



## WHITE PAPER

August 2022

### The Inflation Reduction Act: Impact on Renewable Energy

The Inflation Reduction Act (the “Act”), signed into law by President Biden on August 16, 2022, will significantly impact clean energy. This *White Paper* contains a summary of the provisions most relevant to the renewable energy industry.

The Act offers robust energy tax incentives designed to enhance energy security through the Internal Revenue Code (the “IRC”). The Act directs approximately \$369 billion toward energy and climate spending, including wind, solar, clean energy storage, and other clean energy manufacturing projects. The Act extends and expands existing tax credits for wind and solar energy that have either lapsed or were set to expire, and offers tax credits and accelerated depreciation to technologies previously ineligible for incentives, such as energy storage and clean hydrogen. To be eligible for the headline credits, however, projects must generally comply with prevailing wage and apprenticeship requirements. Bonus credits may be available for projects that utilize U.S. domestic suppliers or are located in certain low-income or other specified communities. Additionally, it may now be significantly easier to monetize renewable energy credits, because the Act permits a “direct pay” election for tax-exempt entities, and also allows taxpayers to sell the credits to unrelated parties for cash.

The below chart summarizes the key renewable energy incentives available to taxpayers under the Act.

---

## EXTENSION AND MODIFICATION OF EXISTING PRODUCTION TAX CREDIT

(IRC § 45)

(ACT § 13101)

- 
- **Effective Date** Generally applies to facilities placed in service after December 31, 2021.
- The provisions related to domestic content, energy communities, and marine and hydrokinetic facilities apply to facilities placed into service after December 31, 2022.
- 
- **Current Law** Current law allows a production tax credit (i.e., a credit per kilowatt hour (“kWh”)) for electricity produced from renewable resources at certain facilities, to be claimed over a 10-year period from when the facility is placed in service. The credit is available for electricity produced from wind facilities as well as closed-loop biomass, open-loop biomass, geothermal, landfill gas, trash, qualified hydropower, and marine and hydrokinetic energy facilities, but only if the construction of such facilities began before January 1, 2022. The ability to claim production tax credits for solar facilities has lapsed.
- Under current law, the amount of the credit is 1.5 cents per kWh (subject to an inflation adjustment) of electricity produced from wind, solar, closed-loop biomass, and geothermal energy, subject to certain phase-outs applicable to each type of facility. Credits for electricity produced from qualified hydropower, marine and hydrokinetic energy, and certain other facilities are generally reduced by 50%.
- For certain types of facilities, taxpayers can generally elect to claim an investment tax credit (as described below) rather than a production tax credit.
- 
- **Change** The Act extends the deadline for starting construction to January 1, 2025, for all technology types. It also allows solar facilities to qualify for the production tax credit and eliminates the phaseouts for wind facilities placed in service on or after January 1, 2022.
- The Act makes qualified hydropower and marine and hydrokinetic energy facilities eligible for the full production tax credit (rather than the 50% credit).
- The Act maintains the statutory credit amount of 1.5 cents per kWh (subject to an inflation adjustment), but taxpayers must comply with certain prevailing wage and apprenticeship requirements (as described below) to earn the full amount of the credit. Compliance with these requirements is not necessary for small facilities (i.e., facilities with a maximum output of less than 1 megawatt) or for facilities where construction starts before the publication of relevant guidance (with a 60-day grace period).
- The Act provides for a 10% credit bonus for facilities that meet certain domestic content requirements. Generally, these requirements are met if the taxpayer certifies that certain steel, iron, or manufactured components were produced in the United States.
- The Act provides for an additional 10% bonus for facilities located in “energy communities,” which includes brownfield sites; certain locations with minimum tax revenues from the extraction, processing, transport, or storage of coal, oil, or natural gas; and certain census tracts that were where, or were adjacent to a tract where, certain coal production or generation occurred.
- Limitations apply where the taxpayer uses tax-exempt bonds to finance the facilities.

**Prevailing Wage and Apprenticeship Requirements:** All laborers and mechanics employed by the taxpayer (or any contractor or subcontractor) in the construction or repair (for a certain period of time) of a facility must be paid prevailing wages for the location in which the facility is located, as determined by the Secretary of Labor. Additionally, the taxpayer must ensure that at least 15% of labor hours be performed by qualifying apprentices (or 10% or 12.5% for facilities the construction of which begins in 2022 or 2023, respectively). Further, the taxpayer must comply with the applicable apprentice-to-journeyworker ratios set by the Department of Labor. Failure to meet these requirements reduces the credit by a factor of 5.

---

■ **Insights**

For the first time in years, solar facilities are eligible for the production tax credit. Together with other changes in the Act, this should bring renewed attention on solar projects.

The Act all but mandates that taxpayers comply with the prevailing wage and apprenticeship requirements. Taxpayers may wish to start construction as soon as possible, because those requirements do not apply to facilities that begin construction before 60 days after the publication of guidance relating to those requirements.

The Act creates significant bonuses for projects that use domestic suppliers and/or that are located in energy communities. Currently, U.S. manufacturing may not be in a position to meet the domestic content requirements.

**Revenue Estimate:** (\$51 billion)

---

**EXTENSION AND MODIFICATION OF EXISTING INVESTMENT TAX CREDIT**

(IRC § 48)

(ACT § 13102)

---

■ **Effective Date**

Generally applies to property placed into service after December 31, 2021.

The additions to the definition of “energy property” and the changes relating to domestic content and energy communities apply to property placed in service after December 31, 2022.

---

■ **Current Law**

Current law allows for an investment tax credit—i.e., a credit for a certain percentage of dollars invested in certain types of qualifying energy property.

Under current law, there is an investment tax credit equal to 26% for qualifying solar equipment, fuel cell power plants, fiber-optic solar equipment, small wind energy facilities, and waste energy recovery facilities; 30% for offshore wind facilities; and 10% for microturbines, combined heat and power systems, and geothermal heat pumps, each subject to significant phaseouts.

---

■ **Change**

The Act allows a 30% investment tax credit for solar equipment if construction starts before January 1, 2025 (reverting to 10% if construction starts thereafter).

The Act allows a 30% investment tax credit for fiber-optic solar equipment, fuel cell power plants, waste energy recovery facilities, combined heat and power facilities, and small wind energy facilities, and a 10% investment tax credit for microturbine property if, in each case, construction starts before January 1, 2025.

The Act allows a 30% investment tax credit for geothermal heat pumps, if construction starts before January 1, 2035 (with phasedowns to 26% and 22% in 2033 and 2034, respectively).

The Act expands the 30% investment tax credit to apply to qualifying energy storage technology, biogas property, electrochromic glass, microgrid controllers, electromechanical fuel cells, and linear generator assemblies, if construction starts before January 1, 2025.

The Act also expands the credit to include amounts paid or incurred for qualifying interconnection property in connection with the installation of energy property.

The Act includes provisions similar to those described above relating to prevailing wage and apprenticeship requirements, bonus amounts for using domestic content, bonus amounts for locating facilities in “energy communities,” and limitations on projects financed with tax-exempt bonds.

---

■ **Insights**

The Act extends the investment tax credit to several new technologies and increases the credit amount for technologies already covered under current law, including combined heat and power systems and geothermal heat pumps.

Like in the case of the production tax credit, the Act all but mandates that taxpayers comply with the prevailing wage and apprenticeship requirements.

**Revenue Estimate:** (\$14 billion)

---

## **INCREASE IN ENERGY CREDIT FOR SOLAR AND WIND FACILITIES PLACED IN SERVICE IN CONNECTION WITH LOW-INCOME COMMUNITIES**

(IRC § 48)

(ACT § 13103)

---

■ **Effective Date** Effective beginning January 1, 2023.

---

■ **Current Law** There are currently no special rules for solar or wind facilities placed in service in connection with low-income communities.

---

■ **Change** Facilities that receive an allocation of “environmental justice solar and wind capacity limitation” may receive a bonus investment tax credit of 10% for solar or wind projects located in low-income communities or on Native American land, or an additional 20% where the facility is part of a low-income residential building project or a qualified low-income economic benefit project.

The Secretary of the Treasury must allocate up to 1.8 gigawatts of “environmental justice solar and wind capacity limitation” to facilities each year.

To qualify, a facility must be placed in service within four years after the Secretary of the Treasury makes an allocation to the facility.

---

■ **Insights** The Secretary must establish the allocation program within 180 days of the Act’s date of enactment.

No separate revenue estimate.

---

## NEW ADVANCED MANUFACTURING PRODUCTION CREDIT FOR WIND AND SOLAR COMPONENTS

(IRC § 45X)

(ACT § 13502)

---

■ **Effective Date** Effective for components produced and sold after December 31, 2022, and before January 1, 2033.

---

■ **Current Law** There is no current credit for the production and sale of qualifying solar and wind components.

---

■ **Change** This provision allows a credit for eligible listed solar and wind energy components, inverters, qualifying battery components, and critical minerals produced and sold by the taxpayer in the United States. The credit will apply to the year of sale.

The amount of the credit depends on the type of eligible component. For example, for any applicable critical minerals, the credit will equal 10% of the costs the taxpayer incurred with respect to production. For battery cells, the credit will be \$35 times the battery cell capacity expressed in kilowatt hours (except that such capacity shall not exceed 100 times the cell's maximum discharge amount).

The credit will generally phase out beginning in 2030, but no phaseout applies to the production of critical minerals.

The credit will not be available for components from a facility for which the advanced energy production credit is or ever has been claimed.

---

■ **Insights** Note that many of the other energy tax credits include domestic content requirements. Accordingly, a credit for manufacturing of components in the United States is a welcome addition.

**Revenue Estimate:** (\$30.6 billion)

---

## NEW CLEAN ELECTRICITY PRODUCTION CREDIT APPLICABLE TO ALL TECHNOLOGIES

(IRC § 45Y)

(ACT § 13701)

---

■ **Effective Date** Effective as to property placed in service after December 31, 2024.

---

■ **Current Law** There is no current clean electricity production tax credit specifically, although certain types of renewable energy are eligible for a production tax credit under section 45.

---

■ **Change** This new tax credit will be for the sale of domestically produced electricity with a greenhouse gas emissions rate not greater than zero. The amount of the credit will be 1.5 cents per kWh of electricity (failure to meet prevailing wage and apprenticeship requirements, similar to those described above, will result in the credit amount being reduced by a factor of 5), subject to inflation adjustment. The credit amount will be increased by 10% for electricity produced in certain communities or that utilize certain domestically produced products.

The credit will begin to phase out when emissions reduction target levels are achieved or after 2032 (the later of the two).

Taxpayers will not be able to claim the clean electricity production credit if the facility or electricity produced from the facility claimed certain other energy-related investment or production tax credits.

- 
- **Insights** Some facilities may be eligible for both the clean electricity production credit and the existing section 45 production tax credit, in which case a taxpayer will need to choose which is more favorable. This may replace the existing production tax credit when it expires or phases out.

**Revenue Estimate:** (\$11.2 billion)

---

## NEW CLEAN ELECTRICITY INVESTMENT CREDIT APPLICABLE TO ALL TECHNOLOGIES

(IRC § 48E)

(ACT § 13702)

- 
- **Effective Date** Effective as to property placed in service after December 31, 2024.

- 
- **Current Law** There is no current clean electricity investment tax credit specifically, though certain types of renewable energy are eligible for an investment tax credit under section 48.

- 
- **Change** This new tax credit will be for investments in qualifying zero-emissions electricity generation facilities or energy storage technology. The base credit will be 30% subject to prevailing wage and apprenticeship requirements similar to those described above being met (failure to do so will result in the credit being reduced by a factor of 5). The credit amount will be increased by 10% for electricity produced in certain communities or that utilize certain domestically produced products. The ability to claim the credit as direct pay will be subject to meeting domestic content requirements.

The credit will have the same phase-out schedule as the clean energy production tax credit described above.

Taxpayers will not be able to claim the clean electricity investment credit if the facility or electricity produced from the facility claimed certain other energy-related investment or production tax credits (including the clean energy production credit).

- 
- **Insights** This credit will be available for more technologies than the existing investment tax credit, including energy storage technologies.

Some facilities may be eligible for both the clean electricity investment credit and the existing section 48 investment tax credit, in which case a taxpayer will need to choose which is more favorable. This may replace the existing investment tax credit when it expires or phases out.

**Revenue Estimate:** (\$50.9 billion)

---

## ACCELERATED DEPRECIATION FOR CLEAN ENERGY PROPERTY

(IRC § 168)

(ACT § 13703)

- 
- |                         |  |
|-------------------------|--|
| ■ <b>Effective Date</b> | Effective as to facilities and property placed in service after December 31, 2024.   |
| ■ <b>Current Law</b>    | There is accelerated (five-year) depreciation for certain energy investment credit property, including solar, wind, geothermal, qualified fuel cell, microturbine, and waste energy recovery property.   |
| ■ <b>Change</b>         | The Act provides a five-year depreciation recovery schedule for all qualified property under the clean electricity production credit as well as all qualified property or energy storage technology in which a qualified investment has been made under the clean electricity investment credit rules above. |
| ■ <b>Insights</b>       | <b>Revenue Estimate:</b> (\$624 million)   |
- 

## DIRECT PAY ELECTION AND ABILITY TO TRANSFER TAX CREDITS

(IRC §§ 6417, 6418)

(ACT § 13801)

- 
- |                         |  |
|-------------------------|--|
| ■ <b>Effective Date</b> | Effective for tax years beginning after December 31, 2022.   |
| ■ <b>Current Law</b>    | There is no current broadly applicable direct-pay election or provision for the transfer of credits to unrelated parties for cash.   |
| ■ <b>Change</b>         | <p>Certain taxpayers (e.g., tax-exempt entities) may elect for the following credits to be refundable, known as “direct pay”: (i) the alternative fuel vehicle refueling property credit; (ii) the renewable electricity production credit; (iii) the carbon oxide sequestration credit; (iv) the zero-emission nuclear power production credit; (v) the clean hydrogen production credit; (vi) in the case of certain tax-exempt entities, the qualified commercial vehicles credit; (vii) the advanced manufacturing production credit; (viii) the clean electricity production credit; (ix) the clean fuel production credit; (x) the investment tax credit under section 48; (xi) the qualifying advanced energy project credit; and (xii) the clean electricity investment credit.</p> <p>Other taxpayers will be able to make the election for: (i) the clean hydrogen production credit; (ii) the carbon oxide sequestration credit; and (iii) the advanced manufacturing production credit, subject to certain restrictions and limitations.</p> <p>Amounts received as direct pay under this provision will not count toward the \$1 billion book income threshold for determining whether the new corporate minimum tax applies.</p> <p>Non-exempt taxpayers may elect to transfer all or a portion of the credits eligible for direct pay (other than the qualified commercial vehicles credit) to unrelated third parties for cash</p> |
-

---

■ **Insights**

The direct pay provisions will have the effect of making refundable many tax credits that are currently nonrefundable. This will also circumvent other restrictions on the general business credit.

Direct pay and the ability to sell tax credits for cash offers significant additional flexibility in the available financing options for projects that take advantage of the relevant credits. These will also likely decrease the need to seek tax equity investors.

No separate revenue estimate.

## LAWYER CONTACTS

**Edward T. Kennedy**

New York

+1.212.326.3775

[etkennedy@jonesday.com](mailto:etkennedy@jonesday.com)

**Jeff A. Schlegel**

Houston

+1.832.239.3728

[jaschlegel@jonesday.com](mailto:jaschlegel@jonesday.com)

**Dickson C. Chin**

New York

+1.212.326.7893

[dchin@jonesday.com](mailto:dchin@jonesday.com)

**Sean E. Jackowitz**

Boston

+1.617.449.6936

[sjackowitz@jonesday.com](mailto:sjackowitz@jonesday.com)

**Kelly Rubin**

Dallas

+1.214.969.3768

[krubin@jonesday.com](mailto:krubin@jonesday.com)

**Alexandra L. Wilde**

Houston

+1.832.239.3853

[awilde@jonesday.com](mailto:awilde@jonesday.com)

*Nisha Jain, Paul W. Johnson III, and Thomas M. Zaino contributed to this White Paper.*

Jones Day publications should not be construed as legal advice on any specific facts or circumstances. The contents are intended for general information purposes only and may not be quoted or referred to in any other publication or proceeding without the prior written consent of the Firm, to be given or withheld at our discretion. To request reprint permission for any of our publications, please use our "Contact Us" form, which can be found on our website at [www.jonesday.com](http://www.jonesday.com). The mailing of this publication is not intended to create, and receipt of it does not constitute, an attorney-client relationship. The views set forth herein are the personal views of the authors and do not necessarily reflect those of the Firm.