

Renewable Energy



A clean energy solution for Housing Credit properties.

Renewable energy is a key resource as states work to address energy affordability and build more resilient communities.

However, access to renewable energy remains out of reach for many low-income communities — a gap that matters most for households for whom the national average share of income spent on energy costs is three times that of other households.

When paired with renewable energy systems, affordable housing can reduce overall housing costs for both owners and residents, while delivering more reliable and resilient power. Housing Finance Agencies (HFAs) play an important role in driving this investment, given their role in allocating Low-Income Housing Tax Credits (Housing Credits).

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HOUSING FINANCE AGENCIES

explicitly encourage the use of renewable energy sources in LIHTC properties.

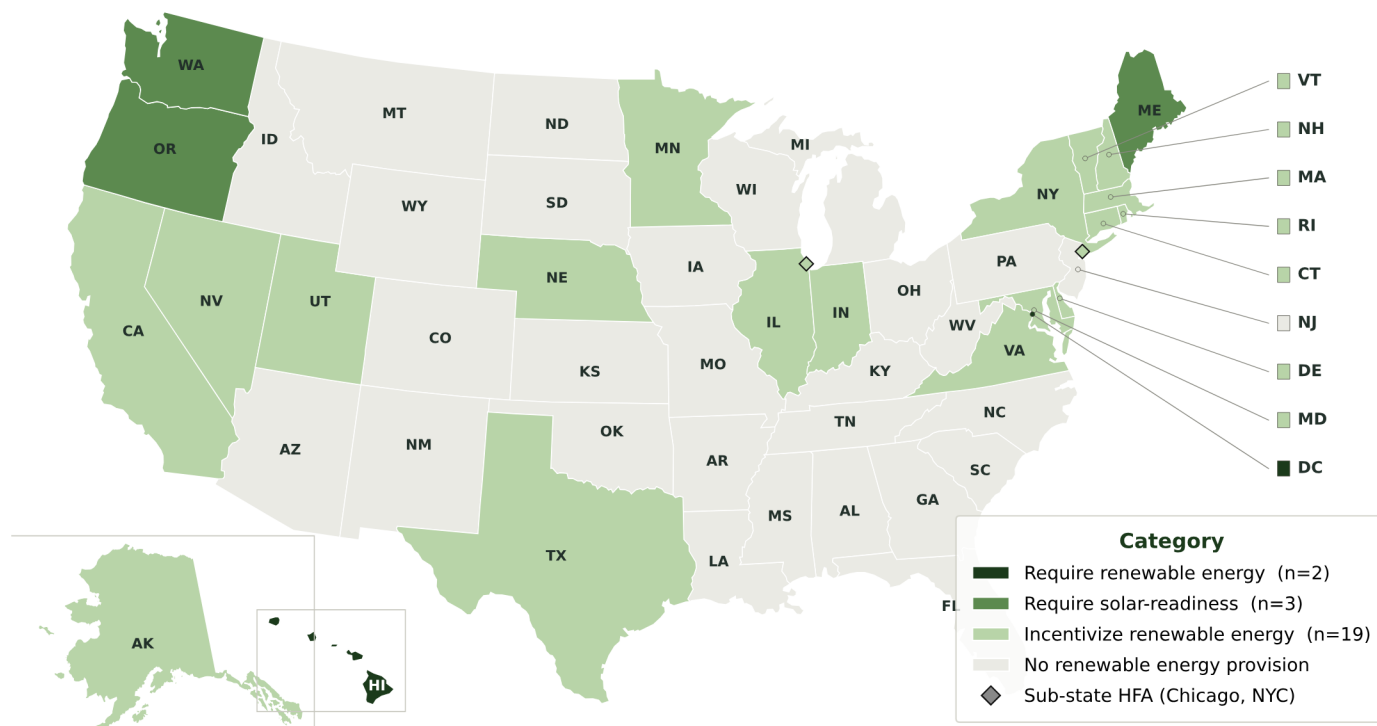
The following analysis examined **53 Qualified Allocation Plans (QAPs)** released before August 2025, providing insight into how state and local HFAs ensure that low-income renters benefit from renewable energy sources.

At least 24 HFAs explicitly include renewable energy in their QAPs or supporting documents. This represents an increase of one HFA since NHT's 2023 analysis. Montana and North Dakota no longer encourage renewables; Illinois, Indiana, and New Hampshire have begun to.

Three ways HFAs encourage renewable energy in their QAPs.

<p>1 Require renewable energy installation.</p> <p>Washington, D.C. and Hawaii (for water heating) expect developers to include renewable energy or demonstrate why it is not feasible.</p>	<p>2 Award points for renewable energy.</p> <p>Most agencies use QAP language or competitive scoring points to encourage renewable energy.</p>	<p>3 Require solar-readiness or an assessment.</p> <p>Some agencies require that new construction projects be designed to accommodate future solar PV installation.</p>
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HFA Treatment of Renewable Energy in LIHTC Qualified Allocation Plans



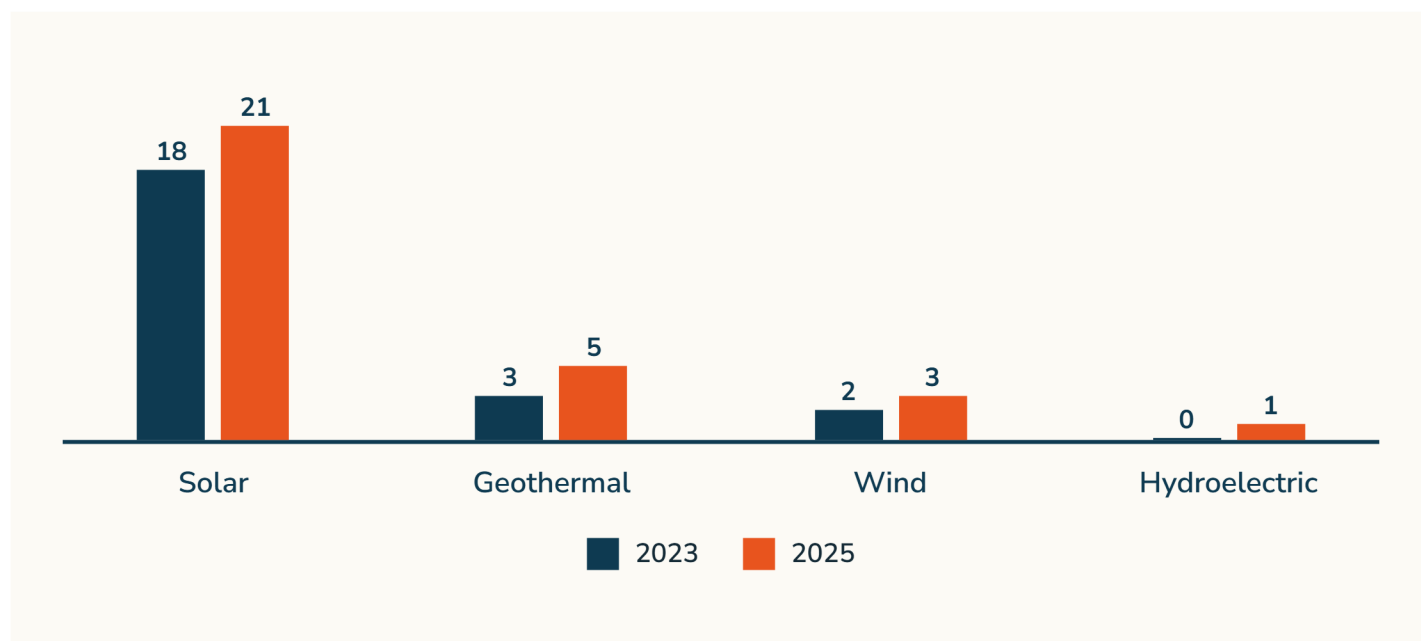
Of the 24 HFAs that explicitly encourage the use of renewable energy sources in their LIHTC properties, just two HFAs—Washington, D.C., and Hawaii—create the expectation that developers must include renewable energy in their projects or demonstrate why including it is not feasible. Another 19 HFAs incorporate language that encourages the use of renewable energy sources or provide points to projects that incorporate renewable energy as part of their competitive scoring process. Finally, three HFAs require that developers construct properties to be solar-ready. For example:

- **Maine Housing** requires LIHTC properties to include electrical wiring to support future PV solar panel installation.
- **Oregon Housing & Community Services** requires covered projects to be designed "solar-ready" if feasible, certified by a qualified solar consultant.
- **Washington State Housing Finance Commission** requires LIHTC properties to meet the Evergreen Sustainable Development Standard, which requires that new construction projects be designed to accommodate future solar PV installation. In addition, projects that involve the rehabilitation of existing buildings can earn points for incorporating upgrades to accommodate future solar PV installations.

Solar dominates the types of renewable energy in QAPs.

Solar is by far the most common type of renewable energy that HFAs require or encourage in their Housing Credit properties. Geothermal is the second most common type of renewable energy mentioned — 20% of HFAs that encourage or require renewable energy in their QAPs specify geothermal as an eligible energy source.

FIGURE 1 · NUMBER OF QAPS THAT SPECIFY TYPES OF RENEWABLE ENERGY



How QAPs tie renewable energy to measurable benefits.

QAPs may require that renewable energy systems be sized to offset a percentage of the building's annual energy demand (generally 25–30 percent), with additional points available to developers who exceed the minimum. Developers in 8 states are required or incentivized to ensure renewable energy offsets a percentage or dollar amount of energy demand from residents, common areas, or the entire property.

Some HFAs go further, requiring developers to direct cost savings to tenants by offsetting a specific share of utility costs per unit each year:

- **Alaska** requires that any on-site energy source be projected to generate a benefit of at least **\$40 per unit, per year**.
- **Utah** requires that projects opting for solar subtract the cost of electricity from residents' utilities and total rent payment.



— FEDERAL POLICY SHIFT

Federal changes are reshaping the economics of renewable energy.

The QAPs and supporting documents examined for this Infobrief were in place **prior** to significant federal policy changes. HR1, signed in July 2025, accelerated the phase-out of the Investment Tax Credit and other clean energy tax credits established under the Inflation Reduction Act, with most credits scheduled to expire after 2027. The Low-Income Communities Bonus Credit under Section 48(e) — a tax credit bonus for solar serving low-income households — is among the affected provisions. The EPA's **Solar for All** program, a \$7 billion competition targeting residential solar in disadvantaged communities, has also been terminated.

Because this analysis reflects QAPs adopted before these shifts, it does not yet capture how HFAs may respond. Agencies that assumed federal incentives would help make solar pencil out will need to revisit whether their QAP language is strong enough to drive deployment in a tighter economic environment.

The role of solar for resiliency hubs.

Beyond offsetting property-level demand, on-site solar lets affordable housing owners power **resiliency hubs**. These facilities can include space for residents to gather if they cannot stay in their unit, refrigerators to keep medicine cold, access to potable water, and charging stations for personal devices.

For properties that are a good fit for on-site solar, resiliency hubs powered by solar and backup battery storage can maintain critical operations during outages while reducing long-term energy costs and reliance on fossil fuels. For example, **Delaware** offers points for projects that include a resiliency hub complete with a kitchen, bathrooms, water fountain, and back-up power for heating, cooling, refrigeration, and phone charging.

DEFINITION

Resiliency Hub

A common-area facility used to support residents, provide backup power, and distribute resources during and after a natural disaster.



SOLAR ARRAY AT CHANNEL SQUARE APARTMENTS, WASHINGTON, D.C.

Strengthening the role of renewables.

Fewer than half of the HFAs studied — 24 of 53 — currently require or encourage renewable energy in their QAPs. As they revise their QAPs, agencies can strengthen the role of renewables by **(1)** requiring or incentivizing on-site renewable energy systems rather than design-readiness alone, **(2)** sizing those systems to offset a meaningful share of building energy demand, and **(3)** integrating resiliency hub provisions so that solar investments deliver value during outages and emergencies.

Learn more about how QAPs can accelerate the affordability, opportunities, and sustainability of affordable housing on our [QAP analysis home page](#).

— TABLE 1

State requirements and incentives for renewable energy.

STATE	ENERGY TYPE	SOLAR INSTALLATION REQUIRED	SOLAR INSTALLATION INCENTIVIZED	SOLAR READY REQUIRED
AK	Does not specify		✓	
CA	Solar		✓	
CT	Solar (PV system)		✓	
DC	Solar	✓		
DE	Solar (PV)		✓	
HI	Solar (hot water system)	✓		
IL	Solar		✓	
IN	Solar (PV)		✓	
Chicago	Solar, geothermal, wind power		✓	
MA	Solar (PV, hot water), wind, hydro-electric		✓	
MD	"Solar, geothermal, etc."		✓	
ME	Solar (PV panels)			✓
MN	Solar (passive heating/cooling & PV/solar hot water ready)		✓	
NE	Geothermal, solar		✓	
NH	Solar, geothermal		✓	
NV	"e.g., photovoltaics, wind power"		✓	
NY	Solar (PV), geothermal		✓	
NYC	Solar		✓	
OR	Solar (solar-thermal or solar-electric)			✓
RI	Solar (PV panels), other renewables		✓	
TX	Solar		✓	
VA	"Renewable energy electric system"		✓	
VT	"On-site and community-based renewable generation"		✓	
WA	Solar (PV panels)		✓	✓

✓ Renewable energy required
 ✓ Renewable energy incentivized
 ✓ Solar-ready required

This Infobrief was designed with the assistance of AI using Claude Design.