



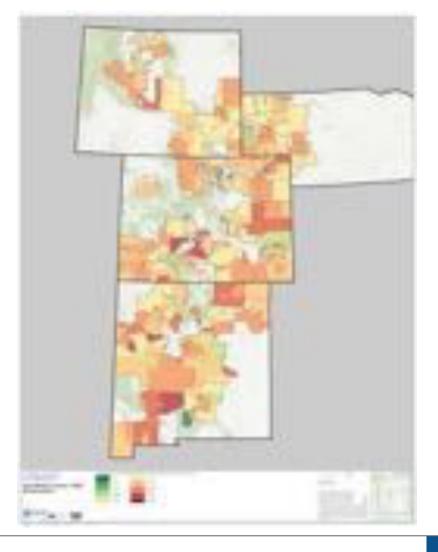
# On-bill Repayment to Decarbonize Buildings

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> WHATEVER THE FUTURE HOLDS WE'LL POWER IT

### Background and Energy Burden in Rural Areas

- Tri-State Generation and Transmission serves 42 distribution systems
- ~31% of the households in the service area are below 80% of the area median income
- U.S. rural energy burden is 42% greater than metropolitan
- Average U.S. utility serves 32 consumers/mile/\$79k annual revenue; Tri-State serves 5 consumers/mile





# The Opportunity

- 35% of the households in Tri-State's service territory heat with propane; 30% heat water with propane
- Low-income households lack discretionary income to pay for retrofits
- Breaks down barriers to electrification
  - consumer education
  - high upfront cost for electrification
- Tri-State administering the program is more cost-effective
- On-bill financing is a better fit than traditional financing for many consumers
  - Businesses not a debt obligation
  - Renters resolves the split-incentive issue
  - Government removes TABOR barriers in Colorado
  - Overall, improves investment in the building stock



### Tariff On-Bill Repayment: A Powerful Mechanism for Underserved Communities

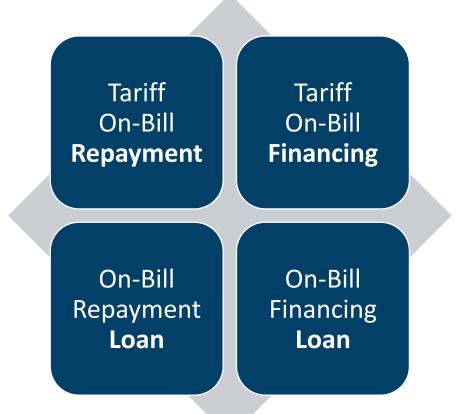
- What is tariff on-bill repayment?
  - OBR is a mechanism by which utility consumers can receive a clean energy installation at no upfront cost and pay via a voluntary charge on their utility bill
  - Does not qualify as a loan considered a utility service received by consumer & paid back over time
  - Eliminates certain underwriting criteria that often disqualify a consumer and avoids additional debt burden

### **On-Bill High Level Process Flow**





### On-Bill Models: What's the Difference & Why does it Matter?





# Electrify and Save On-Bill Repayment: an on-bill model with many advantages

### Unlocking hard-to-serve markets

- Beneficial Electrification: improves ROI through low interest rates and eliminating upfront capital requirement; Coop partnership increases awareness and credibility
- Underserved customers: addresses landlord-tenant split incentive issue; for low-income households, addresses credit and capital constraints

### Standardization Benefits

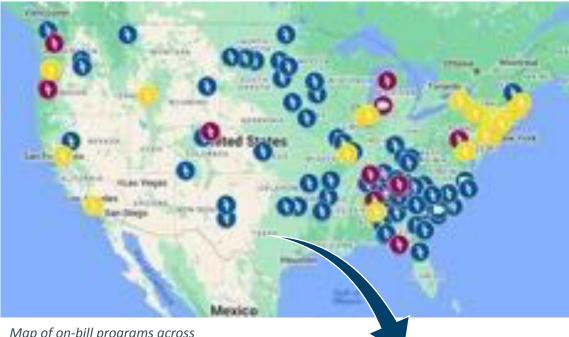
- CCEF can provide technical assistance and program admin functions that relieve resource-constrained cooperatives of administrative burden
- Applying for USDA funds maintains low interest rates and eliminates the need for the coop to bring capital
- Program uniformity is attractive to contractors and reduces market confusion

#### **Contractor Network**

- CCEF can develop a contractor network to serve coop territories with limited qualified contractors
- Contractor management provides credibility and appropriate oversight to maintain consumer protection



## Case Studies: A Proven Model Nationwide



Map of on-bill programs across the country (source: EESI)

> Enabled \$630M in projects with <1% default rate!



- Launched 2018
- 400 projects to date
- \$20M deployed
- No defaults!



- Launched 2019
- 90% survey respondents reported improved home comfort
- 70% reported high satisfaction w/ utility bill reductions
- No defaults!



- Creative pilot bringing clean energy to affordable housing
- Solar & heat pumps in 24 homes



# Thank you for your time and energy.

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