



Market Intelligence Guide | Connecticut



HELIO SOLAR

SAFE. SIMPLE. SUSTAINABLE.

MARKET INTELLIGENCE GUIDE

CONNECTICUT

For: Energy Consultant • Energy Pro • Energy Specialist

Utilities & Rates | Rate Crisis Context | Full Incentives Stack | Clean Energy Mandates | Project Timelines

Updated: February 2026



Connecticut

One of the Strongest Solar Markets in the Northeast

Read These First — Important Connecticut Market Notes

1. **SALES LICENSING REQUIRED** — Anyone closing a residential solar deal in CT must comply with the state's Home Improvement Salesperson (HIS) licensing rules. Confirm your licensing status with your manager before your first CT close.
2. **NO MORE NET METERING** — As of January 1, 2022, CT transitioned from traditional net metering to the Residential Renewable Energy Solutions (RRES) program. Use the term 'RRES credits' or 'bill credits' — not 'net metering' — with customers.
3. **FEDERAL TAX CREDIT EXPIRED** — The 30% residential solar ITC (§25D) expired December 31, 2025. Lead with RRES program value, state incentives, and the rate hedge story.
4. **BATTERY = MAJOR UPSELL** — CT's Energy Storage Solutions program offers up to \$16,000 upfront on batteries plus 10-year performance payments. Battery is the premium add-on in CT.
5. **MUNICIPAL UTILITIES** — Some CT towns have municipal utilities. These customers use Net Billing, not RRES. Not disqualified — but always confirm before building a proposal.

Connecticut Service Area

Helio supports solar installations throughout Connecticut, including all major population centers and surrounding towns. There are no standard travel adders in Connecticut. Coverage may vary for remote locations — submit with notes rather than self-disqualifying.

- **Major cities served:** Bridgeport, New Haven, Stamford, Hartford, Waterbury, Danbury, New Britain, West Haven, Meriden, Norwalk, and surrounding towns
- **How to confirm serviceability:** Submit the lead with a complete address. Operations confirms. Always add notes for unusual site conditions.
- **Training note:** Do not self-disqualify a lead based on assumptions. Submit with notes.



SECTION 1 — THE RATE CRISIS: WHY EVERY DOOR IS AN OPPORTUNITY

Connecticut's Rate Reality

Connecticut consistently ranks among the top 2–3 most expensive states for electricity in the country. All-in residential rates average ~31.64¢/kWh — nearly double the U.S. average of ~16¢/kWh. For a household using 700 kWh per month, that's over \$220/month before delivery surcharges. The supply rate resets twice per year — January 1 and July 1 — creating a recurring cycle of rate shock that keeps the solar conversation relevant all year.

The Numbers That Open Doors

- Avg. all-in residential rate (late 2025): ~31.64¢/kWh
- U.S. national average: ~16¢/kWh → CT pays nearly 2× the national average
- Average monthly bill for 700 kWh home: \$220–\$250+
- Supply rate resets: January 1 AND July 1 every year — two built-in 'rate shock' moments
- Jan 2026 supply increase: Eversource +30% vs. summer 2025; United Illuminating +17%
- Winter 2022–23: Supply rates spiked 60%+ after Russia's Ukraine invasion — customers still remember
- Root cause: ~50% of New England's grid runs on natural gas — every global gas spike hits CT bills

Rep Talking Point

'Connecticut has the highest electricity rates in the continental U.S. The utility resets your supply price twice a year — January and July. That's two guaranteed moments every year for your bill to go up. Solar locks in your energy cost for 25 years. Your utility bill will never do that.'

Current Rate Breakdown

Category	Details
Eversource Supply (Jan 2026)	12.64¢/kWh (up from 9.75¢/kWh summer 2025 — a 30% seasonal spike)
UI Supply (Jan 2026)	13.70¢/kWh (up from 11.68¢/kWh summer 2025 — a 17% increase)
Delivery / Distribution	~7–10¢/kWh (set by PURA rate case — rises every few years)
Transmission	~2–3¢/kWh (FERC / ISO-NE — rising due to data centers & grid modernization)
Public Benefits / Conservation	~2–3¢/kWh (state-mandated RAM charge, CES charge)
All-In Average Total	~31.64¢/kWh (supply + delivery + transmission + program charges)
National Comparison	CT rate = 1.98× the U.S. average of ~16¢/kWh
Avg. Monthly Bill (700 kWh)	~\$220–\$250 (higher in winter when gas prices spike)
Root Cause	~50% of NE grid runs on natural gas; limited pipeline capacity amplifies every price spike



Key Rate Insight for Reps

Solar offsets your TOTAL bill — supply, delivery, transmission, and all program charges. When CT rates go up (they always do), the value of every solar kWh produced goes up too. Customers on the RRES Netting Tariff earn credits at the full retail rate — so their savings compound automatically as utility rates rise. This is the most powerful long-term value story in Connecticut.



SECTION 2 — CONNECTICUT UTILITIES & PROJECT TIMELINES

Who Serves Your Customers

Connecticut has two investor-owned utilities (IOUs) regulated by PURA, plus approximately 30 municipal utilities. Knowing which utility a customer is on determines their solar program and credit structure.

Utility	Customers	Territory	Solar Program
Eversource (CL&P)	~1.2 million	Hartford, Tolland, Windham, most Fairfield, northern New Haven counties	RRES — Netting or Buy-All
United Illuminating (UI)	~350,000	Greater New Haven, Bridgeport, Shelton, Derby, Ansonia, Orange, Milford (parts)	RRES — Netting or Buy-All
Municipal Utilities	~400,000	Groton, Wallingford, Norwich, Bozrah, Woodstock, Jewett City, Rockville, Putnam, others	Net Billing — confirm before quoting

How the Electric Bill Is Built

Understanding the bill structure helps you explain why all-in rates are so high — and where solar savings come from.

Bill Component	Who Sets It	Typical Amount	Changes How Often
Supply (Generation)	Wholesale market via PURA	~12–14¢/kWh	Twice a year: Jan 1 & Jul 1
Distribution / Delivery	PURA rate case (Eversource / UI)	~7–10¢/kWh	Every 2–4 years
Transmission	FERC / ISO-NE	~2–3¢/kWh	Periodically
Public Benefits (RAM)	PURA / State Legislature	~1–3¢/kWh	Annual RAM adjustment
Conservation Charge (CES)	State mandate	~1–2¢/kWh	Annual

Project Timelines — Setting Customer Expectations

Use these as customer-facing guidelines. They are averages, not guarantees. Weather, permitting, site conditions, and utility queues all affect actual timelines.

Category	Details
Contract → Installation	~75 days (statewide average)
Installation → PTO	~10–20 days (after passing inspection)
Eversource Utility Approval	~30–45 days (after inspection passed)
United Illuminating Approval	~30–45 days (after inspection passed)



Ground Mount Adder	+60–90+ days (additional local permitting required)
Panel Upgrade Adder	+30–60 days
Roof Work Adder	+30–60 days
Pre-1980 Homes	Often require a Home Energy Audit prior to utility approval — flag early
Transformer Upgrade	Occasionally required; cost ~\$1,000–\$5,000 passed to homeowner; adds 4–8 weeks
AHJ Permitting (Avg.)	~30 days (safe expectation: 4–6 weeks)

Common CT Fire Code Setback Rules

- Two 3-foot pathways from eave to ridge required on the residence.
- One pathway must be on the driveway side of the home.
- Each roof plane with solar panels must have at least one 3-foot pathway from eave to ridge.
- Ridge setback: 18 inches in most cases.
- If ALL roof planes have solar panels: 3-foot ridge setback required.
- Always confirm current local AHJ requirements — some municipalities have stricter rules.

Municipal Utilities — Net Billing vs. RRES

Municipal utility customers are NOT disqualified from solar — but the credit program differs.

- They use Net Billing instead of RRES. Credits may not be at full retail rate.
- Some municipal rates are lower than Eversource/UI — changes the savings calculation.
- Action: Flag any municipal utility customer for Operations before building a proposal.

Do not use RRES credit rates in your savings estimate for municipal customers.



SECTION 3 — SOLAR INCENTIVES

RRES — Connecticut's Core Solar Program

The Residential Renewable Energy Solutions (RRES) program replaced traditional net metering on January 1, 2022. It governs how Eversource and UI customers are compensated for solar production. Customers choose one of two structures at enrollment — locked in for 20 years.

RRES — Netting Tariff (Most Common for Residential)

How it works: Your solar system powers your home first. Excess production exported to the grid earns bill credits at the full retail electricity rate (~31¢/kWh).

- Credits offset all future supply AND delivery charges — not just supply.
- Credits roll forward month to month indefinitely — they never expire.
- Solar Energy Adjustment: Small charge of ~\$0.04/kWh on total solar production (2026 rate). Always factor this into your savings estimate.

System sizing rules:

- Based on customer's highest average annual consumption over the prior 5 years.
- EV allowance: Can add ~4,300 kWh/yr per EV (up to 2 vehicles) to sizing baseline.
- Whole-home heat pump: Future ASHP usage can be included in sizing baseline.
→ Always size for the fully electrified future home, not just today's usage.

Enrollment term: 20 years, locked in at application date.

Eligibility: Eversource or UI residential customers. System must be ≤ 25 kW.

RRES — Buy-All Tariff (Alternative Structure)

How it works: 100% of solar production is exported to the grid. Home draws from grid normally. You receive a fixed per-kWh payment for every kWh the system produces.

- 2026 Buy-All Rate: \$0.3289/kWh — locked in for the full 20-year term at enrollment.
- Rate includes the Renewable Energy Certificate (REC) value.
- Rate increments slightly each year for new enrollees — today's rate is guaranteed only today.

Requires two meters (generation and consumption metered separately).

Best fit: High-production systems; certain PPA/lease structures.

Less common for typical residential — Netting Tariff usually provides greater savings.

! Federal Tax Credit Update — Critical for 2026 Sales

The 30% Residential Clean Energy Credit (IRS §25D) expired December 31, 2025 for customer-owned systems.

TPO/commercial systems (§48E) retain credits through ~2027, then phase down.

- Cash / loan customers: No 30% federal credit. Lead with RRES value, state programs, and rate hedge.
- Lease / PPA customers: Developer may pass through §48E value — confirm with your finance team.
- Battery storage (§48E): Commercial incentives remain — strong upsell story.

Shift your urgency message to: State incentives are intact NOW. Battery programs are funded NOW.

The best time to act is before any future program changes.

Tax Exemptions

- **Sales Tax Exemption (6.35%):** All solar equipment and installation is fully exempt from CT's 6.35% sales tax. Automatic — no action needed.
- **Property Tax Exemption:** The added home value from solar is excluded from property tax assessment statewide. Zero additional property taxes for going solar — permanent benefit.



SECTION 4 — BATTERY STORAGE, HEAT PUMPS & EV INCENTIVES

Battery Storage — Energy Storage Solutions Program

Energy Storage Solutions — Up to \$16,000 Upfront + 10-Year Performance Payments

One of the strongest residential battery incentive programs on the East Coast. Available to Eversource and UI customers through the state-sponsored Energy Storage Solutions program.

UPFRONT INCENTIVE (at or near installation):

- Up to \$16,000 for residential battery installations.
- Amount based on: battery kWh capacity + household income tier + home location.
- Low-income and environmental justice community customers: HIGHEST incentive tier.
- Standard income households: Standard tier. Confirm current rate card at time of proposal.

PERFORMANCE INCENTIVE (ongoing — paid twice yearly for 10 years):

- Utility dispatches battery June–September, ~3–8 PM on high-demand days.
- Payment based on kW dispatched × incentive rate.
- Battery recharges after each dispatch — minimal disruption to the household.

PAIRING WITH RRES:

- RRES solar credits + battery incentive income = compelling dual-value pitch.
- With Buy-All at \$0.3289/kWh, stored solar energy dispatched back to the grid is highly valuable.

Eligibility: Eversource or UI customers. New residential battery installations only.

Application: Submitted through the solar installer.

The CT Battery Sales Pitch

Battery storage in CT isn't just backup power — it's a revenue-generating asset.

- Upfront incentive (up to \$16,000) dramatically reduces the customer's net battery cost.
- Performance payments generate income for 10 years just for being connected to the program.
- With CT's rate volatility, batteries also provide peace of mind during winter spike events.

The battery upsell in CT has one of the best ROI profiles in our entire territory.

Heat Pumps — EnergizeCT Rebates



Heat Pump Rebates — EnergizeCT (Up to \$15,000)

Available through EnergizeCT — a joint Eversource/UI/State initiative funded by ratepayers.

AIR SOURCE HEAT PUMP (ducted or ductless mini-split):

- Up to \$15,000 rebate when replacing oil, propane, natural gas, or electric resistance as PRIMARY heat.
- Rebate scales with system size (tons) and efficiency rating.

HEAT PUMP WATER HEATER: \$750 rebate.

HOME ENERGY SOLUTIONS ASSESSMENT: \$50 co-pay for in-home audit.

- Technician installs LEDs, pipe wraps, air sealing on-site during visit.
- Unlocks eligibility for deeper ASHP rebates and low-rate heating loans.

HEATING LOAN (EnergizeCT): Up to \$15,000 at 0.99% fixed rate for heating systems.

SMART-E LOAN (CT Green Bank): Up to \$40,000 at 4.49%–6.99% APR, 5–12 year terms.

- Covers solar, batteries, heat pumps, insulation, electrical panel upgrades.
- Up to 25% usable for non-energy improvements (e.g., roof repair before solar).

Note: Federal §25C heat pump credit (\$2,000/yr cap) expired December 31, 2025.

EV & Charger Incentives

EV Incentives — CHEAPR + Utility Charger Programs

CHEAPR (CT Hydrogen & Electric Automobile Purchase Rebate):

- Standard rebate currently \$500 while CT DEEP preserves post-federal-credit funding.
- DEEP plans to increase above \$1,500 as the fund is recapitalized post-federal-expiration.
- Income-qualified rebates: Remain available at enhanced amounts — check DEEP portal.

EV CHARGER REBATE — Eversource:

- Up to \$1,400 toward Level 2 wiring and charger hardware installation.
- \$25/month bill credit for enrolling in smart off-peak charging.

EV CHARGER REBATE — United Illuminating: Similar rebates — confirm current amounts.

Federal §30D (\$7,500) and §25E (\$4,000) EV credits expired September 30, 2025.

SOLAR + EV BUNDLE TIP:

- RRES allows up to 2 EVs to be factored into the system sizing baseline.
- An EV adds ~3,000–4,500 kWh/yr. Size up now — 'Your EV can run on free sunshine.'

Electrification Sizing — Size for the Future Home

Standard solar sizing covers today's usage. But most CT homeowners will eventually add a heat pump, EV, or heat pump water heater. Size the system for the electrified future home.

Typical additions:

- EV (home charging): +3,000–4,500 kWh/year
- Air source heat pump: +2,000–5,000 kWh/year (replaces oil/gas heating load)
- Heat pump water heater: +500–800 kWh/year

RRES allows up to 2 EVs in the sizing baseline — use this. Upsizing now, while financing is in place, costs a fraction of adding panels later.

SECTION 5 — CLEAN ENERGY MANDATES & PROGRAM CONTEXT

Why These Incentive Programs Exist

Connecticut's solar and battery incentive programs are not voluntary — they are driven by legally binding state mandates. Every solar system installed helps utilities meet their legal obligations under the Renewable Portfolio Standard (RPS). When you understand the mandates, you can speak confidently about why the programs exist and why they're durable.

Mandate	Requirement	Target Year	Status
RPS — Class I Renewables	40% of electricity sales from solar, wind, fuel cells	2030	~27% in 2024 — in progress
RPS — Total (all tiers)	48% renewable generation share	2030	Legislated — PA 18-50
100% Clean Electricity	100% from zero-carbon sources (PA 22-5)	2040	Legally binding
Net Zero Economy	Economy-wide net zero GHG emissions	2050	EO + legislation
RRES Program	20-year contracts for enrolled systems — state committed by law	Ongoing	Active
EV Adoption	145,000 EVs on CT roads	2030	In progress

What Mandates Mean for Your Sales Pitch

CT is legally required to reach 100% clean electricity by 2040 — just 14 years away. Every year, utilities need MORE clean generation to comply with their RPS requirements. The RRES Buy-All rate (\$0.3289/kWh) exists because utilities NEED that clean energy and must pay for it. These programs are mandated by law — not discretionary budget items.

The question for your customer is not 'should I go solar?'

The question is: 'Do I lock in today's rate and incentives, or wait while my bill keeps climbing?'

What's Driving Future Rate Increases

- **Grid Modernization:** Eversource and UI are spending billions to upgrade the grid for EVs, heat pumps, and clean energy. These costs flow into delivery rates and won't stop soon.
- **ISO-NE Capacity Markets:** Regional capacity auction prices have surged due to data center demand growth and power plant retirements. CT customers pay this directly.
- **Natural Gas Dependency:** Until the region's generation mix shifts away from gas (projected post-2035), winter supply price spikes will persist.
- **Offshore Wind Integration:** New England is procuring offshore wind, but near-term integration costs are substantial before long-term savings materialize.



Close With Urgency

- Every month a customer waits = another month of paying CT's top-3 national rates.
- The 30% federal tax credit is gone for customer-purchased systems. State incentives are intact — now.
- Battery upfront incentive funding is finite and allocated annually. Caps apply.
- RRES Buy-All rates increment each year for new enrollees — today's rate is today's rate only.
- Solar + storage today locks in their energy future. Waiting only increases the cost.

**SECTION 6 — QUICK REFERENCE CHEAT SHEET****Full Connecticut Incentive Stack at a Glance**

Incentive	Type	Value	Duration / Notes
RRES Netting Tariff	Bill credits	~31¢/kWh on net exports	20 years, locked at enrollment
RRES Buy-All Tariff	Fixed production payment	\$0.3289/kWh all production (2026)	20 years, locked at enrollment
Energy Storage Solutions	Upfront rebate + perf. pay	Up to \$16,000 upfront + 10-yr payments	New installations; Eversource/UI only
CT Sales Tax Exemption	Tax savings	6.35% savings on system cost	Permanent — automatic cost
CT Property Tax Exemption	Tax savings	Zero added property tax for solar	Permanent — statewide solar
Heat Pump Rebate (EnergizeCT)	Cash rebate	Up to \$15,000 ASHP	Annual program funding
HP Water Heater Rebate	Cash rebate	\$750	Annual program funding
Smart-E Loan (CT Green Bank)	Financing	Up to \$40,000 at 4.49–6.99% APR	5–12 year terms
Heating Loan (EnergizeCT)	Financing	Up to \$15,000 at 0.99%	Heating equipment only
CHEAPR EV Rebate	EV purchase rebate	\$500 now; expected to increase	Monitor DEEP portal
EV Charger Rebate (Eversource)	Charger rebate	Up to \$1,400 wiring + \$25/mo	Ongoing — Eversource customers

Key Contacts & Resources

Category	Details
PURA (rate regulator)	portal.ct.gov/pura — Rate filings, utility oversight, interconnection
EnergizeCT	energizect.com — Heat pumps, assessments, loans, efficiency programs
CT Green Bank	ctgreenbank.com — Smart-E Loan, Energy Storage Solutions program
DEEP (EV incentives)	portal.ct.gov/deep — CHEAPR EV rebates, charger programs, energy policy
Eversource RRES	eversource.com — RRES application, solar interconnection, rate schedules
United Illuminating RRES	uinet.com — RRES for UI customers, solar program details
DSIRE Database	programs.dsireusa.org/system/program/ct — All CT incentives, comprehensive



HIS Licensing — Required Before Closing Any CT Deal

Anyone closing a residential solar deal in Connecticut must hold a valid Home Improvement Salesperson (HIS) license or operate under a licensed contractor.

- Closing without proper licensing can void contracts and create regulatory liability for Helio.
- Contact your manager or compliance team to confirm your CT licensing status.
- This is a hard requirement — not optional.