



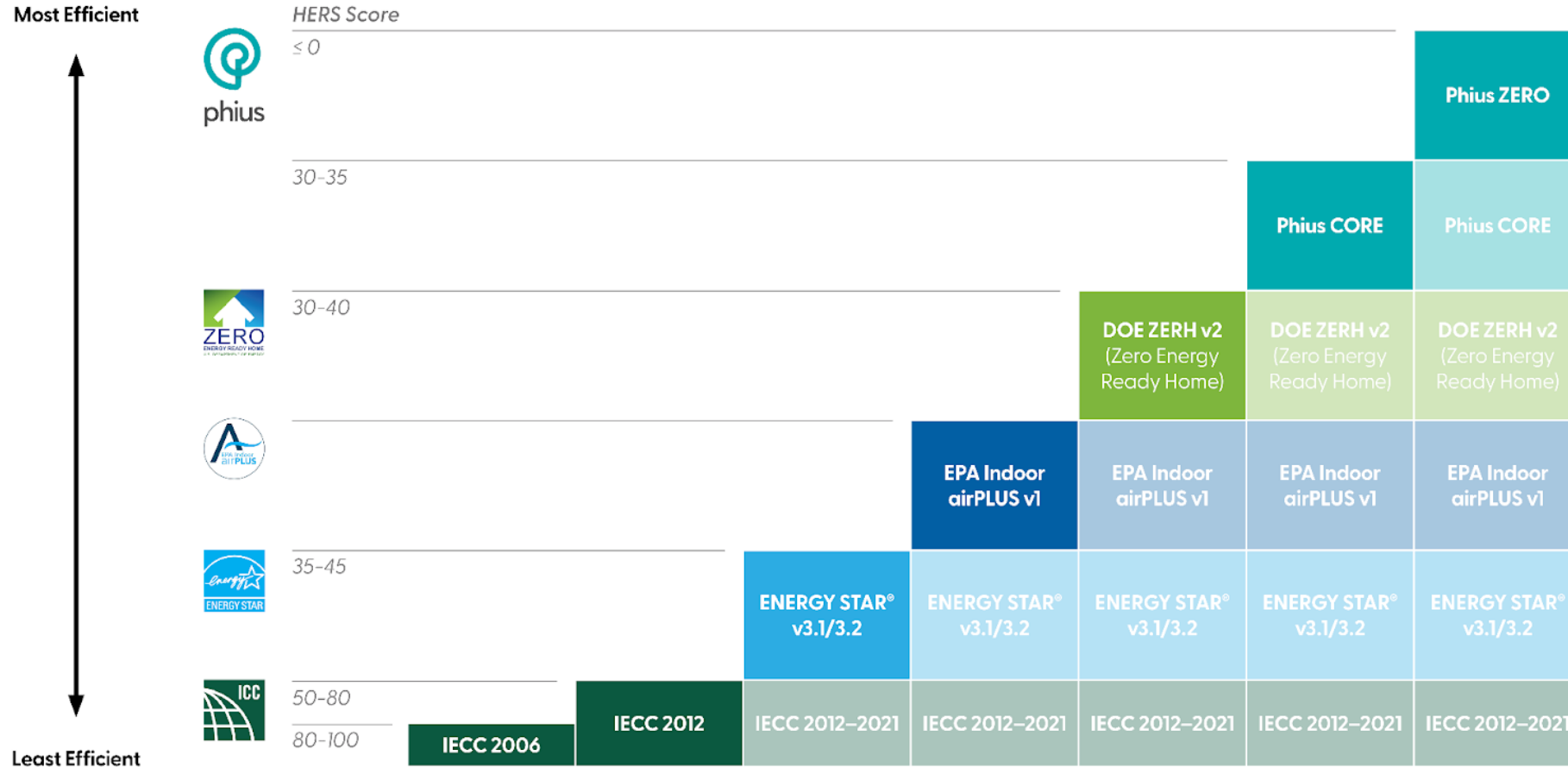
Phius & IRA: Funding Incentives

What is the IRA?

- Signed by President Biden in August of 2022
- Lower energy usage & costs
- Promotes clean energy & manufacturing
- Incentives to:
 - Build energy efficient buildings, and upgrade existing ones
 - Use higher quality building envelope materials
 - Train & higher workers to become familiar with installation

Phius Co-Requisite Requirements

U.S. DOE High Performance Staircase



How is the IRA Relevant to Phius?

Energy Efficiency Sections in the IRA

45L	New Energy Efficiency Home Credit
179D	Energy Efficiency Commercial Buildings Tax Deduction
25D	Residential Clean Energy Credit
25C	Energy Efficiency Home Improvement Credit
30C	Alternative Fuel Vehicle Refueling Property Credit

45L: New Energy Efficiency Home Credit

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

179D: Energy Efficiency Commercial Buildings Tax Deduction

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

25D: Residential Clean Energy Credit

25D	Solar HW	Solar Electric	Wind	Geothermal 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

25C: Energy Efficiency Home Improvement Credit

25C	Home Energy Audits	Doors	Windows	Insulation & Air Sealing	Residential Energy Property	Heat Pumps & Biomass Stoves/Boilers
Requirement	Written report; identify energy updates & savings	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

30C: Alternative Fuel Vehicle Refueling Property Credit

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

Phius Dovetails

- [45L](#): obtaining Phius certification requires certification through Energy Star and ZERH
- [179D](#): Phius certification requires more energy efficient mechanical systems and building envelope components to meet project-specific targets
- [25D](#): 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.

Phius Dovetails (continued)

- [25C](#): Phius REVIVE certification requires more energy efficient mechanical systems and building envelope components to meet project-specific targets
- [30C](#): Phius and ZERH certification both require electric vehicle charging infrastructure for all project types.

Braiding Incentives

- IRA incentives can be used in tandem with one another
- IRA incentives can be used in tandem with state incentives
- Answer these questions:
 - What is the project scope?
 - New construction or retrofit
 - What role do you play in the project?
 - Owner, developer, contractor, renter, homeowner
 - What is the building function?
 - Single-family residential, multifamily residential, commercial, mixed-use

Project Criteria Table

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	-	-	-	-
	Mixed-use	x	x	-	-	-
	Commercial	-	x	-	-	-

Braiding Incentives: Scenario (1)

- Location: Boston, Massachusetts
- Project Scope: New Construction
 - Size: 45,000 ft² (residential)
 - Size: 10,000 ft² (non-residential)
 - Number of units: 50
- Building Function: Mixed-Use

Braiding Incentives: Scenario (1)

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	-	-	-	-
	Mixed-use	x	x	-	-	x
	Commercial	-	x	-	-	-

IRA Incentives (1)

- **IRA 45L**: \$45,000 or \$225,000*
- **IRA 179D**: \$5,000 or 25,000*
- **IRA 30C**: 6%, or 30%*, of total EV equipment expenses
- Total: \$50,000 or \$250,000*

*If prevailing wages are being met

Mass Save Incentives (1)

- Pre-Construction: \$62,500
 - Feasibility Study: \$5,000
 - Energy Modeling: \$20,000
 - Pre-Certification (Design Certification): \$37,500
- Market Transformation Adders: \$2,750+
 - Wi-Fi Connected Thermostat: \$100/unit
 - Induction Cooktop: \$250/unit
 - In-Unit Heat Pump Water Heater: \$250/unit
 - Centralized or Split-System Heat Pump Water Heater: \$750/unit
 - ENERGY STAR Certified Ground-Source Heat Pump: \$1,000/unit
 - ASTM E779 test results ≤ 0.25 CFM/sf @75pa: \$400/unit

Mass Save Incentives (1)

- Post-Construction (Final Certification): \$150,000
- Total: \$215,250
 - Pre-Construction: \$62,500
 - MTAs: \$2,750
 - Post Construction: \$150,000

Phius Feasibility Study Fees

Feasibility Study				
iCFA (sf)	<10,000	10,001-50,000	50,001-100,000	For each additional 50,000
Single-Family	\$1,500	n/a		
Multifamily	\$2,000	\$3,000	\$3,500	+\$500
Non-Residential	\$2,500	\$3,500	\$4,000	+\$500

Total Monetary Incentives (1)

- \$265,250 can be obtained for a 50-unit, 55,000ft² building
 - IRA: \$50,000 or \$250,000*
 - Mass Save: \$215,250

*Meeting prevailing wage and apprenticeship requirements can increase the total amount to \$465,250

Actual costs associated with Alternative Fuel Vehicle Refueling Property can also increase this value

Braiding Incentives: Scenario (2)

- Location: Edgartown, Massachusetts
- Project Scope: New Construction
 - Size: 2,000 ft²
 - Number of units: 1
- Building Function: Single-Family

Braiding Incentives: Scenario (2)

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	-	-	-	-
	Mixed-use	x	x	-	-	x
	Commercial	-	x	-	-	-

IRA Incentives (2)

- **IRA 45L**: \$5,000
- **IRA 25D**: 30% of costs for solar hot water, solar electric, wind energy, geothermal energy, battery storage, fuel cell, & labor costs
 - *Renter/Homeowner eligible
- **IRA 30C**: 6% of total EV equipment expenses
 - *Renter/Homeowner eligible

Mass Save Incentives (2)

- Market Transformation Adders: (up to) \$10,000
 - Induction Cooktop: \$250/unit
 - Split-System Heat Pump Water Heater: \$750/unit
 - ENERGY STAR Certified Ground-Source Heat Pump: \$9,000/unit
- Post-Construction (Final Certification): \$25,000
- Total: \$26,000

Total Monetary Incentives (2)

- \$31,000* can be obtained for a single-family home
 - *This amount may change depending on which Market Transformation Adders are chosen and actual costs associated with Residential Clean Energy Credit & Alternative Fuel Vehicle Refueling Property will also increase this value