NARUC Innovation Webinar

Coordinating Federal Energy Efficiency Funding with Regulated Utility Programs

October 26, 2023

Thank you to the U.S. Department of Energy Office of Electricity for their support of this event
ABOUT NARUC

• The National Association of Regulatory Utility Commissioners (NARUC) is a non-profit organization founded in 1889.

• Our Members are the state utility regulatory Commissioners in all 50 states & the territories. FERC & FCC Commissioners are also members. NARUC has Associate Members in over 20 other countries.

• NARUC member agencies regulate electricity, natural gas, telecommunications, and water utilities.
THE NARUC CENTER FOR PARTNERSHIPS & INNOVATION

Background & Focus

• NARUC staff dedicated to providing technical assistance to members.

• CPI identifies emerging challenges and connects state commissions with expertise and strategies to inform their decision making.

• CPI builds relationships, develops resources, and delivers trainings.

• All CPI support is federally funded via cooperative agreements with DOE and NIST.

Newly updated CPI fact sheet with recent publications, upcoming events, new member working groups located under Quick Links at: www.naruc.org/cpi
NARUC Innovation Webinar Series

One webinar most months
All NARUC members and stakeholders are invited

The Energy-Transportation Nexus:
Solar Highways and the Road to a Cleaner Grid
November 9, 2023 | 3:00 – 4:00 PM EST

Powering the Future:
Transforming Energy Distribution with Artificial Intelligence
December 14, 2023 | 3:00 – 4:00 PM EST

https://www.naruc.org/cpi-1/innovation-webinars/

NARUC thanks the U.S. Department of Energy for its support of this series.
UPCOMING IN-PERSON EVENTS

2023 NARUC Annual Meeting and Education Conference
CONNECTING THE DOTS
Innovative/Disruptive Technology and Regulation
NOVEMBER 12-15, 2023 • LA QUINTA, CALIFORNIA

NARUC-DOE Transportation Electrification Planning Workshop

NARUC Grid Data Sharing Framework Simulation
DISTRIBUTION SYSTEM AND RESILIENCE PLANNING TRAINING

• November 29-30, 2023, Washington, DC (Registration now open!)
• Week of January 22, 2024, Orange County, CA (Registration coming soon)
• Week of March 18, 2024, Nashville, TN (Registration coming soon)
KEY IRA REBATE PROVISIONS

• Section 50121: Home Energy Performance-Based, Whole House Rebates
  • “Home Efficiency Rebates” (HOMES)
  • All households eligible, but bonuses for LMI

• Section 50122: High-Efficiency Electric Home Rebate Program
  • “Home Electrification and Appliance Rebates”
  • AKA “High-Efficiency Electric Home Rebate Act (HEEHRA)”
  • Limited to households <150% AMI

https://www.energy.gov/scep/home-energy-rebates-frequently-asked-questions
FEDERAL TAX CREDITS AMENDED BY IRA

• Energy Efficiency Home Improvement Credit
  • Typically 30% of costs, with some individual limits
  • $1,200 aggregate yearly tax credit maximum for building envelope
  • Separate $2,000 aggregate yearly credit limit for appliances

• Residential Clean Energy Property Credit
  • Typically 30% of costs
  • No limit
### Home Efficiency Rebates + 25c tax credits

<table>
<thead>
<tr>
<th>Improvement</th>
<th>% of cost</th>
<th>Maximum credit</th>
<th>Efficiency criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home energy audits*</td>
<td>30%</td>
<td>Up to $150</td>
<td>Auditor certification requirements to be determined by DOE</td>
</tr>
<tr>
<td>Heat pumps</td>
<td>30%</td>
<td>Up to $2,000 per year</td>
<td>Based on CEE Tiers</td>
</tr>
<tr>
<td>Heat pump water heaters</td>
<td>30%</td>
<td>Up to $2,000 per year</td>
<td>Based on CEE Tiers</td>
</tr>
<tr>
<td>Central air conditioners*</td>
<td>30%</td>
<td>Up to $600</td>
<td>Based on CEE Tiers</td>
</tr>
<tr>
<td>Natural gas, propane, or oil furnaces, boilers, or water heaters*</td>
<td>30%</td>
<td>Up to $600</td>
<td>Based on CEE Tiers</td>
</tr>
<tr>
<td>Biomass stoves or boilers</td>
<td>30%</td>
<td>Up to $2,000 per year</td>
<td>Thermal efficiency of at least 75%</td>
</tr>
<tr>
<td>Electric panel or circuit upgrades for new electric equipment*</td>
<td>30%</td>
<td>Up to $600</td>
<td>200 amps or more</td>
</tr>
<tr>
<td>Insulation materials*</td>
<td>30%</td>
<td>Up to $600</td>
<td>Based on 2021 IECC</td>
</tr>
<tr>
<td>Windows and skylights*</td>
<td>30%</td>
<td>Up to $600</td>
<td>ENERGY STAR Most Efficient</td>
</tr>
<tr>
<td>Exterior doors*</td>
<td>30%</td>
<td>Up to $500 (max of $250 for each door)</td>
<td>ENERGY STAR</td>
</tr>
</tbody>
</table>

*Subject to combined cap of $1,200 per year

Rebates of $2,000 to $4,000 depending on savings
Double to $4,000 to $8,000 for LMI households

$1,200 per year cap (excluding HP and HPWH)
$2,000 for HP
$2,000 for HPWH (or 30% of cost)
Home electrification and appliance rebates

• Up to $14,000 in rebates for low- and moderate-income households
• Prescriptive, point-of-sale rebates
• Supports transition to all-electric homes
• Incentives for contractor participation

<table>
<thead>
<tr>
<th>Appliance</th>
<th>Rebate Amount (Maximum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat Pump (for space heating and cooling)</td>
<td>$8,000</td>
</tr>
<tr>
<td>Electric Stove, Cooktop, Range, or Oven, or Clothes Dryer</td>
<td>$840</td>
</tr>
<tr>
<td>Heat Pump Water Heater</td>
<td>$1,750</td>
</tr>
<tr>
<td>Electric Wiring</td>
<td>$2,500</td>
</tr>
<tr>
<td>Electric Load Service Center (Breaker Box)</td>
<td>$4,000</td>
</tr>
<tr>
<td>Insulation, Air Sealing, and Ventilation</td>
<td>$1,600</td>
</tr>
</tbody>
</table>
Moderator: Commissioner Jeffrey Hughes
North Carolina Utilities Commission

Speakers:
Jennifer Amann, ACEEE
Laura Schauer, Illume Advising LLC
Rebecca Foster, Vermont Energy Investment Corporation
Evaluation Policies and Considerations

Program Theory
Addressing questions such as:
What is the program theory?
What are we trying to achieve?
What are the barriers to overcome? Etc.

Credit and Value
Are public funds being used wisely? Who gets credit and how do we measure that? And to what extent does the “who” matter?

Purpose

Metrics
Traditional cost effectiveness vs. effective use of funds tying to program theory and goals

Attribution

Partner
Collaborate to Achieve
While separate funding streams, they interweave to achieve a common goal. Finding opportunities to leverage resources is critical

ACCOUNTABILITY AND PROGRESS
Our Thinking

Planning and Approach is Important

Thoughtful planning:
  Taking time to come together and align on the why, who, what, and again why

Measuring and documenting the beginning:
  Often a missed opportunity, but we have it now

Shifting from a resource acquisition to market transformation mindset:
  These take different approaches, and there’s been extensive thinking on methodologies to start from

A mindset of growth, education, and learning:
  Necessary across all of us as we embark on a relatively new path