics paid prevailing wages, and for five years after the project is placed into service any laborers or mechanics maintaining the property must also be paid prevailing wages, and the apprenticeship requirements must be met. However, for any project with a BOC date that pre-dates January 29, 2023, 60 days following the date on which the IRS initially released prevailing wage guidance, those facilities do not need to comply with prevailing wage and apprenticeship requirements to obtain the 30% ITC rate or 1.5 cents/kWh PTC rate. Guidance clarified that BOC for these purposes is determined either by starting work of a physical nature ("Physical Work Test") or by paying or incurring five percent or more of the total cost of the facility ("Five Percent Safe Harbor"), each as more fulsomely set forth in existing guidance, namely Notices 2013-29 and 2018-59 and each of their follow-on Notices. Taxpayers satisfying either test will be considered to have begun construction. In addition, there are no prevailing wage and apprenticeship requirements for projects of less than 1 MW.

Apprentices are required for specified percentages of total labor hours of the project, starting at 12.5% for projects with a BOC date in 2023 and escalating to 15 percent over the coming years. The taxpayer and any contractor or subcontractor that employs four or more individuals to perform construction on a qualifying project must employ at least one qualified apprentice.

Prevailing wages are determined by locality by the Secretary of Labor. To find the prevailing wage determination for a geographic area and type of construction with requisite labor classifications, the taxpayer can reference [www.sam.gov](http://www.sam.gov). If there is no published wage determination for the geographic area and type of construction for the facility or if the proper wage determination was published but without one or more relevant labor classifications, the taxpayer can use the procedures found in 40 USC §§ 3141-48. To rely on such procedures, the taxpayer must contact the DOL Wage and Hour Division at [IRAprevailingwage@dol.gov](mailto:IRAprevailingwage@dol.gov) with information on the type of facility, facility

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<sup>5</sup> These increased percentages only apply by their terms to PTC projects; however, this appears to have been a drafting oversight as the official summary produced by the Senate Finance Committee appears to suggest that the above percentages will also apply to the tech-neutral ITC. As the statutes currently read, the tech-neutral PTC will have these increasing domestic content requirements while the tech-neutral ITC remains at 40%. We expect for this to be corrected.

location, proposed labor classifications, proposed prevailing wage rates, job descriptions and duties, and any rationale for the proposed classifications.

For apprenticeship, to qualify for the 30% credit rate, the project must be constructed with apprentices (or with a showing of a good faith effort, described more below), but apprentices do not appear to be required for the 5-year after period following construction as the statute limits references to apprenticeship to construction. The guidance requires specific hourly ratios of apprentices to journeyworkers. To satisfy the apprenticeship labor hour requirement, the percentage total labor hours that must be performed by apprentices is 12.5 percent for 2023. A taxpayer must further ensure that it employed 1 or more qualified apprentices if it or a contractor employ 4 or more individuals to perform construction work on the facility.

While the prevailing wage and apprenticeship requirements are stringent, there are cure provisions for both, and an exception for apprenticeship.

- **Cure Period for Prevailing Wage:** There is generally a 180-day “cure” period if an eligible entity (through a contractor) fails to meet these requirements, as long as the workers are compensated for the difference between wages paid and the prevailing wage, plus interest, in addition to paying a penalty to Treasury (calculated as \$5,000 multiplied by the number of workers who were underpaid). These fees can add up and be substantial, so it is of course advisable to work with a labor contractor who is experienced or has the requisite resources to certify compliance with prevailing wage rules. Underscoring this, we further note that there is language in the IRA that carves out any “intentional disregard” of the prevailing wage rules, meaning, an eligible entity should not claim the credit without intent and effort to comply; if Treasury finds “intentional disregard,” the taxpayer must compensate each worker *three times* the difference in wages and pay *twice* the penalty to Treasury. If the taxpayer makes the cure payment more than 180 days after the IRS makes a final determination that the taxpayer failed to meet these requirements, the taxpayer can no longer receive the 30% credit for that taxable year.
- **Cure Provisions for Apprentice Requirements:** The taxpayer may cure the discrepancy by paying a penalty to the Treasury of \$50 multiplied by the total labor hours for which requirements are not satisfied. The penalty is increased to \$500 per hour in the event such discrepancy was due to intentional disregard.
- **Good Faith Effort Exception:** Taxpayers who have made a good faith effort to hire qualified apprentices with respect to the construction of a project are deemed to satisfy the apprenticeship requirement and can claim the bonus credit rate if the eligible entity makes a “good faith effort” to request apprentices from a registered apprenticeship program and receives a denial or does not receive a response within five business days.

## F. Bonus Credits for Energy Communities

As a preliminary matter, please see our client alert on the initial guidance released by the IRS for energy communities [here](#). “Energy community” is a new concept introduced by the IRA. To qualify, taxpayers need only satisfy one of the three below categories.

- **Brownfield Site (“Brownfield Category”):** Defined as a Brownfield site under subparagraphs (A), (B), and (D)(ii)(III) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (“CERCLA”). In short, the IRA



did not incorporate the entirety of the Brownfield definition but incorporated the portions of the definition that encompass most Brownfield sites today. In particular, the definition took care to include “mine-scarred lands,” that are not subject to CERCLA but were added to the Brownfield definition in 2002 amendments to the law. Notice 2023-29 largely reiterates CERCLA-based standards in the Code. Essentially, a site meets the definition of a brownfield site if it was previously assessed through federal and certain other resources as a brownfield site, or if an ASTM E 1903 Phase II Environment Site Assessment has been completed with respect to the site and such assessment confirms the presence of a hazardous substance (42 U.S.C. § 9601(13) (hazardous substance)) or pollutant or contaminant (42 U.S.C. § 9601(33) (pollutant or contaminant)) or, for projects with a nameplate capacity of not greater than 5MW (AC), an ASTM E 1527 Phase I Environment Site Assessment has been completed with respect to the site and such assessment confirms the presence of a hazardous substance or pollutant or contaminant. The site must also not fall into the list of sites that are statutorily excluded from the definition.

- Areas with Significant Fossil Fuel Deployment (“Statistical Area Category”): Defined as a metropolitan statistical area (“MSA”) or non-metropolitan statistical area (“non-MSA”) that has or has had since 2009 a 0.17% or greater direct employment or 25% or greater local tax revenue related to the extraction, processing, transport or storage of coal or natural gas AND has an unemployment rate at or above the national average unemployment rate for the previous year. Further, for awareness, MSAs are large, and significantly larger than census tracts. To give a sense of this, Arizona has 11 MSAs, with one encompassing all of Phoenix. To determine fossil fuel employment, Notice 2023-29 identifies MSAs and non-MSAs that have (or had any time after December 31, 2009) 0.17 percent or greater direct employment related to the extraction, processing, transportation, or storage of coal, oil, or natural gas in Appendix B (see “Implementation Tracker” section for hyperlinks to guidance materials). Please note, these MSAs and non-MSAs will remain on this list in Appendix B, and new MSAs and non-MSAs that meet this criterion in later years will be added (see e.g., Appendix 1 to Notice 2023-47). ***To qualify as an energy community under this category, the MSAs and non-MSAs listed in Appendix B (and subsequent updates) must also have an unemployment rate that is at or above the national average unemployment rate for the previous year, therefore, MSAs and non-MSAs can overall lose their status as qualified energy communities.*** Notice 2023-47 determines MSAs’ and non-MSAs’ unemployment rates by using county-specific Local Area Unemployment Statistics published by the Bureau of Labor Statistics (“BLS”) and aggregating figures across the counties located in such MSA or non-MSA. Treasury and the IRS intend to publish an annual list of MSAs and non-MSAs satisfying the fossil fuel industry employment standard (taking into account the unemployment standard requirement) each May. The MSAs and non-MSAs that meet 2022 unemployment rate requirements are energy communities as of January 1, 2023, and they will maintain that status until the unemployment rates for 2023 become available and a new list of MSAs and non-MSAs that qualify are provided. Generally, a MSA’s or non-MSA’s energy community status in future years will last from May of the initial year through April of the following year. The current list applicable to 2023 may be found [here](#). The notice defers on the question of how to determine fossil fuel tax revenue for MSAs and non-MSAs, the other way to show fossil fuel reliance.

- Census Tracts with Closed Coal Mines or Coal-Fired Plants (“Coal Closure Category”): Defined as a census tract in which, after December 31, 1999, a coal mine has closed, or, after December 31, 2009, a coal-fired electric generating unit has been retired, or any immediately adjoining tract to the foregoing. The recent notice provides a list of census tracts in the Coal Closure Category. In the case of closed coal mines whose location cannot be pinpointed in a census tract (e.g., closed coal mines with listed latitude and longitude coordinates that do not place the mines in a listed county and state), the taxpayer must submit evidence to correct the irregularity in location to Mine Safety and Health Administration to potentially qualify those areas. In the case of shuttered coal-fired power plants that have irregular locations, taxpayers must submit information to the EIA to address the irregularities to potentially qualify those areas. The [Interagency Working Group on Coal & Power Plant Communities & Economic Revitalization](#) also released a “Coal Power Plant Redevelopment Visualization Tool” that allows developers to see coal power plants set to retire alongside key infrastructure characteristics relevant to potential redevelopment opportunities, such as transmission lines and substations.

The Department of Energy [hosts a dynamic mapping tool](#) that can be utilized to assess whether a specific location falls within an energy community. Please note that this tool, as the Department of Energy indicates, does not reflect Brownfield sites and has other data limitations as well.

Notice 2023-45 also clarified that if a taxpayer begins construction of an energy communities project on or after January 1, 2023, in a location that is in an energy community as of the beginning of construction date, then that location will continue to be considered an energy community for the duration of the credit period for the PTC (current and technology-neutral), or on the placed-in-service date for the ITC (current and technology-neutral).

Further, a project is treated as “located in” or “placed in service within” an energy community if 50% or more of the project’s nameplate capacity is located in an area that qualifies (e.g., the “nameplate capacity test.”) This determination is made by dividing up the nameplate capacity of the project’s energy-generating units located in an energy community by the total nameplate capacity of all generating units of the project. For offshore wind projects, if none of the energy-generating units are within a census tract, MSA, or non-MSA, then the nameplate capacity attribution rule is applied by attributing all the nameplate capacity of such project to the land-based power conditioning equipment that conditions energy generated by the project for transmission, distribution, or use that is the closest to the point of interconnection. Finally, for projects that do not have nameplate capacity, if 50% or more of its square footage is in an area that qualifies, the project is considered “located in” or “placed in service” within an energy community (e.g., the “footprint test”).

### **G. Low-Income Solar and Wind and Solar/Wind + Storage Bonus Credit**

As a preliminary matter, please see Wilson Sonsini’s client alert on initial guidance issued by the IRS for the low-income bonus credit [here](#). For qualifying solar or wind facilities with output of less than 5MW, there is an additional 10% bonus credit for building in certain low-income communities and an additional 20% if the facility is located in certain qualified low-income residential buildings or benefit projects. In addition, such projects must receive an allocation of the Environmental Justice Solar and Wind Capacity Limitation. Unlike other bonus credits available to the ITC, this is a “capped” or “allocated”

bonus credit that requires an application and must be approved. The allocation process allots a maximum annual capacity limitation for all eligible facilities of 1.8 gigawatts for 2023 and 2024 (and 0 gigawatts thereafter; instead, the allocation will be under the tech-neutral ITC). Taxpayers must receive an allocation from this amount to qualify for the bonus credit. Unused allocations may be carried forward and used in subsequent tax years.

*Standalone storage projects do not qualify for this adder as it only applies to qualified, small-scale solar and wind facilities; however, this adder can be available in combined solar (or small wind) + storage projects claiming the ITC, so long as the storage property is charged at least 50% by the connected solar (or small wind) property.*

To qualify, facilities must fall into one of four categories generally applicable to low-income oriented projects.

1. In Category 1, “Located in a Low-Income Community,” a 10% bonus credit is available for up to 700 MW of capacity located in low-income communities, as defined by certain census tract income metrics. The Department of Energy now has a dynamic map available to view Category 1 Eligibility, along with additional selection criteria, available [here](#).
2. In Category 2, “Located on Indian Land,” a 10% bonus credit is available for up to 200 MW of capacity located on federally recognized Indian land.
3. In Category 3, “Qualified Low-Income Residential Building Project,” a 20% bonus credit is available for up to 200 MW of capacity installed on residential rental buildings that participate in an affordable housing program and allocate the “financial benefits” of electricity produced equitably among the building’s residential occupants.
4. In Category 4, “Qualified Low-Income Economic Benefit Project,” a 20% bonus credit is available for up to 700 MW capacity that distributes at least 50% of the “financial benefits” of electricity produced to households with income of less than 200% of the poverty line applicable to a family of the size involved, or less than 80% of area median gross income.

Facilities that meet special ownership or geographic criteria will receive priority during the initial application window. Revenue Procedure 2023-27, hyperlinked above, provides the procedures for potential applicants to apply for an allocation. It specifically provides information that applicants will need to apply and describes the application process and allocation award process. In general, the application must include:

- Facility maximum net output and nameplate capacity
  - Wind Facilities: Applicants must report the expected maximum net output defined as the nameplate capacity in alternating current.
  - Solar Facilities: Applicants must report the expected maximum net output of the facility as measured in alternating current and the nameplate capacity in direct current.
  - Facility Location: Applicants must report the location of the facility, including street address (if applicable) and coordinates.
- Documentation
  - A list of documents that applicants must submit is listed below. However, the required documents vary depending on whether the projects are front-

of-meter or behind-the-meter (“BTM”), and furthermore, for BTM projects, whether they are above or below 1 MW AC. Please see the Revenue Procedure for further detail.

- Executed contract to purchase the facility, lease the facility, or PPA, in their entirety and inclusive of amendments, appendices, consumer disclosures, and schedules thereto.
- Copy of final executed interconnection agreement, if applicable (if the facility is located in a market where this cannot be signed prior to construction or interconnection of the facility, a signed conditional approval letter from the jurisdictional utility and/or affidavit signed by an individual with authority to bind the applicant can be submitted in place).
  - If an interconnection agreement is not applicable (e.g., due to utility ownership), this requirement is satisfied by a final written decision from a public utility commission, cooperative board, or other applicable governing body.
- Documentation demonstrating property will be installed on an eligible residential building (for Category 3).
- Plans to ensure tenants receive required financial benefits, including a draft “benefits sharing statement” (Category 3).
- General Attestations
  - Site control through ownership, executed lease contract, site access agreement, or similar agreement between property owner and applicant.
  - Facility has obtained all applicable federal, state, tribal, and local non-ministerial permits, or that facility is not required to obtain such permits.
  - Applicant is in compliance with all federal state and local laws, including consumer protection provisions and safety obligations.
  - Applicant has appropriately sized the facility or that customer/offtaker subscriptions will be sized to meet customer’s energy needs.
  - The proposed location of facility has been deemed suitable for installation.

Further, specific attestations are applicable as well depending upon the applicable Category. Finally, the IRS set forth procedures for application evaluations, including a rolling application review process following a 30-day initial acceptance window, followed by a lottery. Further attestations are required once a facility that has received an allocation is placed in service, including an attestation that there has been no material change to ownership, permission to operate, and a final, professional engineer as-built design plan (where applicable).

**Important Dates and Registration Requirements:** DOE will begin accepting applications across all four categories, listed above, in early fall 2023, The date and time for the application portal to open for registration and application submission and

additional program resources will be announced in September 2023. Each individual completing an application on behalf of an organization will need a [Login.gov](https://www.login.gov) account. Applications submitted within the first 30 days will be treated as submitted on the same date and time, and on a rolling basis thereafter. DOE may accept applications for the 2023 program through early 2024.

## II. New Section 45X Advanced Manufacturing Production Credit

The IRA created a new tax credit, under Code Section 45X, for “Advanced Manufacturing Production.” Under prior law, no tax credit existed for renewable components produced in the United States. Code Section 45X provides a PTC for eligible components produced in the United States and sold to unrelated third parties. Eligible components include solar polysilicon, wafers, cells, modules, backsheets, longitudinal purlins, and structural fasteners; wind blades, nacelles, towers, and offshore foundations; inverters; battery electrode active materials, cells, and modules; and critical minerals. Minerals that can be mined for the credit include Aluminum, Antimony, Barite, Beryllium, Cerium, Cesium, Chromium, Cobalt, Dysprosium, Europium, Fluorspar, Gadolinium, Germanium, Graphite, Indium, Lithium, Manganese, Neodymium, Nickel, Niobium, Tellurium, Tin, Tungsten, Vanadium, Yttrium, and a catchall category. All of these minerals are subject to certain refining requirements.

The credit amount varies based on physical size and per watt capacity of components (e.g., for a thin film photovoltaic cell, the credit amount is 4 cents multiplied by the DC watt capacity of the cell; for wind blades, 2 cents per watt rated capacity of the turbine; and for solar grade polysilicon, \$3 per kilogram). A taxpayer cannot claim both the 45X credit and the Code Section 48C credit for advanced energy property (discussed below) for the same property.

The 45X credit is effective for components that are both produced and sold after December 31, 2022, and it is fully effective through December 31, 2029. Beginning in 2030, the credit phases down 25% each year, with a complete phase-out at the end of 2032. The production and sale of critical mineral components are not subject to the phase-out.

The 45X credit is fully transferable for taxpaying entities. Direct pay is fully available for tax-exempt entities, and for 5 years for taxpaying entities beginning in the year in which they make a direct pay election, provided such years-end prior to January 1, 2033. Such a taxpaying entity may revoke this election, but the revocation will be irrevocable.

## III. Expanded Section 48C Advanced Energy Property Credit

The IRA extended and modified the advanced energy project credit under Code Section 48C. The credit is effective for property placed in service after December 31, 2022. The base credit amount is 6% of qualifying project costs. The credit increases to 30% if the prevailing wage and apprenticeship requirements are satisfied. The IRA provides \$10 billion of funding for Code Section 48C projects. As expanded, Code Section 48C applies to projects that establish, expand, or re-equip facilities for producing, manufacturing, or recycling advanced grid, energy storage, and fuel cell equipment, equipment used for production of low-carbon fuels, chemicals, and related products, renewable energy and energy efficiency improvements, equipment used for the capture, removal, use, or storage of CO<sub>2</sub>, and advanced light, medium, and heavy-duty vehicles, and related components.

The 48C credit is fully transferable for taxpaying entities. Direct pay is only available for tax-exempt entities.

#### IV. Grants and Loans under the IRA

- A. Additional Funding for Electric Loans for Renewable Energy (Section 22001):** Provides \$1 billion to USDA for loans to be made pursuant to the Rural Electrification Act (7 U.S.C. 940g). Currently, loans provided under this program are made for the generation of electricity from “renewable energy sources” for resale to rural and nonrural residents. Renewable energy sources under the existing program include solar, wind, hydropower, biomass, or geothermal sources, and this Section also adds electricity storage projects that support such renewable energy sources to the list of projects eligible to receive funds under this Section. Loans provided with this funding may only be forgiven up to 50%, except if such requirement is waived by the Secretary of Agriculture. For-profit entities are eligible to apply.
- B. Greenhouse Gas Reduction Fund (Section 60103):** \$27 billion to better leverage private sector investment and community lenders to invest in “zero-emission technologies” which could include storage, wind, solar, electric vehicle, and energy efficiency projects at the community level. This would be the first launch of a U.S. fund to support state green banks at \$7 billion, with the \$20 billion remainder set aside for federal investments.
- C. USDA Assistance for Rural Electric Cooperatives (Section 22004):** Provides \$9.7 billion for loans and financial assistance to rural electric cooperatives to purchase renewable energy systems, zero-emissions systems, and carbon capture and storage systems, to deploy such systems or to make energy efficiency improvements to electricity generation and transmission systems. The federal cost share is capped at 25% of the total project cost and no eligible entity may receive an amount equal to more than 10% of the total amount provided under this Section.
- D. Improving Energy Efficiency or Water Efficiency or Climate Resilience of Affordable Housing (Section 30002)**
- (1)** \$837,500,000 to the Department of Housing and Urban Development for direct loans to fund projects that improve energy or water efficiency, indoor air quality or sustainability, implement the use of low-emission technologies, materials, or processes, including zero-emission electricity generation, energy storage, or building electrification, or address climate resilience, of an eligible property.
  - (2)** \$60,000,000 for expenses of contracts administered by the Secretary, including to carry out property climate risk, energy, or water assessments, due diligence, and underwriting functions for such grant and direct loan program.
  - (3)** \$42,500,000 for energy and water benchmarking of properties eligible to receive grants or loans.