



Rhode Island Executive Climate Change Coordinating Council

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February 2022



The American Council for an Energy-Efficient Economy is a nonprofit 501(c)(3) founded in 1980. We act as a catalyst to advance energy efficiency policies, programs, technologies, investments, & behaviors.

Our research explores economic impacts, financing options, behavior changes, program design, and utility planning, as well as US national, state, & local policy.

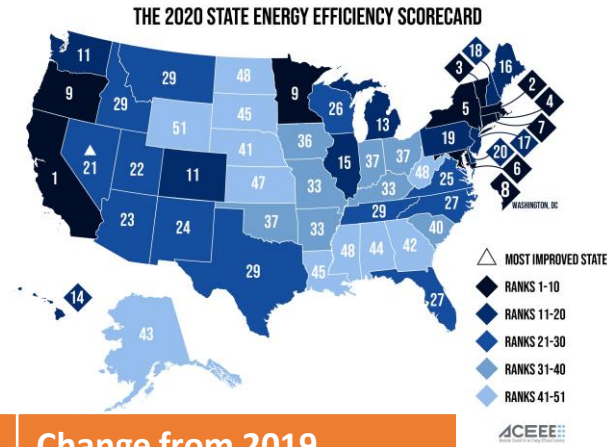
Our work is made possible by foundation funding, contracts, government grants, and conference revenue.

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Year	Historic Rank
2020	4
2019	3
2018	3
2017	3
2016	4
2015	4
2014	3
2013	6
2012	7
2011	5
2010	7
2009	9
2008	11
2007	9

Rhode Island in the State Scorecard

- Scored 39.5 out of 50 points (-1 compared to 2019) to finish in 4th
- 2021 utility electric savings: 2.14% (ranked 2nd)
- 2021 utility natural gas savings: 1.06% (ranked 4th)



Scoring Category	2020 Point total	Change from 2019
Utilities	19.5 (out of 20)	-0.5
Transportation	8 (out of 10)	+2
Building Energy Policies	6 (out of 9)	+0.5
State Government-Led	6 (out of 6)	No change
Appliance Standards	0 (out of 2)	No change
Total	39.5 (out of 50)	-1*

*reflects removal of CHP category in which RI received 3 points in 2019

*Note: Forthcoming 2022 State Energy Efficiency Scorecard will include a reimagined methodology including **15 new scoring metrics** with an expanded focus on decarbonization, electrification, and equity.*

2021 State Policy Trends

- New energy laws set ambitious goals to decarbonize state economies with electrification as a growing priority (IL, CO, MA, MN, OR, WA)

- Legislative focus on removing barriers to

beneficial electrification

- MN's ECO Act
- Illinois Climate & Equitable Jobs Act
- Colorado's SB21-246

- **Building energy codes**

- Increasing adoption of 2018 IECC
- 2021 IECC code review underway in many states (CT, IL, MD, MA, NJ, NY, VT)
- Plans ongoing to develop ambitious statewide stretch codes in MA and IL

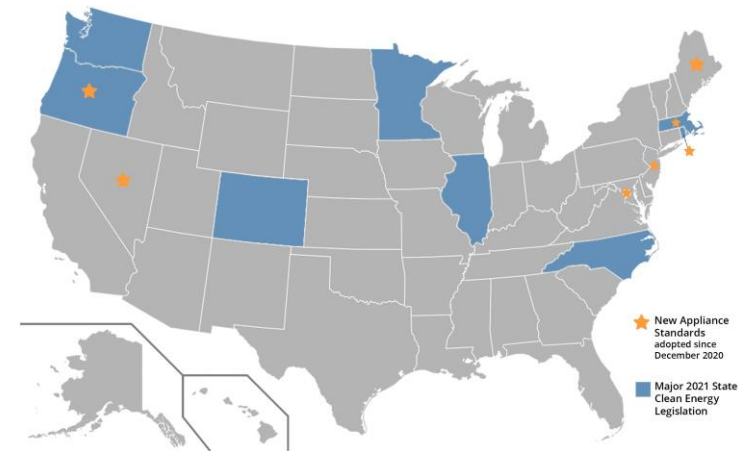
- Very active year for **appliance standards** adoption

- Six states, including Rhode Island, requiring minimum energy/water use efficiency for 15+ types of products

- Historic opportunity to support clean energy transition

- \$1 trillion Bipartisan Infrastructure Law provides billions in funding for weatherization, building energy codes, home & building upgrades, worker training, & transportation electrification.

2021 Major State Clean Energy Legislation & Appliance Standards

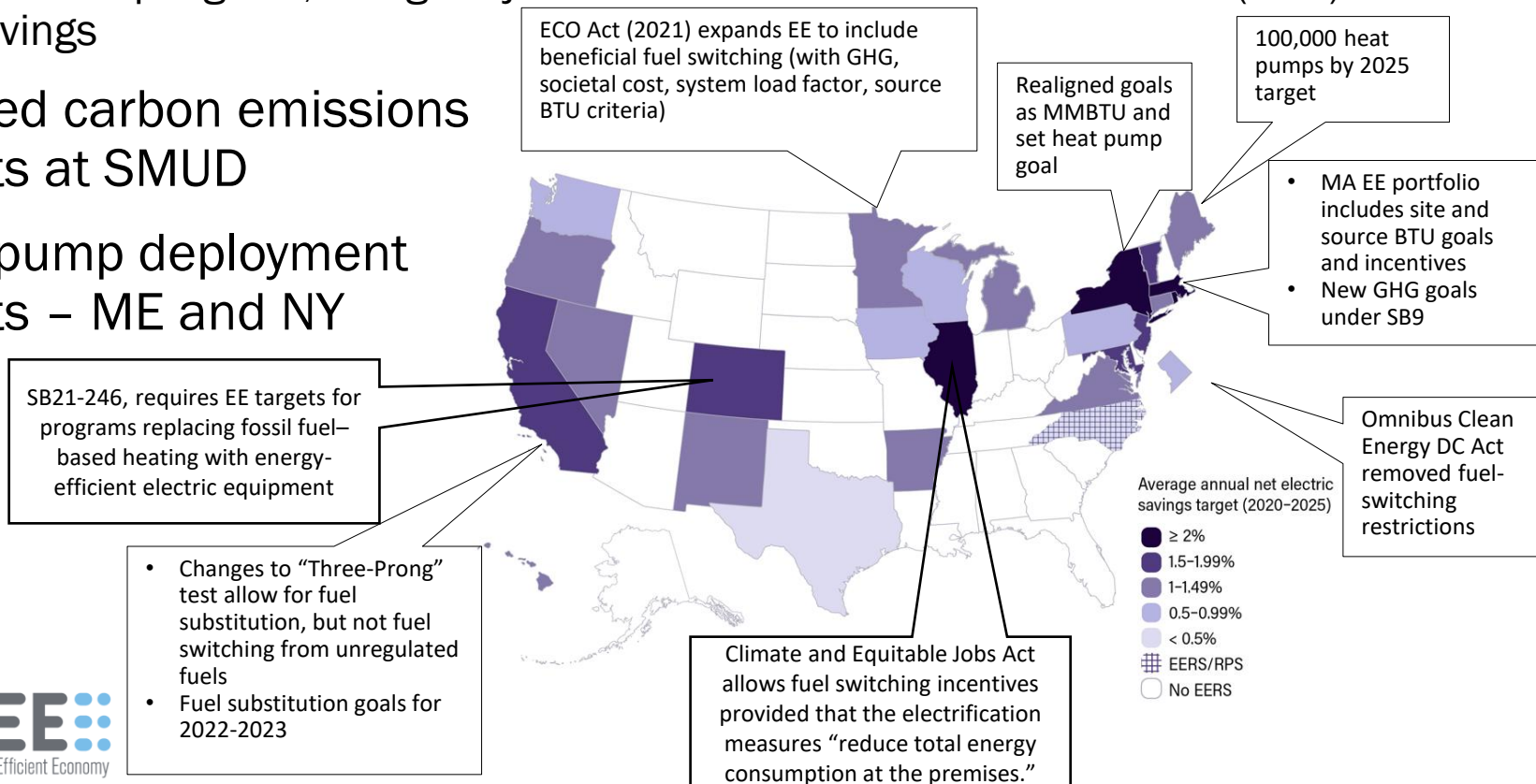


EERS have begun to evolve to enable both energy efficiency and electrification to scale

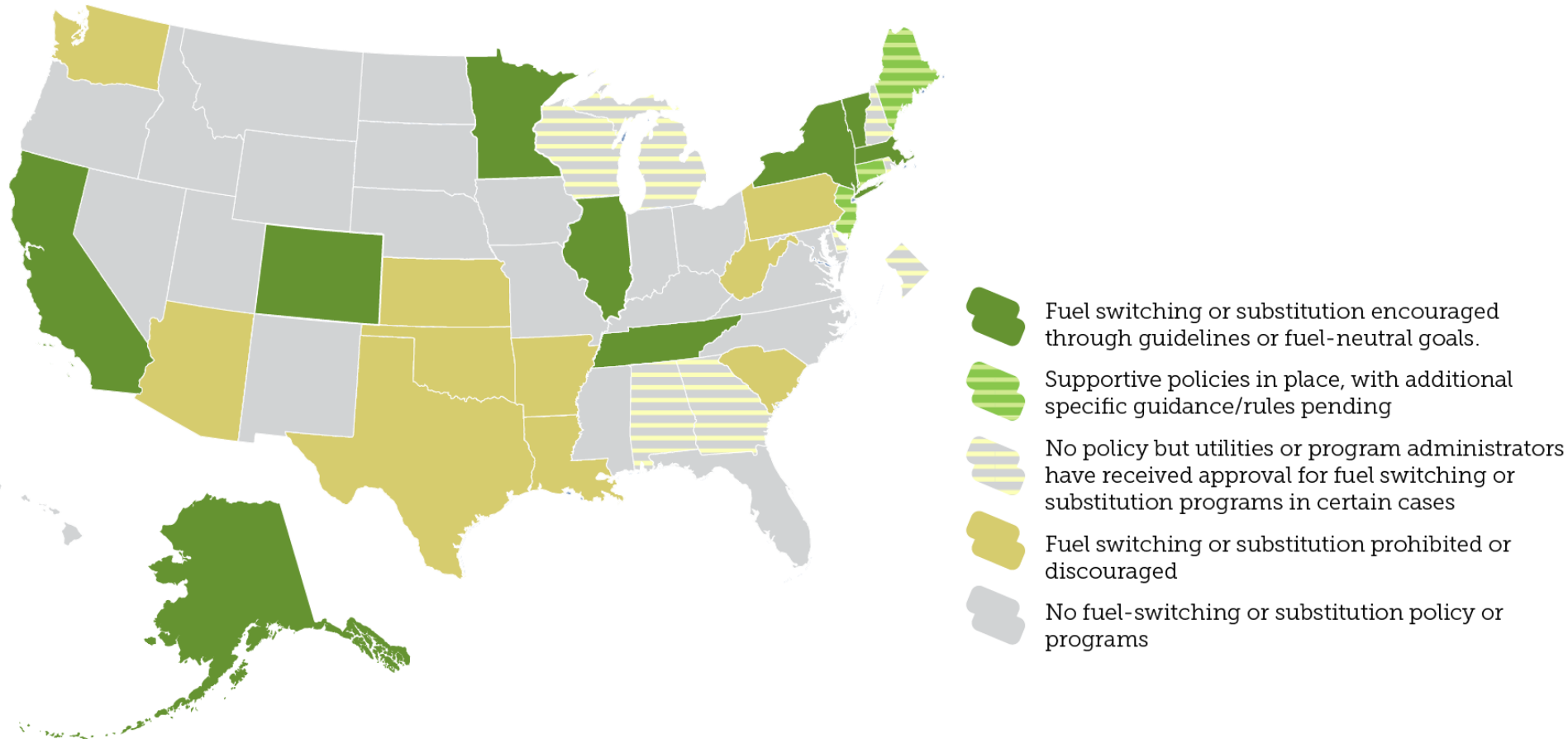
- Fuel-neutral “BTU” goals in NY and MA
 - both include sub-targets or multiple targets in portfolio to ensure electricity efficiency
 - NY: overarching target, based on site BTUs
 - MA: multiple goals, using “adjusted” Btus based on site and source (CHP) savings

- Avoided carbon emissions targets at SMUD

- Heat pump deployment targets – ME and NY



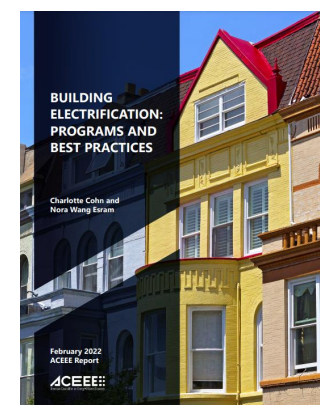
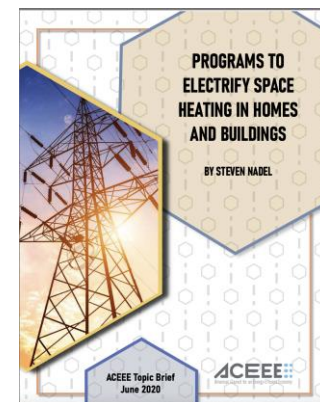
Fuel switching rules also have begun to evolve



Source: ACEEE. 2022. (DRAFT) *State Policies and Rules to Enable Beneficial Electrification in Buildings through Fuel Switching.*

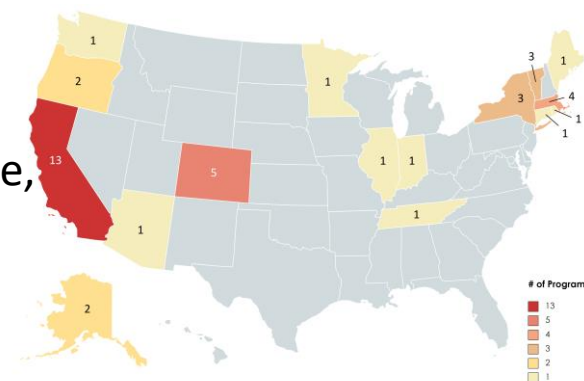
States are updating program designs to scale EE + electrification

- Electrification in Buildings is growing – programs had a collective annual budget of \$166 million
 - Up from \$108 million reported in Nadel 2020

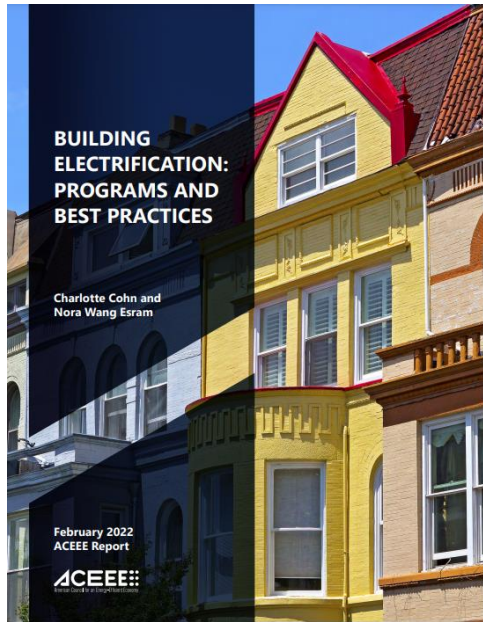


Program design trends:

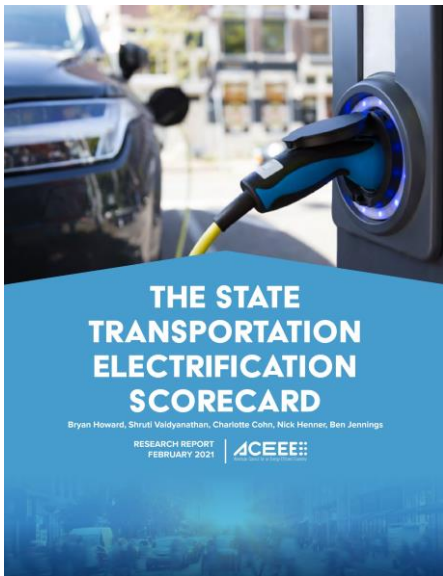
- Encouraging weatherization to reduce loads alongside new heat pumps
 - Offering 'pre-electrification' or 'heat pump ready' programs (e.g, weatherization, envelope programs)
 - 1/3 of programs require weatherization
- Targeting upstream incentives to contractors or distributions
- Updating program materials, incentives to align with reducing total energy use across fuels
 - Contractor training in cold climate heat pump performance, maintenance, etc
 - Offering higher incentives, enabled by all fuel savings and value on GHG reductions



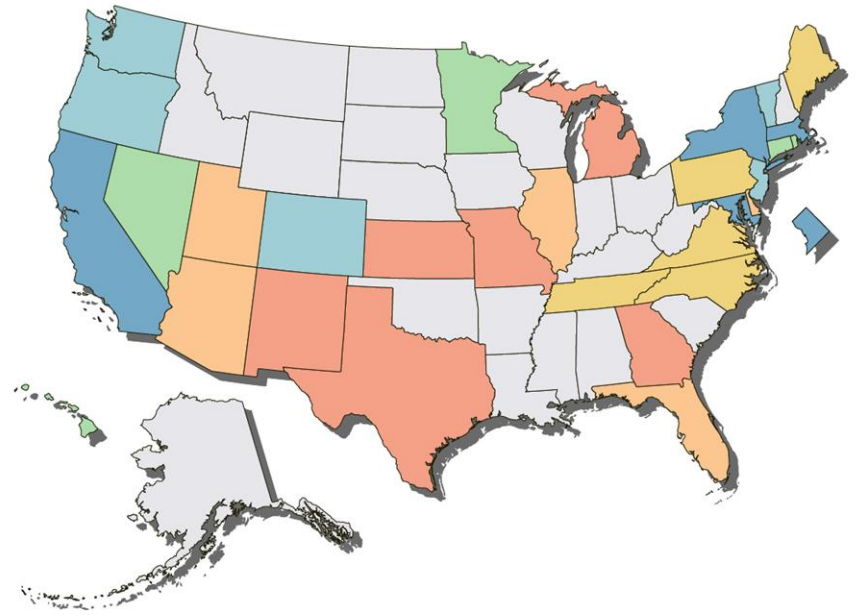
Building Electrification Programs: Recommendations by Actor



Actor	Recommendations
State Legislatures / Government	<ul style="list-style-type: none">• Set concrete Building Electrification targets within climate plans• Provide funding for programs for hard-to-reach sectors• Price carbon emissions at the wholesale level
Regulators	<ul style="list-style-type: none">• Remove barriers to fuel switching incentives• Value climate/GHG impacts in cost effectiveness testing
Utilities	<ul style="list-style-type: none">• Expand program offerings• Phase out incentives for fossil fuel equipment
Contractors	<ul style="list-style-type: none">• Receive education & training to install heat pumps
Homeowners / property mgrs	<ul style="list-style-type: none">• Plan ahead for replacement of fossil fuel equipment• Implement energy efficiency & weatherization alongside heat pumps



The State Transportation Electrification Scorecard



- | | | | | | |
|----------------------------|----------------|------------------|--------------------|--------------|----------------|
| 1-5 | 6-10 | 11-15 | 16-20 | 21-25 | 26-29 |
| 1. California | 6. Washington | 11. Hawaii | 16. Virginia | 21. Utah | 26. Missouri |
| 2. New York | 7. Vermont | 12. Minnesota | 17. Maine | 22. Florida | 27. Georgia |
| 3. District of
Columbia | 8. Colorado | 13. Connecticut | 17. Pennsylvania | 23. Illinois | 27. Texas |
| 4. Maryland | 9. Oregon | 14. Nevada | 19. North Carolina | 24. Delaware | 29. Kansas |
| 5. Massachusetts | 10. New Jersey | 15. Rhode Island | 20. Tennessee | 25. Arizona | 29. Michigan |
| | | | | | 29. New Mexico |

Unranked

Common State Action

23 states have comprehensive planning for more EVs and EV charging

27 states have incentives such as rebates, tax credits, and grants to buy large electric pickups and delivery trucks

48 states use federal funds to buy electric transit buses

36 states have utility programs that offer lower electric rates at preferred times for EV (Level 2) charging

15 states have utility funding to spur EV and EV charging adoption in low-income areas and environmental justice communities



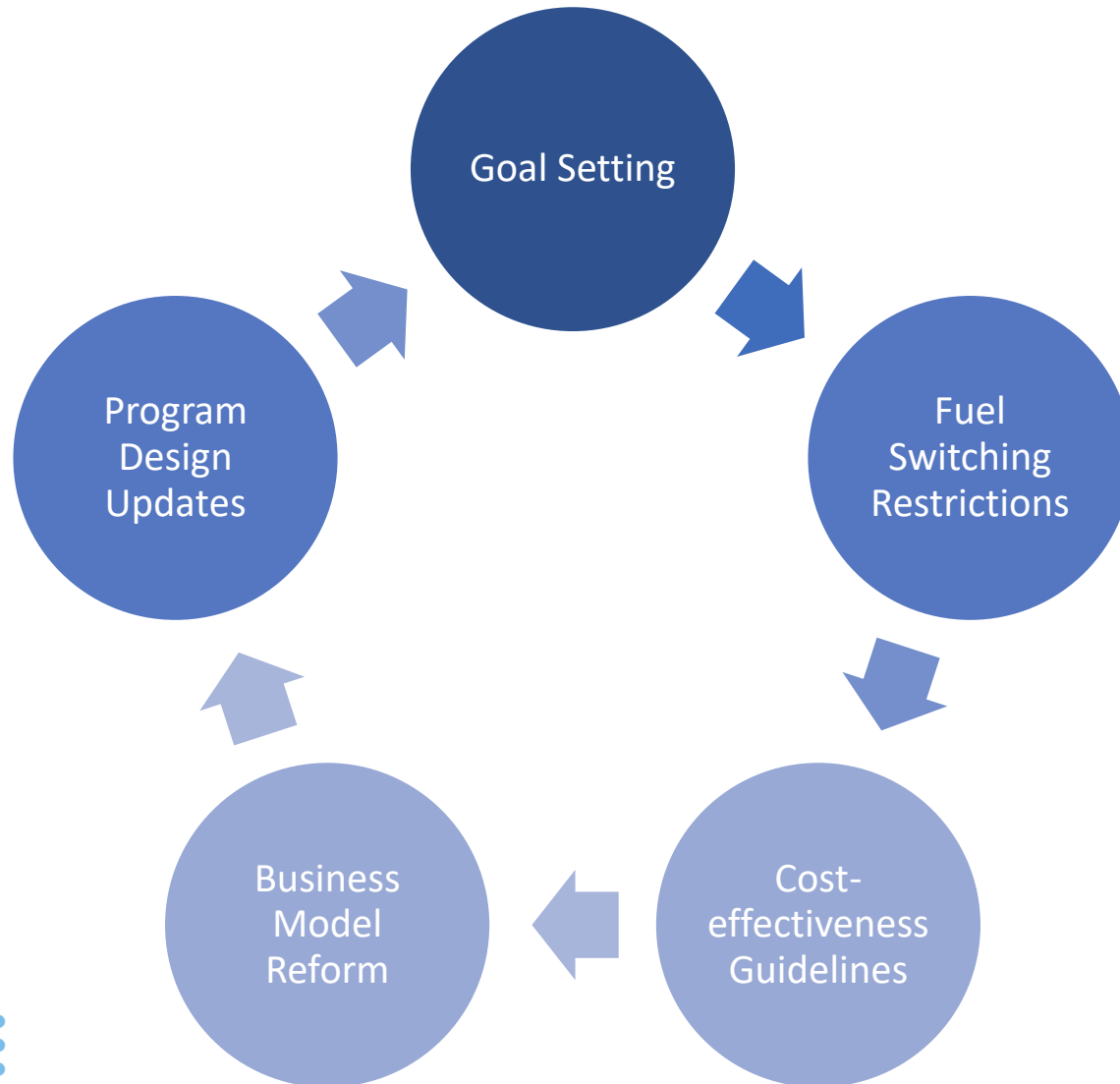
Leading with Equity Initiative

- Initiative launched in early 2021
- Feedback that the leaders in Scorecards are not doing enough to advance equitable policies or programs
- Overall goal to ensure that all cities, states, and utilities leading in the Scorecards must be leading across equity-focused metrics
- Designed so that community-based organizations (CBOs) are helping to drive the development of a full landscape of improved equity-related metrics



Bonus slides

Emerging state policy tools for bringing beneficial electrification into energy efficiency programs



States adjusting cost-effectiveness testing to better value electrification

- National Standard Practice Manual now includes guidelines for electrification
- Electrification will require increased generation, and increase net electric utility system costs
 - how much will depend on when and how they are used rate design, demand response, direct load control, are all important)
 - with vehicle-to-grid, could potentially reduce net electric system costs
- But, will also reduce costs from the other fuels (gas, oil, propane) they replace, so important to include those impacts
- Important to include net GHG, air emissions impacts
- Typically lead to increased electric utility revenues; may lead to reduced electricity rates

