The Commonwealth Fund Inflation Reduction Act (IRA) Activation

Sustainability Tax Incentives

The following content was developed based on guidance available as of January 2024

A Note from the Authors

This document is part of a series of related resources for health care leadership released by the Commonwealth Fund. This document is an introductory guide for organizations to understand the strategies for decarbonizing the health care system using tax incentives in the Inflation Reduction Act of 2022 to **strengthen organizational resiliency and reduce financial risks all while cutting down on greenhouse gas emissions.**

Decarbonizing the Health Care System

IRA Activation – Sustainability Tax Incentives

FOCUS OF THIS DOCUMENT

The creation of this action guide was a collaborative effort from Deloitte and the Commonwealth Fund. For more information on the authors, please refer to the Appendix.

How to Use this Document

If you have 10 minutes

Skim sections 1, 2, and 3 to understand how the health care sector can decarbonize and which tax incentives can help support that goal

If you have 30 minutes

Review all sections, focusing on areas of opportunities in section 3 and how specific tax incentives can inform decarbonization strategy

If you have 60 minutes

Read the end-to-end action guide to understand the details and logistics on using tax incentives to decarbonize and key players and their responsibilities

Key Terms*

- **Direct Emissions**: Emissions from owned or controlled sources. This includes emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc.
- **Indirect Emissions**: Emissions from the generation of purchased energy consumed by the company. This includes emissions from electricity, steam, heating, and cooling consumed by the company; all other indirect emissions that occur in a company's value chain. This includes both upstream and downstream emissions, such as emissions from transport-related activities in vehicles not owned or controlled by the company, electricity-related activities, outsourced activities, waste disposal, etc.
- **Direct Pay Provisions**: A method of payment in which tax credits are refunded for cash, allowing tax-exempt entities to benefit from tax incentives that may otherwise not be applicable

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Executive Summary

The health care sector has played a significant role in the ongoing climate crisis, contributing **~8.5%** of total U.S.-based greenhouse gases (GHGs)[(1)], jeopardizing progress toward health equity. The negative impacts of emissions-driven climate change are happening now.[(2)]

This guide will draw references from the Decarbonization Action Guide published by BDHEA, the Commonwealth Fund, and Deloitte. Find the guide here for more information.

Areas of Opportunities for Decarbonizing the Health Care Sector

This document will explore the following ways for the health care sector to decarbonize, previously explored in the Decarbonization Action Guide. This guide will focus on three short-term areas of opportunity incentivized by the Inflation Reduction Act, further explained to the right, to offset some of the added cost.

Short-term areas of opportunity

- ENERGY EFFICIENCY
- RENEWABLE ENERGY
- TRANSPORTATION EFFICIENCY

- CLINICAL INNOVATION
- LOW-CARBON MEDICINES[(3)]
- SUPPLY CHAIN OPTIMIZATION[(3)]

The *Inflation Reduction Act of 2022*[i] provides incentives to accelerate decarbonization across the economy, including the health care system, and help offset the cost of sustainable investments.

With **$369 billion** in climate and clean energy investments, the IRA is among the most significant climate legislation ever passed by Congress.[(4)]

While previous tax incentives left out tax-exempt entities, the IRA offers a cash payment equal to the full value of certain tax credits in the form of **Direct Pay**.[(5)]

This document will outline **5 key provisions in the IRA** most relevant to the decarbonization of the health care sector.

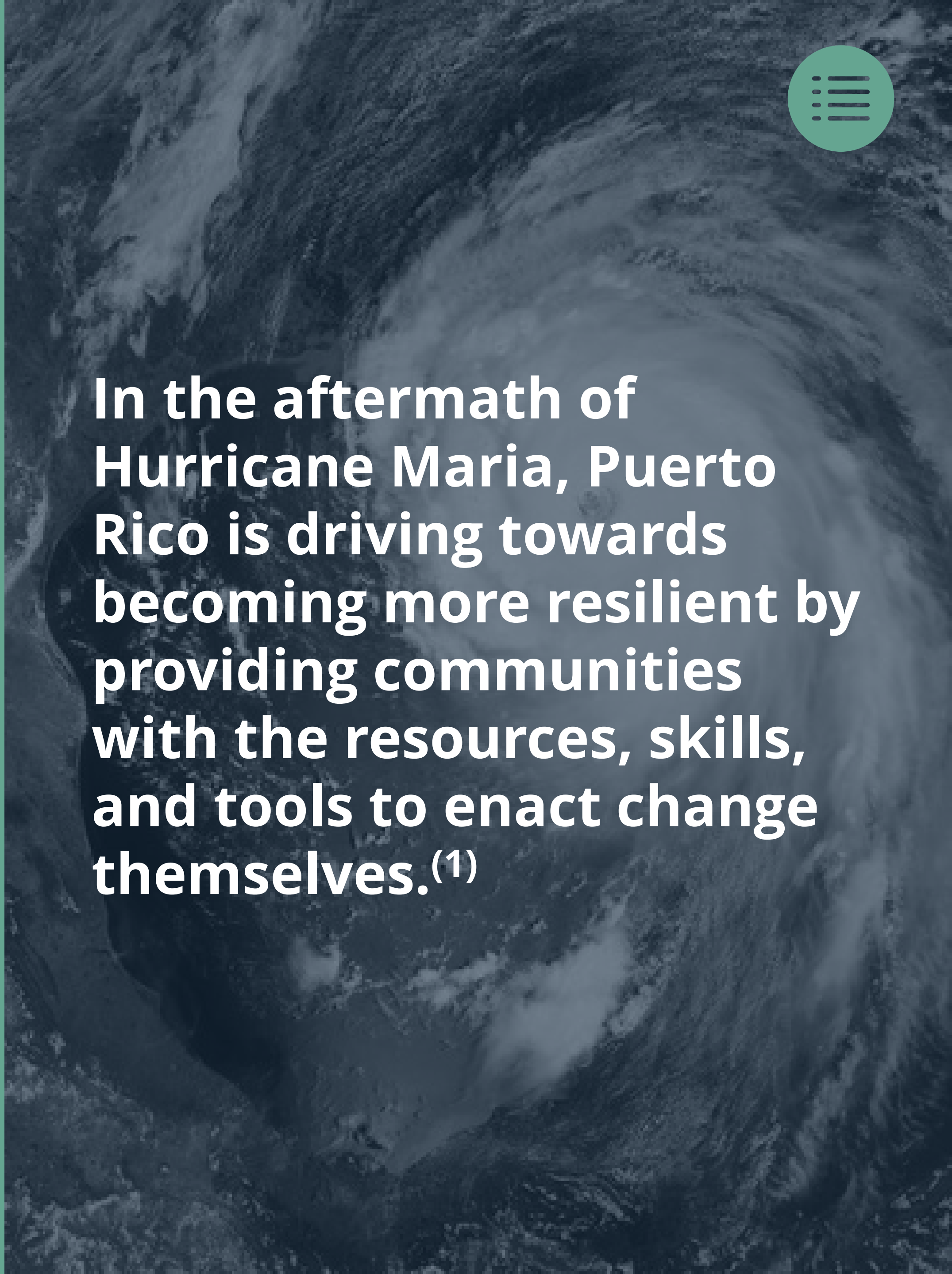
This document acts as a beginner's guide for understanding the incentives available under the IRA, giving an overview of the incentives, requirements, eligibility, and other key considerations.

(1)) Decarbonizing the U.S. Health Sector — A Call to Action; (2) Pollution and health: a progress update; (3) In some cases, health care organizations may be able to apply for IRA benefits across certain aspects of their supply and delivery chains; (4) Treasury Announces Guidance on Inflation Reduction Act's Strong Labor Protections; (5) Elective Pay and Transferability

02

The Case for Decarbonization of Health Systems

As the health care sector continues to contribute to GHG emissions, its role in providing care and community support is even more important to address the health inequities of climate change, build organizational resilience, and reduce financial risks.



In the aftermath of Hurricane Maria, Puerto Rico is driving towards becoming more resilient by providing communities with the resources, skills, and tools to enact change themselves.[1]

Sources: (1) Building Resilience in Puerto Rico

The U.S. health care sector is a material contributor to GHG emissions

The U.S. health care sector contributes ~8.5% of total U.S.-based GHG emissions[1] and approximately 25% of global health care sector emissions,[2] driven by a few underlying factors within an interconnected ecosystem

High Standard Of Care

Many health care facilities (e.g., hospitals, manufacturing plants) **operate continuously,** and all should comply with the highest standards of **hygiene, safety, and quality**

Redundant processes play an important role in safeguarding against provider error, but can also generate substantial system waste

Source: Health information exchanges reduce redundant medical procedures

Energy Demands

Lifesaving medical equipment, manufacturing processes, heating and cooling, and **cold storage** drive high rates of energy use and are often powered by fossil fuels

Hospitals tend to have a high energy use intensity, nearly three times the average commercial building energy use

Source: Integrating Health and Energy Efficiency in Healthcare Facilities

Waste Generation

Health care and life sciences operations tend to generate substantial amount of **wastewater** and **solid waste** that generally require emissions-heavy processing

U.S. hospitals generate 3.4B lb. of solid waste annually; e.g., a single hysterectomy, the second most common major surgery for women in the U.S., can produce 20 lb. of waste

Source: Environmental Impacts of Surgical Procedures

Reliance on Transportation

Patient and staff **commuting**, **patient transfers**, and the **transportation of goods and supplies** all can contribute to the sector's carbon footprint

Health care organizations might face some challenges in calculating and controlling transportation emissions due to their multiple and heterogenous sources

Source: Reducing Healthcare Carbon Emissions

Medical Overuse

Overdiagnosis and overtreatment in the health care space is not only a health threat with serious ethical implications but also a contributor to the sector's carbon footprint

Hospital care and clinical service sectors contribute the most carbon dioxide within the U.S. health care industry

Source: Carbon Emissions from Overuse of U.S. Health Care: Medical and Ethical Problems

Sources: (1) Decarbonizing the U.S. Health Sector — A Call to Action; (2) Health Care Pollution And Public Health Damage In The United States: An Update. This slide was previously published in the Decarbonization Action Guide.

Provider and health systems GHG emissions are categorized across three key scopes

Organizational Emissions

Scope 1 ~21%

Scope 2 ~15%

Value Chain Emissions

Scope 3 ~64%

Example Provider and Health Systems Emissions Sources[1]

Scope 1:
Direct emissions from owned or controlled sources. This includes emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc. [2]

- On-Site Fuel Combustion
- Fleet Vehicles
- Point of Use Medical Gases

Scope 2:
Indirect emissions from the generation of purchased energy consumed by the company. This includes emissions from electricity, steam, heating, and cooling consumed by the company [3]

- Purchased Electricity

Scope 3:
All other indirect emissions that occur in a company's value chain. This includes both upstream and downstream emissions not covered in Scope 2 [4]

- Supplies and Services
- Waste
- Investment Portfolio
- Agriculture

Source: (1) Health Care's Climate Footprint; (2) & (3) Scope 1 and Scope 2 Inventory Guidance; (4) Scope 3 Inventory Guidance; Note: Emissions sources for health ecosystem informed by EPA and WHO. For a full list of Scope 1, 2, and 3 emissions categories, refer to the GHG Protocol.

Health care organizations can reduce their emissions footprint through these common decarbonization strategies

ENERGY EFFICIENCY

Design infrastructure and facility footprint to optimize for resource efficiency and introduce green, energy-efficient tech into operations

e.g., green building technology, all-electric building construction, HVAC system and lighting modifications

RENEWABLE ENERGY

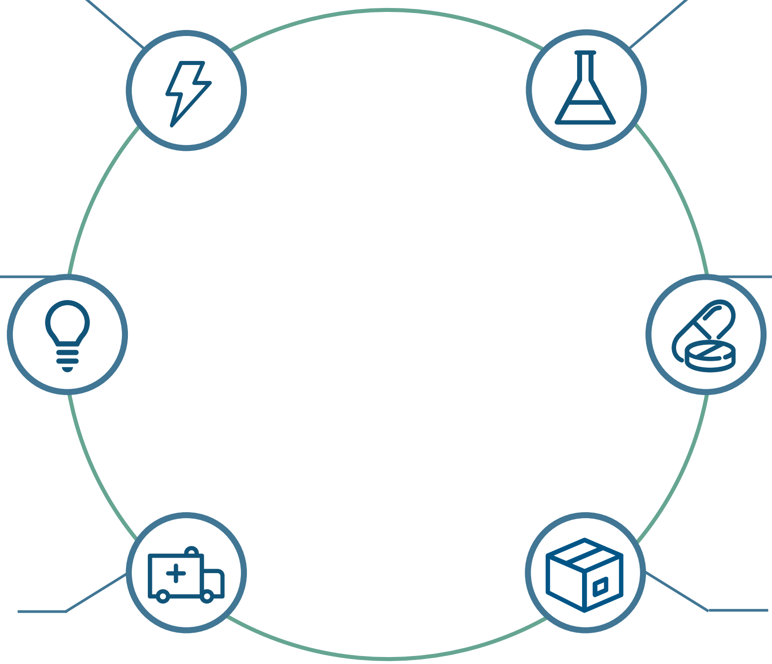
Power operations through renewable energy sources through on-site energy generation

e.g., on-site electric microgrids or solar panels

TRANSPORTATION EFFICIENCY

Limit transportation-related emissions via zero-emission fleets, active travel and public transport, and hybrid health care strategies

e.g., EV charging stations, zero-emission shuttle fleets, efficient mobile health centers



CLINICAL INNOVATION

Improve overall system effectiveness, eliminate unnecessary care, support preventative care, and introduce new processes that limit the volume and toxicity of waste

e.g., reduced single-use items, on-site waste treatment, prevention efforts, expansion of telehealth and virtual services

LOW-CARBON MEDICINES(1)

Substitute high-emission products with more climate friendly alternatives, and incentivize the production of climate-smart medication

e.g., low fresh gas flows, regional anesthesia techniques, alternative medicine delivery mechanisms, green R&D and chemistry

SUPPLY CHAIN OPTIMIZATION(1)

Reduce reliance on disposable and single-use supplies and incorporate local, sustainable, and circular principles in procurement

e.g., supplier sustainability scorecards, procurement from community-based agriculture, food waste reduction strategies

Incentivized by the IRA

Source: (1) In some cases, health care organizations may be able to apply for IRA benefits across certain aspects of their supply and delivery chains. This slide was previously published in the Decarbonization Action Guide.

To propel decarbonization efforts, there are different opportunities, including the IRA, to incentivize and advance priority topics

Inflation Reduction Act (IRA)[1]

The IRA is U.S. federal legislation, signed into law in August 2022, that invests $**369B** [2] into sustainability to reduce pollution, expand clean energy production, and address health inequities with bonus credits for special census tracts, among other investments.

The IRA creates **opportunities for health care organizations to work towards a zero emissions future.** While previous incentives were inaccessible to tax-exempt entities, the **IRA opens the door for nonprofits through direct pay provisions.**

Focus of this document

New Markets Tax Credit (NMTC) Program[3]

The NMTC Program incentivizes community development and economic growth through the use of tax credits that **attract private investment to distressed communities**.

Although not specific to the health care sector, this program can **incentivize health systems to address health inequities** by building up the resiliency of under-resourced communities that are already **disproportionately impacted by climate-related risks.**

CHIPS and Science Act[1]

The **Creating Helpful Incentives to Produce Semiconductors** (CHIPS) and Science Act is a federal statute enacted in August 2022 that appropriates $53B to spur the US semiconductor industry.

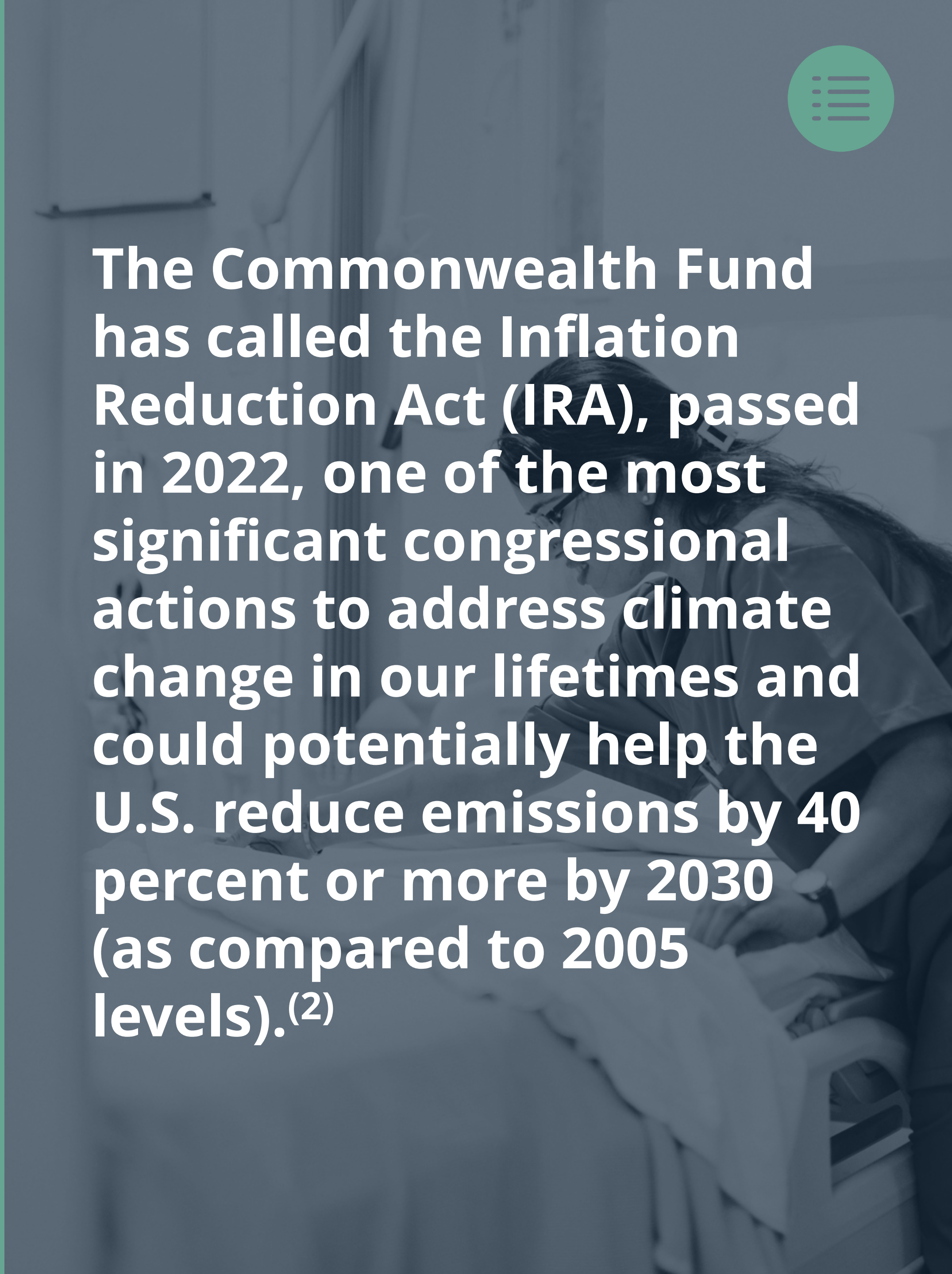
The legislation incentivizes semiconductor manufacturing and research, which can improve the supply chain through **green technologies like smart upgrades** and **renewable energy systems** with relatively less applicability to health systems.

Source: (1) Congress's Climate Triple Whammy: Innovation, Investment, and Industrial Policy – RMI; (2) Treasury Announces Guidance on Inflation Reduction Act's Strong Labor Protections; (3) New Markets Tax Credit Program

03

Areas of Opportunity

While there are many incentives in the market to encourage a shift towards decarbonization[1], this document will focus on the incentives provided in the Inflation Reduction Act (IRA).



The Commonwealth Fund has called the Inflation Reduction Act (IRA), passed in 2022, one of the most significant congressional actions to address climate change in our lifetimes and could potentially help the U.S. reduce emissions by 40 percent or more by 2030 (as compared to 2005 levels).[2]

Sources: (1) Congress's Climate Triple Whammy: Innovation, Investment, and Industrial Policy – RMI; (2) How the Inflation Reduction Act Can Help the Health Care Sector Reduce Greenhouse Gas Emissions

Organizations advancing their decarbonization ambition through efficiency and renewables can benefit from IRA incentives and achieve greater resilience, savings, and community value

	IRA INCENTIVES	VALUE DRIVERS
ENERGY EFFICIENCY Design infrastructure and facility footprint to optimize for resource efficiency and introduce green, energy-efficient tech into operations *e.g., green building technology, all-electric building construction, HVAC system and lighting modifications*	• Energy Efficient Commercial Buildings Deduction[ii]	• Resiliency • Cost Savings
RENEWABLE ENERGY Power operations through renewable energy sources through on-site energy generation *e.g., on-site electric microgrids or solar panels*	• Investment Tax Credit (ITC)[iii] • Renewable Energy Production Tax Credit (PTC)[iv]	• Resiliency • Cost Savings • Community Impact
TRANSPORTATION EFFICIENCY Limit transportation-related emissions via zero-emission fleets, active travel and public transport, and hybrid health care strategies *e.g., EV charging stations, zero-emission shuttle fleets, efficient mobile health centers*	• Qualified Commercial Clean Vehicle Credit[v] • Alternative Fuel Vehicle Refueling Property Credit[vi]	• Cost Savings • Community Impact

The IRA incentives can be organized in the order of relative complexity based on the level of effort required, helping applicants identify ways to get started

Level of Complexity

Simple — *Complex*

45W: Qualified Commercial Clean Vehicle Credit

Provides a tax credit for up to $40,000[vii] per vehicle for new purchases of commercial clean vehicles, depending on vehicle weight and hybrid vs. battery electric vehicles (BEV)

30C: Alternative Fuel Vehicle Refueling Property Credit

Provides a tax credit for 6% or 30%[viii] of the cost (credit capped at $100,000 per property)[ix] of refueling and charging stations in eligible locations for alternative fuels such as electricity, hydrogen, and biodiesel

179D: Energy Efficient Commercial Buildings Deduction

Provides tax deduction for energy efficiency improvements to qualifying commercial buildings;[x] must be part of (i) interior lighting systems, (ii) heating, cooling, ventilation, and/or hot water property, or (iii) the building envelope[xi]

48/48E: Investment Tax Credit (ITC)

Provides a tax credit ranging from 6%[xii] to 70% of the upfront cost of a "qualifying energy property"[xiii] such as solar and wind electricity generation and standalone battery storage projects

45/45Y: Renewable Energy Production Tax Credit (PTC)

Provides a 10-year tax credit ranging from 0.3 cents to 1.5 cents[xiv] per kwh for electricity generated by renewable energy resources and sold to unrelated party[xv] after facility is placed in service

Note: The criteria for determining the relative level of effort is further expanded in the following slides

Simple — Complex

Transportation Efficiency – Qualified Commercial Clean Vehicle Credit

The §45W Qualified Commercial Clean Vehicle Credit incentivizes fleet decarbonization and can be utilized by the vehicle owners and users, lowering the total cost of ownership

INCENTIVE OVERVIEW

Provides a tax credit for up to $40,000 per vehicle for new purchases of commercial clean vehicles, depending on vehicle weight and hybrid vs. BEV.[xvi]

- **Period of Availability**: Vehicles acquired and placed in service between 1/1/23 and before 1/1/33[xvii]

Nonrefundable and Nontransferable	Direct Pay for Tax-exempt Organizations	No Limit to # of Credits	General Business Credit Terms Apply

KEY CONSIDERATIONS

- Relative to other credits, the clean vehicle credit is easier to claim given it has **less requirements to meet in order to redeem the full credit amount**. See Key Considerations section for more detailed information.
- This credit is extremely beneficial to organizations that own or operate a substantial fleet, which may include shuttles, mobile care units, home health care services, etc.

For more information, see §45W Qualified Commercial Clean Vehicle Credit.

ELIGIBILITY

Organization Types and Usage:[xviii]

- Businesses and tax-exempt entities that acquire and own motor vehicles or mobile machinery for use in the US
- Must be for use in business, not for resale

Vehicle Types:[xix]

- Covers pure battery electric vehicles (BEVs), hybrids (PHEVs), and fuel cell (hydrogen) powered vehicles (FCEV)
- Minimum of 7 and 15 kWh battery capacity for hybrids and BEVs under and over 14,000 lbs, respectively

WHY THIS MATTERS TO HEALTH CARE

Health care organizations that rely on vehicle fleets (e.g., for patient transportation, delivery of medical supplies, or home health care services) can lower the total cost of ownership for such, allowing for greater investment into patient care and other critical operating areas. Additionally, reduced tailpipe emissions within the local communities these organizations serve can improve health factors that rely on air quality.

Case Study – Transportation Efficiency Example

A large hospital system would like to replace its fleet of patient and medical support transport vehicles with a **new fleet of electric vehicles (EV)**. It plans on bringing in a **fully electric mixture of shuttle buses and cars**.

Situation

The hospital system can take advantage of the **§45W Qualified Commercial Clean Vehicle Credit** to receive a credit of the lessor of:
(a) 15% (30% for fully electric vehicles) of the basis of the qualified commercial clean vehicle
or
(a) the incremental cost* of such vehicle

Car (6,000 lbs.)		Shuttle Bus (15,000 lbs.)	
Lessor of: (a) 30% of total cost of EV: $55,000 (b) Incremental cost* relative to a comparable vehicle of $40,000	**Credit**: (a) $16,500 (b) $15,000	**Lessor of**: (a) 30% of total cost of EV: $150,000 (b) Incremental cost* relative to a comparable vehicle of $105,000	**Credit**: (a) $50,000 (b) $45,000
Capped at $7,500 *per vehicle that has a gross vehicle weight of less than 14,000 lbs.*		***Capped at $40,000*** *for vehicles over 14,000 lbs.*	
Final refundable credit after weight limitation: **$7,500**		Final refundable credit after weight limitation: **$40,000**	

*The incremental cost is the excess of the purchase price over the price of a comparable vehicle (i.e., a fully gas or diesel vehicle similar in size and use).

The hospital system is able to receive a $7,500 credit per car and $40,000 per shuttle bus, which reduces the cost of fleet electrification, enabling the organization to decrease their GHG emissions and contribute to cleaner streets for the local community

(1) & (2) See Key Considerations details

Transportation Efficiency – Alternative Fuel Vehicle Refueling Property Credit

The §30C Alternative Fuel Vehicle Refueling Property Credit enables the fleet electrification of vehicles owned and/or operated by health care organizations, transitioning into clean transportation and reducing dependency on fossil fuels

INCENTIVE OVERVIEW

Provides a tax credit for 6% or 30%(1) of the cost (credit capped at $100,000 per item of property) of refueling and charging stations for alternative fuels such as electricity, hydrogen, and biodiesel.[xx]

- **Period of Availability**: Infrastructure placed in service between 1/1/23 and 12/31/32[xxi]

Transferable

Direct Pay for Tax-exempt Organizations

No Limit to # of Credits

General Business Credit Terms Apply

KEY CONSIDERATIONS

- The location and type of refueling station of the refueling property is crucial as it may affect eligibility and the permit application process, which may vary depending on locality. Solar or energy storage properties that fall outside of an eligible census tract could potentially qualify for the ITC.(2)
- See the CDFI Fund Mapping Tool to find information on a specific census tract.

For more information, see §30C Alternative Fuel Vehicle Refueling Property Credit.
(1) 6% base credit multiplied by 5x (to 30%) if PW&A requirements are met.
(2) See Investment Tax Credit (ITC) for more information.

ELIGIBILITY

Organization Types and Usage:

- Businesses and tax-exempt entities[xxii] that install a qualified refueling property placed in service in the eligibility timeframe and location. Station owners who install qualified equipment at multiple sites are allowed to use the credit towards each refueling station in each location.[xxiii]

Geographic Location:[xxiv]

Property must be placed in an eligible census tract, being either:

a) Low-Income Community with certain poverty rate and median income requirements; or

b) Non-urban area as defined by the Census Bureau

WHY THIS MATTERS TO HEALTH CARE

Alternative fuel vehicle refueling properties can help health care organizations cut costs by reducing the amount spent on traditional gasoline or diesel fuels. The shift towards alternative fuels and the accessibility of refueling stations for community members can further lower greenhouse gas emissions, which may result in long-term cost savings and contribute to a cleaner environment for its local community.

Case Study – Transportation Efficiency Example

A community health center would like to install **electric vehicle (EV) charging stations in 10 different locations, 5 stations per location,** for its new EV fleet for supplies delivery and home health care services with a cost of $10,000 per charging station

Situation	Base Credit	Meeting PW&A requirements for installation and maintenance (1)
The health center is able to claim the **§30C Alternative Fuel Vehicle Refueling Property Credit**(2) and is planning to implement the project at 10 centers, each located in a **low-income community**	• 6% of each station = $600 per station • Refundable credit per location: $3,000 Total refundable credit: **$30,000**	• 30% of each station = $3,000 per station • Refundable credit per location: $15,000 Total refundable credit: **$150,000**

Note: The credit is limited to $100,000 per charging station

The community health center can receive a maximum of $15,000 tax credits per location for a total of $150,000 back. This can significantly reduce the financial burden of the center, freeing up resources that could better support other strategic goals

(1) See Key Considerations details
(2) Please also note that the basis of the property for which a credit is allowable shall be reduced by the amount of such credit.

Energy Efficiency

The §179D Energy Efficient Commercial Buildings Deduction can help organizations improve the energy efficiency of existing commercial buildings, such as retrofitted health care facilities, and new construction projects

INCENTIVE OVERVIEW

Provides $0.50–$1.00/sq ft tax ($2.50-$5.00/sq ft if PW&A(1) requirements are met) deduction for energy efficiency improvements to qualifying commercial buildings;[xxv] must be part of (i) interior lighting systems, (ii) HVAC and/or hot water property, or (iii) the building envelope[xxvi]

- **Period of Availability**: Permanent; new rules begin in 2023

Allocable* | No Direct Pay Eligibility | Stackable with other Credits | No Limit to Size of Total Deduction

KEY CONSIDERATIONS

- **Energy Efficiency Requirement:** Minimum 25% reduction in building energy usage when compared to governmental standards for new construction[xxvii] and prior annual energy use intensity for retrofits.[xxviii]
- Because this incentive **is not eligible for Direct Pay**, it is important to discuss with contractors about meeting the requirements of the credit at the onset of the project to negotiate construction costs

ELIGIBILITY

Eligible Organizations:

- Owners (including nonprofit entities) of energy efficient commercial building (or retrofit) property installed in buildings located in the US
- Nonprofit entities can allocate the credit to the contractor/designers (architects, engineers) of energy efficient buildings and receive a reduced price in return[xxix]

Eligible Property:

Interior lighting systems | Heating, cooling, ventilation, and hot water systems | Building envelope

WHY THIS MATTERS TO HEALTH CARE

Health care organizations **spend over $6.5 billion on energy** each year, and that amount is rising to meet patients' needs. Hospitals can allocate more resources to better serve patients by being more energy efficient. Every $1 a non-profit health care organization saves on energy is equivalent to generating $20 in new revenues for hospitals or $10 for medical offices. (2)

*Deductions are allocated to the designers of energy efficient buildings owned by a tax-exempt entity.
(1) See Prevailing Wage & Apprenticeship; (2) Source: Energy Star

Simple — Complex

Case Study – Energy Efficiency Example

A tax-exempt community heath center would like to improve the energy efficiency of their 30,000 sq. ft. facility by renovating the **HVAC water heater system and the interior lighting system** with a goal of reducing energy usage by 25% minimum and 50% maximum

Situation

The health center's **third-party engineering contractors** for the HVAC water heater system and **designer** of the interior lighting system are able to apply for the **179D Energy Efficient Commercial Buildings Deduction**[(1)] to subsidize the renovation

	Not meeting PW&A requirements [(2)] Sliding scale of $0.50 - $1.00 per square foot	**Meeting PW&A requirements** Sliding scale of $2.50 - $5.00 per square foot
Scenario 1: Reduced energy usage by 25%	• $0.50/SF → $15,000 deduction Total tax savings for contractor/designer[(3)]: **$3,150**	• $2.50/SF → $75,000 deduction Total tax savings for contractor/designer: **$15,750**
Scenario 2: Reduced energy usage by 50%	• $1.00/SF → $30,000 deduction Total tax savings for contractor/designer: **$6,300**	• $5.00/SF → $150,000 deduction Total tax savings for contractor/designer: **$31,500**

***Note:** *tax savings is calculated by multiplying the deduction by corporate income tax rate of 21%.*

As a result, the health center can receive a reduced price from the contractors/designers, which will generate cost savings, freeing up resources to be redirected to patient care, as well as reduce its environmental footprint

(1) Please note that if a §179D deduction is allowed for any energy-efficient commercial building property, the basis of that property must be reduced by the amount of the deduction.
(2) See Prevailing Wage & Apprenticeship details
(3) Tax rates represent approximate rate of 21% after December 31, 2017. Retroactive studies would be calculated using the applicable deduction amounts and tax rates current at the time the improvements were placed in service.

Simple — Complex

Renewable Energy – Investment Tax Credit

The §48 Investment Tax Credit (ITC) can enable health care organizations to reduce their energy procurement costs, reduce indirect emissions, and improve operational resiliency to mitigate climate-related risks

INCENTIVE OVERVIEW

Provides a tax credit of 6% of the cost of qualifying "energy property";[xxx] credit may be increased up to 70% If applicable requirements for adders are met (i.e., PW&A, domestic content, energy communities)[(1)]

- **Period of Availability:** Projects beginning construction before 1/1/25[xxxi]

Note: the §48E Clean Electricity Investment Credit, which is intended to replace the §48 ITC upon its expiration, is available for projects placed in service after 12/31/2024.[xxxii] Projects qualifying for both can take only one.

- Transferable
- Direct Pay (for tax-exempt)
- Not Stackable with 45 PTC[(2)] for Same Project
- No Limit to # of Credits
- General Business Credit Terms Apply

KEY CONSIDERATIONS

- The type of renewable energy will depend on each organization's needs (i.e., urban facilities might not be able to install solar or wind-generated energy due to a lack of land but may install geothermal or cogeneration). Consult with local facility managers to understand specific needs.

ELIGIBILITY

Organization Types and Usage:

- Businesses that own renewable energy projects
- Tax-exempt entities that own renewable energy projects

Project Types:

- Fuel cell, solar, small wind, standalone energy storage, biogas, microgrid controllers, combined heat and power properties[(3)]

Example project types (non-exhaustive):

Fuel Cell | Solar | Energy Storage | Geothermal | Combined Heat and Power

WHY THIS MATTERS TO HEALTH CARE

Renewable energy can reduce dependency on traditional power sources, dramatically increasing the resilience of health-care facilities in the face of climate-related risks while lowering costs during peak usage times and cutting GHG emissions. For example, after a 2007 tornado destroyed 90 percent of the buildings in Greensburg, Kansas, a local hospital was able to rebuild its facilities with on-site wind turbines that provide the majority of the hospital's total electrical load.[(4)]

For more information, see §48 Investment Tax Credit (ITC) and §48E Clean Electricity Investment Tax Credit (ITC)

(1) See Contracting for more information on how the bonus credits are applied
(2) See page on Production Tax Credit (PTC) for more detail
(3) For a full list of qualifying project types, see Summary of Inflation Reduction Act provisions related to renewable energy
(4) Source: Following a Devastating Tornado, Town and Hospital Rebuild to Harness Wind Energy

Case Study – Renewable Energy Example

A tax-exempt community hospital is looking to implement a **renewable energy project** totaling $6 million in costs that will begin construction in 2024

Situation

The hospital is able to apply for the **§48 Investment Tax Credit (ITC)**(1) for specifically implementing **battery storage,** which accounts for **$6 million** of the total costs

Base Credit	Meeting PW&A requirements (2)	Meeting PW&A and domestic content requirements(2)
• 6% of costs related to energy storage	• 30% of costs related to energy storage	• 40% of costs related to energy storage
Refundable credit: **$360,000**	Refundable credit: **$1,620,000***	Refundable credit: **$2,400,000**

For properties that begin construction after 2024, there will be a transition to technology neutral credits, which means that the generator must have zero greenhouse gas emissions to receive the full credit

Because construction started in 2024, any direct pay amounts are reduced by a 10% haircut (i.e., $1,800,000 (30% of costs) less $180,000 (10%)) if domestic content requirements are not met.

The hospital can receive a total of $2,400,000(3) tax credits back for a generator that costs $6 million, reducing its energy procurement costs, which can help mitigate reliance on the energy grid and lighten the burden on an already stressed electricity system

(1) Please note that the basis of clean electricity property utilized in connection with the §48 ITC is reduced by 50% of the credit amount.
(2) See Key Considerations details
(3) This case study does not contemplate the effects of meeting all requirements for bonus adders, which can lead to a maximum of 70% bonus credits if all conditions are met

Simple Complex

Renewable Energy – Renewable Energy Production Tax Credit

The §45 Renewable Energy Production Tax Credit (PTC) is beneficial for health care organizations that generate a portion of their electricity through renewable sources to offset the costs of energy procurement

INCENTIVE OVERVIEW

Provides a 10-year tax credit ranging from \$5.50 to \$33.00[(1)] per MWh[xxxiii] for electricity generated by renewable energy resources and sold to unrelated party[xxxiv] after facility is placed in service[(2)]

- **Period of Availability**: Projects beginning construction before 1/1/25

Note: the §45Y Clean Electricity Production Credit, which is intended to replace the §45 PTC upon its expiration, is available for projects placed in service after 12/31/2024.[xxxv] Projects qualifying for both credits can take only one. Also note that for §45Y, unlike in the case of §45, there is no requirement that generated electricity be sold to a third party.[xxxvi]

Transferable

Direct Pay (for tax-exempt)

Not Stackable with 48 ITC for Same Project

No Limit to # of Credits

General Business Credit Terms Apply

KEY CONSIDERATIONS

- The production of renewable energy may not apply to all health care organizations. Health care facilities that rely on energy procurement from third-parties should see if the energy provider is able to claim such credits and reduce the energy sales price.

ELIGIBILITY

Organization Types and Usage:

- Businesses that own renewable energy projects
- Tax-exempt entities that own renewable energy projects

Project Types:

- Electricity generation from wind, solar, biomass, geothermal, small irrigation, landfill and trash, hydropower, etc.

Example project types (non-exhaustive):

Solar

Wind

Hydropower

WHY THIS MATTERS TO HEALTH CARE

Renewable energy production can not only reduce GHG emissions, cut costs, and improve resiliency, it can also enable health care facilities to return energy to the community. A health system in Wisconsin produces more renewable energy than it uses, making it the first net energy health system in the country. It has also invested in landfill biogas development and a community wind farm that gives back to the local community.[(3)]

For more information, see §45 Production Tax Credit and §45Y Clean Electricity Production Tax Credit

(1) Base rate is \$5.50/MWh, \$27.50/MWh if PW&A requirements met (lower for "partial credit facilities," as defined in I.R.C. § 45(b)(4)(A); additional increases possible if domestic content, energy community requirements met (+10% each).

(2) Note that projects eligible for the 45 PTC may elect to utilize the 48 ITC instead; in that case, the requirement that generated electricity be sold to a third party is removed.

(3) Source: "How Health Care Can Lead the Way on Renewable Energy"

The IRA provisions most relevant to health care can be ranked in order of level of complexity as explained by the justifications below

Level of Complexity

Simple → *Complex*

45W: Qualified Commercial Clean Vehicle Credit

30C: Alternative Fuel Vehicle Refueling Property Credit

179D: Energy Efficient Commercial Buildings Deduction

48/48E: Business Energy Investment Tax Credit (ITC)

45/45Y: Renewable Energy Production Tax Credit (PTC)

45W, 30C, 179D:

- Vendor can claim credit/deduction and provide reduced sale price for tax-exempt entities

45W:

- PW&A requirements not applicable
- Do not need to segregate project costs for eligibility
- Easy to calculate for amount eligible
- Minimal documentation needed

30C, 179D:

- Must meet PW&A to redeem higher credit percentage

30C:

- Depending on the alternative fuel and property type, may require a cost segregation analysis
- Must be in a qualified census tract[1]; Otherwise, if it includes solar or energy storage, it could potentially qualify for the ITC

179D:

- Many organizations are already installing eligible components
- Requires third party engineering review of systems/property for eligibility

48/48E, 45/45Y:

- Must meet domestic content to redeem full direct pay amount
- Must meet PW&A to redeem higher credit percentage for facilities with a capacity of over 1 MW
- Required to reduce amounts for tax exempt bond financing
- Requires substantial documentation related to eligibility, placed in service date, beginning of construction date, and credit bonus adders
- If beginning construction after 12/31/2024, some of the eligible energy properties are no longer available if they do not generate electricity or are not net neutral GHG emissions

48/48E:

- Often requires cost segregation analysis to determine eligible components

45/45Y:

- Must be sold[2] to a third party unless the project begins construction or is placed in service after 12/31/2024

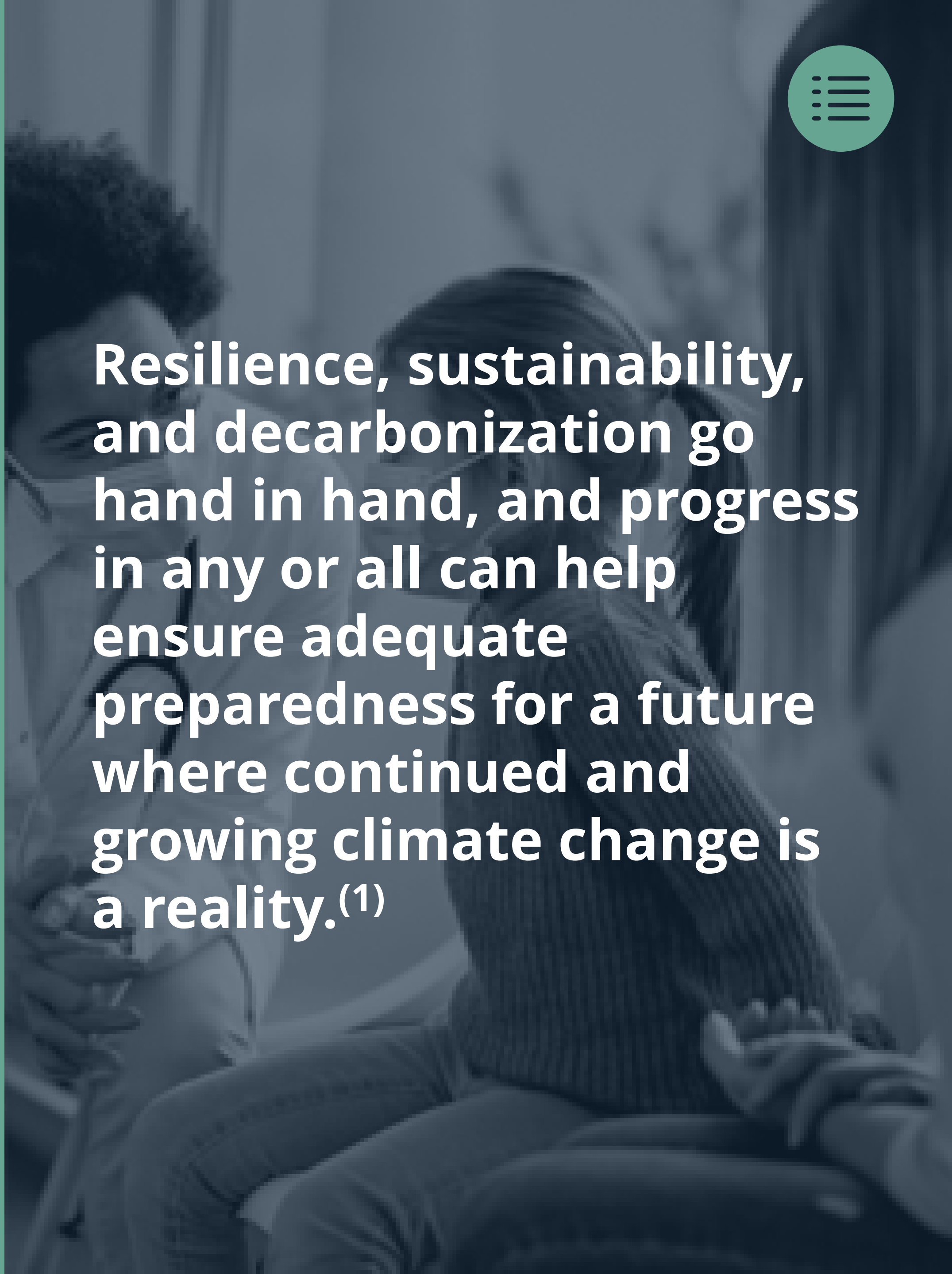
Legend: Contracting | Timing | Funding | Structuring

(1) See the CDFI Fund Mapping Tool to find information on a specific census tract (change reference to actual appendices)
(2) and then must only be measured or monitored by a third party

04

Key Considerations

The IRA includes many specific requirements and moving parts based on the logistics and applicability of the project. This section will briefly explain some of the major considerations that organizations should be aware of to understand the appropriate approach.



Resilience, sustainability, and decarbonization go hand in hand, and progress in any or all can help ensure adequate preparedness for a future where continued and growing climate change is a reality.[1]

Sources: (1) How Health Care Organizations Can Use the Inflation Reduction Act to Reduce Costs, Enhance Resilience, and Lower Their Environmental Footprint

Key Considerations

Healthcare organizations should be aware of the different requirements and rules surrounding the contract, timing of the project, how the project is funded, and the structure of the project. Click into each card below for more detailed information

CONTRACTING

Requirements within the contracting phase to determine amount eligible

Points of Consideration
- Prevailing Wage & Apprenticeship (PW&A)
- Domestic Content Requirements
- Energy Community Requirements
- Low Income Community Requirements
- Beginning of Construction
- Third-Party Contractors

TIMING

Considerations such as construction timeline, direct pay timing, phase out timelines for specific provisions, and filing requirements that impact the tax credit value

Points of Consideration
- Beginning of Construction
- Credit Phase Out
- Technology Eligibility
- Filing Requirements
- Direct Pay
- Placed in Service

FUNDING

How the organization chooses to fund IRA projects will affect the credit amount and/or application process

Points of Consideration
- Tax-exempt Bonds
- Tax-exempt Grants
- Examples of financing structure

STRUCTURING

Definitions of applicable entities and rules and restrictions on appropriate partnerships, which may affect eligibility

Points of Consideration
- Taxpayer Requirements
- Applicable Entity
- Electing Taxpayer
- Single Energy Project

Key Considerations

Tax-exempt entities should require that third-party contractors/subcontractors document the requirements below. This should be established during in the procurement phase in order to provide tax-exempt entities support for claiming a higher credit

CONTRACTING

Requirements within the contracting phase to determine amount eligible

Points of Consideration
- Prevailing Wage & Apprenticeship (PW&A)
- Domestic Content Requirements
- Energy Community Requirements
- Low Income Community Requirements
- Beginning of Construction
- Third-Party Contractors

If Prevailing Wage & Apprenticeship (PW&A)(1) requirements are met(2)

- the organization can reap **5x** more credits than the base amount for most of the clean energy credits

If the project uses a certain percentage of domestically produced steel, iron, or other manufactured products, the credit rate is increased by (3)

- **10%** (applies to §45 [xxxvii] and §45Y)[xl]

  or

- **10 percentage points** if PW&A requirements are met and **2 percentage points** if PW&A requirements are **NOT** met (applies to §48[xxxviii] and §48E[xxxix])

If the location of the project is in any of the following categories (3)

- Brownfield sites
- Qualified statistical areas
- Coal mine or generator closures

the organization can receive an additional 10% credit rate increase (for §45/45Y)[xli] or an additional 2% or 10% credit rate increase (for §48/48E)[xlii]

If certain small-scale wind or solar projects are in low-income communities

- the credit amount can be increased by 10-20% under 48/48E (ITC)[xliii] after successful application to the IRS

If the project partners with third-party designers for a building energy efficiency project

- the third-party design or engineering may claim the 179D Energy Efficient Commercial Buildings Deduction[xliv]

(1) See Labor and Apprenticeship Requirements for more detailed information.
(2) A project can also be eligible for a 5x credit multiplier if either (a) construction began before January 29, 2023 or (b) the project has a maximum net electrical/thermal output of less than 1 megawatt.
(3) See Domestic Content and Energy Communities for more detailed information.

Key Considerations

Depending on when the construction of the project begins, the amount of credits available may vary

TIMING

Considerations such as construction timeline, direct pay timing, and phase out timelines for specific provisions that impact the tax credit value

Points of Consideration
- Beginning of Construction
- Credit Phase Out
- Technology Eligibility
- Filing Requirements
- Direct Pay
- Placed in Service

If construction begins before January 29, 2023,

- prevailing wage and apprenticeship requirements are deemed to be met[xlv]

If construction begins after calendar year 2024,

- credit becomes technology neutral (project must generate (or store) electricity with net zero greenhouse gas emissions)[xlvi]

If the entity is making a Direct Pay election under section 6417 and begins construction on the project

- **in calendar year 2024,** the credit is phased down to 90%[xlvii] if domestic content requirements are not met
- **in calendar year 2025,** the credit is phased down to 85%[xlviii] if domestic content requirements are not met
- **after 2025,** the credit is phased down to 0% if the domestic content requirements are not met[xlix]

To make a direct payment and transferability election,

- entities must **pre-file on an IRS-administered electronic portal (this is mandatory) in the year the work will be completed and is ready to claim the credit**.[l] Failure to successfully pre-register and obtain the registration number renders an election ineffective[li]

If a direct payment election is made by the applicable entity no later than the due date of the tax return for the taxable year for which the election is made (including extensions)

- the payment is generally treated as made on the later of:
  - (1) the due date (determined without regard to extensions) of the tax return, or
  - (2) the date that the tax return is filed[lii]

If the entity is making a Direct Pay election,

- it is only eligible for projects placed in service during tax years beginning after 12/31/2022[liii]

Key Considerations

The type of funding of a project can affect the amount of credits available. See below for a few scenarios as examples

FUNDING

How the organization chooses to fund IRA projects will affect the credit amount and/or application process

Points of Consideration
- Tax-exempt Bonds
- Tax-exempt Grants
- Examples of financing structure

If the project is financed by tax-exempt bonds,

- then the amount allowed is reduced under certain credits by the lesser of the ratio of tax-exempt bond proceeds used over total project costs, and of 15%[liv]

If the project is financed by tax-exempt grants/incentives,

- there *may* be a reduction in the allowed credit amount
- project-specific tax-exempt funds limit the allowable credit amount to the excess of total project costs over tax-exempt funds used. General purpose tax-exempt funds may be used on projects without limiting credit use.Tax exempt funds are included in the property's basis for computing the credit, regardless of whether the basis must be reduced under other provisions[lv]

Example 1: Taxpayer A intends to construct a solar parking facility for $1,000,000 in qualifying costs, and to claim the §48 ITC. Separately, Taxpayer A has received an $800,000 general purpose federal grant for facility improvements and decides to utilize the entire $800,000 of that grant funding toward the construction of the solar parking facility. Assuming Taxpayer A qualifies for the full 30% of the §48 ITC, they would be able to claim a credit in the amount of $300,000

Example 2: Same facts as Example 1, except that the $800,000 federal grant received was awarded specifically for Taxpayer A's solar parking facility. Despite otherwise qualifying for the full 30% of the credit, Taxpayer A would only be eligible to claim a credit in the amount of $200,000 (i.e., after applying the $800,000 tax-exempt financing, the eligible credit amount is limited to the remaining $200,000)

Example 3: Same facts as Example 2, except that Taxpayer A received $1,000,000 in federal grant funding specifically for the solar parking facility. Taxpayer A would not be eligible to claim any credit

Note that direct pay funds would be received on the normal timeline for entities receiving tax refunds, which can be months or even years after placing the asset in service—consider the effect on funding timeline requirements.[vi]

Key Considerations

The legal structuring of the organization applying for and receiving IRA credits will affect eligibility

STRUCTURING

Definitions of applicable entities and rules and restrictions on appropriate partnerships, which may affect eligibility

Points of Consideration

- Taxpayer Requirements
- Applicable Entity
- Electing Taxpayer
- Single Energy Project

If making a direct pay election, it must be made by an applicable entity or electing taxpayer:[lvii]

- An ***applicable entity is*** generally a non-profit entity or governmental organization
    - An applicable entity ***must directly own*** the underlying property or conduct activities giving rise to the underlying applicable credit or the election ***cannot be made***[lviii]
- A Partnership and/or S corporation may be an ***electing taxpayer*** (any taxpayer that is not an applicable entity but only available for 45X, 45V, and 45Q), but it ***CANNOT*** be an "applicable entity" even if some or all of its owners are applicable entities[lix]

An applicable entity is any one of the following:[lx]

- Section 501(a) tax-exempt organization
- Government of any U.S. territory or state, the District of Columbia, Indian tribal government, or any political subdivision, agency or instrumentality thereof
- Rural electric cooperative
- Alaska Native Corporation
- The Tennessee Value Authority

An electing taxpayer is any taxpayer other than an applicable entity that elects to receive direct payments during the applicable 5-year periods (for 45V, 45Q, or 45X credits only)[lxi]

If the project contains multiple components,

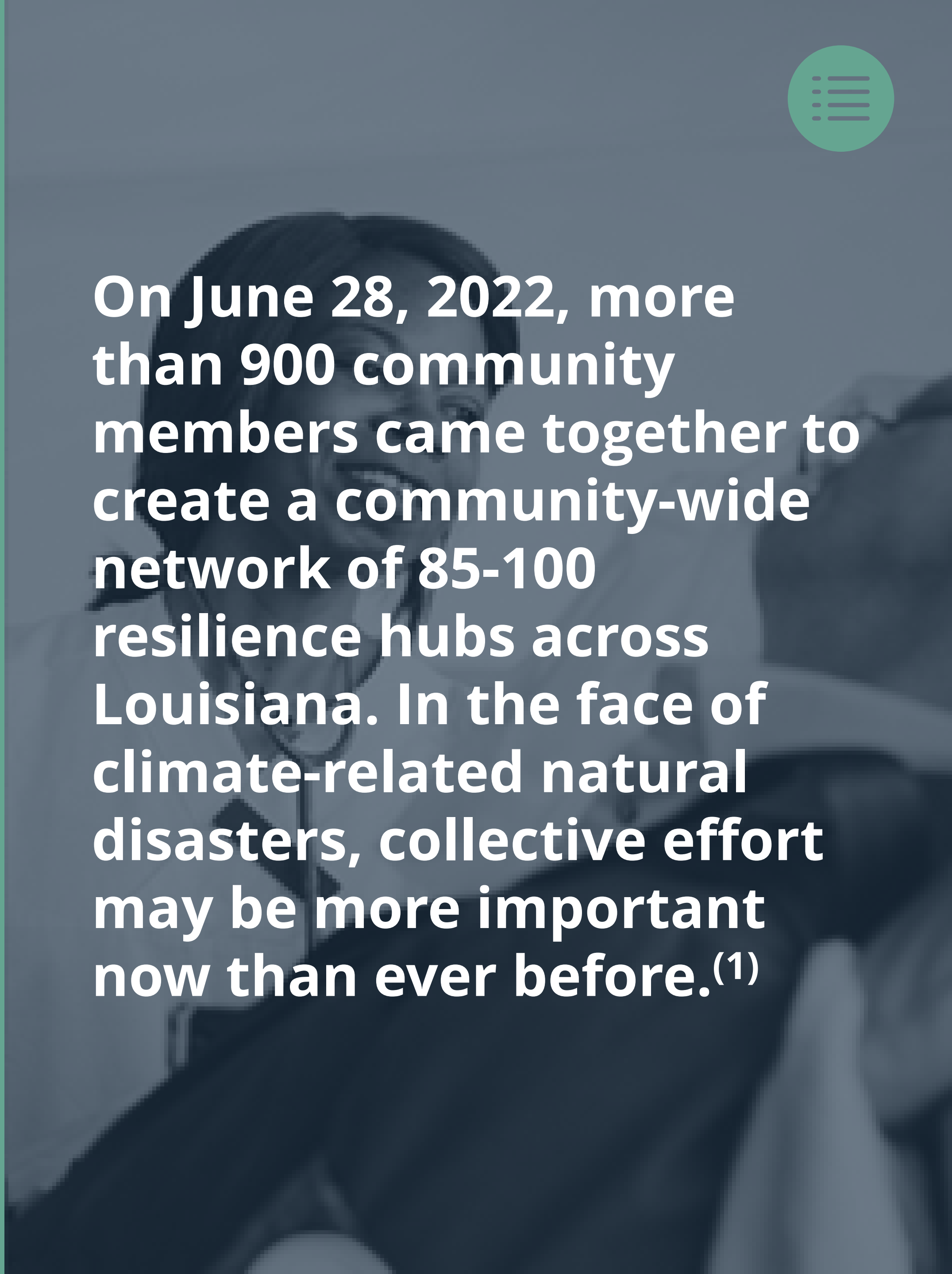
- For ITC purposes, the credit amount is determined on the eligible basis of the "single energy project". The determination of multiple projects being single energy property can be beneficial when needing to group property into a single beginning of construction date, however, it may cause a project to also not meet the 1MW exception and thus need to qualify for the prevailing wage and apprenticeship requirements separately[lxii]

05

Roles & Responsibilities for Decarbonization Through the IRA

The decarbonization process involves many players and moving parts in navigating and utilizing the incentives in the IRA. This section explores how each player interacts with each other and their unique position to empowering a sustainable future.

Sources: (1) Together New Orleans launches community lighthouse project



On June 28, 2022, more than 900 community members came together to create a community-wide network of 85-100 resilience hubs across Louisiana. In the face of climate-related natural disasters, collective effort may be more important now than ever before.[1]

Overview of Health Care Leadership Personas for IRA Activation

Multiple players, both internal and external to the health care ecosystem, drive activation of the IRA; seven personas in particular play an essential role[1]

Board & Board Chair

Motivator

The Board provides strategic direction and oversight in conjunction with the Board Chair, who should ensure alignment of the Board with the CEO and the organization's vision on utilizing the IRA

Chief Executive Officer

Leader

The CEO should understand the implications of the IRA, sign off on IRA-related strategies and projects, and drive coordination with the Board

Alternative titles: President, Director

Chief Tax Officer

Policy Expert

The Chief Tax Officer should determine the amount of incentives available to inform the organization's investment strategy and its sustainability goals

Alternative titles: Tax Director, Tax Compliance Officer

Chief Financial Officer

Resource Coordinator

For IRA-eligible projects, the CFO should understand the ROI impact, determine resource allocation, and manage financial risks and recordkeeping

Alternative titles: VP Finance, Controller

Chief Strategist

Innovator

The Strategist should identify opportunities within the IRA, ensure stakeholder alignment and support, prioritize projects, and foster innovative solutions

Alternative titles: Director of Business Development, Director of Innovation

Facilities Operations Lead

Implementor

The Operations Lead should identify and implement facility-level IRA-related projects, engage physicians & staff, maintain compliance, and monitor progress

Alternative titles: Chief Operating Officer, GM, Facilities Manager, Service Manager, Contract Manager

Chief Sustainability Officer

Driver of change

The Chief Sustainability Officer should shape the overall decarbonization strategy and communicate progress internally and externally. The IRA may also impact the Chief Sustainability Officer's budget, requiring greater project oversight.[2]

Note: 1) Roles, titles, and responsibilities are not mutually exclusive and often differ based on the profile of an organization, 2) Some organizations name specific sustainability leaders who might also wear multiple other hats, but often the role of a Chief Sustainability Officer is assumed by other parts of the organization

Health Care Ecosystem Relationships for IRA Activation

Ecosystem relationships are critical for successful ideation, implementation, and support of IRA-related projects

Key Roles and Responsibilities to Activate the IRA

	How the IRA can empower you	How you can help activate the IRA
Board & Board Chair	• Promote long-term organizational resilience and mitigate climate-related risks, embedding them into quality oversight • Strengthen relationships with donors and partners through community engagement • Position the organization strategically among peers	• Review and oversee the strategic planning and consider long-term implications and risks
Chief Executive Officer	• Provide resources to achieve sustainability goals and other enhancement projects for organizational development • Enable workforce upskilling on sustainability topics • Fulfill organizational mission and mandate to promote human health through greater climate resiliency	• Ensure cross-functional alignment and support and outline sustainability goals to be achieved with the IRA • Collaborate with community leaders and fellow health care organizations to maximize collective effort in creating a positive impact on the community
Chief Tax Officer	• Support broader organizational resiliency, cost reduction, and sustainability goals by taking advantage of available credits • Demonstrate industry leadership on tax policy and incentives	• Understand the eligibility qualifications and adders and determine the subsequent amount of credits available
Chief Financial Officer	• Transform high investment costs and uncertain ROI into financially viable investments • Establish proof points to build the business case for investment in sustainability and equity efforts	• Account for the credit amount into the financial planning and showing how the tax incentives affect the bottom line through cost savings
Chief Strategist	• Promote long-term organizational resilience • Accelerate existing strategic priorities • Facilitate strategic planning of business model to spark innovation • Build brand differentiation among health care peers	• Champion the exploration and adoption of innovative practices that can be incentivized by the IRA
Facilities Operations Lead	• Accelerate facility sustainability and cost savings goals • Capitalize on IRA incentives to free up resources, which can provide financial and operational flexibility	• Identify opportunities under the IRA that can be integrated into the operations of the organization • Oversee the construction process and manage supplier and contractual relationships
Chief Sustainability Officer	• Promote long-term organizational resilience • Accelerate progress against enterprise sustainability goals (e.g., net zero, energy usage intensity goals) • Enhance the organization's reputation by demonstrating commitment to sustainability	• Build a business case to achieve organizational buy-in and support from the C-Suite and Operations Lead • Deep understanding of the current landscape towards decarbonization and identifying areas of opportunities

Key Considerations Across All Personas

Based on interviews with health care leaders across all personas, several common challenges and opportunity areas emerged

1.

How do we build tax literacy to address gaps in understanding?

Health care leaders have stratified information based on levels of expertise and resources. Existing inequities are exacerbated when under-resourced communities and safety net hospitals do not have the capacity to digest the IRA and to take advantage of what would help them the most

2.

How do we dispel uncertainties and instill confidence in leadership?

Before approaching a project that has never been done before, health care leaders need to feel confident in the return on investment made possible by the IRA. Even established health systems favor small-scale pilot programs as a proof of concept

3.

What turnkey solutions exist to help interested leaders jumpstart progress?

Health care leaders express interest in understanding easily accessible benefits/incentives to take advantage in the immediate future. Success stories and implementation plans would help ease the discomfort leaders feel about approaching this topic

4.

How can health care organizations plan well in advance to obtain benefits?

Delaying the alignment of projects with the IRA could result in lost value. By proactively ensuring projects are IRA-compliant, organizations can leverage these benefits, supporting their financial and sustainability goals

Health care organizations can act now **to benefit from IRA incentives, many of which took effect in January 2023**

HOW CAN I GET STARTED?

1 Identify relevant provisions

- Learn more about the credits, grants, and loans applicable to your organization
- Check eligibility criteria such as location and labor requirements
- Talk to external specialists to validate research and fill in knowledge gaps

2 Engage stakeholders

- Connect with Finance, Procurement, Tax, and Government Relations to gain buy-in and build the business case
- Discuss with internal management to better understand organizational needs and how to qualify for the benefits of the IRA

3 Move quickly

- Lock in domestic, low-emission suppliers to access IRA credit adders tied to geography, wages, apprenticeship, and more
- Start preparing now to be able to meet incentive caps for grant programs and capitalize on first mover advantages

Overview of Timeline for Sample IRA Provisions

Credit	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Description & Highlights
§45, §48: Production & Investment Credits	**Previous legislation extended**												The existing PTC/ITC regime will be replaced by technology neutral, emissions-based credits in 2025. The new credits phase out in 2032 or when emissions targets are reached
§45Y/§48E: Clean Electricity Production & Investment Tax Credits				**IRA provision in effect**									
§45W, §30C: Commercial Clean Vehicle & Alt. Charging Credits		**IRA provision in effect**											Credit covers electric/fuel cell vehicles (e.g., EV, fuel cell, etc.)

Sources: Deloitte Analysis, H.R.5376 - Inflation Reduction Act of 2022

For additional support activating the IRA's climate provisions in health care, check out the following resources

Health Care IRA Resources

How Health Care Organizations Can Use the Inflation Reduction Act to Reduce Costs, Enhance Resilience, and Lower Their Environmental Footprint - National Academy of Medicine (nam.edu)

The Office of Climate Change and Health Equity (OCCHE) Quickfinder for Leveraging the Inflation Reduction Act for the Health Sector | HHS.gov

Inflation Reduction Act of 2022 | U.S. Department of Energy

Catalytic Program on Utilizing the IRA | OCCHE

General IRA Resources

WH IRA Guidebook

Includes overview, description, and funding details for each IRA funded incentive

BGA IRA User Guide

Provides overview of IRA incentives by sector and explains funding mechanisms

IRS Credits and Deductions under the IRA

Resources, forms and descriptions of IRA tax credits and deductions

06

Appendix

See this section for a more detailed breakdown of specific requirements.

§45W Qualified Commercial Clean Vehicle Credit

INCENTIVE OVERVIEW

Provides a tax credit equal to the lesser of: (a) 15% (30% for vehicles not powered by gasoline or internal combustion engine) of the basis of the qualified commercial clean vehicle, or (b) the incremental cost* of such vehicle, capped at either $7,500 per vehicle that has a gross vehicle weight of less than 14,000 lbs.) or $40,000 for other vehicles.

A **Qualified Commercial Clean Vehicle** is:

1. made by a qualified manufacturer and acquired for use or lease by the taxpayer and not for resale;
2. either (a) manufactured for use on public streets, roads, and highways (i.e., not trains); or (b) is mobile machinery (i.e., construction vehicles or forklifts);
3. Either propelled (a) by an electrically charged motor (min. 15kWh capacity or 7kWh for vehicles less than 14,000 lbs.) or (b) EPA –certified hydrogen fuel cell; and
4. Depreciable.

Example Vehicles:

- Under 14,000 lbs.: Cargo van, box trucks, city delivery trucks, step van, full-size pick-up truck, minivan, sedan, etc.
- At or Over 14,000 lbs.: School bus, refuse truck, sleeper cab, beverage truck, large walk-in trucks, etc.

*The **incremental** cost is the excess of the purchase price over the price of a comparable vehicle (i.e., a fully gas or diesel vehicle similar in size and use).

ADDITIONAL CONSIDERATIONS

- Treasury to provide guidance on incremental cost.
- No double benefit – credit disallowed on vehicles taxpayer claims for 30D.
- Tax exempt entities, certain co-ops, and others may elect direct payment option.
- Taxpayers must include VIN numbers on tax returns.
- Qualified manufacturer is a manufacturer who enters into a written agreement with the Secretary to provide periodic written reports containing information related to the vehicles.
- Transferability is not available for 45W and thus not eligible to transfer credit to dealer like under 30D.

Effective for vehicles purchased January 1, 2023, through December 31, 2032.

This slide builds on the information previously covered in Transportation Efficiency – Qualified Commercial Clean Vehicle Credit

§30C Alternative Fuel Vehicle Refueling Property Credit

INCENTIVE OVERVIEW

Provides a tax credit of 6% (or 30% if meets wage and apprenticeship requirements) of costs for qualified alternative fuel vehicle ("QAFV") refueling property, up to $100,000 credit with respect to any single item of QAFV property (removing the location restriction).

A **QAFV Refueling Property** is property which is:

1. For the storage or dispensing of a clean-burning fuel into the fuel tank of a motor vehicle propelled by such fuel, or
2. For the recharging of motor vehicles propelled by electricity.

Clean-burning fuels are:

1. Any fuel where at least 85% of the volume consists of one or more of the following: ethanol, natural gas, compressed natural gas, liquified natural gas, liquified petroleum gas or hydrogen.
2. Any mixture which consists of two or more of the following: biodiesel, diesel fuel, or kerosene and at least 20% of the volume consists of biodiesel without regard to any kerosene.
3. Electricity.
4. Certain transportation fuel with an emissions rate of not greater than 50 kg of CO_2e per mmBTU.

ADDITIONAL CONSIDERATIONS

- Prevailing Wage and Apprenticeship Requirements.
- Property required to be located in eligible census tract (any NMTC eligible zone) or in a non-urban area.
- Definition of "single item" which replaced "with respect to all" QAFV "at a location".
- Direct pay option under 6417 for applicable entities and transferability under 6418 for non-applicable entities.
- Special rules for electric charging stations for certain vehicles with 2 or 3 wheels.

Effective for property placed in service January 1, 2023, through December 31, 2032.

This slide builds on the information previously covered in Transportation Efficiency – Alternative Fuel Vehicle Refueling Property Credit

§179D Energy Efficient Commercial Buildings Deduction

INCENTIVE OVERVIEW

Provides \$0.50–\$1.00/sq ft tax (\$2.50-\$5.00/sq ft if PW&A requirements are met) deduction for energy efficiency improvements to qualifying commercial buildings; must be part of (i) interior lighting systems, (ii) HVAC and/or hot water property, or (iii) the building envelope.

Qualifying buildings include:

- **Energy efficient commercial building property (EECBP)** must be installed on or in a building located in the U.S. and within the scope of a specified Reference Standard 90.1 of the American Society of Heating, Refrigerating, and Air Conditioning Engineers and the Illuminating Engineering Society of North America[(1)]. It must be property for which depreciation or amortization is allowable, and installed as part of the interior lighting systems, the heating, cooling, ventilation, and hot water systems, or the building envelope. It must be certified as being installed as part of a plan to reduce the total annual energy and power costs for the above systems by 25% or more in comparison to a reference building meeting the minimum requirements of Reference Standard 90.1.
- **Energy efficient building retrofit property (EEBRP)** must be installed on or in a qualified building as part of the interior lighting systems, the heating, cooling, ventilation, and hot water systems, or the building envelope. A qualified building is a building located in the U.S. and originally placed in service not less than 5 years before the establishment of a qualified retrofit plan for the building. EEBRP must be property for which depreciation or amortization is allowable, and it must be certified as meeting certain energy saving requirements.

ADDITIONAL CONSIDERATIONS

- Beginning in 2023, if local prevailing wages are paid and apprenticeship requirements are met, an increased maximum deduction applies. The maximum amount increases to five times the savings per square foot amount.
- The deduction is available to:
  - Owners of qualified commercial buildings
  - Designers of EECBP/EEBRP installed in buildings owned by specified tax-exempt entities, including certain: government entities, Indian tribal governments, Alaska Native Corporations, and other tax-exempt organizations
- The deduction was previously available only to owners of qualified commercial buildings and designers of EECBP installed in buildings owned by certain government entities.

Beginning January 1, 2023.

This slide builds on the information previously covered in Energy Efficiency.
Source: Energy Efficient Commercial Buildings Deduction.
(1) For more information, see AHRAE.

§48 Investment Tax Credit (ITC)

INCENTIVE OVERVIEW

Provides a tax credit based on capital investment in a variety of renewable (e.g. solar, wind) and conventional energy technologies to incentivize investment in new energy resources. In general, the credit is 6% (or 30% if wage and apprenticeship requirements are met) of the basis of eligible property placed in service during the taxable year. Additional credit amounts ("adder") are available if the project meets certain requirements.

Examples of **qualified energy property**:

- Solar property
- Fiber-optic solar property
- Fuel cell property
- Microturbine property
- Geothermal property
- Combined heat and power system property
- Small wind energy property
- Waste energy recovering property
- Energy storage technology
- Biogas
- Microgrid controllers
- Dynamic Glass

Direct payment option under Sec. 6417 for applicable entities and transferability under Sec. 6418 for non-applicable entities are available.

ADDITIONAL CONSIDERATIONS

- Cannot be property which is part of facility used for production credit under Sec. 45.
- Extended begun construction deadline to before Jan 1, 2025 (before Jan 1, 2035 for geothermal heat pumps).
- Includes wage and apprenticeship requirements for the 5X multiplier to the base credit for facility placed in service after 2022.
- Includes a 2% domestic content "adder" applied to the base credit (or 10% bonus credit) if certain domestic content requirements are satisfied.
- Includes a 2% energy communities "adder" applied to the base credit (or 10% bonus credit) if facility is located in an "energy community".
- New rules establish different begun construction deadlines important to ITC facilities.

Effective for projects beginning construction before 1/1/25.

This slide builds on the information previously covered in Renewable Energy – Investment Tax Credit

§48E Clean Electricity Investment Tax Credit (ITC)

INCENTIVE OVERVIEW

Section 48E provides a technology-neutral Investment Tax Credit for qualified capital investments in an electric generating facility or energy storage property for which GHG emissions rate is not greater than zero. The credit is 6% (or 30% if wage and apprenticeship requirements are met) of the qualified investment, subject to increased credit percentage if eligible for adders.

Section 48E is not available for any facility for which a credit is allowed under sections 45, 45J, 45Q, 45U, 45Y, 48, or 48A for the taxable year or any prior taxable year.

The 48E credit begins to phase out for facilities or energy storage technology the construction of which begins during the second calendar year following the Applicable year, which is the later of:

(1) the calendar year in which the annual GHG emissions from the production of electricity in the US are not greater than 25% of 2022 emissions from electricity production

or

(2) calendar year 2032.

The credit is fully phased out for facilities or energy storage technology the construction of which begins after 3rd calendar year following the Applicable year.

ADDITIONAL CONSIDERATIONS

- Includes wage and apprenticeship requirements for the 5X multiplier to the base credit for facility placed after 2024.
- Includes a 2% domestic content "adder" applied to the base credit (or 10% bonus credit) if certain domestic content requirements are satisfied.
- Includes a 2% energy communities "adder" applied to the base credit (or 10% bonus credit) if facility is located in "energy community."
- New rules establish different begun construction deadlines important to ITC facilities.
- Direct payment option under 6417 for applicable entities and transferability under 6418 for non-applicable entities are available.

Effective for facilities placed in service after 2024.

This slide builds on the information previously covered in Renewable Energy – Investment Tax Credit

§45 Production Tax Credit

INCENTIVE OVERVIEW

Provides a tax credit amount of 0.3 cents (or 1.5 cents if meets wage and apprenticeship requirements) per kwh of electricity produced using certain energy resources at a qualified facility and sold to an unrelated party.

The credit is available for a 10-year period starting from the date the facility is placed in service.

A **Qualified Energy Resource** includes:

- Wind
- Closed-loop biomass/Open-loop biomass* - (material or solid waste from plant which is planted exclusively for purposes of being used at facility to produce electricity)
- Geothermal energy
- Municipal solid waste*
- Qualified hydropower production
- Marine and hydrokinetic renewable energy
- Solar

*The credit rate for open-loop biomass, trash, and landfill facilities are reduced by one-half.

ADDITIONAL CONSIDERATIONS

- Credit reduced for Tax-Exempt Bonds.
- Extended begin construction deadline to Dec. 31, 2024.
- Includes wage and apprenticeship requirements for the 5X multiplier to the base credit for facility placed in service after 2021.
- Includes a 10% domestic content "adder" applied to the base or bonus credit if certain domestic content requirements are satisfied.
- Includes a 10% energy communities "adder" applied to the base or bonus credit if facility is located in "energy community."
- Direct payment option under 6417 for applicable entities and transferability under 6418 for non-applicable entities are available.

Effective for facilities beginning construction before 1/1/25.

This slide builds on the information previously covered in Renewable Energy – Renewable Energy Production Tax Credit

§45Y Clean Electricity Production Tax Credit

INCENTIVE OVERVIEW

IRC section 45Y provides a credit of 0.3 cents per kWh of electricity produced by taxpayer at a qualified facility for which the GHG (Greenhouse Gas) emissions rate is not greater than zero and such electricity is sold, consumed or stored. The credit is increased to 1.5 cents per kWh if wage and apprenticeship requirements are met.

The credit is available for a 10-year period beginning on the date that the facility was originally placed in service after **2024.** The credit is not available for any facility for which a credit is allowed under sections 45, 45J, 45Q, 45U, 48, 48A, or 48E for the taxable year or any prior taxable year.

The 45Y credit begins to phase out for facilities the construction of which begins during the second calendar year following the Applicable year, which is the later of:

(1) the calendar year in which the annual GHG emissions from the production of electricity in the US are not greater than 25% of 2022 emissions from electricity production

or

(2) calendar year 2032.

The credit is fully phased out for facilities the construction of which begins after 3rd calendar year following the Applicable year.

ADDITIONAL CONSIDERATIONS

- Includes a 10% domestic content “adder” applied to the credit if certain domestic content requirements are satisfied.
- Includes a 10% energy communities “adder” applied to the credit if facility is located in “energy community.”
- Direct pay election for applicable entities and credit transferability election for non-applicable entities.
- New rules establish different begun construction deadlines important to the facilities.
- Not later than January 1, 2025, Treasury shall issue guidance regarding implementation of section 45Y, including calculation of GHG emission rates for qualified facilities and determination of the credit.

Effective for facilities beginning construction before 1/1/25.

This slide builds on the information previously covered in Renewable Energy – Renewable Energy Production Tax Credit

Prevailing wage and apprenticeship requirements (“PWA”)

Satisfying certain labor requirements may increase the amount of the base credit by up to five (5) times the base statutory credit amount.

Federal Credits and Incentives Updates

Prevailing wage and apprenticeship requirements

Code Section	Credit Description	Construction (through placed-in-service)		Alteration or repair (after placed-in-service, during recapture/credit period)	Beginning of Construction before 1/29/23*
		Prevailing Wage	Apprenticeship	Prevailing Wage (Apprenticeship N/A)	
30C	Alternative Fuel Refueling Property Credit	✓	✓	✗	✓
45	Electricity produced from certain renewable resources	✓	✓	✓	✓
45L	New energy efficient home credit	✓	✗	✗	✗
45Q	Credit for carbon oxide sequestration	✓	✓	✓	✓
45U	Nuclear power production credit	✗	✗	✓	✗
45V	Credit for production of clean hydrogen	✓	✓	✓	✓ **
45Y	Clean electricity production credit	✓	✓	✓	✓
45Z	Clean fuel production credit	✓ ***	✓ ***	✓	✗
48	Energy Credit	✓	✓	✓	✓
48C	Qualifying advanced energy project credit	✓	✓	✗	✗
48E	Clean electricity investment credit	✓	✓	✓	✓
179D	Energy efficient commercial buildings deduction	✓	✓	✗	✓

**See I.R.S. Notice 2013-29. PWA deemed met if placed in service before 1/29/2023; the last date for a taxpayer to qualify for the increased credit/deduction amounts without having to meet the PWA requirements.*

**PW applies for alteration/repair regardless if 60 day period met; 60 day requirement applies to exempt from meeting PWA during Construction phase ONLY; not applicable after Construction phase of the facility

***If facility was placed in service prior to 1/1/2025, then the prevailing wage requirements do not apply during Construction. Clarification is needed with regards to apprenticeship requirement for facilities placed in service prior to 1/1/2025.

Federal Credits and Incentives Updates

Prevailing wage and apprenticeship requirements

In General
With respect to most of the clean energy credits in the IRA, taxpayers must satisfy prevailing wage and apprenticeship requirements to qualify for the increased credit amount.

- Satisfying these labor requirements increases the amount of the base credit to an increased credit amount generally equal to five (5) times the base statutory credit amount (30% ITC and 0.55 cent PTC per kWh for 2023 inflation adjusted).

- The prevailing wage requirements and apprenticeship requirements are adopted for: sections 30C, 45, 45L, 45Q,45U (wage only), 45Y, 45V, 45Z, 48, 48C, 48E, and 179D.

Example Credit Rates / Values		
Incentive	**Base**	**Bonus**
Section 45: Production Tax Credit	0.3 cent/kWh	1.5 cent/kWh
Section 48: Investment Tax Credit	6%	30%
Section 48C: Qualified Advanced Energy Project	6%	30%
Section 45Q Carbon Sequestration Credit: not direct air capture facility	\$12/metric ton \$17/metric ton	\$60/metric ton \$85/metric ton
Section 45Q Carbon Sequestration Credit: direct air capture facility	\$26/metric ton \$36/metric ton	\$130/metric ton \$180/metric ton
Section 45V: Clean Hydrogen Production Credit	\$0.60/kg	\$3.00/kg
Section 179D: Energy Efficient Commercial Buildings Deduction	\$0.50 - 1.00/sq ft	\$2.50 - 5.00/sq ft

Note: Above amounts may be subject to inflation adjustments.

Federal Credits and Incentives Updates

Prevailing wage and apprenticeship requirements

Beginning of construction exception: a qualified facility or an energy project is deemed to meet the prevailing wage and apprenticeship requirements if construction begins prior to January 29, 2023. Otherwise, taxpayers must meet the prevailing wage and apprenticeship requirements summarized below for increased credit amounts.

Small project exception: facility with a maximum net output of less than 1 megawatt (AC). Sections 45, 45Y, 48 and 48E only

Prevailing wage and apprenticeship requirements:

Prevailing wage requirement: Laborers and mechanics employed by the taxpayer, or any contractor and subcontractor must be paid prevailing wage rates of a similar character in the locality in which the facility or project is located for construction, alteration or repair during construction and alteration or repair during the recapture or credit period.

Apprenticeship requirements:

1. **Labor Hours:** The applicable percentage of total labor hours performed by qualified apprentices for construction, alteration or repair work (including work performed by any contractor or subcontractor) must be performed by qualified apprentices:

- 10% for facilities which begin construction before 2023; 12.5% if during 2023; 15% if after 2023.
- Subject to the applicable apprentice-to-journeyworker ratio

2. **Participation**: Each taxpayer, contractor, or subcontractor that employs four or more laborer/mechanics must employ one or more qualified apprentices to perform such work.

Federal Credits and Incentives Updates

Prevailing wage and apprenticeship requirements

Prevailing wage:

(1) Paying a penalty in the amount of $5,000 ($10,000 if intentional disregard) per laborer and mechanic who were paid wages below the prevailing wages for any period during the year to the IRS; **and**

(2) making payments to such laborer or mechanic in an amount (*3 if intentional disregard) equal to the difference between the amount required to be paid and the amount actually paid, plus interest

Apprenticeship:

(1) Paying a penalty to the IRS in an amount equal to $50 ($500 if intentional disregard) multiplied by the number of total labor hours for which did not satisfy requirements; **or**

(2) "Good Faith Effort" - a taxpayer shall be deemed to have satisfied the requirements (no penalty payment necessary) if such taxpayer has requested qualified apprentices from a registered apprenticeship program and such request has been denied or a response has not been received within 5 business days. The Good Faith Effort is valid for 120 days from the date of the request.

Prevailing wage and apprenticeship requirements: Proposed regulations for recordkeeping

Prevailing Wage Recordkeeping:

Records sufficient to demonstrate compliance with the Prevailing Wage requirements may include the following information for each laborer and mechanic (including each qualified apprentice) employed by the taxpayer, contractor, or subcontractor with respect to each facility:

- identifying information, including the names, social security or tax identification number, address, telephone number, and email address,
- The location and type of qualified facility,
- The labor classification the taxpayer applied to the laborer or mechanic, including the applicable wage determination,
- The hourly rates of wages paid (including rates of contributions or costs for bona fide fringe benefits or cash equivalents thereof) for each applicable labor classification,
- Records to support any contribution irrevocably made on behalf of a laborer or mechanic to a trustee or other third person pursuant to a bona fide fringe benefit program, and the rate of costs that were reasonably anticipated in providing bona fide fringe benefits to laborers and mechanics pursuant to an enforceable commitment to carry out a plan or program described in 40 U.S.C. 3141(2)(B), including records demonstrating that the enforceable commitment was provided in writing to the laborers and mechanics affected,
- The total number of labor hours worked per pay period,
- The total wages paid for each pay period (including identifying any deductions from wages),
- Records to support wages paid to any apprentices at less than the applicable prevailing wage rates, including records reflecting the registration of the apprentices with a registered apprenticeship program and the applicable wage rates and apprentice to journeyworker ratios prescribed by the apprenticeship program, and

In the case of transfer of credits, all PWA Requirements, including recordkeeping requirements, apply to the eligible taxpayer entity who determined the credit (i.e., the transferor).

Apprenticeship Recordkeeping Requirement:

Records sufficient to demonstrate compliance with the apprenticeship requirements may include the following information for each apprentice employed by the taxpayer, contractor, or subcontractor with respect to each facility:

- Any written requests for the employment of apprentices from registered apprenticeship programs, including any contacts with the U.S. Department of Labor's Office of Apprenticeship or a State apprenticeship agency regarding requests for apprentices from registered apprenticeship programs,
- Any agreements entered into with registered apprenticeship programs with respect to the construction, alteration, or repair of the facility,
- Documents reflecting the standards and requirements of any registered apprenticeship program, including the applicable ratio requirement prescribed by each registered apprenticeship program from which taxpayers, contractors, or subcontractors employ apprentices,
- The total number of labor hours worked by apprentices, and
- Records reflecting the daily ratio of apprentices to journeyworkers

In the case of transfer of credits, all PWA Requirements, including recordkeeping requirements, apply to the eligible taxpayer entity who determined the credit (i.e., the transferor).

Taxpayer, Contractor, and Subcontractor Responsibilities

Ensure contractors and Subcontractors are responsible for understanding and adhering to PWA requirements.

1 Incorporate PWA requirements in contracts and subcontracts

Ensure that the required contract clauses and applicable wage determinations are incorporated into any prime or lower-tier subcontracts.

2 Pay at Least the DOL Prevailing Wages

Pay at least the DOL prevailing wages, listed in the applicable wage determination(s), to laborers and mechanics who work on the site of work on a weekly basis.

Contractors can meet this obligation by paying each laborer and mechanic the applicable prevailing wage for the classification of work they perform entirely as cash wages or by a combination of cash wages and employer-provided bona fide fringe benefits

3 Maintain Accurate Records of Hours Worked and Wages Paid

Maintain an accurate record of hours worked and wages paid, including fringe benefit contributions.

In addition to the employee information listed on certified payroll records, contractors must also retain information on the full social security number, address, and if applicable apprenticeship/trainee program information for all covered workers.

Helpful Websites:

- www.sam.gov
- https://www.dol.gov/agencies/whd/IRA.
- Registered apprenticeship programs can be located using the Office of Apprenticeship's partner finder tool, available at *https://www.apprenticeship.gov/partner-finder* and through the applicable State Apprenticeship Agency, *https://www.apprenticeship.gov/about-us/state-offices*.
- https://www.apprenticeship.gov/about-us/apprenticeship-system; A map showing which state agencies have been recognized by DOL as State Apprenticeship Agencies, along with state agency contact information
- Inflation Reduction Act of 2022 | Internal Revenue Service (irs.gov)

Domestic Content bonus credit

Applicable to the following sections:

- *Section 45 (production tax credit)*
- *Section 45Y (clean electricity production credit)*
- *Section 48 (investment tax credit)*
- *Section 48E (clean electricity investment credit)*

Federal Credits and Incentives Updates

Domestic Content bonus credit

Requirements & Timing:

Domestic Content includes any **steel**, **iron**, or **manufactured product** (MP) which is a component of a facility or project (upon completion of construction) and is produced in the United States (US)

The domestic content requirements for steel and iron will be applied in a manner consistent with 49 C.F.R. 661.5

MP is deemed to have been produced in the US if not less than the adjusted percentage of the total costs of all such MPs of such facility or project are attributable to MPs (including components) which are mined, produced, or manufactured in the US

Adjusted Percentage		
Year Construction Begins	**Applicable Project***	**Offshore Wind***
Before 2025	40%	20%
During 2025	45%	27.5%
During 2026	50%	35%
During 2027	55%	45%
After 2027	55%	55%

***The adjusted percentages do not increase for section 48E (clean electricity ITC)**

Domestic Content bonus credit

Requirements & Timing:

The bonus credit applies to facilities or energy projects originally **placed in service after December 31, 2022**.

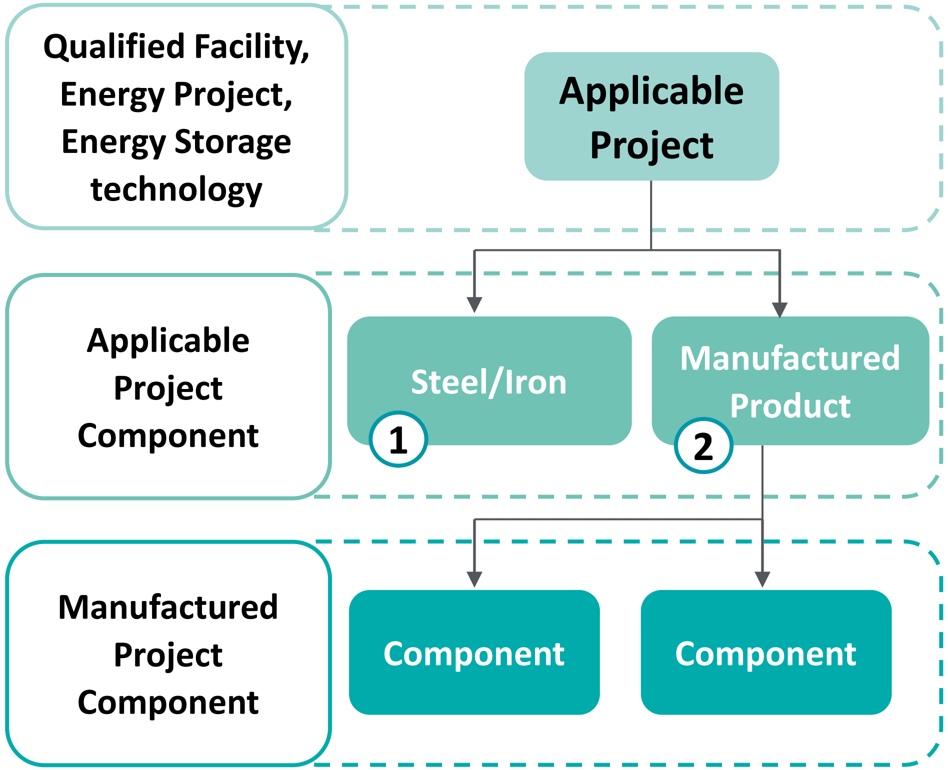
An **Applicable Project** may qualify as originally placed in service even though it contains some used property, provided the fair market value of the used property is not more than 20% of the Applicable Project's total value calculated by adding the cost of the new property to the value of the used property ("80/20 Rule").

If a section 6417 (direct pay) election is made and the project/facility does not meet the Domestic Content requirements, the applicable percentage of the direct payment is reduced:

Beginning of Construction	Applicable Percentage
Before January 1, 2024	100
In calendar year 2024	90
In calendar year 2025	85
After December 31, 2025	0

Federal Credits and Incentives Updates

Domestic Content bonus credit – Notice 2023-38



Bucket 1: Steel or Iron

- Requirement: all manufacturing processes with respect to any steel or iron items that are Applicable Project Components take place in the United States, except metallurgical processes involving refinement of steel additives
- The requirement applies to Applicable Project Components that are construction materials made primarily of steel or iron and are structural in function
- The requirement does not apply to steel or iron used in Manufactured Products or subcomponents of Manufactured Product Components
  - For example: items such as nuts, bolts, screws, washes, cabinets, covers, shelves, clamps, fittings, sleeves, adapters, tie wire, spacers, door hinges, and similar items that are made primarily of steel or iron but are not structural in function

Bucket 2: Manufactured Products

- Manufactured Products Requirement is met if all Applicable Project Components that are Manufactured Products are produced in the United States or are deemed to be produced in the United States
- A Manufactured Product is considered to be produced in the United States if:
  - **(1) All of the manufacturing processes for the Manufactured Product take place in the United States, and**
  - **(2) All of the Manufactured Product Components of the Manufactured Product are of U.S. origin**
  - A Manufactured Product Component is considered to be of U.S. origin if it is manufactured in the United States, regardless of the origin of its subcomponents
  - A Manufactured Product Component that is not manufactured is a U.S. Component if it is mined in the United States

Federal Credits and Incentives Updates

Domestic Content bonus credit – Notice 2023-38

Definitions

Applicable Project: (i) qualified facility under sections 45 and 45Y; (ii) an energy project under section 48; (iii) a qualified investment with respect to a qualified facility or energy storage technology under section 48E

Applicable Project Component: any article, material, or supply, whether manufactured or unmanufactured, that is directly incorporated into an Applicable Project; an Applicable Project Component may qualify as steel, iron, or a Manufactured Product

Manufactured Product: an item produced as a result of the manufacturing process

Manufactured Product Component: any article, material, or supply, whether manufactured or unmanufactured, that is directly incorporated into an Applicable Project Component that is a Manufactured Product

Produced: (with respect to a Manufactured Component): produced as a result of the manufacturing process

Mined: derived from the extraction or ores or minerals from the ground or from the waste or residue of prior mining

Manufacturing Process: the application of processes to alter the form or function of materials or of elements of a product in a manner adding value and transforming those materials or elements so that they represent a new item functionally different from that which would result from mere assembly of the elements or materials

Steel & Iron: The Steel & Iron requirement applies to Applicable Project Components that are construction materials made primarily of steel or iron and are structural in function. Applied in a manner consistent with 49 CFR §661.5(b) and (c). The Steel or Iron Requirement does not apply to steel or iron used in Manufactured Product Components. For example, items such as nuts, bolts, screws, washers, cabinets, covers, shelves, clamps, fittings, sleeves, adapters, tie wire, spacers, door hinges, and similar items that are made primarily of steel or iron but are not structural in function are not subject to the Steel or Iron Requirement.

United States: the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the U.S. Virgin Islands, and the Commonwealth of the Northern Mariana Islands

Domestic Cost Percentage:

$$\text{Domestic cost percentage} = \frac{\boldsymbol{Cost\ of\ U.S.\ Manufactured\ Products + U.S.\ Manufactured\ Product\ Components\ of\ non\ U.S.\ Manufactured\ Products}}{\boldsymbol{Cost\ of\ all\ U.S.\ and\ non\ U.S.\ Manufactured\ Products}}$$

Components cost: Manufactured Product Components of Non-U.S. Manufactured Products that are Applicable Project Components if the Manufactured Product Components are mined, produced, or manufactured in the United States

The cost of a U.S. Manufactured Product or U.S. Component includes only direct costs as defined in Treas. Reg. § 1.263A-1(e)(2)(i), that is direct materials and direct labor costs, that are paid or incurred within the meaning of section 461 by the U.S. Manufactured Product's manufacturer to produce the U.S. Manufactured Product or by the Non-U.S. Manufactured Product's manufacturer to produce or acquire the U.S. Component.

Direct costs, including direct labor costs, of incorporating the Applicable Project Components into the Applicable Project are not counted in the Domestic Manufactured Products and Component Cost.

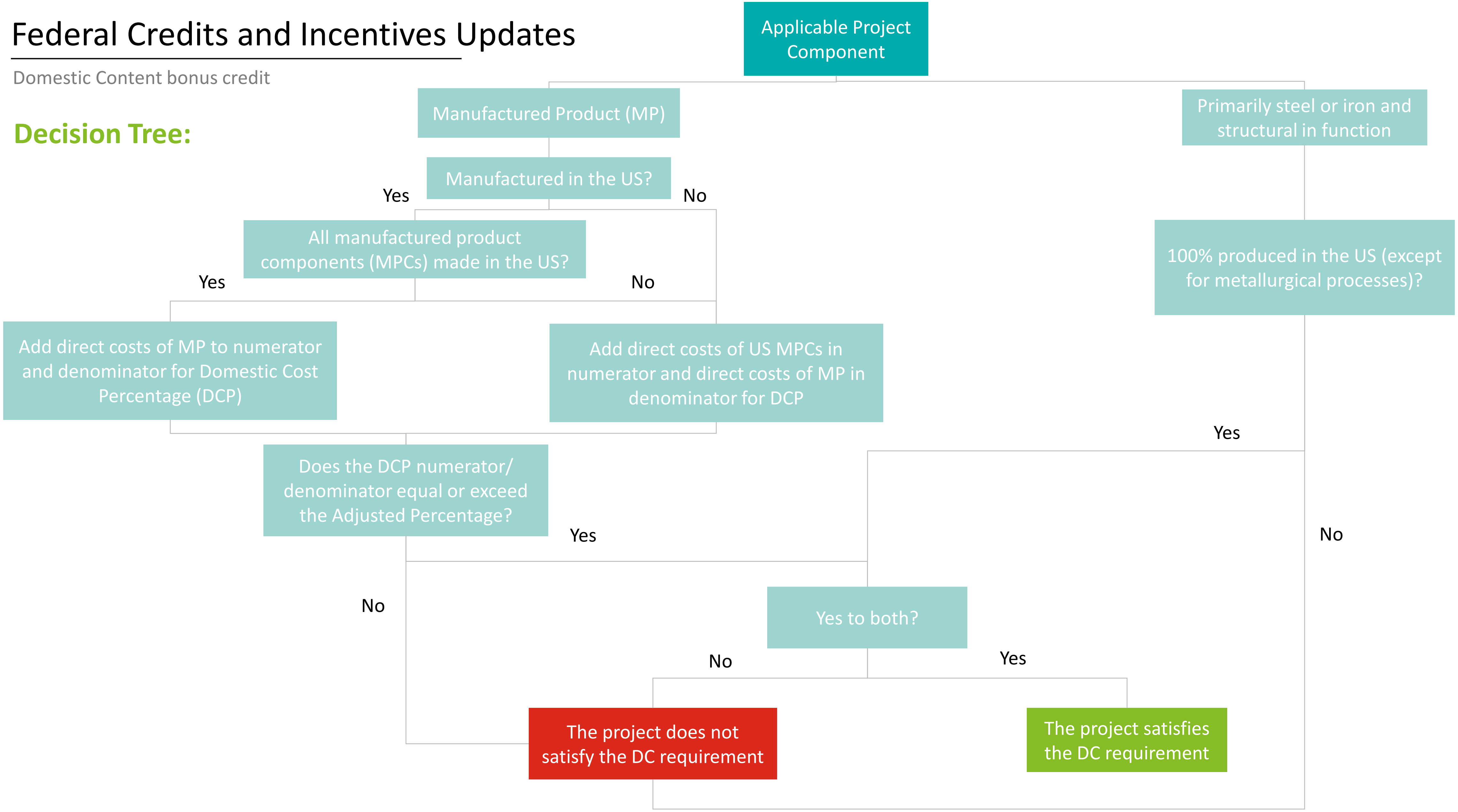
The manufacturer of a U.S. Manufactured Product or a Non-U.S. Manufactured Product is the person that performed the manufacturing process that produced the U.S. Manufactured Product or the Non-U.S. Manufactured Product.

The Total Manufactured Products Cost for an Applicable Project is the sum of the costs of each Applicable Project Component that is a Manufactured Product.

Federal Credits and Incentives Updates

Domestic Content bonus credit

Decision Tree:



Federal Credits and Incentives Updates

Domestic Content bonus credit: Example

- Manufactured Product 1 is not manufactured in the U.S. and has 2 components (1A & 1B). 1A is manufactured in the U.S. and 1B is manufactured outside of the US.
- Manufactured Product 2 is manufactured in the U.S. and has 3 components. All 3 components are manufactured in the U.S.

	Asset	Cost	Asset	Cost
Component	1A	\$30	2A	\$30
Component	1B	\$45	2B	\$50
Component			2C	\$100
Manufactured Product	1	\$100	2	\$200

Manufactured Product 1 is a non-U.S. Manufactured Product

Manufactured Product 2 is a U.S. Manufactured Product

Domestic Cost Percentage

$$\frac{\$30 + \$100 + \$30 + \$50}{\$100 + \$200} = 70\%$$

(30+100 + 30 + 50) = 210

(100 + 200) = 300

210/300 = 70%

The Project satisfies the domestic content requirements and therefore receives the increase in the credit rate

Bonus credits for Energy Communities

- *Applicable to the following sections:*
  - *Section 45 (production tax credit);*
  - *Section 45Y (clean electricity production credit);*
  - *Section 48 (investment tax credit); and*
  - *Section 48E (clean electricity investment credit)*

Energy Community:

Brownfield site; or

A metropolitan statistical area ("MSA") or non-metropolitan statistical area ("non-MSA") which has (or had since 2009) (1) 0.17% or greater direct employment or (2) 25% or greater local tax revenues related to the extraction, processing, transport or storage of coal, oil or natural gas, and has an unemployment rate at or above the national average unemployment rate for the previous year; or

A census tract (or directly adjoining tract) where a coal mine closed after 1999, or a coal-fired electric generating unit was retired after 2009

Notice 2023-29 as updated by Notice 2023-45 (both published on July 17, 2023) establishes rules and requirements pertaining to the three categories of energy communities.

Federal Credits and Incentives Updates

Bonus credits for Energy Communities

The energy community rules and requirements are applicable to the following sections for qualified facilities and energy projects located in an energy community and **placed in service after 2022**:

Section	**Bonus**
Sections 48 & 48E	• 2 percentage points energy community adder applied to the base credit amount, or • 10 percentage points energy community adder if the project is located in an “energy community” and meets prevailing wage & apprenticeship requirements
Sections 45 & 45Y	10% increase in credit amount for any qualified facility located in an energy community and meets the prevailing wage & apprenticeship requirements

Federal Credits and Incentives Updates

Bonus credits for Energy Communities

Brownfield:

Definition: a brownfield site, as defined in 42 U.S.C. section 9601(39)(A), is real property, the expansion, redevelopment or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant (as defined under 42 U.S.C. section 9601) and certain mine-scarred land (as defined in 42 U.S.C. section 9601(3)(D)(ii)(III)); a brownfield site does not include the categories of property described in 42 U.S.C. section 9601(39)(B)

Requirement: The site was previously assessed through federal, state, territory, or federally recognized Indian tribal brownfield resources as meeting the definition of a brownfield site under 42 U.S.C section 9601(39)(A)

Brownfield Safe Harbor:

- An ASTM E 1903 Phase II Environmental Site Assessment confirms the presence on the site of a hazardous substance as defined under 42 U.S.C. section 9601(14), or a pollutant or contaminant as defined under 42 U.S.C. section 9601(33)
- For sites under 5 megawatts (AC), an ASTM E 1527 Phase I Environmental Site Assessment has been completed; the presence on the site of a hazardous substance as defined under 42 U.S.C. section 9601(14), or a pollutant or contaminant as defined under 42 U.S.C. section 9601(33)

Fossil Fuel Employment & Tax Revenue

Requirement:

- A MSA or non-MSA which has (or had since 2009) (1) 0.17% or greater direct employment or (2) 25% or greater local tax revenues related to the extraction, processing, transport or storage of coal, oil or natural gas,
- And has an unemployment rate at or above the national average unemployment rate for the previous year

Tax revenue data is not readily available via a public source. The IRS and Treasury Department requested public comment on possible data sources and revenue categories.

NAICS Code	Description
211	Oil and Gas Extraction
2121	Coal Mining
213111	Drilling Oil and Gas Wells
213112	Support Activities for Oil and Gas Operations
213113	Support Activities for Coal Mining
32411	Petroleum Refineries
4861	Pipeline Transportation of Crude Oil
4862	Pipeline Transportation of Natural Gas

Notice 2023-29 Resources:

- List of Treasury/IRS defined MSAs and non-MSAs (N-2023-29 Appendix A)
- List of MSAs and non-MSAs (by county) that meet the Fossil Fuel Employment threshold
  - N-2023-29 Appendix B
  - N-2023-47 Appendix 1 addition to N-2023-29 Appendix B
- List of MSAs and non-MSAs that meet the Fossil Fuel Employment threshold and Unemployment Rate threshold (based on calendar year 2022 data)
  - N-2023-47 Appendix 2

Appendix B will be updated annually in May for the prior year data

Coal Closures

Requirement: A census tract (or directly adjoining tract) where a coal mine closed after 1999, or a coal-fired electric generating unit was retired after 2009

Coal Mine Status: “Abandoned” or “Abandoned & Sealed”

Coal-Fired Electric Generating Unit Type:

- 2014-2022: “Conventional Steam Coal” or “Coal Integrated Gasification Combined Cycle”
- 2010-2013: “primary fuel source code of anthracite coal, bituminous coal, lignite coal, refined coal, coal-derived synthesis gas, subbituminous coal, and waste/other coal”

NOTICE 2023-29

List of census tracts in the coal closures category

N-2023-29, Appendix C

NOTICE 2023-47

N 2023-47 Appendix 3

Additional census tracts to the Notice 2023-29 Appendix C that meet the Coal Closures requirement

DATA SOURCE

Census tracts are determined using the 2020 Decennial Census

Coal closures are monitored and reported by the U.S. Department of Labor’s Mine Safety & Health Administration

Federal Credits and Incentives Updates

Bonus credits for Energy Communities

Nameplate Capacity Test & Footprint Test:

- A project will be considered located in an EC if 50% or more of the project's nameplate capacity is in an area that qualifies as an energy community. Offshore energy generation units will apply the nameplate capacity test to the "land-based power conditioning equipment that conditions energy generated by the project for transmission, distribution, or use and that is closest to the point of interconnection"
- If no nameplate capacity, footprint test should be applied. Project will be considered as located/placed in service within an EC, if 50% or > of its squared footage is an area that qualifies as an EC.

Timing to Test if a Project is in an Energy Community:

Section	Testing Date
Sections 48 & 48E	Date the project is placed in service
Sections 45 & 45Y	Each year during the qualified facility's 10-year credit period
Safe Harbor	Begun construction date for projects which begin construction on or after January 1, 2023

Substantiation:

- General recordkeeping requirements under section 6001 must be met in order to substantiate that a qualified project is in an energy community
- This guidance applies for taxable years ending after April 4, 2023. Treasury and the IRS indicated they will be issuing proposed regulations.

Federal Credits and Incentives Updates

Bonus credits for Energy Communities

Timing to Test if a Project or Facility is in an Energy Community:

Project Type	Begun Construction	Placed in Service	Energy Community Testing Date
Section 48 ITC	November 15, 2022	December 15, 2024	December 15, 2024
	June 30, 2023	August 1, 2026	June 30, 2023 or August 1, 2026
Section 45 PTC	July 15, 2022	September 15, 2023	Each year during the qualified facility's 10-year credit period
	March 1, 2023	January 31, 2024	March 1, 2023 or each year during the qualified facility's 10-year credit period.

Bonus credits for Low-Income Communities

- *Applicable to the following sections:*
  - *Section 48 (investment tax credit); and*
  - *Section 48E (clean electricity investment credit)*

Section 48(e) – Low Income Communities Bonus Credit Program:

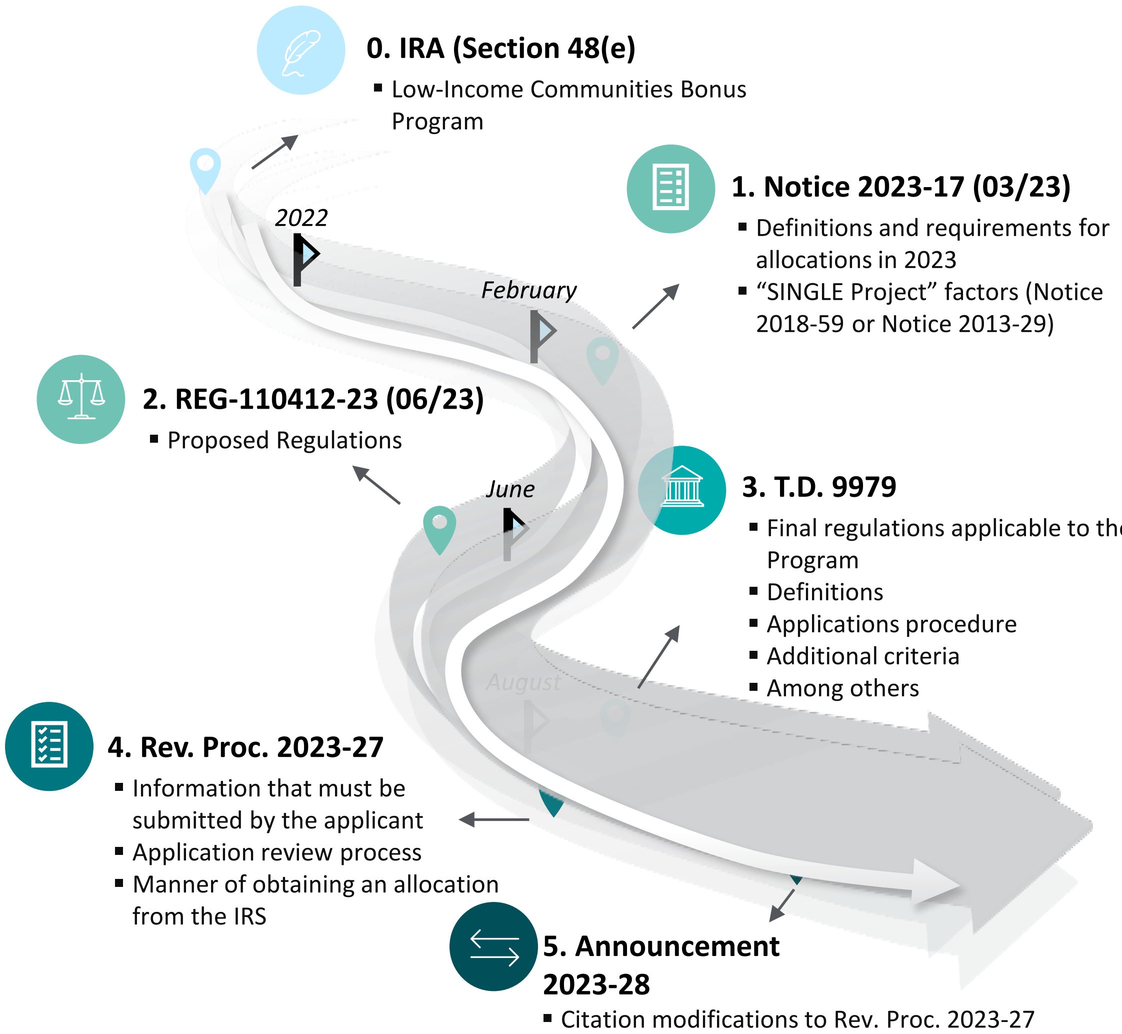
Background and Timeline:

Annual allocation of environmental justice solar and wind capacity limitation (total 1.8GWdc annually) to:

- Small scale solar and wind facilities
- With a maximum net output of less than 5MW (AC)
- Placed in service within specified low-income communities

10% adder > located in a low-income community (LIC) or on Indian land

20% adder > qualified low-income residential building project or a qualified low-income economic benefit project



Federal Credits and Incentives Updates

Bonus credits for Low-Income Communities

Allocations

For 2023*, the capacity limitation for each facility category is:

Category 1: Located in LIC**	700 megawatts
Category 2: Located on Indian Land	200 megawatts
Category 3: Qualified low-income residential building project	200 megawatts
Category 4: Qualified low-income economic benefit project	700 megawatts

*Treasury and IRS may adjust this initial reservation of capacity in future guidance.

**This amount will be subdivided between BTM (490 mW) and FTM facilities (210 mW).

Application & Applicant

The owner of the facility must submit an application per facility per the allocation year to apply for an allocation of the Capacity Limitation. The application must contain the required information, documentation, and attestations. DOE will publicly announce opening and closing dates for the application.

In general – The owner of the facility is the applicant and is the recipient of the allocation.

Disregarded entities - The owner of the disregarded entity is the owner of the facility and is the applicant.

Partnerships and S corporations – The owner of the facility is the partnership or S corporation and is the applicant, not the partners or shareholders.

Federal Credits and Incentives Updates

Bonus credits for Low-Income Communities

Category 1:

Low Income Communities

- Any population census tract with a poverty rate of at least 20% based on the 2012-2015 American Community Survey data;
- A non-metropolitan area with a median family income less than or equal to 80% of the statewide median family income; or
- A metropolitan area with a median family income less than or equal to 80% of the greater of: (a) the statewide median family income or (b) the metropolitan area median family income.

The Department of Energy received Category 1 allocation applications totaling 4,227 MW, more than 6x the 700 MW capacity limit originally set.[1]

+ 10 Percentage points

Category 2:

Indian Land

- Any population census tract with a poverty rate of at least 20% based on the 2012-2015 American Community Survey data;

The Department of Energy received Category 2 allocation applications totaling 49 MW, out of a 200 MW capacity limit originally set.[1]

Category 3:

Qualified low-income residential building project

- Facility installed on the same or adjacent parcel of land as a qualified low-income residential building project. A qualified low-income residential building project is:
  - A residential rental building that participates in a covered housing program or other affordable housing program ("Qualified Residential Property"); and
  - At least 50% of the financial benefits of the electricity produced by such facility are allocated equitably among occupants.

The Department of Energy received Category 3 allocation applications totaling 165 MW, out of a 200 MW capacity limit originally set.[1]

+ 20 Percentage points

Qualified low-income economic benefit project

- The Facility must serve multiple qualifying low-income households ("Qualifying Household");
- At least 50% of the facility's total output in kW must be assigned to Qualifying Households; and
- Each Qualifying Household must be provided a bill credit discount rate of at least 20%.

The Department of Energy received Category 4 allocation applications totaling 3,892 MW, more than 5x the 700 MW capacity limit originally set.[1]

Category 4:

(1) According to the DOE's Low-Income Communities Bonus Credit Program Capacity Dashboard (last accessed 01/23/2024).

Transferability and Direct Pay

Federal Credits and Incentives Updates

Transferability and Direct Pay

- **Elective Payment –** Section 6417 allows an ***applicable entity*** or ***electing taxpayer**** to elect to be treated as having made a payment of tax equal to 100% of the value of the ***applicable credit determined*** for the taxable year. This provision applies to the following tax credits:

Direct Pay Election: Applicable Credits
Section 30C alternative fuel vehicle refueling property credit
Section 45 renewable electricity production tax credit
Section 45Q carbon oxide sequestration credit*
Section 45U zero-emission nuclear power production credit
Section 45V clean hydrogen production credit*
Section 45W qualified commercial vehicles (tax-exempt entity)
Section 45X advanced manufacturing production credit*
Section 45Y electricity production credit
Section 45Z clean fuel production credit
Section 48 energy investment tax credit
Section 48C qualifying advanced energy project credit
Section 48E clean electricity investment credit

***Electing taxpayer –** For the section 45V clean hydrogen production credit and the section 45Q carbon oxide sequestration credit, any taxpayer can elect direct pay for the first five years of the credit period. For the section 45X advanced manufacturing credit, any taxpayer can elect direct pay for any consecutive five years within the credit period. During these periods the electing taxpayer engaged in these tax credit qualified activities is treated as an applicable entity.

Timing – Generally, the election must be made by the applicable entity no later than the due date of the tax return for the taxable year for which the election is made (including extensions), but in no event earlier than February 13, 2023. The payment is generally treated as made on the later of (1) the due date (determined without regard to extensions) of the tax return, or (2) the date that the tax return is filed.

Federal Credits and Incentives Updates

Transferability and Direct Pay

Transferability Election – Section 6418 allows an ***eligible taxpayer*** to elect to transfer all (or any portion specified in the election) of an ***eligible credit determined*** to an unrelated taxpayer for cash consideration. Such consideration is not includible in gross income of the transferor and is not deductible by the transferee. The transferee is not able to transfer the credit. This provision applies to the following eligible credits:

Transferability Election: Eligible Credits
Section 30C alternative fuel vehicle refueling property credit
Section 45 renewable electricity production tax credit
Section 45Q carbon oxide sequestration credit
Section 45U zero-emission nuclear power production credit
Section 45V clean hydrogen production credit
Section 45X advanced manufacturing production credit
Section 45Y electricity production credit
Section 45Z clean fuel production credit
Section 48 energy investment tax credit
Section 48C qualifying advanced energy project credit
Section 48E clean electricity investment credit

Partnerships or S Corporations – With respect to a transferor that is a partnership or S corporation, any amount received as consideration is treated as tax-exempt income for purposes of sections 705 and 1366. Each partner's distributive share of such tax-exempt income is based on such partner's distributive share of the otherwise eligible credit for each taxable year. Similar rules apply in the case of S corporations and their shareholders.

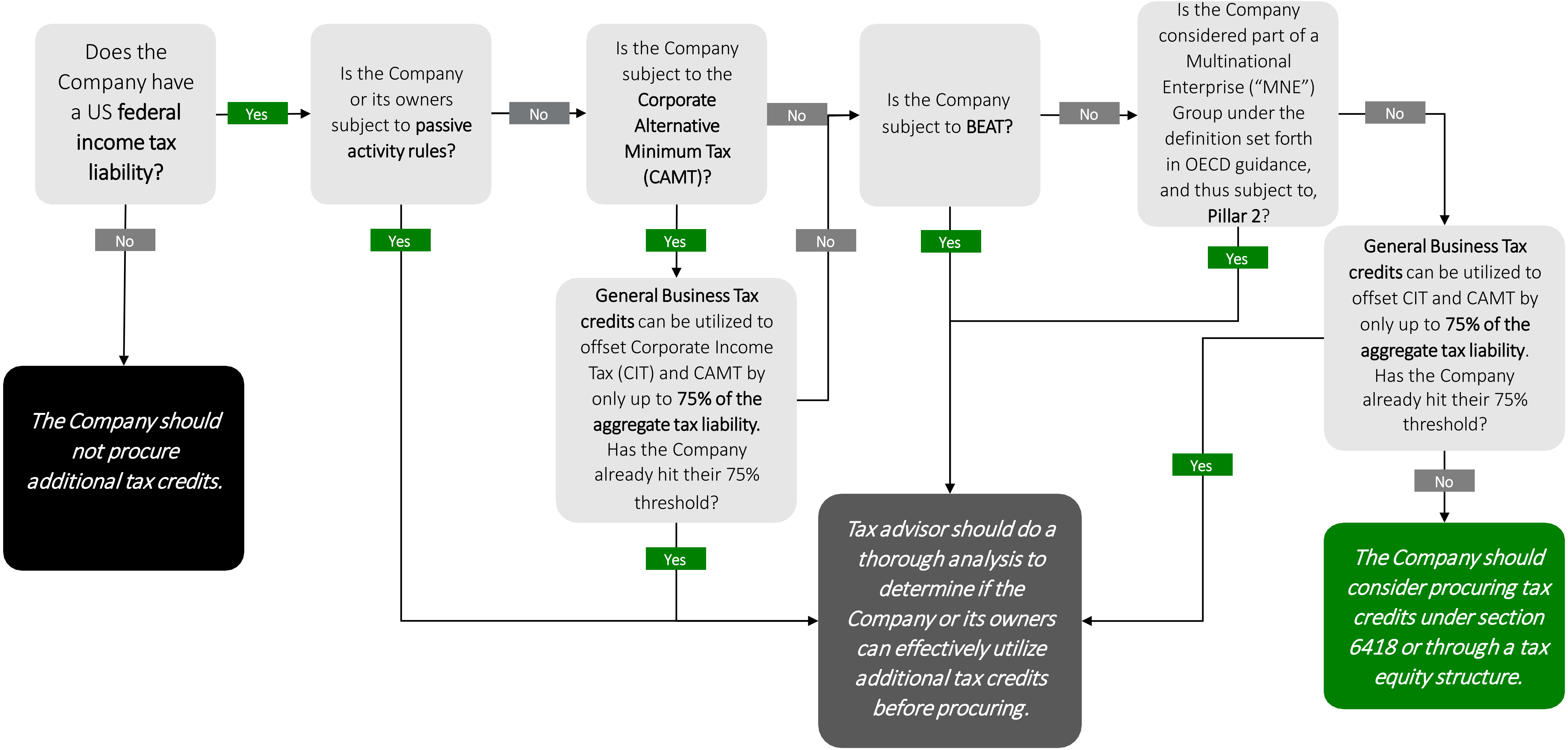
Timing – Elections to transfer the credit must be made not later than the due date (including extensions) for the tax return for the taxable year for which the credit is determined, but in no event earlier than February 13, 2023. The credit is taken into account in the first taxable year of the transferee taxpayer ending with, or after, the taxable year of the transferor with respect to which the credit was determined.

Ineligible Credits

- Section 30D Clean Vehicle Credit
- Section 45W Credit for Qualified Commercial Clean Vehicles
- Section 48DAdvanced Manufacturing Investment Credit

Federal Credits and Incentives Updates

Transferability and Direct Pay: Utilization considerations



Transferability and Direct Pay: Deep dive into Direct Pay

Federal Credits and Incentives Updates

Transferability and Direct Pay: Deep dive into Direct Pay

Who can make a direct pay election?

- An "applicable entity" or "electing taxpayer."
- Election must be made with respect to each "applicable credit property" determined with respect to the "applicable entity" or "electing taxpayer."

What is an "electing taxpayer"?

- Taxpayer other than an applicable entity that elects to receive direct payments during the applicable 5-year periods for 45V, 45Q, or 45X.
- Partnerships and S corporations may be electing taxpayers.
- A partnership or S corporation must elect to receive direct payments for credits; NOT the partners or S corporation shareholders.

What is the "applicable credit property"?

- A ***property-by-property*** or ***facility-by-facility*** election except in the case of energy property described in section 48, where an applicable entity or electing taxpayer may choose to make the direct-pay election with respect to ***an energy project***.

What is an "applicable entity"?

- Includes, but is not limited to, section 501(a) tax-exempt organizations, governments of any U.S. territory, State, the District of Columbia, Indian tribal governments, or any political subdivision, agency or instrumentality thereof, and rural electric cooperatives, Alaska Native Corporations, and the Tennessee Value Authority.
  - All organizations described in sections 501(c) and 501(d) including public charities, private foundations, social welfare organizations, labor unions, business leagues, and religious or apostolic organizations.
  - Cities, counties, and other political subdivisions including water districts, school districts, economic development agencies, and public universities and hospitals that are agencies and instrumentalities of states or political subdivisions.
  - Agencies and instrumentalities of the United States are not defined as applicable entities.
  - Co-owners of an undivided interest in applicable credit property, including an arrangement treated as a tenancy in common, or pursuant to a joint operating agreement that has properly elected out of subchapter K under section 761.
  - Partnerships and S corporations are not "applicable entities" even if some or all of their owners are applicable entities.

To make a valid direct payment election, applicable entity or electing taxpayer files as part of its original tax return the following:

- Appropriate IRS Form for the applicable credit, Form 3800 and a schedule.
- Any other information specified in guidance.
- For entities not required to file income tax returns, the election must be made by the 15th day of the fifth month after the entity's taxable year unless an additional six-month extension of time is granted pursuant to additional guidance that has not yet been published.
- 9100 relief for late election is not available.

Other special rules

- No direct-payment election may be made for any credits purchased pursuant to section 6418.
- Each direct-payment election is made for an applicable credit property as an all or nothing election.
- Except for credits under section 45V, 4SQ, and 45X, any election once made is irrevocable and remains in effect for the entirety of the applicable tax credit period (i.e., 10-year or 12-year PTC period).
- An applicable entity or electing taxpayer must directly own the underlying property or conduct activities giving rise to the underlying applicable credit or the election cannot be made (i.e., the recipient of an election pursuant to section 45Q(f)(3)(B), and the lessee in a lease passthrough election under section 50(d)(5) and Treas. Reg. 1.48-4 cannot make the election).

How to determine the "applicable credit"?

- Special rules apply for tax exempt organizations and governmental entities allowing the amount of any applicable credit to be determined without regard to certain governmental and tax-exempt use restrictions under sections 50(b)(3) and (b)(4)(A)(i) and by treating any property as used in a trade or business of the applicable entity.
  - Allows for the determination of an applicable credit outside the unrelated business context
  - Allows the use of accelerated depreciation for applicable credit property used in a trade or business
  - Requires the application of the at risk rules (section 49) in the context of investment credit property and the passive activity rules (section 469) for all applicable credits when engaged in a trade or business
- General rule with respect to income, including certain grants and forgivable loans, that are exempt from federal income tax:
  - Proposed Regulations provide that all grants and forgivable loans used to purchase, construct, reconstruct, erect, or otherwise acquire investment-related property (i.e., 30C, 45W, 48, 48C, or 48E applicable credit property) is generally included in the basis for purposes of computing the applicable credit amount.
- Special rule / exception:
  - If income exempt from tax under subtitle A is received ***for the specific purpose*** of purchasing, constructing, reconstructing, erecting, or otherwise acquiring investment-related property (the "Restricted Tax Exempt Amount"), the applicable credit amount is reduced to the extent the Restricted Tax Exempt Amount plus the applicable credit exceeds the cost of the investment-related property.

Example:

Public charity B receives a $60,000 grant from a private foundation to build energy property, P, a qualified investment credit property that costs $80,000.

B uses $20,000 of its own funds plus the $60,000 grant to build P.

B's basis in P is $80,000. Based upon acquisition cost, B can earn a section 48 investment credit (with bonus credit amounts) of $40,000 (50% of basis).

However, because the amount of the restricted tax exempt grant ($60,000) plus the section 48 credit ($40,000) exceeds P's cost by $20,000, B's section 48 applicable credit is reduced by $20,000 so that the total amount of the section 48 investment credit plus the restricted tax exempt grant equals the cost of P.

Transferability and Direct Pay: Deep dive into Transferability

Federal Credits and Incentives Updates

Transferability and Direct Pay: Deep dive into Transferability

Who can make a transfer election?

- Only an "eligible taxpayer" that is not an ”applicable entity” or “electing taxpayer” otherwise eligible for the direct pay election.
- Election must be made with respect to each “eligible credit property” determined with respect to the “eligible taxpayer."

What is an "eligible taxpayer”?

- Any taxpayer that is not an applicable entity under section 6417(d)(1)(A).
- Partnership, S corporation, sole owner of a disregarded entity.
- Co-owners of an undivided interest in eligible credit property including an arrangement treated as a tenancy in common, or pursuant to a joint operating arrangement that has properly elected out of subchapter K under section 761.
- Member of a consolidated group.

What is the “eligible credit property”?

- A ***property-by-property*** or ***facility-by-facility*** election except in the case of energy property described in section 48, where an eligible taxpayer may choose to make the transfer election with respect to ***an energy project***.

Limitations on the "eligible credits" that can be transferred

- Once an eligible credit is transferred with respect to eligible credit property, the eligible credits cannot be transferred again (no second transfer rule)l
- While brokerage arrangements are allowed to facilitate transfers, dealer arrangements are not.
- An eligible taxpayer may also elect to transfer specified portions of an eligible credit to one or multiple transferees, but the same credit cannot be sold to different parties or double counted in any way.
- An eligible taxpayer must directly own the underlying property or conduct activities giving rise to the underlying eligible credit or the transfer election cannot be made (i.e., the recipient of an election pursuant to section 45Q(f)(3)(B), and the lessee in a lease passthrough election under section 50(d)(5) and Treas. Reg. 1.48-4 cannot make the election).

Federal Credits and Incentives Updates

Transferability and Direct Pay: Deep dive into Transferability

How to determine the "eligible credit"?

- All federal income tax rules apply to determine the eligible credit amount including certain governmental and tax-exempt use restrictions under sections 50(b)(3) and (b)(4)(A)(i), and when applicable, the section 49 at risk rules.
- However, taxpayer-specific utilization rules DO NOT apply when determining the eligible amount (i.e.., limitations imposed under section 38(b), 38(c), and section 469).
- Special rules apply for REITs (or partnerships with REIT partners) allowing the amount of any eligible credit to be determined without regard to the former section 46(e).

Paid in Cash Requirement

- Cash payments to transferors as consideration must be made no earlier than the first day of the eligible taxpayer's taxable year during which the credit is determined and no later than the due date for completing a transfer election statement.
- Implications for the financing investments that generate eligible credits.

"Excessive Credit Transfer" Penalty

- Recapture does not result in excessive credit transfer penalties
- Anti-abuse rule

Is transferee taxpayer subject to risk of recapture?

- Transferee taxpayer generally subject to risk of recapture with respect to transferred investment tax credits ("ITCs").
  - Exception for recapture when the transferor is a partnership or S corporation, and the recapture occurs as a result of changes in the ownership of the partnership or S corporation.
    - In such case, transferee taxpayer is NOT subject to recapture.
    - Recapture consequences imposed solely upon the owner(s) of the partnership or S corporation.

Recapture notification required

- **Transferor must notify transferee of the occurrence of a recapture and information necessary to calculate the recapture amount.**
- **Transferee must notify transferor of the recapture amount in order for the transferor to adjust basis of the eligible.**

Federal Credits and Incentives Updates

Transferability and Direct Pay: Deep dive into Transferability

- To make a valid transfer election, eligible taxpayer files as part of its *original tax return* (including extensions) the following:
  - Appropriate IRS Form for the eligible credit, Form 3800 and a schedule
  - *Transfer election statement* *(completed by both transferor and transferee)*
    - Must include among others, a representation that the transferor provided the "required minimum documentation" to the transferee
  - Any other information specified in guidance
  - 9100 relief for late election is not available

- May transfer all or a portion of the eligible credit to one or multiple transferees; however, cannot separately transfer any bonus amount from the base amount

Required minimum documentation:

- Information that validates the existence of the credit property
- Documentation substantiating the transferor satisfied the requirements to include any bonus credit amounts
- Evidence of the transferor's qualifying costs, production activities and sales amounts
- Must be retained by the transferee pursuant to recordkeeping requirements

Federal Credits and Incentives Updates

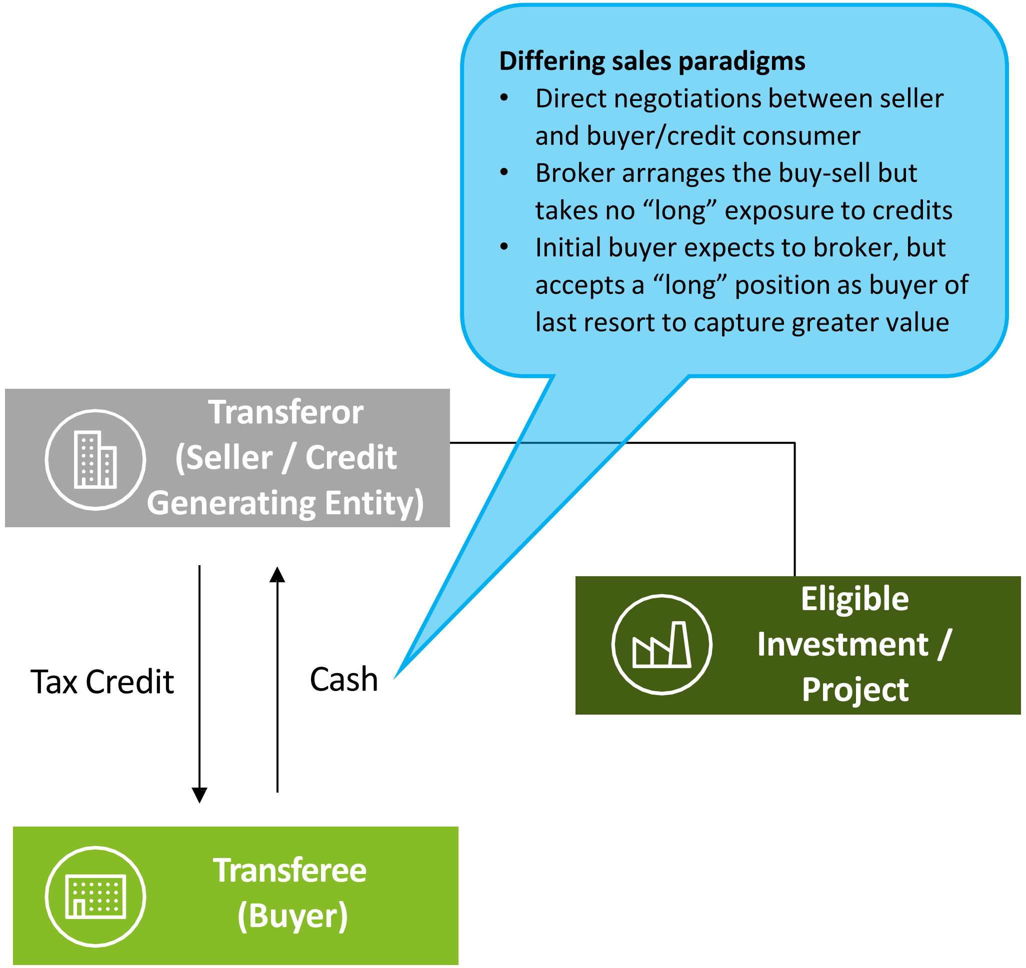
Transferability and Direct Pay: Deep dive into Transferability

Transferee will perform **due diligence** on the investment and Transferor

- the type of credit being transferred,
- quality of supporting documentation provided by Transferor,
- Transferor's credit-worthiness, and
- maturity of the technologies generating the credit.

The **market pricing** and credit availability is influenced by many factors, including, but not limited to:

- the type of credit being transferred,
- quality of supporting documentation provided by Transferor,
- Transferor's credit-worthiness,
- maturity of the technologies generating the credit, and
- Transferee's ability to utilize tax credits, book the effective rate benefit, and save cash taxes.

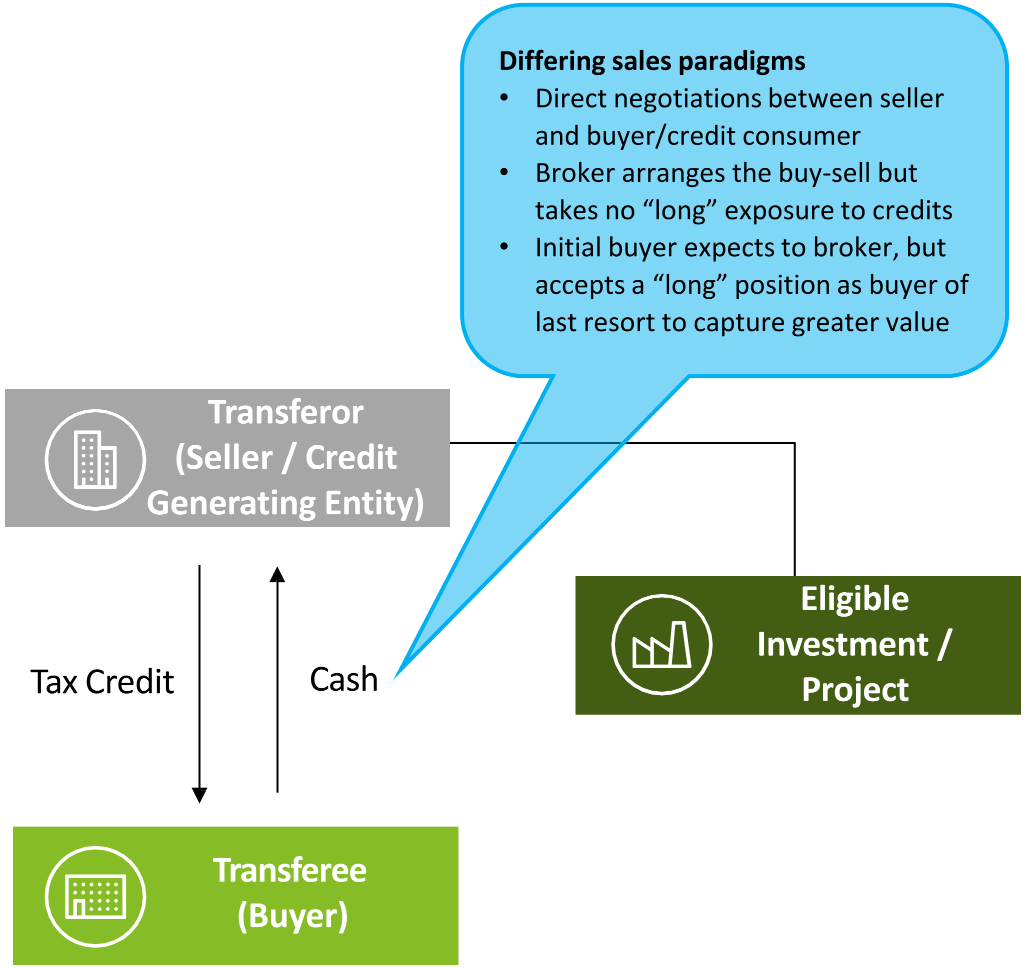


Federal Credits and Incentives Updates

Transferability and Direct Pay: Deep dive into Transferability

Transfer transactions often involve the execution of the following legal documents subject to negotiation by the parties:

- Term sheet
- Tax credit purchase and sale agreement:
  - Purchase price
  - Seller guaranty / indemnification
  - Representations, warranties, and covenants
  - Closing date or firm date conditions precedent
  - Funding date conditions precedent
  - Compliance period provisions
  - IRS audit / tax contest provisions
  - Tax credit insurance provisions
  - Transaction cost provisions
  - Forbearance agreement / permitted encumbrances
  - Certificates, compliance reports, other forms and exhibits (e.g., funding date certificate, IE certificate, funding notice, annual compliance certificate, quarterly asset performance reports, minimum insurance requirements)
- Transfer election statement



Endnotes

i. Pub. L. No. 117-169, 136 Stat. 1818 (2022).
ii. I.R.C. § 179D.
iii. I.R.C. §§ 48(a), 48E.
iv. I.R.C. §§ 45(a), 45Y.
v. I.R.C. § 45W.
vi. I.R.C. § 30C.
vii. I.R.C. § 45W(b)(4).
viii. I.R.C. § 30C(a).
ix. I.R.C. § 30C(b)(1).
x. I.R.C. § 179D(c)(1).
xi. I.R.C. § 179D(c)(1)(c).
xii. I.R.C. §§ 48(a)(2)(A)(i)(i), 48E(a)(2)(A)(i).
xiii. I.R.C. §§ 48(a)(5)(D), 48E(b)(3)(A).
xiv. I.R.C. §§ 45(b)(2)-(6), 45Y(a)(2).
xv. I.R.C. § §45(c)(7)(A)(i)(II). In the case of § 45Y, the taxpayer may either (a) sell the produced electricity to a third party, or (b) if the qualified facility is equipped with a metering device owned and operated by an unrelated person, sold, consumed, or stored by the taxpayer. §45Y(a)(1).
xvi. I.R.C. § 45W(b)(4).
xvii. I.R.C. § 45W(a).
xviii. I.R.C. § 45W(c)(2).
xix. I.R.C. § 45W(c)(3).
xx. I.R.C. § 30C(c)(2).
xxi. I.R.C. § 30C(i).
xxii. I.R.C. § 30C(e)(2).
xxiii. I.R.C. § 30C(g)(1)(B).
xxiv. I.R.C. § 30C(c)(3).
xxv. I.R.C. § 179D(b).
xxvi. I.R.C. § 179D(1)(C)(i-iii).
xxvii. I.R.C. § 179D(c)(1)(D).
xxviii. I.R.C. § 179D(f)(2)(A)
xxix. I.R.C. § 179D(d)(4).
xxx. I.R.C. § 48(a)(3).
xxxi. I.R.C. § 48(a)(3)(A)(ii).
xxxii. I.R.C. § 48E(b)(3)(A)(ii).
xxxiii. I.R.S. Announcement 2022-23, I.R.B. 2023-34 (2023).
xxxiv. I.R.C. § 45(a)(2)(B).
xxxv. I.R.C. § 45Y(b)(1)(A)(ii).
xxxvi. I.R.C. § 45Y(a)(1)(A)(ii)(II).
xxxvii. I.R.C. § 45(b)(6).
xxxviii. I.R.C. §§ 48(a)(12).
xxxix. I.R.C. § 48E(a)(3)(B).
xl. I.R.C. § 45Y(g)(11)(A).
xli. I.R.C. §§ 45(b)(11)(A), 45Y(g)(7).
xlii. I.R.C. §§ 48(a)(14), 48E(a)(3)(A)(i).
xliii. I.R.C. §§48(e), 48E(h).
xliv. I.R.C. § 179D(d)(3)(A).
xlv. See generally the Prevailing Wage and Apprenticeship Requirements sections for all relevant credits.
xlvi. I.R.C. §§ 45Y(b)(1)(A), 48E(b)(3)(A).

Endnotes

xlvii. I.R.C. §§ 45(b)(10)(A), §45Y(g)(12)(C)(ii), 48(a)(13),48E(d)(5).
xlviii. I.R.C. §§ 45Y(g)(12)(C)(iii), 48(a)(13),48E(d)(5).
xlix. I.R.C. §§ 45Y(g)(12)(C)(iv), 48(a)(13),48E(d)(5).
l. Prop. Treas. Reg. § 1.6417-2(b)(2); Treas. Reg. § 1.6417-5T(a).
li. Prop. Treas. Reg. § 1.6417-2(b)(2); Treas. Reg. § 1.6417-5T(a).
lii. Prop. Treas. Reg. § 1.6417-2(d).
liii. I.R.C. § 6417(a).
liv. I.R.C. §§ 45(b)(3), 45Y(g)(8), 48(a)(4), 48E(d)(2).
lv. Prop. Treas. Reg. § 1.6417-2(c)(3); see also IRS FAQs, Elective Pay and Transferability Frequently Asked Questions: Elective Pay.
lvi. Prop. Treas. Reg. § 1.6417-2(d).
lvii. I.R.C. § 6417(a), Prop. Treas. Reg. § 1.6417-1(g).
lviii. Prop. Treas. Reg. § 1.6417-2(a)(1).
lix. Preamble to REG-101607-23, 88 Fed. Reg. 40,558; Prop. Treas. Reg. § 1.6417-2(a)(1)(iv).
lx. I.R.C. § 6417(d)(1)(A).
lxi. Prop. Treas. Reg. § 1.6417-1(g).
lxii. Prop. Treas. Reg. § 1.48-13(d)(3).

About the Authors

The creation of this action guide was a collaborative effort from Deloitte and the Commonwealth Fund

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