



How Multi-Family Affordable Housing Retrofits Can Leverage New Rebates & Tax Credits

The 2022 Inflation Reduction Act

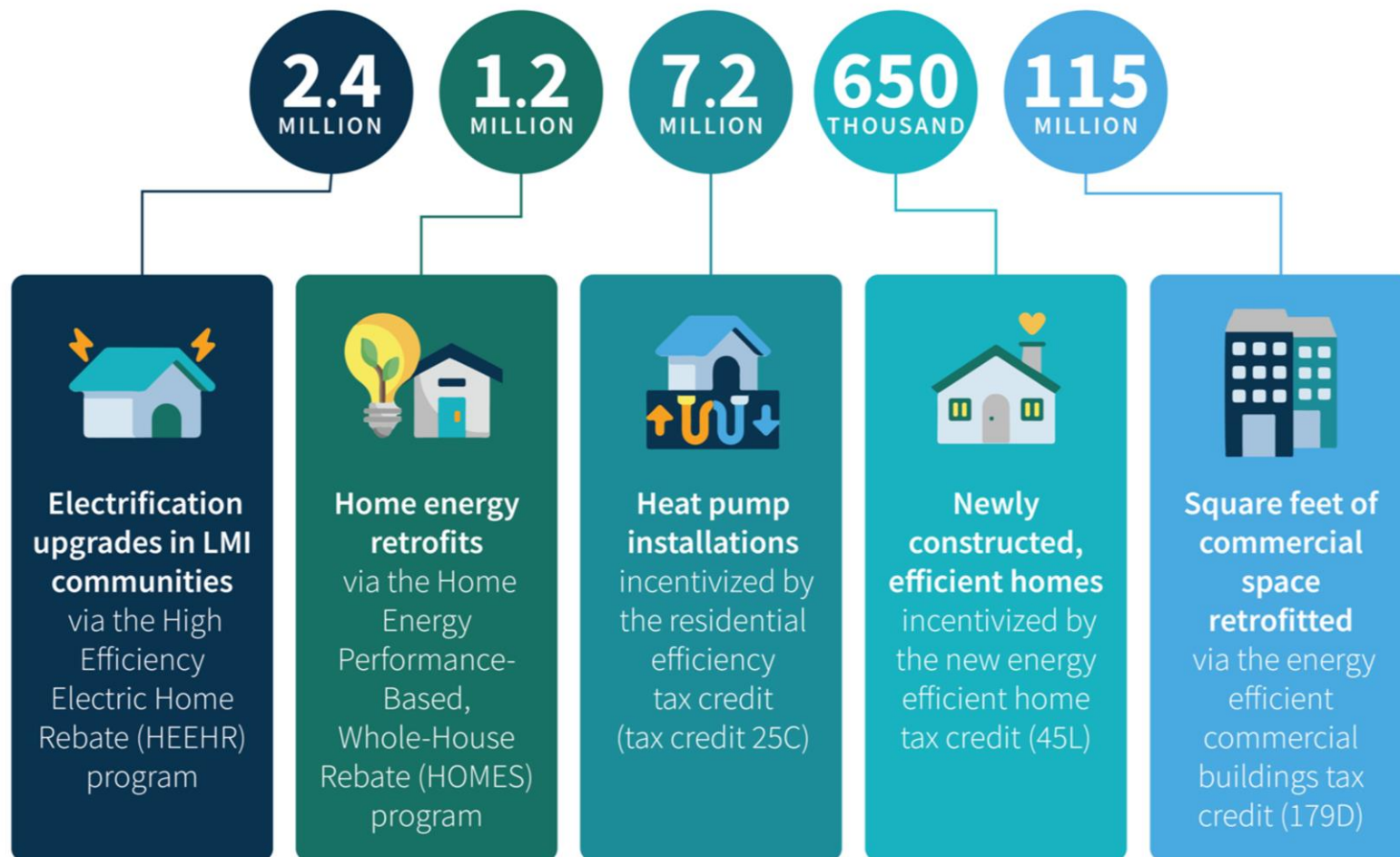
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Carbon-Free Buildings



The Inflation Reduction Act of 2022 (IRA)

...with **over \$60 billion** in critical clean energy, climate and electrification measures that support disadvantaged communities, **the IRA could transform the building sector.**



Agenda

 Review the applicable sections in the IRA

 What we don't know...yet

 Apply the benefits to a project example

 Potential other sources of funding

Q&A

Which benefits apply to affordable multifamily housing retrofit projects?

Administered by STATE agencies - DOER



✓ Home Energy Efficiency Rebate (HOMES)

- up to \$8,000/apartment for energy savings

✓ High Efficiency Electric Home Rebate Act (HEEHRA)

- up to \$14,000/apartment for electrification

✓ 45L Homes Energy Efficiency Tax Credit

- New & existing buildings = \$500 to \$5,000/apartment (depending on prevailing wage and efficiency achievements)

✓ 48 Renewable Energy Tax Credit

- Up to 30 - 60% refundable tax credit for clean energy

Administered by FEDERAL agencies - IRS



Home Energy Efficiency Rebates (HOMES)



- ✓ Designed to save households 20 – 45% energy use
- ✓ Performance-based retrofit rebates
- ✓ Administered by State & Tribal Energy Offices
- ✓ Through 2031- but not available yet
- ✓ Increased rebates for low to moderate income households
- ✓ Applies to energy saving efforts and equipment

Electric heat pumps

Electrical panel & wiring upgrades

Air sealing

Duct sealing

Insulation

Materials to improve ventilation

Other energy-saving technologies



Home Energy Efficiency Rebates (HOMES)



Low Income* dwelling unit (not less than 20% energy savings)	Lesser of \$4,000/dwelling unit or 80% project costs.
Low Income dwelling unit (not less than 45% energy savings)	Lesser of \$8,000/dwelling unit or 80% project costs.
Market rate dwelling unit (not less than 20% energy savings)	Lesser of \$2,000/dwelling unit or 50% project costs. \$200K multifamily building cap.
Market rate dwelling unit (not less than 40% energy savings)	Lesser of \$4,000/dwelling unit or 50% project costs. \$400K multifamily building cap.

** Not less than 50% of dwelling units are occupied by households <80% AMI*



High Efficiency Electric Home Rebate Act (HEEHRA)



- ✓ Point of sale / qualifying purchase rebates
- ✓ New construction or retrofits
- ✓ Administered by State & Tribal Energy Offices
- ✓ Through 2031- but not available yet
- ✓ Applies to electrification equipment and some energy saving efforts
- ✓ Contractor rebate– up to \$500 per installation



High Efficiency Electric Home Rebate Act (HEEHRA)



Electrification Project	Rebate
HVAC Heat Pump	\$ 8,000
Electrical Panel Upgrade	\$ 4,000
Electrical Wiring	\$ 2,500
Heat Pump Water Heater	\$ 1,750
Electric Stove or Induction	\$ 840
Heat Pump Clothes Dryer	\$ 840
Weatherization (insulation, air sealing & vent)	\$ 1,600
Multifamily Maximum Rebates	
> 50% of units with income <150% AMI	50% of costs up to \$14,000/unit
> 50% of units with income < 80% AMI	100% of costs up to \$14,000/unit

Questions and Clarification: REBATES -



- ✓ **Stacking HOMES + HEEHRA is still unclear – Hope to be able to benefit from both: HOMES for envelope + HEEHRA for equipment**
- ✓ **Unclear what HOMES will use as a baseline to determine energy savings**
- ✓ **Unclear if the \$14,000 is a lifetime max to be used only once. It is likely that it could be spread out - \$12k + \$2k for example.**
- ✓ **Rebates will not be retroactive. It is unclear what project scope can be started without jeopardizing eligibility.**
- ✓ **Contractor rebate is in addition to the \$14,000 and per project.**



Questions and Clarification: REBATES -



- ✓ DOER RFI should be issued by the end of January
- ✓ No details on application process
- ✓ Reach out to DOER to advocate for development of Multifamily benefit program
- ✓ Most states should have rebate funding available by end of 2023
- ✓ Rebates won't change – but States have been designated a finite amount and funds may run out before 2031

45L: Energy Efficient Home Tax Credit - IRS



- ✓ Effective January 1, 2023 through 2031
- ✓ New AND Major renovations* (TBD)
- ✓ Can be stacked with the Low-Income Housing Tax Credit (LIHTC) without reducing basis
- ✓ Direct pay to non-profit entities
- ✓ Aligns with building performance qualification

Energy Star Construction

DOE's Zero Energy Ready Home

45L: New Energy Efficient Home Tax Credit



Building Performance Program Compliance	Prevailing Wage	Single Family	Multifamily
EPA Energy Star	Yes	\$ 2,500/unit	\$ 2,500/unit
	No	\$ 2,500/unit	\$ 500/unit
DOE Zero Energy Ready Home (ZERH)	Yes	\$ 5,000/unit	\$ 5,000/unit
	No	\$ 5,000/unit	\$ 1,000/unit

✓ **Benefit from ONE program - \$5000 max**

45L: Energy Efficient Home Tax Credit



- ✓ **Use Portfolio Manager to compare against similar building types**
 - Include all energy used by the property (e.g., electricity, gas, oil, steam, onsite renewable energy)
 - At least 12 full consecutive calendar months of energy data for all active meters and all fuel types
- ✓ **Existing Multifamily = 20 Units or more**
- ✓ **A home or building is ranked on an efficiency scale between 1 and 100.**
- ✓ **A score of 75 or higher is required for certification.**
- ✓ **Existing Buildings [Program Requirements](#)**

45L: Energy Efficient Home Tax Credit - IRS



- ✓ Certified by Energy Star
- ✓ Ceiling, walls, floors, and slabs must meet or exceed 2012 and 2015 IECC requirements
- ✓ Indoor air quality must be approved by EPA
- ✓ Solar PV READY
- ✓ Passive House levels would comply
- ✓ Specific existing multifamily requirements being developed

48 Clean Energy Investment Tax Credit



✓ Commercial Investment Tax Credit (ITC – 48)

*Solar PV, Solar Water Heat, Solar Heat, Geothermal Electric, Solar Thermal Electric, Solar Thermal Process Heat, Solar Photovoltaics, Wind (All), **Geothermal Heat Pumps, Battery storage**, Municipal Solid Waste, Combined Heat & Power, Fuel Cells using Non-Renewable Fuels, Tidal, Wind (Small), Geothermal Direct-Use, Fuel Cells using Renewable Fuels, Microturbines, Offshore Wind Biogas, Microgrid, Interconnection Property*

✓ Transitions to Clean Energy Investment Tax Credit 48E in 2025

*Technology neutral - **ALL** generation facilities and energy storage systems that have an anticipated greenhouse gas emissions rate of zero*

48 Clean Energy Investment Tax Credit



- ✓ Projects under 1MW
- ✓ Through 2031
- ✓ Utility-Scale, Commercial, Industrial, Non-Profit, Government, Etc. and Third-Party-Owned Residential
- ✓ State and tribal governments, non-profits, certain tax-exempt entities and rural cooperatives qualify for DIRECT PAY REFUND PAYMENT
- ✓ Base Credit + Bonus credits available
 - Domestic content*
 - Energy Community*
 - Low-income Residence or Community (solar & wind only)*
- ✓ Competitive application for Bonuses - IRS

48 Clean Energy Investment Tax Credit - IRS



Projects Under 1MWac	Credit
Base Tax Credit	30%
Domestic Content Bonus	10%
Energy Community Bonus	10%
Low Income Community Bonus <u>or</u>	10%
Low Income Residential Building <u>or</u> Low Income Economic Benefit Project	20%

✓ **Could stack all the way to 70%!**

48- Bonus / Add-ons



✓ Domestic Content =

- 100% of the steel or iron used is US produced
- 40% of the manufactured products that are used in constructing the project are US produced

✓ Energy Community =

- Brownfield site
- Areas with fossil fuel production, which have an unemployment rate above the national average
- Census tracts which encompass closed coal mines or closed coal-fired electric plants

48- Bonus / Add-ons



- ✓ **Low-Income Community – SOLAR & WIND only**
 - Projects in low-income communities as defined in IRC Section 45De: roughly $\leq 80\%$ AMI
- ✓ **Low Income Residential – SOLAR & WIND only**
 - Residential rental building that participates in a housing program, and the financial benefits of the electricity produced by the facility are allocated equitably among the occupants of the building.
- ✓ **Low Income Economic Benefit – SOLAR & WIND only**
 - At least 50% of the financial benefits of the electricity produced by the facility are provided to households with income $\leq 80\%$ AMI

Clarification on Tax credits -



- ✓ Unclear on how/when can access direct pay refund
- ✓ Clarification on the definition of major renovations for 45L
- ✓ Confirm Multifamily designation
- ✓ Still waiting for DOE ZERH Multifamily program requirements
- ✓ 48 –Competitive application for add-on credits
- ✓ No details (YET) about process
- ✓ Need clarification and explanation of sharing economic benefits
- ✓ Hoping for final guidance SOON

Applying the IRA benefits to a project

Location

Boston, MA
Non-Prevailing Wage

Units

20

EUI

Before: 75.2 / After: 23.2
> 45% energy savings

HVAC

All Electric mechanicals +
Electrical service upgrade

Solar

Maximize roof top area



Applying the IRA benefits to a project

Cost	\$5,979,511 Non-Prevailing
Units	20 \$299K / unit
EUI	> 45% energy savings
HVAC	All Electric mechanicals
Solar	Maximize roof PV area

Uses	Value
Total Development Costs	\$ 5,979,511.00

Sources	Value
Total Committed Funding	\$ 4,334,260.00
Total Anticipated Funding (other grants and LEAN MF)	\$ 475,000.00

Funding Gap	\$ 1,170,251.00
	% 20%
	Per unit ~\$58,000



Applying the IRA benefits to a project

Home Energy Efficiency Rebate: > 45% energy savings

✓ Assume for envelope improvements only

Low Income* dwelling unit (not less than 20% energy savings)	Lesser of \$4,000/dwelling unit or 80% project costs.
Low Income dwelling unit (not less than 45% energy savings)	Lesser of \$8,000/dwelling unit or 80% project costs.

Up to \$8,000/apartment

20

\$ 160,000



Applying the IRA benefits to a project

Home Energy Efficiency Rebate: > 45% energy savings

Up to \$8,000/apartment	20	\$ 160,000
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HEERHA Electrification Rebate:

✓ Assume for electrical equipment only

Multifamily Maximum Rebates	
> 50% of units with income <150% AMI	50% of costs up to \$14,000/unit
> 50% of units with income < 80% AMI	100% of costs up to \$14,000/unit

up to \$14,000/apartment	20	\$ 280,000
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Applying the IRA benefits to a project

Efficiency & Electrification Rebates:

Up to \$8,000/apartment	20	\$ 160,000
up to \$14,000/apartment	20	\$ 280,000

45L New Homes Energy Efficiency Tax Credit:

Non-Prevailing: \$1000 /unit	20	\$ 20,000
Prevailing: \$5000 /unit	20	\$ 100,000



Applying the IRA benefits to a project

Efficiency & Electrification Rebates:

Up to \$8,000/apartment	20	\$ 160,000
up to \$14,000/apartment	20	\$ 280,000

45L New Homes Energy Efficiency Tax Credit:

Non-Prevailing: \$1000 /unit	20	\$ 20,000
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48 Clean Energy Tax Credit:

30% - 60% of solar	\$259,891	\$ 77,967 – 155,935
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Total Potential \$ benefit: ~ \$538,000 – \$ 615,935



Applying the IRA benefits to a project

Cost	\$5,979,511 Non-Prevailing
Units	20 \$299K / unit
EUI	> 45% energy savings
HVAC	All Electric mechanicals
Solar	Maximize roof PV area

Funding Gap	\$ 1,170,251.00
	% 20%
	Per unit ~\$58,000
IRA Rebates	- \$ ~ 440,000.00
Whole Home	\$ 160,000
Electrification: Assume \$14K/unit	\$ 280,000
IRA Tax Credits	- \$ ~149,945.00
45 L	\$ 20,000
Solar 30% + 20% LI Residential Bonus	\$ 129,945

Revised Funding Gap: \$ 580,305.00

10%
\$29,000/unit



Other possible sources of funding

\$20 M



MOH
(Boston)



\$50 M



DOER
Decarbonization
Fund



\$1 B



**HUD GREEN
& RESILIENT
RETROFIT**



\$27* B



**EPA GHG
REDUCTION
FUND**



\$300 M



**ZERO CARBON
RENO FUND**



HUD Green and Resilient Retrofit Program



... “expects to make multiple rounds of funding available to support energy, and water efficiency retrofits and climate resilience of HUD-assisted multifamily properties”

- ✓ **No guidance available yet on \$/dwelling unit or program requirements**
- ✓ **Low-emission technologies, including zero-emission electricity generation, energy storage or building electrification**
- ✓ **Improve energy or water efficiency, indoor air quality, and Climate resilience**
- ✓ **Energy and water benchmarking**



EPA GHG Reduction Program



...\$8 billion for competitive grants to eligible entities to provide financial and technical assistance to projects that reduce or avoid greenhouse gas emissions in low-income and disadvantaged communities.

- ✓ **\$12 b: competitive grants to eligible to provide financial entities – for projects that reduce or avoid GHG**
- ✓ **\$7 b: competitive grants to enable low-income and disadvantaged communities to benefit from zero-emission technologies,**
- ✓ **No guidance available yet on \$/dwelling unit or program requirements**



MA Zero Carbon Renovation Fund: \$300 M

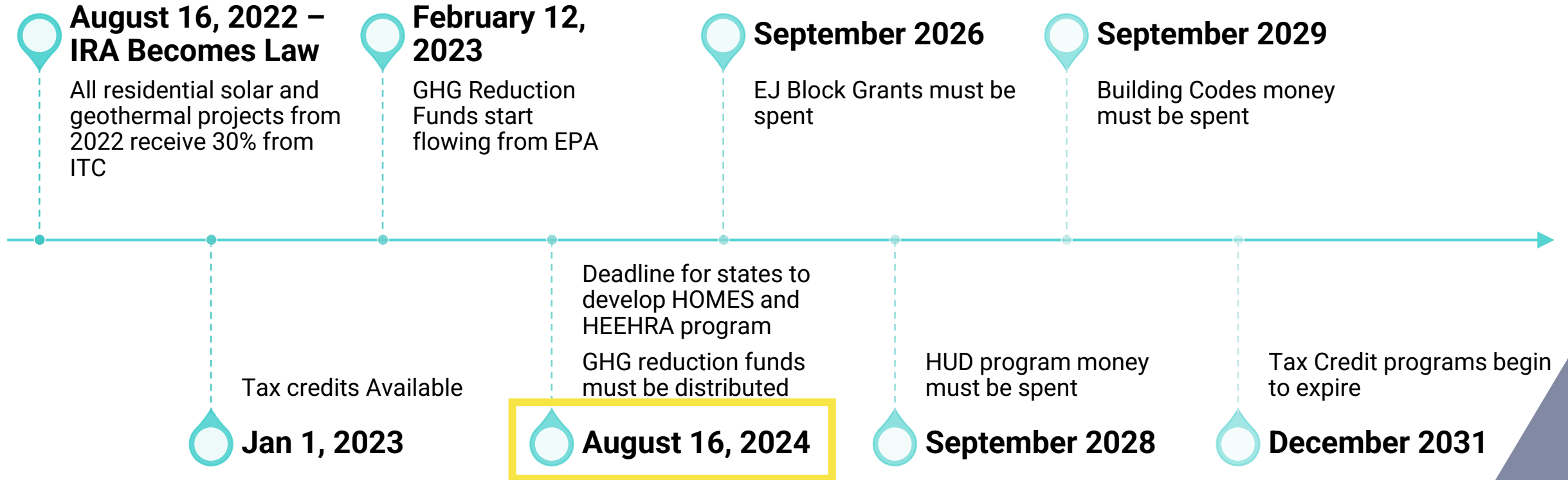


..."prioritize affordable housing, public housing, low- and moderate-income homes, schools, BIPOC and women businesses, and buildings located in Environmental Justice communities"

- ✓ Introduced as a Bill in this State Legislative session – hopefully moves quickly – unclear on timing
- ✓ No guidance available yet on \$/dwelling unit or program requirements
- ✓ Join the COALITION ! - [The Zero Carbon Renovation Fund \(massclimateaction.org\)](https://massclimateaction.org)



Timeline for IRA to Hit the Streets



Other webinars and resources....

Event	Slide Decks	Recording
Making Cents of Incentives: 12/8/22 Built Environment Plus	12.08.22_Incentives_MasterPresentation.pptx (builtenvironmentplus.org)	Making “Cents” of Incentives: MassSave Incentives & IRA Tax Credits to Meet Ambitious Climate Goals - YouTube
The IRA: Passive House Funding Opportunities Demystified: 1/17/2023; 12:00 ET	PHN Presents - The Passive House Network (naphnetwork.org)	
DOE / SCEP: IRA Home Energy Rebate Programs Informational Webinar: 11/2022		IRA Home Energy Rebate Programs Informational Webinar (Text Version) Department of Energy





Thank you.

Good Luck with your project!

Questions?