The Inflation Reduction Act (IRA) was signed by President Biden in August of 2022. The IRA aims to lower energy usage and costs by promoting clean energy and manufacturing by:

- Offering incentives to build more energy efficient buildings
- Using more efficient mechanical systems
- Using higher quality building envelope materials
- Training and hiring workers to become familiar with installing these efficient systems and materials

The IRA contains multiple sections dedicated to improving the energy efficiency of the building industry through tax credits and rebates. Each item in a navy cell in the table below is a clickable component that is specifically linked to its corresponding section.

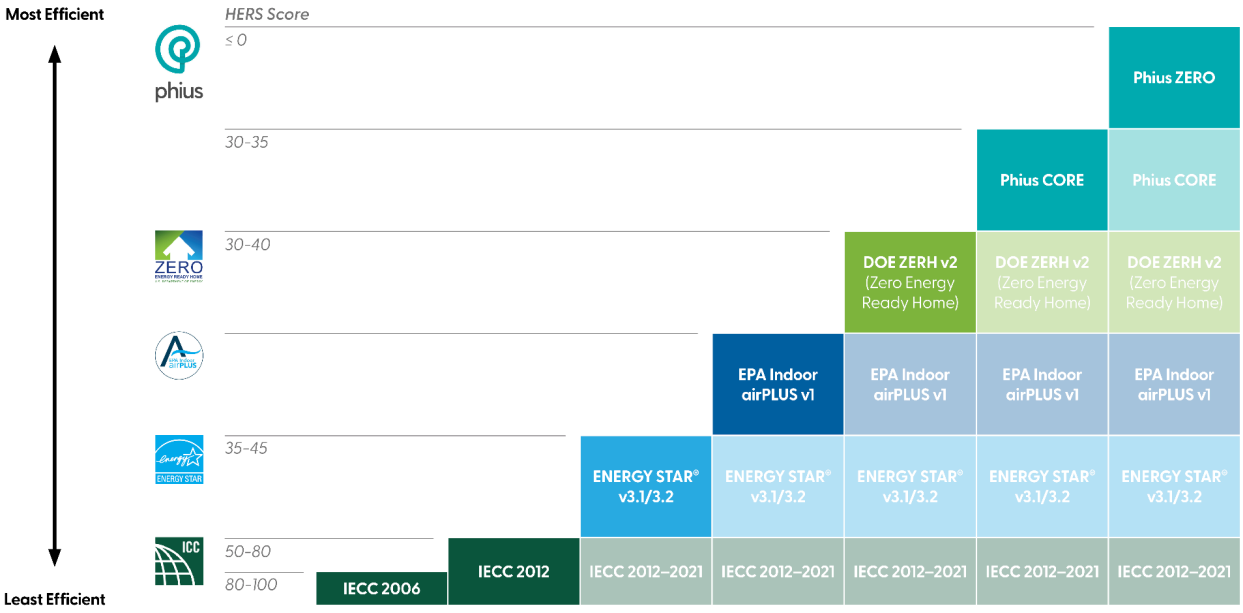
Table 1: Table of Contents

Phius Co-Requisite Relationships

The tax credits, rebates, and deductions mentioned above dovetail with requirements included in the Phius standard. Specifically, the energy efficiency goals that must be met in order to qualify for these tax credits and deductions include: Energy Star; the Department of Energy's Zero Energy Ready Home (DOE ZERH) program; American Society of Heating, Refrigerating and Air-Conditioning Engineers' standard 90.1 (ASHRAE 90.1); and more.

The stair diagram below demonstrates how obtaining Phius CORE or ZERO certification encompasses all the certifications below. Therefore, for the sections below that offer credit for meeting Energy Star or DOE ZERH requirements, Phius projects are also eligible for those credits. Though renewable energy is not required to achieve Phius CORE certification, it is not uncommon for project teams to utilize renewable energy to meet source energy targets. Renewable energy *is* necessary to meet Phius ZERO certification. Below are sections of the IRA related to Phius, with descriptions of what each credit or deduction is, who is eligible to apply for each one, and how to obtain them.

U.S. DOE High Performance Staircase



Section 45L - New Energy Efficiency Home Credit[1]

What: This is a tax credit of $2,500 for meeting Energy Star requirements and $5,000 for meeting the Department of Energy's Zero Energy Ready Home (DOE's ZERH) program when constructing a new single-family home. Tax credits for multifamily projects are available for the same amounts if the building meets prevailing wage requirements. Otherwise, the credit for multifamily buildings is $500 per unit for meeting Energy Star requirements and $1,000 per unit for meeting DOE's ZERH program, see below for more information. Though Phius is not directly named in this tax credit, the requirement of ZERH and Energy Star in order to receive Phius certification leads to Phius projects qualifying for this tax credit.

Who: This tax credit is intended for contractors who construct, or perform a deep retrofit on, a single-family, a manufactured, or a multifamily home. The contractor must own the home and can receive the tax credit once it is sold or leased as a primary residence. If a third-party contractor is hired to aid in the construction, the third-party contractor is not eligible for the tax credit. The IRS describes a qualified energy efficient home is acquired from an eligible contractor in the following situations:

(1) A person constructs a qualified energy efficient home and then sells the home to the homeowner.

(2) A person constructs a qualified energy efficient home and then leases the home to the lessee or tenant.

(3) A person hires a third party contractor to construct a qualified energy efficient home and then sells the home to the homeowner.[2]

How: With single-family and multifamily both eligible for this credit, it's important to ensure how to obtain the credit for each:

- Single-family homes must meet the requirements of one of the following:
    - Energy Star Single-Family New Homes National Program Requirements
        - Version 3.1 (if purchased before January 1, 2025), or
        - Version 3.2 (if purchased after December 31, 2024)
            - $2,500 credit
    - Department of Energy's Zero Energy Ready Home (DOE's ZERH) Program

[1]https://www.irs.gov/newsroom/irs-builders-of-qualified-new-energy-efficient-homes-might-qualify-for-an-expanded-tax-credit-under-section-45l

[2] https://www.irs.gov/irb/2008-12_IRB#NOT-2008-35

        - $5,000 credit
- Multifamily dwelling units must meet the requirements of one of the following:
    - Energy Star Multifamily New Construction Program
        - $500/dwelling unit
    - Department of Energy's Zero Energy Ready Home (DOE's ZERH) Program
        - $1,000/dwelling unit
    - The IRS describes a multifamily project meeting prevailing wage[3] requirements when "the eligible contractor must ensure that any laborers and mechanics employed by the eligible contractor or any subcontractor in the construction of such residence are paid wages at rates not less than the prevailing rates for construction, alteration, or repair of a similar character in the locality in which such residence is located as most recently determined by the Secretary of Labor."

Phius Dovetail: Obtaining Phius certification requires certification through Energy Star and ZERH

Compliance Path	Single-Family ($ per dwelling unit)	Prevailing Wage (applies to multifamily only)	Multifamily ($ per dwelling unit)
EPA Energy Star New Construction	$2,500	No	$500
		Yes	$2,500
DOE Zero Energy Ready Homes (ZERH)	$5,000	No	$1,000
		Yes	$5,000

Once the items laid out above have been met, fill out Form 8908 (please see https://www.irs.gov/forms-pubs/about-form-8908 for instructions and latest information) from the IRS and include the completed form when filing your tax return, including all relevant receipts.

[3] https://www.irs.gov/instructions/i8908#en_US_202312_publink1000116562

Project Criteria		45L
Project Scope	New Construction	x
	Retrofit	x
Role in Project	Owner or Developer	-
	Contractor	x
	Designer	-
	Renter	-
	Homeowner	-
Building Function	Single-family	x
	Multifamily	x
	Mixed-use	x
	Commercial	-

Section 179D - Energy Efficiency Commercial Buildings Tax Deduction[4]

What: Geared toward commercial property and buildings, either newly built or retrofitted, Section 179D provides a tax deduction for qualified buildings that incorporate energy efficiency requirements such as HVAC, hot water, interior lighting systems, and general building envelope components. The deduction is calculated based on how much the installed energy-saving measures are calculated (modeled) to save relative to an ASHRAE 90.1 baseline[5]. Minimum qualifying projects must save at least 25%.

Who: Owners and designers of energy efficient commercial building properties are eligible for this tax deduction. Note below the qualifications for, and differences between, energy efficient commercial building property and energy efficient commercial building retrofit property.

How: Applicable buildings include those within the scope of the ASHRAE 90.1 standard, charitable and religious institutions, private schools/colleges, private hospitals, museums, and tribal communities. Buildings that comply with Phius standards result in significant energy reductions from code-baselines, at least 25%, and therefore have the potential to qualify for significant tax deductions under 179D. Please note that in order to track these reductions, an IRS-approved energy model[6] must be created and submitted. WUFI, used for Phius projects, is *not* an approved software. For qualified softwares, please visit Qualified Software for Calculating Commercial Building Tax Deductions. See table below for more information.

Phius Dovetail: Phius certification requires more energy efficient mechanical systems and building envelope components to meet project-specific targets

[4] https://www.irs.gov/credits-deductions/energy-efficient-commercial-buildings-deduction
[5] Buildings that begin construction before January 1, 2023 should use ASHRAE 90.1-2007 while buildings that begin construction on or after January 1, 2023 should use ASHRAE 90.1-2019
[6] https://www.energy.gov/eere/buildings/qualified-software-calculating-commercial-building-tax-deductions

Tax Deduction = [Square Footage of Building] x [Applicable Dollar Value]		
Deduction Rate	**[Applicable Dollar Value]**	**Baseline**
Standard Deduction	$0.50 *Add $0.02 for each percentage point above 25% (maximum: $1.00)	ASHRAE Standard in effect four years prior to the in-service date
Meets Prevailing Wage and Apprenticeship Requirements in Tax Code	$2.50 (minimum) *Add $0.10 for each percentage point above 25% (maximum: $5.00)	ASHRAE Standard in effect four years prior to the in-service date

Once the items laid out above have been met, fill out Form 7205 (please see www.irs.gov/Form7205 for instructions and latest information) from the IRS and include the completed form when filing your tax return, including all relevant receipts.

Project Criteria		179D
Project Scope	New Construction	x
	Retrofit	x
Role in Project	Owner or Developer	x
	Contractor	-
	Designer	x
	Renter	-
	Homeowner	-
Building Function	Single-family	-
	Multifamily	-
	Mixed-use	x
	Commercial	x

Section 25D - Residential Clean Energy Credit[7]

What: The Residential Clean Energy Credit incentivizes investing in residential renewable energy, whether solar, wind, or geothermal energy. The credit can also be applied to battery storage and fuel cells. Though it is not allowed to surpass the amount owed on an individuals' taxes, any excess unused credit can carry forward. This tax credit can be claimed every year between the years of 2022 and 2032.

Who: Both homeowners and renters can claim this tax credit. Landlords and others who do not primarily live in the residence are not qualified to do so.

How: When looking to apply for this tax credit, these are the purchases or expenses that qualify:

- Solar electric panels
- Solar water heaters
    - Certified through Solar Rating Certification Corporation or similar organization that is state-endorsed
- Wind turbines
- Geothermal heat pumps
    - Meet Energy Star requirements at time of purchase
- Fuel cells
- Battery storage technology
    - Minimum capacity of 3 kwh
- Labor costs for:
    - Onsite preparation
    - Assembly or installation of any of the listed components above
    - Piping to connect to home
    - Wiring to connect to home

Following are important exceptions to this tax credit:

- Building components required to physically support these clean energy components do not qualify.
    - For example, solar roofing tiles or solar shingles do count toward the credit whereas roof trusses to support solar panels do not qualify.

[7] https://www.irs.gov/credits-deductions/residential-clean-energy-credit

- If a public utility subsidy is obtained for the installation or purchase of clean energy components, that subsidy must be subtracted from the qualified expenses as listed above
- Subtract rebates from qualified expenses if:
    - It is based on the cost of the property
    - It comes from the manufacturer, distributor, seller, installer, or another person in this capacity
    - It is not in the form of a payment for services provided
        - I.e. a trade-and-barter type of agreement
    - If all of the above apply, rebates should be subtracted from the qualified expenses

Phius Dovetail: Though renewable energy is not required to achieve Phius CORE certification, it is not uncommon for project teams to utilize renewable energy to meet source energy targets. Additionally, renewable energy is necessary to meet Phius ZERO certification.

Once the items laid out above have been met, fill out Form 5695 (please see www.irs.gov/Form5695 for instructions and latest information) from the IRS and include the completed form when filing your tax return, including all relevant receipts.

25D	Solar HW	Solar Electric	Wind	Geo-thermal Heat Pump	Battery Storage	Fuel Cell	Labor Costs
Coverage	n/a					≤ $500 per 0.5kW	n/a
	30% initially, then 26%, then 22%						
Homeowner	x	x	x	x	x	x	x
Renter	x	x	x	x	x	x	x
Primary Residence	x	x	x	x	x	x	x
Secondary Residence	x	x	x	x	x	n/a	x
Existing Building	x	x	x	x	x	x	x
New Build	x	x	x	x	x	x	x
Carry Forward	x	x	x	x	x	x	x

Project Criteria		25D
Project Scope	New Construction	x
	Retrofit	x
Role in Project	Owner or Developer	x
	Contractor	-
	Designer	-
	Renter	x
	Homeowner	x
Building Function	Single-family	x
	Multifamily	-
	Mixed-use	-
	Commercial	-

Section 25C - Energy Efficient Home Improvement Credit[8]

What: This tax credit provides incentives toward improving the energy efficiency, or reducing energy consumption, of a person's primary residence. The amount of a tax credit cannot surpass the amount owed on an individuals' taxes, nor can any excess unused credit be carried forward in future years. This tax credit can be claimed every year between the years of 2022 and 2032.

Who: A homeowner looking to make energy efficient related improvements to their home, or primary residence, can make use of many opportunities within this tax credit. Though homeowners and primary residences will be the easiest pathway for this tax credit, opportunities exist for renters or owners wanting to make upgrades to a secondary residence as well. However, landlords and other types of property owners who do not live in the residence cannot claim the credit.

How: For projects between Jan 1, 2023 - Dec 31, 2032, the amount of credit you can receive is 30% of the total expenses of the energy efficient improvements. Certain qualified expenses, however, have a maximum allowable credit per year of $1,200 for energy property costs and certain energy efficient home improvements, with limits on:

- Insulation and air sealing systems and/or materials (30% of costs up to $1,200)
    - Must meet International Energy Conservation Code standards in effect at the start of the year 2 years before installation
- Home energy audits must meet requirements noted below:
    - Written report that must include:
        - Home energy auditor's name & relevant tax number, i.e. employer identification number (EIN); or
        - Documentation confirming auditor is certified by program linked below, and
        - The name of the qualified program
    - Inspection that identifies most significant and cost-effective energy efficient updates and an estimate of energy and cost savings in relation to the updates
    - Conducted by a home energy auditor

[8] https://www.irs.gov/credits-deductions/energy-efficient-home-improvement-credit

- Please visit https://www.energy.gov/eere/buildings/us-department-energy-recognized-home-energy-auditor-qualified-certification-programs to find a qualified home energy auditor

- Residential Energy Property Expenses (up to $600 per unit)
  - Central air conditioners; natural gas, propane, or oil water heaters; natural gas, propane, or oil furnaces and hot water boilers
  - Credit may be used toward cost of labor

Phius Dovetail: Phius REVIVE certification requires more energy-efficient mechanical systems and building envelope components to meet project-specific targets

25C	Home Energy Audits	Doors	Windows	Insulation & Air Sealing	Residential Energy Property	Heat Pumps & Biomass Stoves/ Boilers
Requirement	Written report *(see above for more info.)*	Energy Star Certified	Energy Star Certified	IECC	n/a	n/a
Percentage of Total Expenses	30%	30%	30%	30%	n/a	n/a
Maximum Allowable Credit	Up to $150	Up to $250/door, $500 total	Up to $600 total	Up to $1,200	Up to $600/unit	Up to $2,000/year
Cost of Labor	n/a	No	No	No	Yes	Yes

Once the items laid out above have been met, fill out Form 5695 (please see www.irs.gov/Form5695 for instructions and latest information) from the IRS and include the completed form when filing your tax return, including all relevant receipts.
Important Notes: Systems and materials cannot be used, they must be new in order to qualify for the tax credit.

Project Criteria		25C
Project Scope	New Construction	-
	Retrofit	x
Role in Project	Owner or Developer	x
	Contractor	-
	Designer	-
	Renter	x
	Homeowner	x
Building Function	Single-family	x
	Multifamily	-
	Mixed-use	-
	Commercial	-

Section 30C - Alternative Fuel Vehicle Refueling Property Credit[9]

What: This tax credit is available for the purchase and installation of equipment that either refuels or recharges vehicles. In order to qualify, this equipment must be able to recharge the battery of vehicles with electric motors, or store or distribute fuel that is clean-burned[10]. This includes both charging stations and bidirectional charging equipment. The amount available for this tax credit for individuals and businesses is 6% of costs for each individual piece of equipment up to $100,000 total. For businesses meeting prevailing wage and apprenticeship requirements, the same $100,000 total limit applies, but a credit of up to 30% is covered if the $100,000 maximum is not met. For businesses that are tax-exempt, this credit can be claimed as elective pay, or direct pay. The IRS states that a tax-exempt entity "can receive full value of the credit because the IRS treats the elective payment amount as a tax payment. We then count it as overpayment on the return and refund it to the entity."[11]

Who: Unlike many of the other tax incentives mentioned here, this tax credit is accessible to both individuals for their homes as well as businesses who want to install alternative fuel vehicle refueling equipment.

How: When applying for this tax credit there are a few qualifications to take note of:

- The equipment must be used primarily in the United States or United States territories
- The equipment must be ready for use during the same tax year that the tax credit is being applied for
- The equipment must be newly bought: it cannot be used. The first use of the property, also referred to as when the property begins its loss of value, must be by the person applying for the credit
- For equipment used on a residence, this residence must be a primary residence
- The equipment must be installed in one of two community or location types:

[9] https://www.irs.gov/credits-deductions/alternative-fuel-vehicle-refueling-property-credit#qualified
[10] According to the World health Organization, "clean-burning fuel is a fuel that produces little to no air pollution when burned," (https://www.who.int/tools/clean-household-energy-solutions-toolkit/module-7-defining-clean#:~:text=in%20each%20setting.-,Cooking,mg/m3)%20for%20CO)
[11] https://www.irs.gov/credits-deductions/elective-pay-and-transferability

- Low-income community
- Non-urban location
- Visit this map of eligibility to find out if your location qualifies for this tax credit

Forms, instructions, and guidelines for how to claim this credit for the 2023 tax year are still being created. For updates, please visit the "How to claim the credit" section here.

Phius Dovetail: Phius and ZERH certification both require electric vehicle charging infrastructure for all project types.

30C	Individuals	Businesses	Businesses meeting Prevailing Wage Requirements
Percentage of Total Expenses	6%		30%
Maximum Allowable Credit	$100,000		

Project Criteria		30C
Project Scope	New Construction	x
	Retrofit	x
Role in Project	Owner or Developer	x
	Contractor	-
	Designer	-
	Renter	x
	Homeowner	x
Building Function	Single-family	x
	Multifamily	-
	Mixed-use	-
	Commercial	-

The table below gives an overview of which tax credits and tax deductions mentioned in this paper are available based on various project criteria.

Project Criteria		45L	179D	25D	25C	30C
Project Scope	New Construction	x	x	x	-	x
	Retrofit	x	x	x	x	x
Role in Project	Owner or Developer	-	x	x	x	x
	Contractor	x	-	-	-	-
	Designer	-	x	-	-	-
	Renter	-	-	x	x	x
	Homeowner	-	-	x	x	x
Building Function	Single-family	x	-	x	x	x
	Multifamily	x	-	-	-	x
	Mixed-use	x	x	-	-	x
	Commercial	-	x	-	-	x

Braiding Federal and State Incentives

When seeking to qualify for the tax credits and deductions mentioned above, it is important to understand the potential of "braiding" them not only with each other, but also with state-specific energy incentives and codes. Due to having the same goal of improving the energy efficiency of the building industry, many of these sections can be easily used together. In determining which credits and deductions are able to be braided within each other, it is important to understand the scope of the project in terms of these criterion:

- What is the scope of the project?
    - New construction or a retrofit?
- What role do you play in the project?
    - The project owner, the project contractor, a renter, a homeowner, etc.
- What is the building function?
    - Single-family residential, multifamily residential, commercial, mixed-use

Once the questions above have been answered, refer to the Project Criteria table to determine which sections of the IRA are applicable to the project. Appendix A-1 below offers three different scenarios showing various ways to braid multiple IRA incentives with each other and with local codes and incentives.

Applicable Scenarios

Scenario A

In Boston, a developer and contractor team up to design and build a high-end mixed-use project. After determining the various unit types and sizes needed, along with the number of special amenities provided, their total square footage came out to be approximately 55,000 ft^2 (45,000 ft^2 for residential and 10,000 ft^2 for commercial). Due to the size, this project must meet passive standards to comply with the opt-in specialized stretch code that Boston adopted, which requires all residential buildings over 12,000 ft^2 to achieve passive house certification (including Phius).

Because of this opt-in stretch code, Mass Save[12] has offered a Passive House incentive in which projects seeking to achieve Phius certification are awarded funding for pre-construction elements such as a feasibility study, energy modeling, and design

[12] https://www.masssave.com/en/about-us

certification. They are then also awarded more funding for also reaching final certification. See the table below for more specific funding amounts:

Passive House Incentive Structure for Multi-Family (5 units or more)[13]			
Incentive Timing	**Activity**	**Incentive Amount**	**Max. Incentive**
Pre-Construction	Feasibility Study	Up to 100% Feasibility costs	$5,000
	Energy Modeling	75% of Energy Modeling costs	$500/unit, max. $20,000
	Pre-Certification	$750/unit	N/A
Post-Construction	Certification	$3,000/unit	

This project specifically is eligible for approximately $62,500 in Pre-Construction incentives and $150,000 in Post-Construction incentives, totaling $212,500.

After diving into the Mass Save Passive House incentive, they also learn about the IRA. They learn that because of Phius' requirements of meeting DOE's ZERH and Energy Star's program requirements, their project qualifies for sections 45L New Energy Efficiency Home Credit. Though there are incentives for both Energy Star and DOE ZERH, only the highest achieved can be credited. Because Phius requires both, this project is eligible for the tax credit tied to meeting the DOE ZERH requirements. Within the DOE ZERH program are electric vehicle charging station requirements, thus making this project also eligible for 30C Alternative Fuel Vehicle Refueling Property Credit. After further reading into the IRA, they find that they are also eligible for the tax deduction 179D Energy Efficiency Commercial Buildings Tax Deduction because of the commercial space planned for the project.

Though neither of these tax credits require prevailing wage and apprenticeship, incorporating prevailing wage substantially raises the tax credit. For more information regarding prevailing wage and apprenticeship, visit the Inflation Reduction Act Prevailing Wage and Apprenticeship Requirements Fact Sheet and the Inflation Reduction Act Prevailing Wage & Registered Apprenticeship Overview, both made available through the IRS.

[13] https://www.masssave.com/residential/rebates-and-incentives/passive-house-incentives

The Project Criteria chart indicates the available tax credits (in yellow):

Project Criteria (A)		45L	179D	25C	25D	30C
Project Scope	New Construction	x	x	-	x	x
	Retrofit	x	x	x	x	x
Role in Project	Owner or Developer	-	x	x	x	x
	Contractor	x	-	-	-	-
	Designer	-	x	-	-	-
	Renter	-	-	x	x	x
	Homeowner	-	-	x	x	x
Building Function	Single-family	x	-	x	x	x
	Multifamily	x	-	-	-	x
	Mixed-use	x	x	-	-	x
	Commercial	-	x	-	-	x

This project specifically, if prevailing wage and apprenticeship requirements are not met, is eligible for approximately $45,000 through 45L and $5,000 through 179D, totaling $50,000. Please note that this total does not include the 6% rebate of total EV equipment expenses from 30C. If prevailing wage and apprenticeship requirements are met however, it is eligible for $225,000 through 45L and $25,000 through 179D, totaling $250,000. Please note that this total does not include the 30% rebate of total EV equipment expenses from 30C. **The overall total funding this project is eligible for is $262,500, or $462,500 if prevailing wage and apprenticeship requirements are met, plus the added rebate from 30C.**

Scenario B

A developer in Chicago is aiming to build a multifamily affordable housing project. She determines that the best way in this current situation to offset the costs of affordable residential units is to design and build a mixed-use building in which the first floor is commercial space and the upper levels are residential units. She plans to apply for the Low-Income Housing Tax Credit (LIHTC)[14] to provide more funding for her project. As she is doing her research into the Qualified Allocation Plan (QAP)[15], she notices that 10 points are allotted for designing to Phius CORE certification, and 13 points for Phius ZERO certification. Considering the Illinois QAP offers a total of 100 points, getting the extra 10 or 13 could really set her project apart from other submissions. After looking over the budget, she determines that the extra cost of photovoltaic panels to allow the project reach the source energy target of zero or lower puts the project over budget, therefore opting to design to the Phius CORE standard for 10 points.

After making that decision, she dives into the IRA and concludes that as the developer, she is eligible for the tax deduction 179D Energy Efficiency Commercial Buildings Tax Deduction because of the commercial spaces she has planned for the first floor. She also finds that because of the electric vehicle charging station requirements that Phius enforces, she can also apply for 30C Alternative Fuel Vehicle Refueling Property Credit. The final piece of the IRA that she finds applicable to her mixed-use project is the 45L New Energy Efficiency Home Credit. Though she herself is not eligible for this tax credit, the contractor that she is working with on this project is. One thing to note about these three specific IRA incentives is the prevailing wage and apprenticeship options. Though none of the three incentives *require* prevailing wage and apprenticeship, it is highly recommended for all. Larger credit amounts and better deductions are all available when projects meet these requirements. For more information regarding prevailing wage and apprenticeship, visit the Inflation Reduction Act Prevailing Wage and Apprenticeship Requirements Fact Sheet and the Inflation Reduction Act Prevailing Wage & Registered Apprenticeship Overview, both made available through the IRS.

[14] Low Income Housing Tax Credits (LIHTC) are part of a federal policy passed by Congress in 1986 designed to provide capital funding for the construction and rehabilitation of low-income housing. These federal tax credits are distributed through state housing agencies. Each state adopts its own unique criteria and often (but not always) uses a point system.

[15] Qualified Allocation Plans (QAP) are documents that outline the criteria used by state housing agencies to determine which projects should be awarded Low Income Housing Tax Credits (LIHTC).

The Project Criteria chart indicates the available tax credits (in yellow):

Project Criteria (B)		45L	179D	25C	25D	30C
Project Scope	New Construction	x	x	-	x	x
	Retrofit	x	x	x	x	x
Role in Project	Owner or Developer	-	x	x	x	x
	Contractor	x	-	-	-	-
	Designer	-	x	-	-	-
	Renter	-	-	x	x	x
	Homeowner	-	-	x	x	x
Building Function	Single-family	x	-	x	x	x
	Multifamily	x	-	-	-	x
	Mixed-use	x	x	-	-	x
	Commercial	-	x	-	-	x

Scenario C

A couple in California is looking to build a new home. They reach out to a contractor who informs them of an energy efficiency standard called 'Phius,' formerly known as Passive House Institute US. They are initially wary because it sounds like a much higher initial cost than they were originally planning for when the contractor informs them of local incentives and federal tax credits available. California Energy Smart Homes[16] is a program seeking to offer incentives to better the energy efficiency of newly built residential buildings. This program offers $3,000 for an all-electric single-family home, and though Phius does not require all Phius CORE projects to be all-electric, they do require electrification-readiness. Note that it is very common for single-family projects to be all-electric, and Phius ZERO certification requires complete electrification. Paired with this all-electric incentive is "Advanced Technology Bonuses" offering $1,000 for Phius certification and anywhere between $300 and $1,000 for heat pumps. This creates a local incentive total of anywhere between $4,300 and $5,000.

After further discussion with the contractor, the couple decides to go beyond the standard Phius CORE certification and seeks to achieve Phius ZERO certification since they are going all-electric for the local incentive. It is important to note that Phius ZERO certification requires complete electrification, enough renewable energy to offset the source energy used by the house, and a minimum of one electric vehicle ready space. With this decision, the project is now also eligible for the IRA tax credits 25D Residential Clean Energy Credit, 30C Alternative Fuel Vehicle Refueling Property Credit, and 45L New Energy Efficiency Home Credit. Through 45L, this project is eligible for $5,000 for meeting ZERH requirements which is required for Phius certification. 25D and 30C both offer a percentage of total costs of the respective equipment per tax credit/rebate. **The overall total funding for this project is upwards of $10,000, plus the added credits/rebates from 25D and 30C.**

[16] https://caenergysmarthomes.com/

The Project Criteria chart indicates the available tax credits (in yellow):

Project Criteria (C)		45L	179D	25C	25D	30C
Project Scope	New Construction	x	x	-	x	x
	Retrofit	x	x	x	x	x
Role in Project	Owner or Developer	-	x	x	x	x
	Contractor	x	-	-	-	-
	Designer	-	x	-	-	-
	Renter	-	-	x	x	x
	Homeowner	-	-	x	x	x
Building Function	Single-family	x	-	x	x	x
	Multifamily	x	-	-	-	x
	Mixed-use	x	x	-	-	x
	Commercial	-	x	-	-	x