

Inclusive Energy Finance

MIDWEST ENERGY SOLUTIONS CONFERENCE

FEBRUARY 2, 2022



VOTE SOLAR



Who We Are

- About 40 staff based in six regions.
- Solar experts focused on climate justice.
- Focused on state-level legislative and regulatory work.
- Midwest team with active legislative campaigns in Michigan, Minnesota, and Illinois.
- Solar is the name, climate justice is the game.



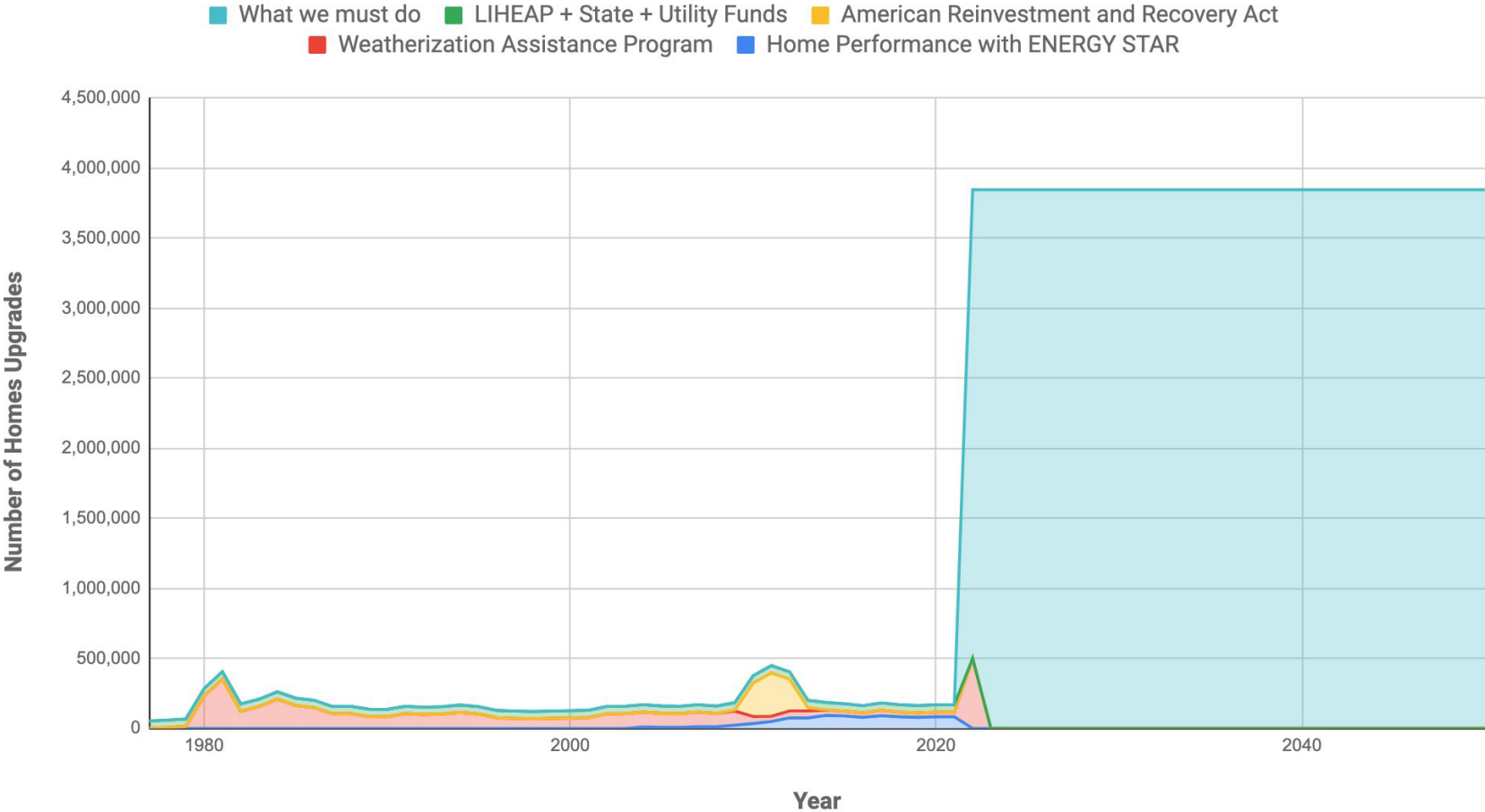
VOTE SOLAR

Bottom Line, Up Front

- The technology is available. We can tackle the climate crisis, reduce energy burdens, and make homes warmer and safer.
- **But**, we lack the political will to mobilize the capital needed. Financial markets are hesitant about energy finance, particularly for the “riskier” investments needed to prioritize disadvantaged communities.
- **Therefore**, we need to find new and innovative ways to financially support customers *and* contractors willing to catalyze this transition.
- Recent legislation in Illinois creates two new tools to do exactly that: the **Equitable Energy Upgrade Program (EEUP)** and the **Clean Energy Jobs and Justice Fund (CEJF)**.



Residential Energy Efficiency Upgrades in the U.S. 1977-2020 with IPCC Compliant Projection



“Upgrade Everyone – for FEPC Energy Burden Subgroup” from Liberty Homes and Clean Energy Works



Climate and Equitable Jobs Act (CEJA)

- Signed into law on September 15, 2021.
- Product of over two years of intense negotiations.
- 956 pages long – affects nearly every aspect of IL's energy economy

Illinois now boasts the ‘most equitable’ climate law in America. What will that mean?

Besides setting targets for a switchover to clean energy, it comes with promises of equitable job creation and an emphasis on helping communities hit hardest by fossil-fuel pollution.

By Brett Chase and Dan Gearino | Inside Climate News | Sep 17, 2021, 5:30am CDT

A Bigger Tent Delivers Stronger Wins for Climate: The Lesson From Illinois

The state’s recently passed Climate and Equitable Jobs Act offers a model for other states to build coalitions to help communities and the planet.

Illinois’ Energy Bill a Power Surge for Equity Efforts

Amanda Vinicky | September 25, 2021, 5:30 pm

10,000 Foot Overview of CEJA Programs

- **Decarbonization targets** – coal-free by 2030, carbon-free by 2045;
- **Significant expansion of renewable portfolio standard (RPS)** – 40% by 2030, 50% by 2040;
- **Equitable contractor and workforce development** – over \$80m per year;
- **Electric transportation incentives** - \$4,000 EV rebates and equitable charging infrastructure;
- **Just Transition** – dedicated programs for fossil communities and workers;
- **Utility reform and accountability** – new ethics measures and performance incentives; and
- **Energy Efficiency** - extension past 2030 and expansion of funding and scope.



And three new inclusive financing mechanisms:

Clean Energy
Jobs and Justice
Fund (CEJF)

IL's non-profit green bank

Illinois Climate
Bank

IL's state-based green bank

Equitable Energy
Upgrade
Program (EEUP)

IL's on-bill financing program

Green Banks



What is a Green Bank?

- It's not a bank.
- Some public, some non-profits.
- Can address multiple scales – city, county, state, country.
- All leverage public or philanthropic capital to unlock private capital.
 - Loan Loss Reserves
 - Interest Rate Buy-Downs



Illinois Climate Bank vs Clean Energy Jobs and Justice Fund

we need both

Climate Bank

- State entity. Lives within Illinois Finance Authority (IFA).
- Will likely focus on larger projects and climate resilience.
- Language allows for other climate-related investments like stormwater management.

Clean Energy Jobs and Justice Fund

- Not-for-profit corporation separate from state government.
- Laser-focused on catalyzing equitable outcomes.
- Creates financing products for disadvantaged customers *and* contractors.



VOTE SOLAR

Clean Energy Jobs and Justice Fund: Next Steps

First, incorporating the not-for-profit corporation.

Next, the Governor appoints the initial 11-person board.

Then, board + Executive Director + staff will design financial products that eliminate barriers to inclusive clean energy development.

The Clean Energy Jobs and Justice Fund receives \$1m/year from the state.

On-Bill Finance

On-Bill Energy Upgrades

```
graph TD; A[On-Bill Energy Upgrades] --> B[On-Bill Finance]; A --> C[On-Bill Repayment]; A --> D[Tariffed On-Bill Finance];
```

On-Bill Finance

- Utility serves as the lender.
- Capital can come from utility or from external source.

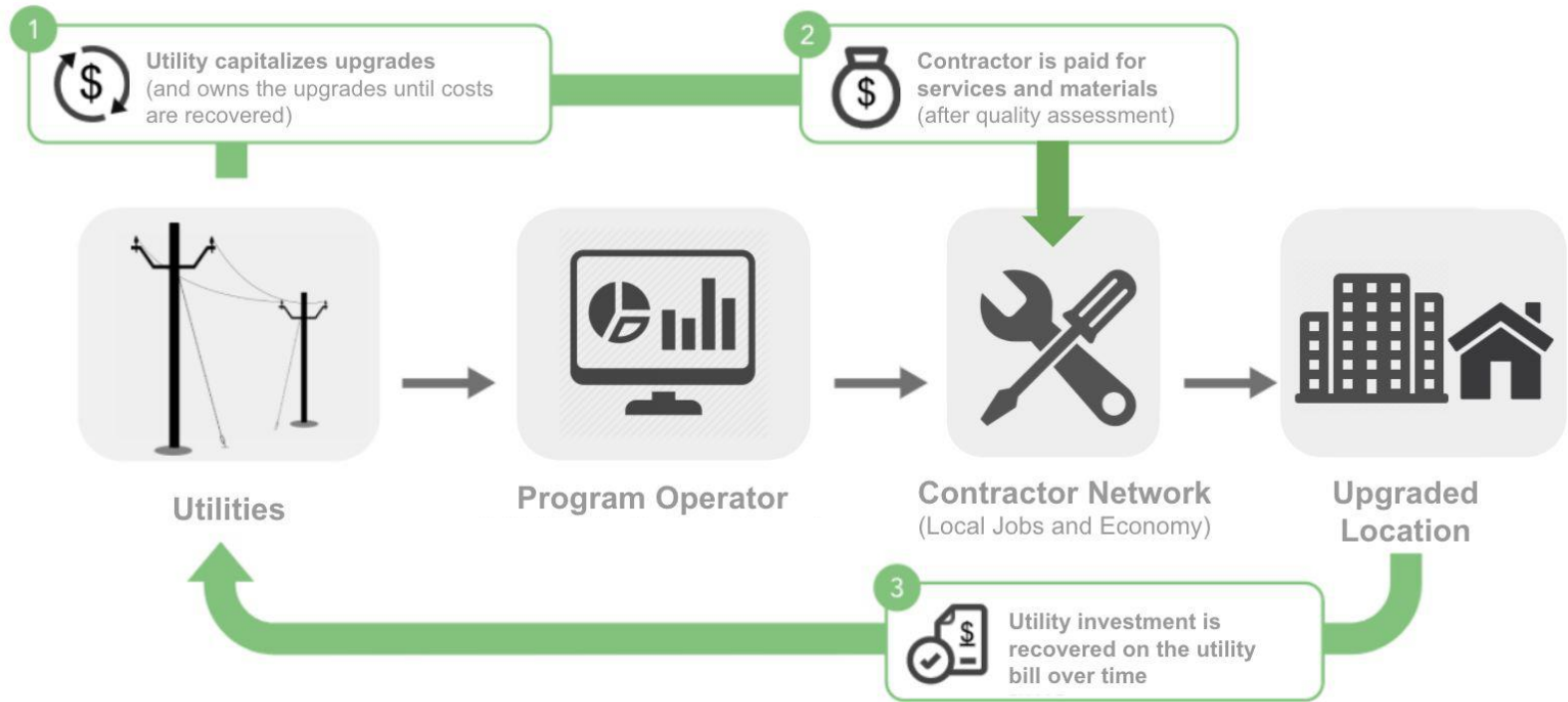
On-Bill Repayment

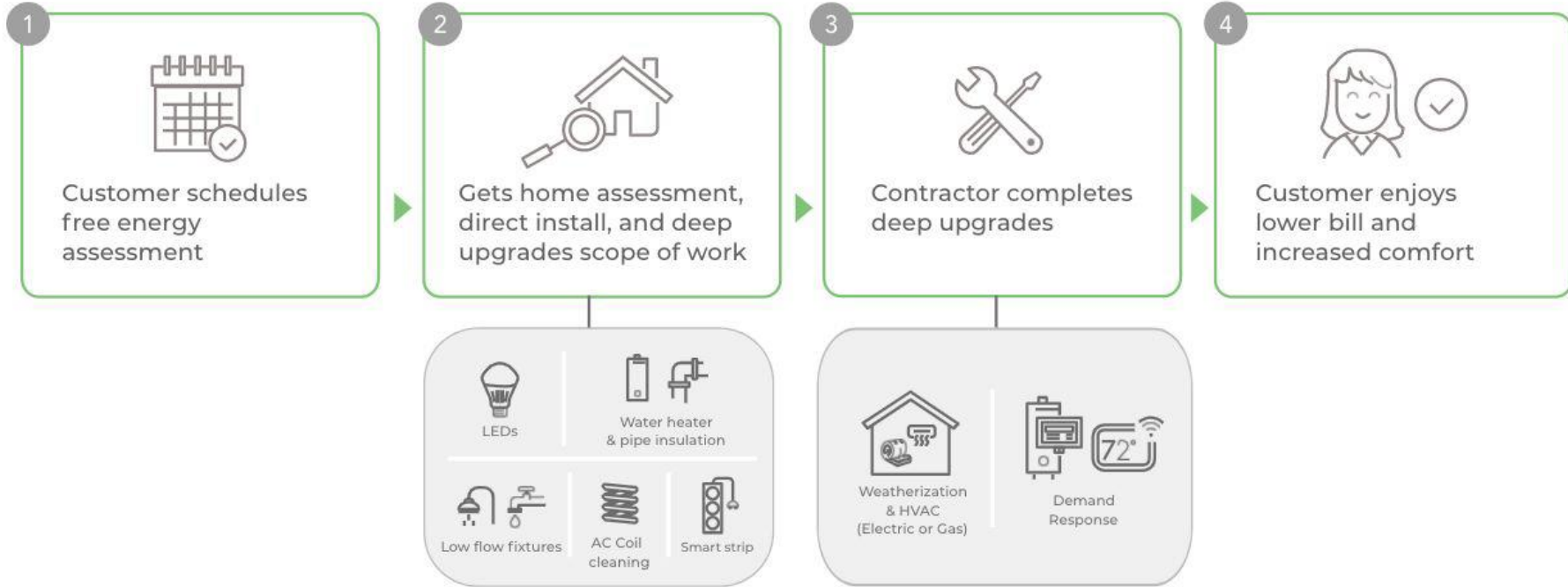
- Third-party lender with pass-through financing.
- Payments collected through the utility bills but sent to third-party, minus processing fees.

Tariffed On-Bill Finance


- Same as On-Bill Finance (utility-funded w/ payments on bills), but where the payments are a tariff on the customer's energy bill.

Pay-As-You-Save[®]





- ✓ No customer loan, lien, or debt
- ✓ No out of pocket cost 
- ✓ No credit or income check
- ✓ Save more than they pay

 CEJA's program does allow for upfront costs in some circumstances to accommodate incentive program payments

Funding	Utility Investment	Consumer Financing
Ratepayer or taxpayer	Utility capex (<5% cost of capital)	Capital providers (>5% cost of capital)
Evaluates the person's income	Evaluates the savings opportunity of the location considering the structure and usage history	Evaluates the person's credit, income, and assets
NA (no obligation with grants)	Tied to the meter	Tied to the property owner
Available only to income qualified	Available to all utility customers with no split incentive (renter-landlord conflict)	Available only to property owners
NA (no payment with grants)	Automatically applies with notice	Generally not transferable
Na (No loss rate with grants)	Disconnection for non-payment* successor customers continue payment (0.1% loss rate) *but customers have easier time paying a lower bill	Non-payment triggers a full write-down of unrecovered funds (3-5% loss rate)

Equitable Energy Upgrade Program: Overview

Who and how?

- Requirements apply to electric utilities serving 500,000+ customers (i.e. Ameren Illinois and Commonwealth Edison)
- \$20m/year per utility for the first year, \$40m/year per utility for the second year, and then sufficient capital to match demand from then on

Must comply with PAYS Essential Elements and Minimum Program Requirements:

- Annual charges can't exceed 80% of estimated annual savings
- Payment term can't exceed 80% of expected measure lifetime
- Upgrades and associated monthly charge must not entail new debt or liens for the participant

Additional Consumer Protections

- Includes language prioritizing customers under 150% Area Median Income
- Additional language ensuring that all customers are made aware of potential free upgrades, rebates, and direct install opportunities

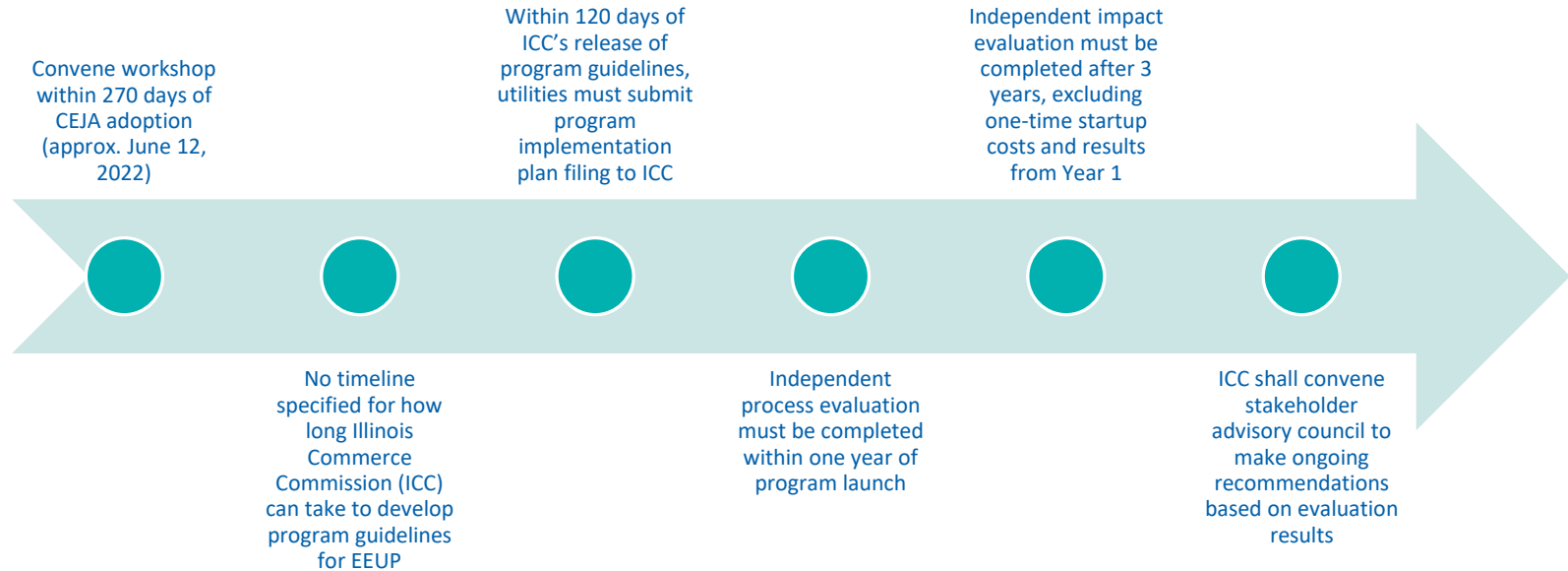


What can the EEUP help finance?

- Energy efficiency upgrades
- Customer-sited renewables
- Energy storage
- Demand response equipment

...so long as 80% of the energy savings cover the cost within 80% of the upgrade's lifetime...

Equitable Energy Upgrade Program: Implementation



Equitable Energy Upgrade Program: Questions

- How will this work for distributed generation? If the investment stays with the energy utility, who claims the federal Investment Tax Credit (ITC), which represents 27% of the solar value stack?
- How do we ensure that income-qualified customers get the most beneficial program or offering? How do we do that without barring them from participating in the program
- How can we put strong safeguards around cost savings assessment methodology? What do we need to do to ensure that energy bills only ever go down as a result of this program?
- How do we ensure pursue consumer protections don't become consumer preventions?

John Delurey
john@votesolar.org
www.votesolar.org



Extra Materials

Flight Path

- BLUF
- Climate and Equitable Jobs Act Overview
- Green Banks Overview
 - Case Study: Clean Energy Jobs and Justice Fund
- Tariffed On-Bill Financing Overview
 - Case Study: Equitable Energy Upgrade Program

	MACED (KY) ^{1,2}	Ouachita Electric Cooperative Corporation (AR) ^{1,3}	Roanoke Electric Cooperative (NC) ^{1,3}	Appalachian Electric Cooperative (TN) ^{1,3}	
Start Date	2011	2016	2017	2019	
Upgrade Package	Wx, HVAC	Wx, HVAC	DI, Wx, HVAC, DR	Wx, HVAC	
Cust. Reached	0.2%	6.2%	6%	0.2%	
Offer Acceptance Rate	78%	90%	90%	90%, no-copay (77% overall)	
Average Upgrade Package Size (\$)	\$7,500	\$6,300	\$7,650	\$8,550	
Avg. Annual Savings	18% \$519	26% \$664	23% \$709	24% \$629	
Average Monthly Energy Savings (\$)	\$43.25	\$55.33	\$59.08	\$52.42	
Average Monthly Tariff (\$)	\$34.60	\$44.26	\$47.26	\$41.93	
Charge-offs	<0.4%	Zero	Zero	Zero	

¹ Energy Efficiency Institute, 2019 PAYS® Status Update

² MACED HowSmart KY Program Data

³ EUtility SmartSheet database,

⁴ Greg Leventis, Presentation: SEE Action Loan Performance—Findings For ACEEE Finance Forum May 25, 2021. Lawrence Berkeley National Laboratory