

Unlocking Green Tax Incentives: Strategies for Energy Efficient Building Savings



Jordan & Skala
Engineers

SUSTAINABILITY SERVICES



TaxTaker

Agenda

- Meet your speakers
- Quick housekeeping

45L Tax Credit

- 45L & ENERGY STAR
- Requirements
- Advantages
- Green Program Alliance
- FAQ

Section 179D

- Eligibility Requirements
- Summary of Changes from Inflation Reduction Act
- Who is Eligible
- How is it Calculated
- Examples

- Q&A

Our Moderators



Jordan & Skala
Engineers
SUSTAINABILITY SERVICES



Mike Dawson
Sustainability Client
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TaxTaker

Austen Legler
Head of Partnerships

Our Speakers



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James Brauer
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Abby Massey
VP of Energy Initiatives

Housekeeping

→ **Getting AIA/PDH Credits**

→ **Poll Questions**

- ◆ **3 Poll Questions**

- ◆ **1 minute to answer**

→ **Q&A**

- ◆ **Enter questions into the Q&A box as we go along**

→ **Follow-up materials**

- ◆ **Copy of recording & other materials will be sent out within
1 week of today's program**

Poll Question #1

Section 45L:

New Energy Efficient Home Credit

45L and ENERGY STAR

- ✓ Disclaimer and timeliness
- ✓ Case study information
- ✓ Requirements and important dates
- ✓ Tax credit rather than deduction

Case Study - Possibilities

- 300 unit project in Houston
- 8 unique unit types
- 10 three-story buildings of 30 units each
- Pursing HUD loan and the Mortgage Insurance Premium Reduction program

Potential Benefits for the Developer

- \$828,000 at the end of the project
- 25 basis points off MIP
- Known, trusted brand for marketing



Tax Credit Amounts

Single-Family for Rent certified as ENERGY STAR	\$2,500/unit
Single-Family for Rent certified as Zero Energy Ready Homes	\$5,000/unit
Multi-Family certified as ENERGY STAR	\$500 or \$2,500/unit
Multi-Family certified as Zero Energy Ready Homes	\$1,000 or \$5,000/unit

ENERGY STAR

- Energy model with onsite visual verification and testing
- Goal of 15-20% more energy efficient than code
- Improvements depend on where you are building, where you are starting from, and when you will complete
 - What energy code are you building under?
 - What MEP systems are you using?
 - What is your expected "acquire" date?



ENERGY STAR version

- EPA decides ENERGY STAR version based on permit date. IRS decides ENERGY STAR version based on "acquire" date.
 - Single Family New Homes acquired after 2025
 - SFNH National v3.2
 - Multifamily New Construction acquired after 2027
 - MFNC National v1.2
 - The .2's are modeled after the 2021 building codes



ENERGY STAR Requirements

PRESCRIPTIVE

Very clear but
more expensive
since there are
no trade offs

ENERGY RATING INDEX (ERI)

Based on per-unit
energy models
with prescriptive
requirements for
any attached
common areas

ASHRAE

Based on a
whole building
energy model

Multiple prescriptive checklists for both design review
and field verification

Dwelling Unit Requirements

MEP Requirements

- Heat Pump Water Heaters for electric water heating
- Resistance strip heating not allowed in most locations, needs Heat Pumps
- Bathrooms exhausted and tested to 50cfm
- Kitchens exhausted and tested to 100cfm
- Fresh air and exhaust per ASHRAE 62.2 and tested
- Transfer grills or jump ducts in all bedrooms

Envelope Requirements

- 2021 IECC minimums

Appliance Requirements

- ENERGY STAR Fridge & Dishwasher
- Efficient ceiling fans

Testing Requirements

- Blower door
- Duct tightness
- Bedroom pressure differential
- Bathroom exhaust
- Kitchen exhaust
- Fresh air

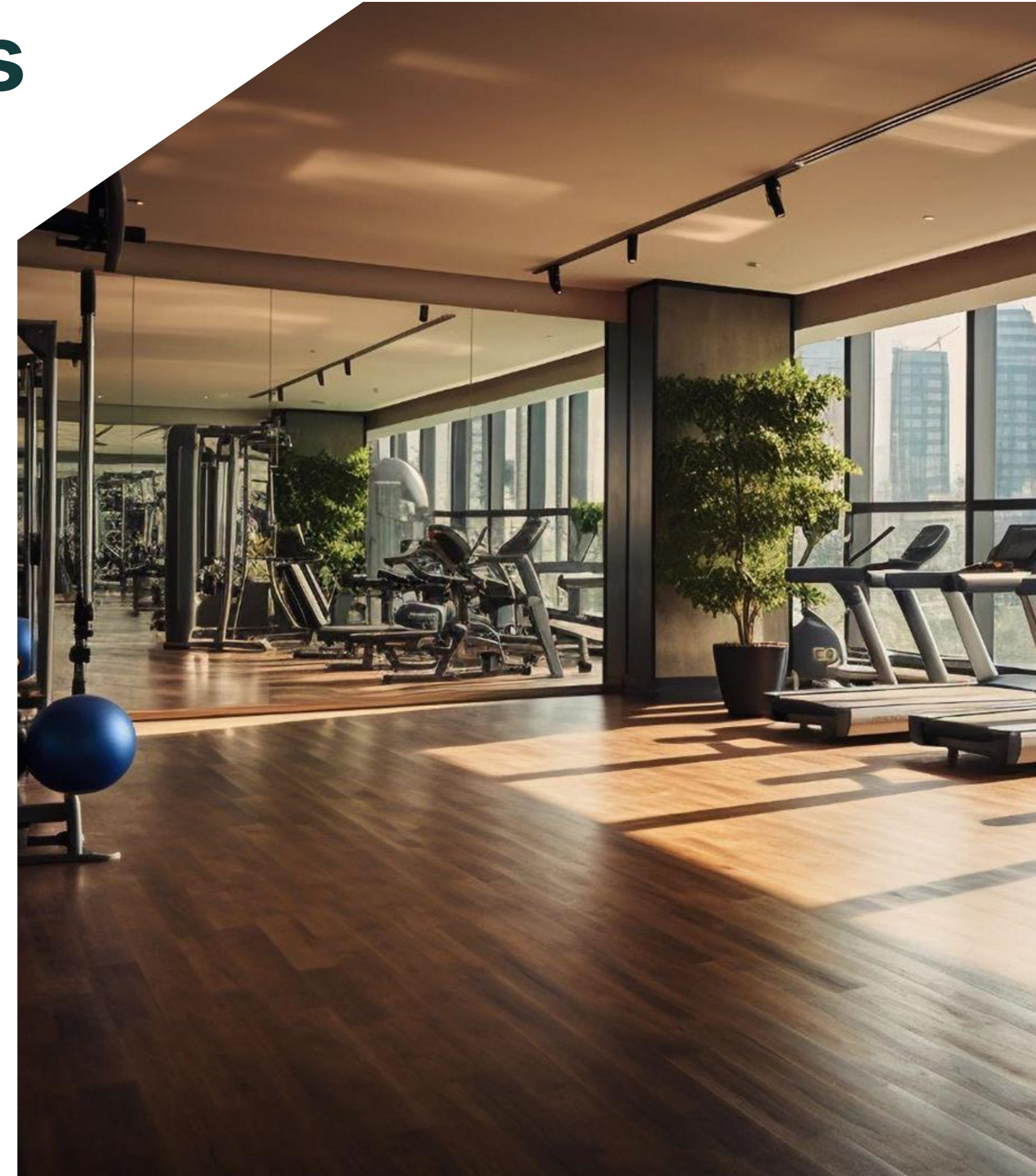


Amenity Area Requirements



Attached Amenity Areas

- Insulation levels that meet or exceed the 2021 IECC
- Fenestration meets or exceeds the 2021 IGCC
- Heating/cooling system efficiency, dependent on type and CZ
- Water heater efficiency requirement
- ENERGY STAR appliances
- WaterSense bathroom fixtures
- Lighting controls and light levels



Other Requirements

➔ Special Requirement to Have a Data Acquisition Strategy

- Tenant lease agreements
- Utility owned master meter
- Whole building energy monitoring system

➔ EPA Partner Agreement for Owner (no cost process)

➔ H-QUITO Requirement for Installing Contractor to be Able to Complete the HVAC Functional Testing Checklist

Other Advantages

- ✓ Aligns with the 2021 Energy Code
- ✓ Can combine with other above code programs
- ✓ Can help with Green financing
- ✓ Fits into a targeted leasing message
- ✓ Meets GRESB reporting for Energy Ratings

Green Program Alliance

LEED BD+C (only 4 stories and up)

- Energy model
- Documentation based

LEED for Homes and MF Mid-Rise (all residential)

- Energy model
- Testing
- Visual verification

NGBS*

- No mandatory energy model
- Visual Verification
- Testing follows 2018 IECC code requirements

	ENERGY MODEL	VISUAL VERIFICATION	TESTING
ENERGY STAR	✓	✓	✓
LEED BD + C	✓		
LEED for Homes	✓	✓	✓
NGBS*		✓	

Utility Programs

CenterPoint

- SF and MF programs, average \$260/unit
- Energy model and visual verification
- Bonus for above code program

Oncor

- SF program with bonus for ENERGY STAR
- Energy model and visual verification

Where is the Low Hanging Fruit?

Single-Family for Rent



Goes straight to \$2,500

Green Financing, such as HUD



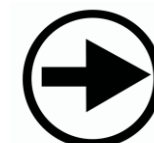
Meets loan compliance, get \$\$\$

**3 stories or less, jurisdiction requires
HPWH and 2021 IECC**



Code requirements offset ENERGY STAR
costs

**Other Requirements need ENERGY STAR
certification**



Additional funding helps pay for what you
are being asked to do

FAQs

1 Can I earn this every year?

A: One-time only per project.

2 When can I claim this?

A: After the project is complete and certified.

3 How do I prove the prevailing wages?

A: IRS says you must keep the payroll documentation.

4 I have a project that just completed, can I get the new credit?

A: No, since the certification needs on-site verification.

Poll Question #2

Section 179D: Energy Efficient Commercial Buildings Deduction

Summary of Changes Implemented by the Inflation Reduction Act (IRA)

- **Increased Deduction** - Deduction rate increased from \$1.88 per square foot to \$5.36 per square foot
- **Deduction Reset** - Buildings no longer have a lifetime maximum of \$1.88 per square foot.
- **Tax-Exempt Entities** - Deduction can now be allocated to designers from non-profit entities (previously only government agencies)
- **Results Analysis** - Deduction is now calculated on a sliding scale with a threshold to qualify at 25% energy cost savings.
- **Alternative Method** - Qualified retrofit projects can use a before and after look at the building to qualify (previously only energy modeling)

Eligible Energy Efficient Systems



HVAC & Hot Water



**Interior
Lighting**



Building Envelope

Eligible Projects



Project Site

New Construction

Renovation

Additions/Expansion

n



Project Size

**Pre-IRA:
25,000 SF or larger**

**Post-IRA:
10,000 SF or larger**



Conditioned Building Space

**Pre-IRA:
Parking Garages**

**Post-IRA:
Buildings that are
heated and/or
cooled**

Who is Eligible to Claim the Section 179D Deduction?

Private Building Owners

Eligible Buildings

Commercial

or
High-Rise Residential
(4+ stories above grade)

Eligible Projects

Any project that
completed construction
since 179D was
introduced to the tax
code (1/1/2006)

Benefits

Accelerated Depreciation
Deduction

Applied to the next original
return

Who is Eligible to Claim the Section 179D Deduction?

Designers

Anyone who creates the technical specifications for the installation of energy efficient property.

Eligible Buildings

**Government
or
Tax-Exempt**

Eligible Projects

**Any project that
completed construction
in an amendable tax year

(typically 3 years back
from the current year)**

Benefit

**Deduction in the tax
year the project was
completed**

How is 179D Calculated?

Determine the annual energy cost savings (as a percentage) by comparing...

Proposed Building

An energy model of the building that includes the new, energy efficient equipment that was installed.

vs.

Reference Building

An energy model of the building that includes the minimum standards as required by the building code.
(ASHRAE 90.1-2007)

How is 179D Calculated?

The New Method - IRA

For projects that completed construction on or after January 1, 2023.

Maximum Value = \$5 per square foot!

		Total Annual Energy & Power Costs		
		25% Reduction	Each Additional % Point	50% or Higher Reduction
Prevailing Wage & Apprenticeship Requirements	Meets	\$2.50/sf	\$0.10/sf	\$5.00/sf
	Does Not Meet	\$0.50/sf	\$0.02/sf	\$1.00/sf

Section 179D Example

Building Owner

Building

100,000 SF Manufacturing Facility

Project

Renovation that included HVAC and lighting

Construction Completion Date

June 2023

Results:
 $100,000 \times \$5.36/\text{SF} = \$536,000$

Energy Modeling Summary - 179D						
System Analysis	Annual Energy Costs		Annual Energy Savings Costs	Threshold for Qualification	Deduction Rate	Deduction
All 3 systems	Proposed	\$43,500	55.32%	50%	\$5.36/SF	\$536,000
	Reference	\$115,000				

New Alternative Method

- Before and after look of the building.
- Qualified retrofit plan - must be prepared by a licensed architect or engineer.
- Measures Energy Use Intensity (EUI) before and after the project.
- Waiting on more guidance on how a building owner can elect to use this method.

Prevailing Wage Requirement

- All laborers and mechanics employed by the taxpayer, contractor, or subcontractor on the project must be paid not less than prevailing rates determined by the Dept. of Labor (Davis-Bacon Act) for the type of work performed in the geographic area of the building.

- www.sam.gov

Select Domain
Wage Determinations

+

By Wage Determination ID

Construction (DBA)

Service Contracts (SCA)

Collective Bargaining Agreement (CBA)

Filter By

—

Location

State

Select State / Province

County/ Independent City

Select County

Apprenticeship Requirement

- **Three components - labor hours, ratio, and participation**
 - **Labor Hours:** The taxpayer must ensure that 15% (12.5% in 2023) of the total labor hours are performed by qualified apprentices from a registered program.
 - **Ratio:** The applicable ratio of apprentices to journeymen is met, as established by the registered program.
 - **Participation:** Any taxpayer/contractor/subcontractor that employs 4 or more laborers or mechanics must also hire at least one qualified apprentice.

Good Faith Exemption: If the request was denied or the registered program does not respond within five business days or denies the request, the taxpayer can receive the bonus rates.

Q&A

If you have more questions, you are
welcome to ask.

Thank You!



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Poll Question #3