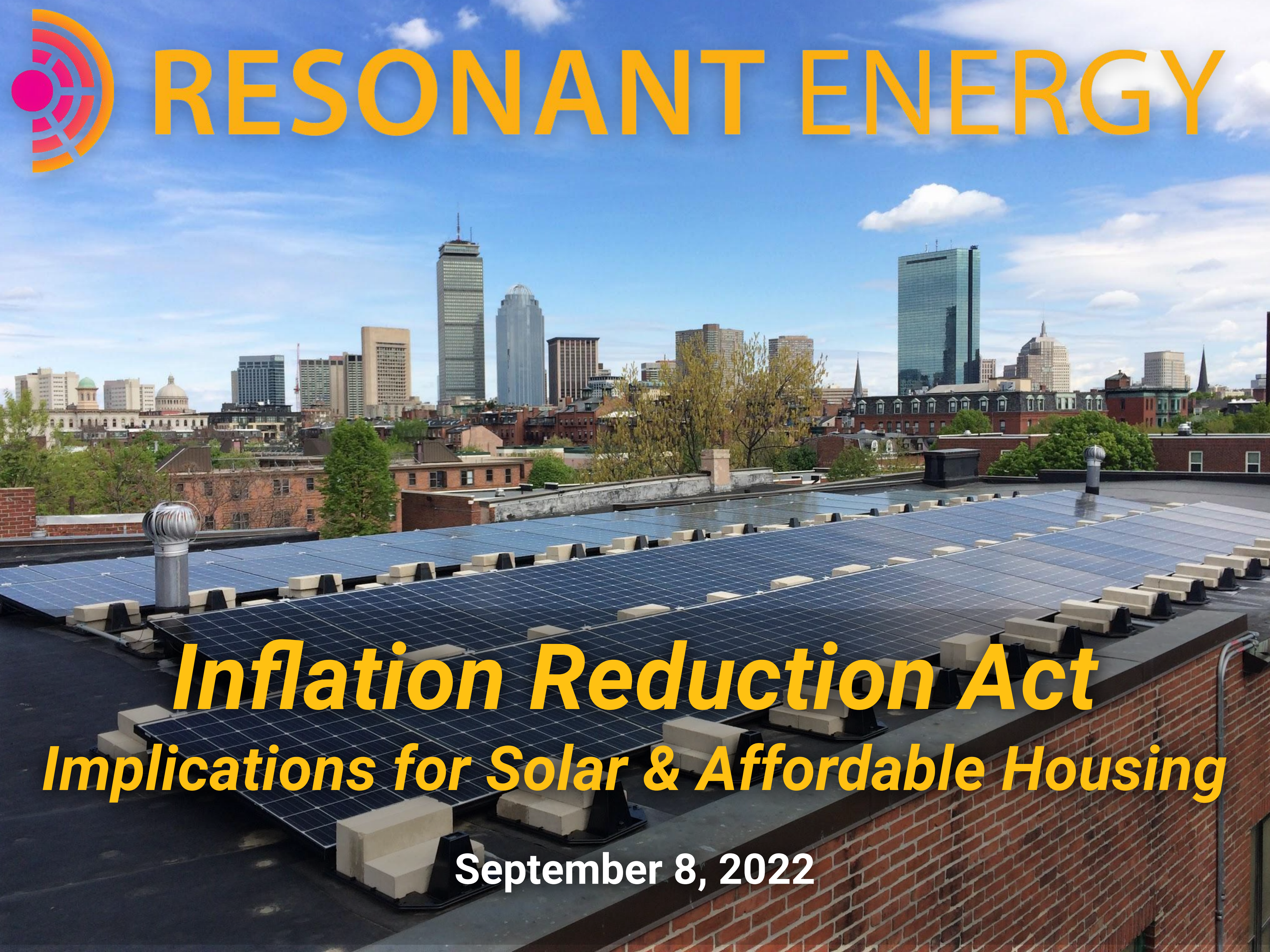


RESONANT ENERGY

Inflation Reduction Act

Implications for Solar & Affordable Housing

September 8, 2022

Agenda

1. **Putting the Inflation Reduction Act (IRA) in context**
2. **The Investment Tax Credit (ITC) Boost**
3. **Direct Pay for Nonprofits**
4. **Domestic Content**
5. **EJ “Adders”**
    a. Location-Based
    b. Affordable Multifamily: Tenant Benefit
    c. Low Income Community Solar

Q&A Session (20 Minutes) Please add all questions to the Q&A box.

Who We Are

- **Mission**: To expand access to clean energy in underinvested communities
- **About**: Boston-based development company building projects in MA, NY
- **Focus**: Affordable Housing, Nonprofit, Small Commercial
- **Mechanics**: Aggregating solar projects for low-cost, high quality installations and impact financing

Summer Series of Webinars

June 9

Solar 101 + Financing and Contracting

Great for Developers

Recording

July 14

Solar Design for New Construction

Great for Architects and Developers

Recording

August 11

Zoning & Certifications

Great for Architects and Developers

Recording

LISC BOSTON

MACDC Celebrating 40 years

STAR Program

Our collective goal:
Support the installation of 4 MW of solar over the next 18 months in affordable housing.

STAR participants receive:

- *Grants for staff time support*
- *Free technical services*

Thus Far…

88 Sites

12 Developers

2.3MW Total solar capacity

LISC BOSTON

40 MACDC Celebrating 40 years

Putting New Policy In Context

In 2009, the Recovery Act (AARTA) established 1603 Grants for solar PV and other technologies.

- Provided 30% cash grants
- Funded over 100,000 systems until 2012 when the program ran out of funds.
- In 2013, an IRS audit confirmed that there was no system to track if owners took the cash grant or the tax credit, which allowed some to fraudulently "double dip" with the program.

Implications: Successor programs like Direct Pay with the IRA is likely to be **paperwork heavy**.

IRA Summary

Investment Tax Credit Boost

22% ➡ 30%

Change: From 2022 to 2032, the investment tax credit for solar will be 30%.

Implication: Significant savings to affordable housing developers, both for ownership, as well as no-cost financing options.

Investment Tax Credit New Requirements

Project Size: To qualify for the 30% ITC and all associated policy adders, projects must either be:

A) < 1 MW AC (**~all multifamily projects**)

B) If > 1 MW AC in size, must meet prevailing wage + apprenticeship requirements.

Direct Pay

Change: Qualifying tax-exempt entities will be able to receive direct cash payments for the full value of the ITC.*

Implication: Owning your own solar array as a nonprofit just got a lot more cost effective.

* Beginning in 2024, increasing “domestic content” requirements take effect in order to receive the full direct payment. Details in the next slides.

High Five for Direct Pay

Direct Pay Qualifiers

Any organization exempt from paying income taxes can qualify for Direct Pay. We *believe* this will include wholly owned 501c3 subsidiaries.

LLC's and LP's with tax investors (any existing LIHTC properties) are not eligible for Direct Pay.

Organizations not eligible for the tax credit or Direct Pay can still receive the benefits of the IRA through no-cost financing options (eg PPAs)

New ITC Transfer Rules

- Previously, the solar ITC needed to flow to the owning entity.
- In affordable housing LIHTC deals, that meant bundling the ITC with LIHTC and selling to the equity investor, which was often more legal effort than it was worth.

"**Assignment**" In 2023, the IRA will allow for the ITC to be "assigned" to a for profit entity, offering an easier pathway to monetize the tax credit in LIHTC deals. Investors will need to be educated and some legal expense will be required when doing for the 1st time.

Investment Tax Credit Eligibility

The following categories are eligible ITC “basis”:

- Equipment (panels, inverters, all racking)
- Installation labor
- Solar company sales & overhead
- Battery storage
- Utility grid upgrades & interconnection costs
  - e.g. transformers

Just added with the new policy!

Takeaway: All Upfront Costs Are Now Eligible!

Not Eligible: Ongoing maintenance (can prepay to get around this)

Nonprofit Direct Pay Example

	35 kW-DC Direct Purchase for a Nonprofit	
	Before IRA	*After IRA*
Upfront Cost	$150,000	$150,000
Direct Pay Reimbursement	$0	$45,000 (30%)
Return after Payback	$165,000	$210,000
Payback Period	11 years	7 years
IRR (Internal Rate of Return)	**7.61%**	**12.38%**

4.77% boost in Nonprofit Ownership IRR

Direct Pay Domestic Content Requirements

	2023	*2024*	*2025*	*2026*	*2027…*
USA Manufactured Goods	40%	40%	45%	50%	55%
USA Steel & Iron*			100%		

* Steel & Iron only relevant for ground mounts & canopies. Rooftop racking uses plastic or aluminum.

	2023	*2024*	*2025*	*2026*	*2027…*
% of ITC If Domestic Content Not Met	**100%** (30%)	**90%** (27%)	**85%** (25%)	0% (0%)	0% (0%)
% of ITC If Domestic Content Met			**100%** (30%)		

Note: System eligibility is determined based on the year that it is placed in service (i.e. built + turned on).

Direct Pay Exceptions

Domestic Content **requirement is waived** for Direct Pay if:

- Domestic materials increase costs by >25%
- Domestic materials aren't available in reasonable quantity or quality.

(How and when these qualifications would be formally set by the government is still to be determined.)

Domestic Content Adder

Whether or not you're receiving Direct Pay, your project can qualify for an ITC adder by meeting the domestic content requirements noted in the previous slide.

	2023	*2024*	*2025*	*2026*	*2027…*
Domestic Content Adder Bonus			**+10%**		

How Achievable Is Domestic Content Adder?

We don't yet know how "40%" will be measured.
(Perhaps by cubic feet? Likely by cost.)

For small commercial projects (e.g. multifamily):

- Modules: Some domestic modules are being sold today (e.g. Silfab) by smaller manufacturers. Could be enough by itself to qualify. Likely that additional cost of modules will be greater than the value of the 10% adder.
- Inverters: No current pathway in MA for domestic
- Racking: Varies; likely possible to be procured from domestic manufacturers at higher cost.

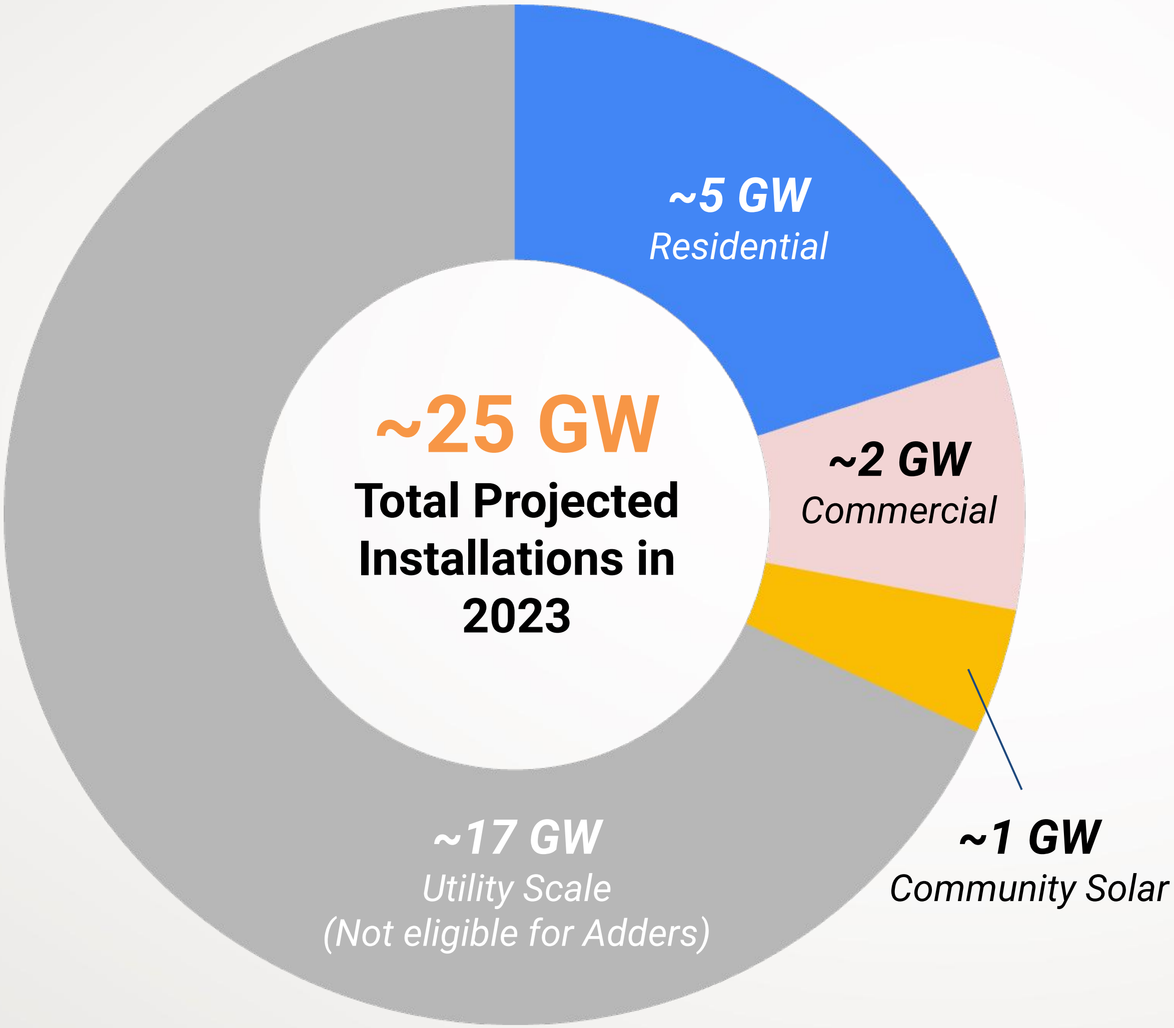
Takeaway: likely <u>neutral value proposition</u> until 2024 or 2025 when it will make sense if going for Direct Pay.

Environmental Justice Adders

Type	EJ Location	Aff. Multifamily Tenant Benefit	Low Income Community Solar
Percentage Boost to ITC	**+10%**	**+20%**	**+20%**
Qualifications	Must be sited in a "low-income community" as defined in IRC 45D(e) - i.e. New Market Tax Credit Definition.	Must be located on a low-income residential building. + The financial benefits are "equitably distributed among the occupants".	50% of output must go to low-income households, defined as income less than 80% of AMI.
Limitations	Only one EJ adder per site. Only available for 2023 and 2024. Only 1.8GW allocated capacity per year. No rollover into 2025. First come, first serve allocation. Can be built up to 4 years after reserving.		

We Love a Democratic Congress!

How Fast Will the Allocation Go?



1.8 GW of EJ Adders in both 2023 & 2024.

If ~25% of projected non-utility scale projects qualify, that <u>will fully subscribe</u> allocation.

TLDR: Quickly!

How to Reserve Allocation

- Currently **TBD**.
- The Treasury has until **February 12, 2023** to finalize the guidelines / application process for how projects reserve their allocation.
- If modeled after state-based allocation processes (e.g. MA, NY, CA), allocation will likely require:
  - Signed Contract (e.g. Purchase or PPA, etc)
  - Interconnection Services Agreement (Utility)

    ***Note**: Both items require a signed letter of intent and some upfront design / permitting work to get to.*

Adder Summary

Year	Base ITC	+	EJ Location	OR	EJ Tenant Benefit or LICSS	+	Domestic Content	=	Largest ITC Possible
2022	30%		-		-		-		30%
2023	30%		10%		20%		10%		60%
2024	30%		10%		20%		10%		60%
2025	30%		-		-		10%		40%
2031	30%		-		-		10%		40%

Strategic Next Steps

- The best thing to do now is to **sign an LOI** to get your project started towards design, contract prep, and initial permitting so you can be at the front of the line when the portal opens in 2023.

- If you have projects that you put on hold due to roof replacements or other barriers, **you should consider accelerating your roof replacements** to maximize potential benefits from the 2023/2024 EJ ITC adders.


Taking Action

How to Work with Resonant

1. Client Provides Intake Info & Drawings
2. Review Feasibility Analysis (No Cost): 2 Wks
3. **Sign Letter of Intent (LOI)** with design retainer
4. Sign Contract: 3-4 months
5. Resonant delivers solar PV solution on a timeline that works for Client
6. *For New Construction: Installation is typically at very end of construction after all roof, HVAC, Plumbing work is complete + permanent power brought to site.*

New Project Intake Process

New Construction - Key info:

1. Groundbreaking date (estimated)
2. Project tax credits (LIHTC, Historic), and whether financing is closed or still pending.
3. Target building certification(s)
4. Electric service (3 phase vs. single phase)
5. Target solar output (kWh/year)
6. Common-area electricity usage (est.)
7. Drawing sets (roof 1st; then structural & electrical)

Visit New Construction Webpage - for intake sheet and submission process.

Additional Resources

Resonant Blog:

1. New Construction: Estimating Electricity Usage & Why It Matters
2. Resonant Energy's "Solar Ready" Definition for New Construction (Designing for Solar)

Additional IRA Reading:

1. SEIA Summary (Solar Only)
2. NovoGradac Write Up (Full Policy Brief)

Thank You!

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