## Achieving Equity with Community Choice Aggregation

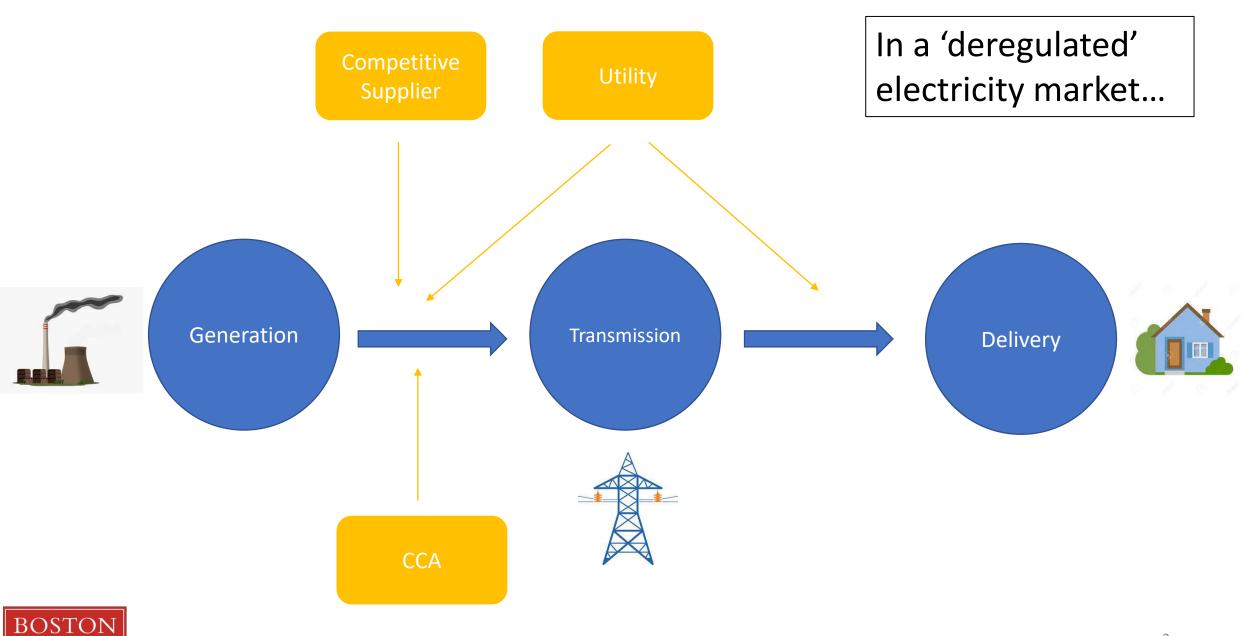
Alicia Zhang PhD Student Boston University Department of Earth and Environment Institute for Sustainable Energy









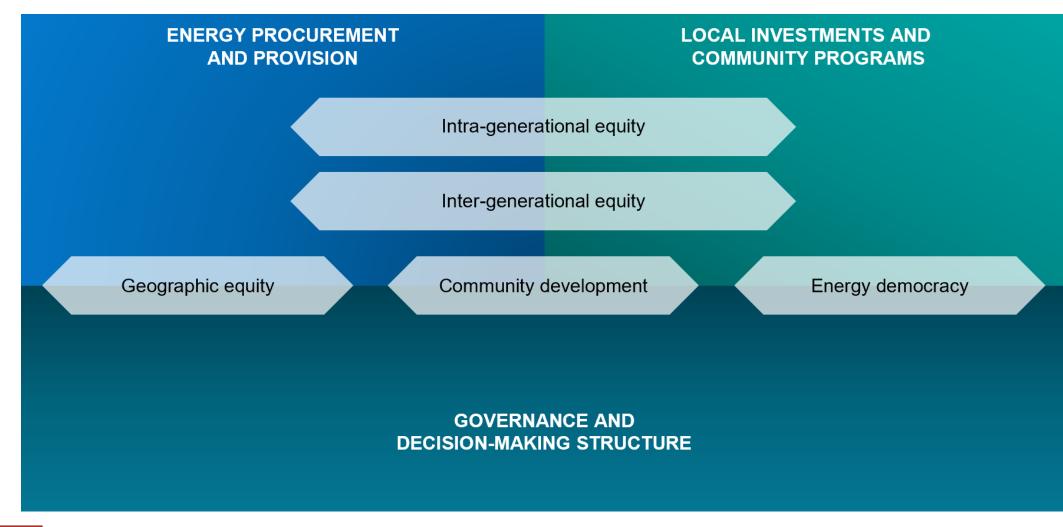


UNIVERSITY

### LOWER RATES FOR CLEAN ENERGY



## What is energy justice?





### CCA models vary in their opportunities for equity

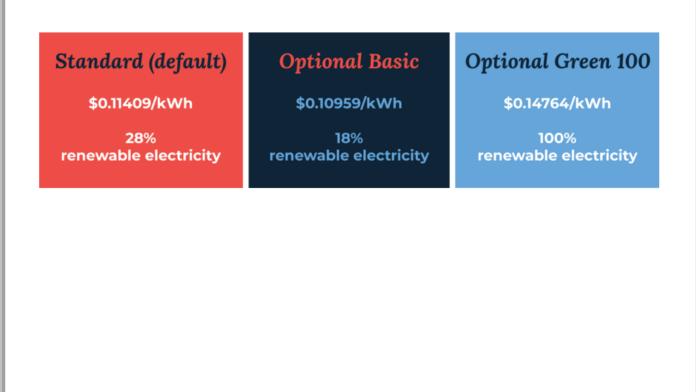
Characteristics of the three CCA Models.

| Model type | Main features  | State presence                        | Program Examples   |
|------------|--|---------------------------------------|--|
| 1.0        | <ul> <li>CCA acts only as an electricity supplier.</li> <li>Main objective is cost savings.</li> <li>Short-term contracts.</li> <li>Limited managerial control.</li> <li>Electricity is usually purchased from the market or remote generating sources.</li> </ul>   | MA, OH, VA, CA, RI,<br>NJ, NY, NH, MD | Lowell Community Choice Power Supply Program (Lowell, MA)  |
| 2.0        | <ul> <li>CCA can provide multiple energy services.</li> <li>Main objective is to maximize community<br/>benefits, including but not limited to cost<br/>savings.</li> <li>Requires managerial capacities and more<br/>complex governance.</li> <li>Emphasizes energy democracy and local<br/>ownership.</li> </ul> | CA, NH                                | East Bay Community Energy (Alameda County, CA)   |
| 3.0        | - CCA programs across municipalities can<br>develop a Joint Powers Agency and share<br>expertise and managerial capacities.  | CA, NH                                | MCE (Contra Costa, Napa, Marin, and Solano<br>Counties, CA). MCE is also part of the California<br>Community Choice Association. |

## Case Study of Boston

### Community Choice Electricity (CCE)

- Largest CCA program in MA
- Began in February 2021
- Opt-out program
- Automatically enrolls all Eversource Basic customers





### Environmental justice is a core principle of CCE

We recognize that pollution and climate change cause more harm to socially vulnerable communities. The program aims to deliver benefits and economic opportunities to these communities.

City of Boston Website



## Methodology

Interviewed 8 persons of interest over video-call/ phone/ email

- Boston city officials who worked on CCE (Community Choice Electricity Outreach Coordinator & Energy Efficiency and Distributed Resources Finance Manager)
- 2 members of Working Group
- Executive Director of Green Energy Consumer Alliance
- Clean Energy Director of MCAN
- Researcher at the Applied Economics Clinic
- Community Outreach Coordinator at Sierra Club (MA Chapter)

#### Questions asked based on interviewee's role in CCE

 Community outreach, misconceptions about CCE, how to address rate variability, influence of Working Groups, opt-out rates, low-income assistance, educating residents, competitive suppliers, etc.



## Themes from Interviews

## Clean energy procurement and low-cost provision is a core feature, but there are challenges

#### Challenges

- Structuring choice between lower rates and higher renewable energy options
- The type and location of new renewable energy sources linked to or owned by CCA programs can also present challenges

#### **Possible Solutions**

- Universal residential service and rate protections
- Decentralization of energy system
  - Include a choice for buying local green energy

| Standard (default)           | <b>Optional Basic</b>        | Optional Green 100                  |
|------------------------------|------------------------------|-------------------------------------|
| \$0.11409/kWh                | \$0.10959/kWh                | \$0.14764/kWh                       |
| 28%<br>renewable electricity | 18%<br>renewable electricity | 100%<br>renewable electricity<br>12 |



# Need for a transparent and accountable governance and decision-making structure

#### Challenges

- Governance structure may not be transparent and inclusive throughout the design *and* implementation model
- Predatory competitive suppliers

#### PRESS RELEASE

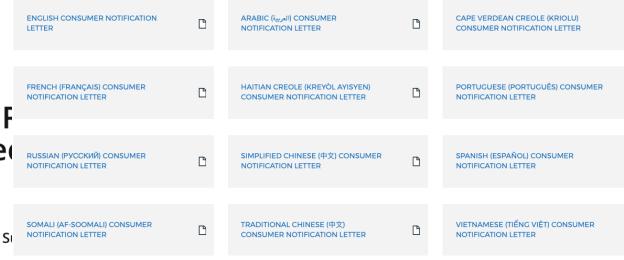
#### New AG Report: Massachusetts F Million Through Competitive Election in Last Five Years



Study Shows Low-Income Residents and Communities of Color Are Disproportionately Harmed; AG Urges Passage of Legislation to Ban S from Signing Up New Residential Customers

#### **Possible Solutions**

- Community outreach, participation, and engagement
- Selection consultant



## CCAs provides opportunities for local investments and community programs

#### Challenges

 Department of Public Utilities has legislation that act as barriers to local development programs such as community solar

#### **Possible Solutions**

- Long-term contracts with local renewable energy generators
- Forming a coalition (3.0 model)







CCA is an opportunity to democratize

Community outreach, engagement, and empowerment should continue through all stages of the CCA implementation

Recommendations to NEJAC



Enforce open market to ward off competitive suppliers

Emphasize community education

Q

Implement a decentralized renewable energy model

Sponsor local green energy



Form a coalition

Create an aggregation of aggregators run by a non-profit entity



How can we transform the energy system to foster sustainability and equity?

- Alternative energy procurement models provide opportunities for fostering equity, including:
  - Inter- and intra- generational equity
  - Energy democracy
  - Community development
  - Geographical equity
- Careful planning and attention on community engagement and equity principles can help municipalities transform the energy system and build community resiliency



## How can we transform the energy system to foster sustainability and equity?

- Electric system is transforming very slowly
- We need to provide opportunities to be more just as we transition and for people to benefit from the system
- CCAs gives whole community stronger presence in the market





## Thank you!

For full report, please visit: <u>www.bu.edu/rccp</u>

Contact info: Alicia Zhang zhanga@bu.edu

