

Together, We Can

THE MID-AMERICA CODES COLLABORATIVE PROJECT

Metropolitan Energy Center

In the past five years alone, MEC has effectively managed \$25 million in federal grants to disperse training, resources, and new technology across Kansas and Missouri.



Kansas City area nonprofit since 1983

- 40 years of energy efficiency

Building Performance

- Commercial and residential buildings
- Project Living Proof demo home in heart of KC

Sustainable Transportation

- Kansas City Regional Clean Cities - 1998
- Central Kansas Clean Cities - 2013

Agenda

- ❑ Historical context of region related to code and energy initiatives
- ❑ Related personal professional history
- ❑ How this grant collaborative came together.
- ❑ The project goals



The Region, Energy Codes and Related Industry Makeup

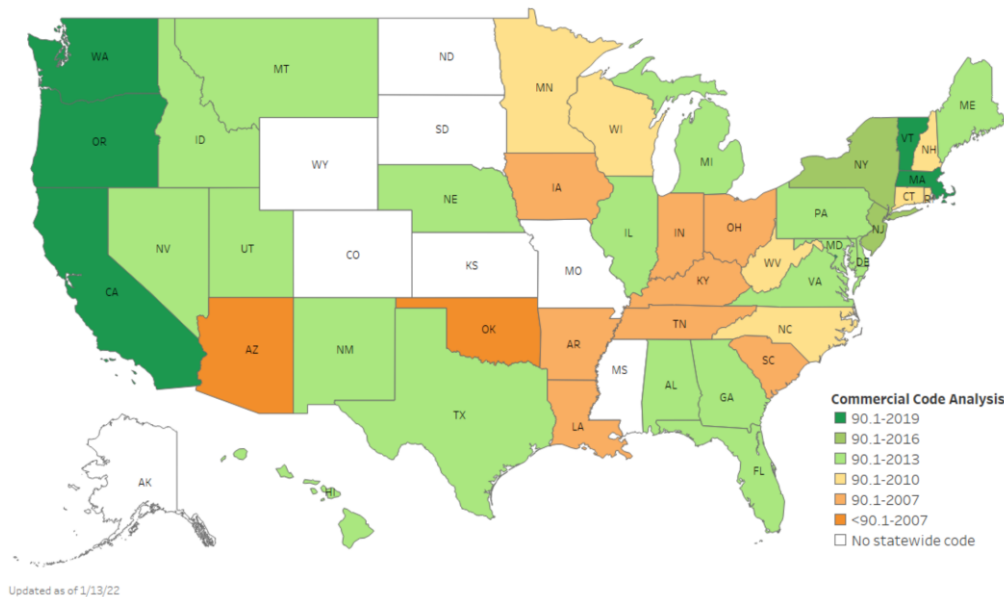
Code Development and Adoption

Kansas and Missouri are 2 of 8 home rule states in the U.S.

Until recently Kansas City, MO was on an amended 2012 IECC

St Louis, MO and Columbia, MO are currently on 2018 IECC with little or no amendments. Kansas municipalities have a similar patchwork.

Many rural communities have no energy code policy to speak of.



Example process: Kansas City region

- Each jurisdiction is on the “six year” code adoption cycle.
- Most of the other municipalities adopted the 2018 IECC, but heavily amended, especially on the residential side. Most are waiting for the 2024 IECC to be published and will pursue study for adoption.
- Kansas City, MO was on 2012 IECC (with weakening amendments) chose to wait in 2020 for the 2021 IECC code to publish.



Housing/Utility Cost Burdens

Energy Cost Burden in KCMO



Among 48 metropolitan areas, KCMO is ranked **7th highest** for energy spending as a proportion of household income ("energy burden"), with **4.5%** of income being spent on energy costs



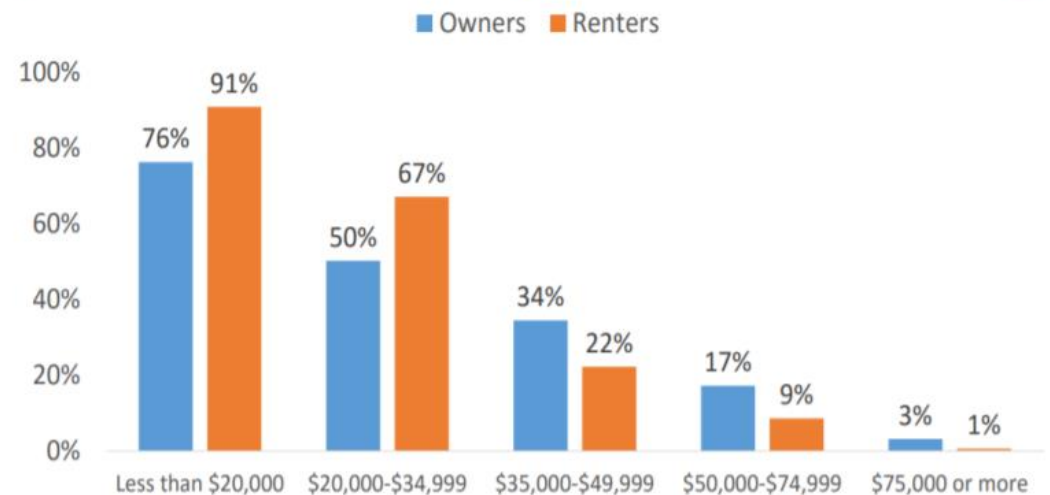
For renter households, KCMO ranks **6th highest**, with an energy burden of **6.1%** of income



For low-income households, KCMO ranks **9th highest**, with an energy burden of **8.5%** of income

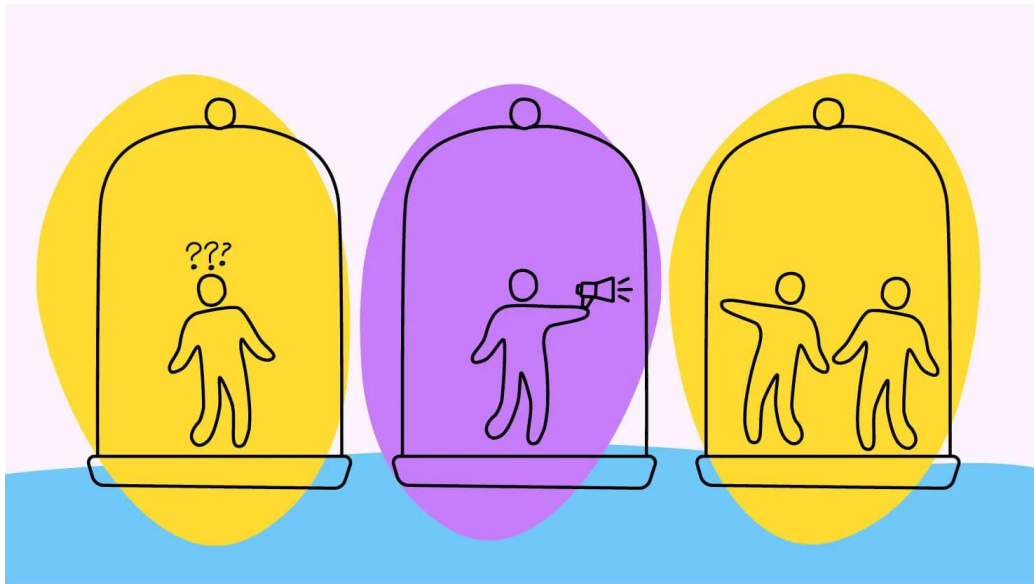
Source: *Lifting the High Energy Burden in America's Largest Cities*, ACEEE, April 2016

Percentage of Households that are Cost-Burdened (>30% of income on housing) by Income Groups



Source: 2011-15 ACS Estimates, US Census

Non-for-Profit Snapshot:



- Traditionally competes for limited resources.
- Heavy workload can mean you don't look around.
- Subtleties in mission, goals and funding resources have made it difficult to coordinate instead of duplicate efforts.



Energy Origin Moment

Personal path to here

We've Been Here Before American Clean Energy and Security Act of 2009 (ACES)



- ❑ In 2007 – Switched Careers into the HERS Rater Vocation from an unrelated field
- ❑ In 2010, registered as a contractor doing both ratings and BPI audits under funded programs related to ACES
- ❑ Then in 2015, I watched the industry deflate after the money ran out

- ❑ You can't sustain a business on federal subsidies alone
- ❑ The workforce during the ACES was predominately white males coming in from the 'burbs
- ❑ Most of the small contractors were good people that loved building science but didn't know business management
- ❑ The length of the project was not long enough for the "free market" to take root

LESSONS
LEARNED



A New Approach...



The RECI Bus Arrived



Requirements:

- We had to have a state energy office as a partner> The MO Dept of Natural Resources agreed
- We needed the following to avoid the mistakes of the ACES era:
 - Diversity
 - Business acumen classes for longevity
 - Entities experienced in both labor and willing business partner recruiting
 - Funding to educate the region – community leadership, policymakers, industry - on the basics of building science
 - Educational partners across the state
 - An existing pilot in the commercial energy vocational training space

The Vocations:

Residential

- HERS Rater
- HERS Energy Modeler
- HERS Rating Field Inspector

Commercial

- HVAC Commissioning
- Energy Efficiency Testing



Key recruits into the partnership

- ❑ MEEA (Midwest Energy Efficiency Alliance
 - ❑ plus Building Energy Exchange KC and St Louis
- ❑ Workforce Development that focuses on recruiting vulnerable populations into workforce
 - ❑ One Union
- ❑ Data analysts
- ❑ CBO's that have never worked within a DOE grant project
- ❑ Youth based entities like Girls & Boys Club of MO; and National Institute for Construction Excellence (NICE)
- ❑ Established, experienced educational partners such as a major community college and university>
 - ❑ Univ of MO, Science and Technology
 - ❑ Kansas City KS Community College

Who's Missing?

**Receiving the
'not-interested'
treatment**



- The local chapters of the HBA
 - National HBA on Project Advisory Committee – PENDING now
- Other major contractor associations
- Key Unions – Pipefitters, Sheet Metal
 - (Our one union-based partner = IBEW in Kansas City)

Looking Ahead to Cooperative Outcomes

Hopes & Dreams:

- ❑ Raise awareness of energy conservation and *critical connection to occupancy health*
- ❑ Create the energy vocation (HERS Raters, HVAC commissioners, commercial building testing specialists) as a “household” profession
- ❑ Have the workforce look like America with a heavy recruiting emphasis on those historically marginalized
- ❑ Expand on workforce development piece into fledgling BPS’s
- ❑ Need for continued collaboration after the fact with other RECI projects in region



Questions?

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The Goal of Conduct and Interaction*

- ☐ Trust
- ☐ Transparency
- ☐ Truth



*In place after a cultural clash> Code of Conduct



Working Collaboratively in Minnesota
National Energy Codes Conference - May 8, 2024

Virginia Rutter, Buildings Program Administrator
Division of Energy Resources

mn.gov/commerce

Mission

- Protect and assist consumers
- Provide oversight to 40+ industries
- Authentically engage with all communities



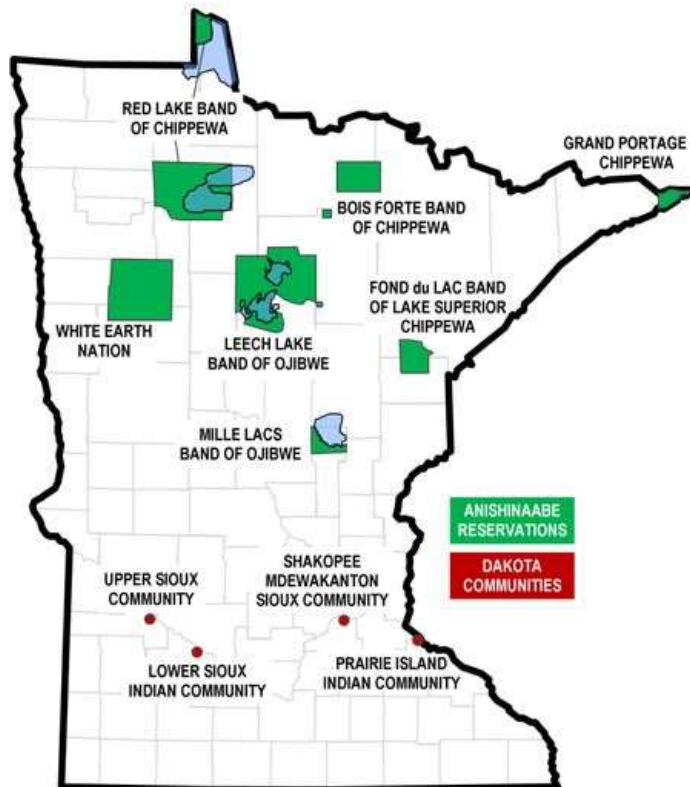
Strategic Priorities

Protect the Public Interest	Protect the public interest through consumer protection, consumer education, assistance to consumers, safety, health, and financial security, and lowering inequities.
Trusted Resource	Serve as a trusted public resource for consumers and businesses by listening and learning from the Minnesotans Commerce serves, being effective stewards of public resources, advocating for Minnesota consumers and developing a policy, programmatic, and regulatory environment that meets their needs.
Reduce Economic Barriers	Reduce economic barriers within Commerce regulatory oversight and reduce disparities within those of all races, ethnicities, religions, economic statuses, gender identities, sexual orientations, (dis)abilities, and zip codes.
Climate Change Resilience	Ensure all, especially historically disadvantaged Minnesotans are resilient to Minnesota's climate and engaged in advancing efforts to mitigate climate change.
Strong, Competitive, Fair Marketplace	Ensure a strong, competitive, and fair marketplace for Minnesotans.

Minnesota Collaborations

- Why collaborate?
 - Expand capacity of State government
 - Provide needed perspectives and solutions
- Examples of collaborations:
 - Government to Government
 - Climate Action Framework
 - RECI-funded work: Advanced Energy Codes Partnership

Minnesota Tribal Nations



- Minnesota home to 11 Federally-recognized Indian tribes
- Minnesota agencies must:
 - Consult annually with each tribal government
 - Collaborate on policies that impact tribal nations
 - Have a tribal liaison to direct agency programs and initiatives

Climate Action Framework

- Stakeholder review & input:
 - 11 Tribal nations
 - 3000+ Minnesotans
- Cross-agency implementation and coordination
- Vision to create a Minnesota that is
 - Carbon-neutral
 - Resilient
 - Equitable



Climate Action Framework

- Clean transportation
- Climate-smart natural and working lands
- Resilient communities
- Clean energy and efficient buildings:
 - 80% reduction in GHG emissions; net-zero commercial code by 2036
- Healthy lives and communities
- Clean economy

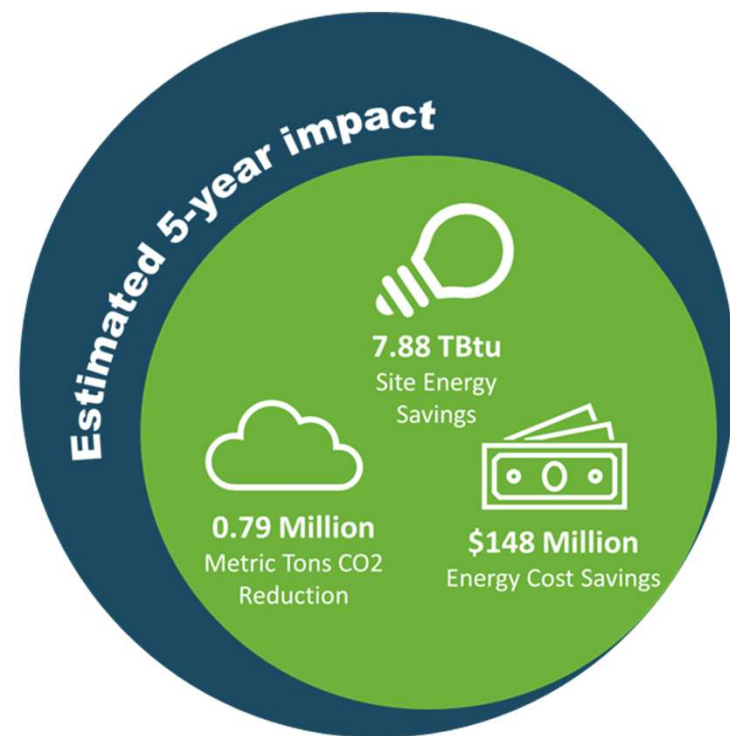
MN Advanced Energy Code Partnership

Mix of government agencies and local and national experts in buildings



MN Advanced Energy Code Partnership

- Develop Advanced (Stretch) Codes for Commercial Buildings to reach net-zero goal
- Increase Code Compliance by providing technical assistance
- Develop Existing Buildings Strategy (BPS) through stakeholder engagement
- Provide Support to Tribal Nations to reach their net-zero goals

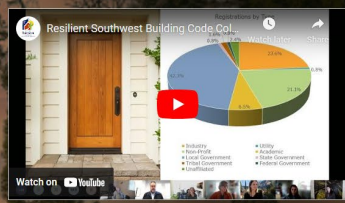


Contact:
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virginia.rutter@state.mn.us



Resilient Southwest Building Code Initiative

The Collaborative intends a transparent and inclusive process and supports additional organizations and jurisdictions joining the project. A sharing session was held on March 2, 2023, to discuss the proposed project with stakeholders and potential partners and invite further participation.



Once the project is formally launched, there will be multiple opportunities to participate, such as providing technical input on the work products, providing recommendations to ensure equitable processes and outcomes, and engaging members and constituents in informing the end products. Training opportunities will also be available for additional local building departments beyond the current city and county partners.

If you or your organization are interested in participating in the project, please indicate your interest [here](#) or click on the button below to be added to the distribution list for the project.

Interested parties will be notified of engagement opportunities including requests to provide input through surveys or interviews, public meetings, availability of draft documents for review, educational sessions, and release of the Regional Resilience Code and supporting resources.

[SIGN UP FOR THE DISTRIBUTION LIST](#)

Who Currently makes up the Collaborative?

New Buildings Institute (NBI)
International Code Council (ICC)
LISC Phoenix (LISC)
University of Arizona Institute for Energy Solutions (IES)

City of Albuquerque, NM
City of Avondale, AZ
City of Flagstaff, AZ
City of Glendale, AZ
City of Las Cruces, NM
City of Mesa, AZ
City of Phoenix, AZ
City of Scottsdale, AZ
City of Tempe, AZ
City of Tucson, AZ
Coconino County, AZ

Arizona Governor's Office of Resiliency
New Mexico Energy, Minerals, and Natural Resources Department

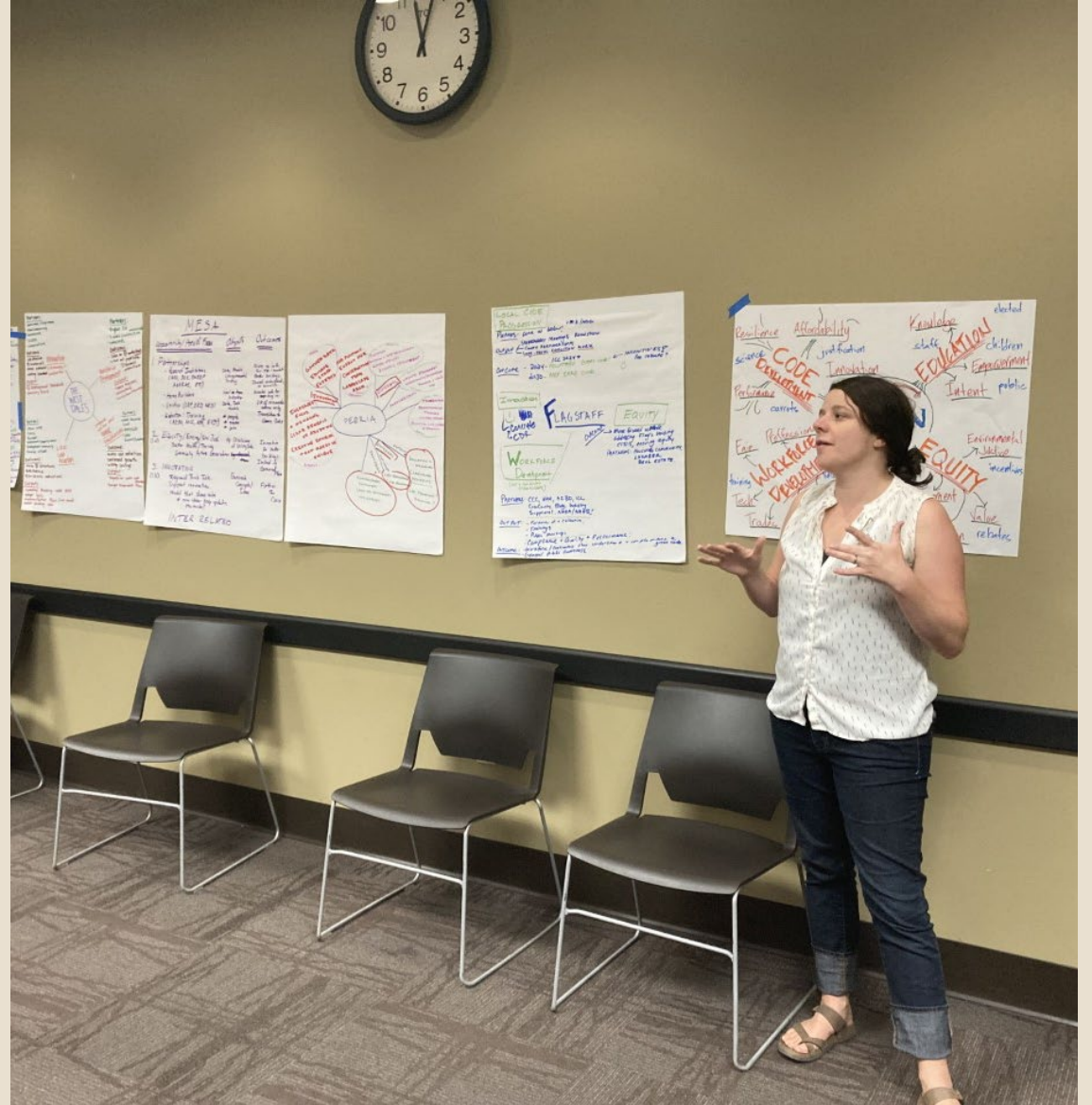
Quest Energy Group
CUADRO Design
Southwest Energy Efficiency Project (SWEET)
Illume Advising
Urban Sustainability Directors' Network (USDN)
Southwest Urban Corridor Integrated Field Laboratory (SW-IFL)
ASU Global Institute of Sustainability
US Green Building Council
ULI - Arizona
The Nature Conservancy

Arizona Construction Trades
Coconino Community College
Pima Community College
Gateway Community College
Foundation for Senior Living

Unlimited Potential
Wildfire
Sonora Environmental Research Institute (SERI)
Cihuapactli Collective (Tribal)
Retail Arts Innovation Livability Community Development Corporation (RAIL CDC)
People's Defense Initiative

How did the collaborators come together?

- Started with City of Tucson
 - Idea: climate-adapted development standards as part of our Climate Plan
 - Couple of months later – initial creation of RECI announced
- Leveraged existing sustainability networks (USDN, SCN)
 - SCN – AZ-based sustainability “sharing network”
 - held a March 2022 session on buildings role in climate plans (Tempe and Scottsdale were speakers)
 - USDN – a sustainability “community of practice”
 - Long-standing network allowed Tucson to easily connect with peers in other cities
 - The value of the USDN network can be seen in the fact they are a partner with ACEEE
 - Got funding from them to convene the initial cities/county before the FOA came out
 - Held a facilitated convening of sustainability + building staff from each community (right before FOA released) to determine basic elements of proposal
 - Bringing building staff in from the beginning was KEY!



COMMON THEMES

- Education - baby step group
 - ↳ special focus on electeds
 - ↳ workforce development
- ↳ Equity - housing related also
 - ↳ process/voices @ the table / persp's
 - ↳ strategies for those not at the table
- ↳ Innovation / tech / think tank
- ↳ Spirit of collaboration
- ↳ Housing
- ↳ Coalition-building
 - ↳ roadblock removal

↳ bldg officials linked...
↳ rethinking stakeholders

↳ nonprofits

- Code adoption
 - ↳ pathway
 - ↳ incentives
 - ↳ pilots
 - ↳ benefits - DATA!
 - ↳ consistency across City/County
- ↳ common common core code w/
 - ↳ flexibility in options/timeline/path
 - ↳ definitions (e.g. what is net zero?)

↳ a gap
↳ step code

- resiliency ^{affordability} needs to be a lens thru which step code gets defined
- sharing successes / creative solutions + failures
 - ↳ amendments
- City / county / Statewide unified voices help make it easier to adopt

What's missing?

- what to do w/ existing stock
- fed \$ on energy audits for
 - ↳ also connects to workforce dev
 - ↳ applies to new construction as well
- Voluntary benchmarking / incentives
- Other voices - we need humility → we may not be getting it right
 - ↳ Internally + externally
 - ↳ how do we invite them in?
- allies in public health
- real cost to construction & cost to climate / ppl of NOT doing this

Why are we doing it this way?

- Common climate and built environment goals
- Historically unfriendly state political environment (especially in AZ)
- Approach
 - Local leadership from communities with strong climate goals, but safety in numbers (strong goals does not always equate to action!)
 - Jurisdictions did not have the time or expertise to accomplish our goals – needed technical experts to lead the work with our guidance
 - Focus on outreach and education to build political support
 - Offer pathways to involvement to “non-leadership” communities – exposing them to new ideas, training, supportive environment can spark



“PART OF THE PROBLEM IS THAT THERE IS NO STATEWIDE APPROACH TO SUSTAINABLE DEVELOPMENT.”

Construction cranes are silhouetted against the colorful sunset in Phoenix on July 13, 2023, the 14th day in a row of temperatures 110 degrees or more. Rob Schumacher/The Republic

ENVIRONMENT

More homes mean more heat. Can new building codes help save metro Phoenix from disaster?



Joan Meiners
Arizona Republic

Published 7:15 a.m. MT Aug. 25, 2023

AZ, NM local climate + building goals: Tucson

Community Resilience

CR-2 Bolster City-owned and community-wide heat mitigation resources to reduce the urban heat island effect and protect vulnerable individuals and communities

The City will move forward with a comprehensive urban heat mitigation strategy, looking to supplement its existing efforts by expanding and installing shade, cool pavements and roofs, and other technologies to mitigate urban heat. The City will also look to provide additional cooling resources – both stationary and mobile – to make sure that everyone has access, especially on high-heat days. We will also coordinate with Sun Tran and other public transit services to help Tucsonans connect with and navigate to these resources.

Lead Implementer(s)	Supporting Implementer(s)	Partners	Timeframe	Emissions Reduction Potential	Cost
City Manager's Office Planning and Development Services	Community Safety, Health & Wellness team Environmental and General Services Procurement Sun Tran	Neighborhood and homeowners associations Developers Employers	1-5 years	🍃	\$\$\$\$

Action #	Action
CR-2.1	Develop a comprehensive urban heat mitigation strategy and implementation plan that addresses shade equity, pavement prevention and reduction, cool roofs and surfaces, and urban greening.
CR-2.2	Install and maintain additional shade canopies, playground shade structures, shade trees, splash pads, drinking water fountains and/or water bottle filling stations in areas of greatest need.
CR-2.2	Work with the City's Community Safety, Health & Wellness team and social service providers to increase access to stationary and mobile resources such as bathrooms, showers, kitchens, and laundry facilities in parks and public spaces that can be activated to support community resilience during emergencies.
CR-2.4	Pilot high-albedo (or light-color and heat-reflective) surfaces on buildings, roadways, sidewalks and paths, and parking lots at City-owned facilities.
CR-2.5	Create climate-resilient design codes and standards for residential, commercial and institutional, and industrial buildings, including standards for landscaping (e.g., tree canopy, green infrastructure) and architecture (e.g., passive design to support thermal comfort and air quality).
CR-2.6	Create climate-resilient design codes for buildings with a focus on energy efficiency, including but not limited to specifications for low-income weatherization, air conditioning, and enhanced filtration for wildfire smoke.

Tucson Resilient Together | 128

Action #	Action
CR-2.7	Expand current standards for shade trees in parking lots to include higher level requirements or additional options for solar or shade canopies.
CR-2.8	Provide resources, training, and discussion spaces for employers and workers that encourage and support protection from extreme heat.
CR-2.9	Work with Sun Tran and other public transit services to create a cool corridor network that connects people to cooling resources during high-heat days and extreme heat events.

Community Resilience



Tucson Resilient Together | 129



Climate Action and Adaptation Plan



AZ, NM local climate + building goals: Tucson

Energy



E-1 Decarbonize City-owned and operated buildings and facilities

The City of Tucson will lead by example and act to both reduce the carbon emissions from City buildings and facilities, as well as bolster the resiliency of City operations. The following actions will reduce energy consumption, eliminate fossil fuels where possible, and improve the health and wellbeing for City workers and Tucsonans at large.

Lead Implementer(s)	Supporting Implementer(s)	Partners	Timeframe	Emissions Reduction Potential	Cost
Environmental and General Services Facilities, Architecture and Engineering	City Manager's Office Procurement	Energy performance contractors	5-10 years	🍃🍃🍃	\$\$\$\$

Action #	Action
E-1.1	Benchmark energy use of City buildings and facilities using EnergyStar Portfolio Manager.
E-1.2	Create an internal carbon tax for City departments that is informed by the City's emissions portfolio.
E-1.3	Implement ongoing weatherization and commissioning (building tune-ups).
E-1.4	Develop a net zero building framework for City-owned buildings and facilities, including but not limited to energy efficiency, electrification, and renewables.
E-1.5	Utilize an energy services company (ESCO) to rapidly but strategically implement energy efficiency measures and equipment in City-owned buildings, and ongoing energy management.
E-1.6	Pilot new and emerging clean energy technologies, including solar streetlights.
E-1.7	Transition municipal landscaping equipment to cordless battery equipment and/or manual tools, and pursue AGZA Green Zone Certification.

E-2 Support the electrification and decarbonization of existing and new residential and commercial buildings

Installing all-electric systems in new buildings reduces construction costs while benefiting people and the environment by eliminating the air pollution associated with burning fossil fuels indoors. The lower cost of development also supports housing affordability. Converting existing buildings is also necessary, and the City will provide new resources to assist building tenants, owners, and managers to undertake retrofit projects. The City will take an equitable approach to ensure that frontline communities benefit from the utility cost savings and are not unfairly burdened by the costs of retrofit projects.

Lead Implementer(s)	Supporting Implementer(s)	Partners	Timeframe	Emissions Reduction Potential	Cost
Environmental and General Services Planning and Development Services	Economic Initiatives Facilities Facilities, Architecture and Engineering	Local First AZ Pima County SAHBA MPA Architects and builders Tucson Electric Power Trico Electric Cooperative University of Arizona	Ongoing	🍃🍃🍃	\$\$ - \$\$\$\$

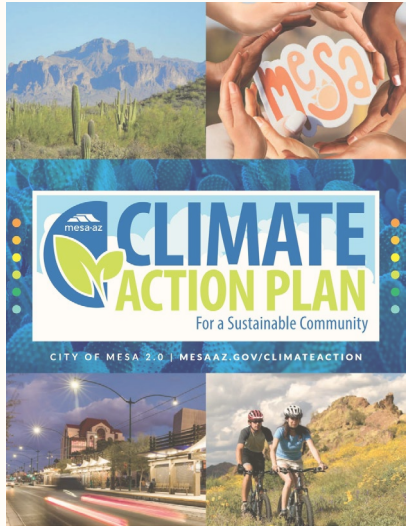
Action #	Action
E-2.1	Partner with the private sector to implement a home energy audit and retrofit program for Tucson residents, with a priority for low-income and renters.
E-2.2	Collaborate with other Arizona cities to pursue funding to develop regional energy code standards (including mandatory and voluntary energy reach codes) that promote highly energy efficient and/or zero-emission buildings in new construction.
E-2.3	Establish a Building Energy Efficiency Fund (BEEF) to increase with financing for building retrofits, including solar and energy efficiency projects.
E-2.4	Identify and utilize partnerships, funding, and incentives for new and existing buildings to replace gas-powered systems and appliances with electric-powered alternatives.
E-2.5	Develop a net zero accelerator program that is designed to provide building and property owners with direct training, guidance, and resources to improve energy efficiency and reduce carbon emissions from buildings.



Climate Action and Adaptation Plan



AZ, NM local climate + building goals: Mesa



Ch 5. Leading by Example: Closer Look at Focus Areas

Based on the City's GHG inventory, the Plan is organized into six 'Focus Areas.' These Focus Areas provide a framework for further areas of study that will evolve with innovation and new approaches over time. In many cases, the Focus Areas are interrelated and provide co-benefits to the identified targets.

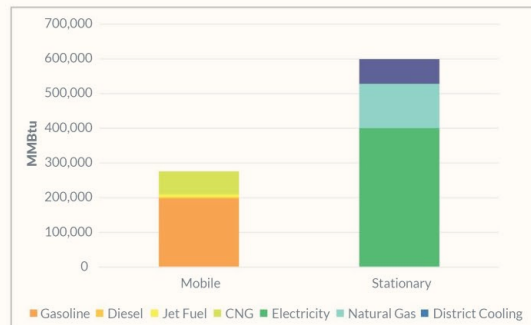
FOCUS AREA 1: Energy

Climate change means higher temperatures and higher demand for energy. Activities, such as traveling, heating and cooling buildings, and utility operations, are energy intensive and currently depend heavily on fossil fuel-based energy.

The most important step we can take to reduce Mesa's GHG emissions is to minimize energy use. The next step is to fulfill remaining energy needs with reliable, renewable, carbon-free energy. To account for and offset emissions from existing fossil-fuel power generation, the community must also continue to invest in new, cost-effective emission reduction strategies. Carbon sequestration, carbon capture, utilization and storage, and other negative emission strategies are key to reaching carbon neutrality.



What kind of energy do we use in City operations today?



LEADING BY EXAMPLE: Even as the City grows, Mesa has reduced energy use in City buildings over the last 3 years. The City is on track to have solar power for 25% of our electric energy use by 2025. The City will install technology that will capture renewable biogas for use in the City's Solid Waste fleet.



TARGET 1.1: Reduce energy use and decarbonize buildings

STRATEGIES:

- Develop programs that improve building energy efficiency, with a goal of net-zero GHG emission energy use.
- Improve energy performance in less efficient buildings with periodic, cost effective and incremental energy efficiency improvements.
- Weatherize City buildings in need of energy efficiency improvement. Pair with strategies like electric vehicle charging, energy storage, and fuel switching.
- Promote use of established home energy rating system for all single-family home so potential buyers and renters can make informed decisions.
- Partner with local utilities and non-profit organizations to weatherize homes and multifamily dwellings for those with the largest risk of the negative effects of climate change. Extend partnerships to commercial facilities to help small business stay ahead of potentially rising energy costs and climate challenges.

TARGET 1.2: Reduce energy use and decarbonize transportation

STRATEGIES:

- Increase access to healthy transportation options, like active transportation (walking, biking), carpooling, public transit, and next generation mobility, with goal to reduce vehicle miles traveled in single occupant vehicles.

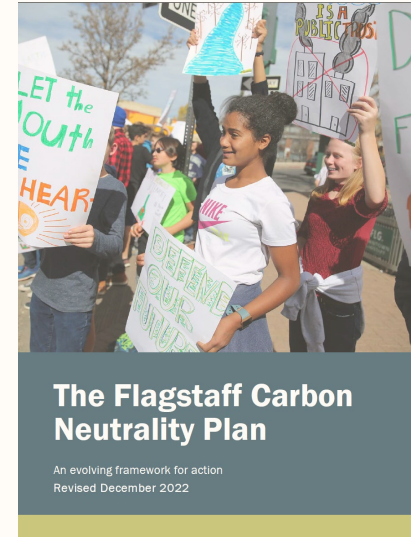
AZ, NM local climate + building goals: Flagstaff

CE-2: Increase renewable energy installations and usage in new buildings.

Opportunity for action:

1. Implement progressively more aggressive building codes, requiring net zero energy buildings by 2030. Net zero energy buildings often incorporate renewable energy installations – primarily rooftop solar- into the design and construction to offset onsite energy use.

Net zero energy buildings – Net zero energy buildings combine energy efficiency and renewable energy to use net zero energy. They use a low amount of energy due to being air-tight, well-insulated and energy efficient. They typically incorporate renewable energy generation on-site, like solar panels. Due to this low energy use paired with energy production, these buildings produce as much energy as they consume, which means that the occupant pays zero utility bills and a zero-emissions building.¹⁹



BE-2: By 2030, require new homes in Flagstaff to be net zero energy homes.

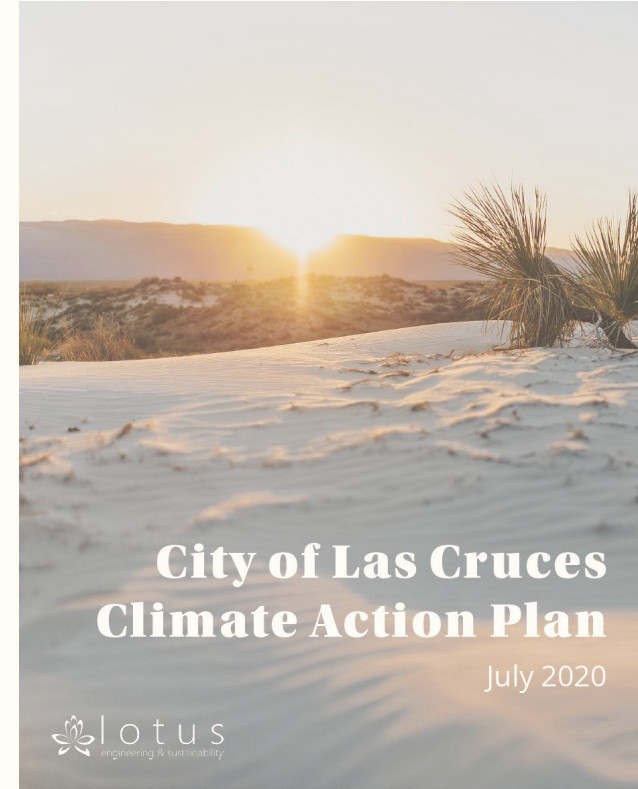
Opportunities for action:

1. Implement progressively more aggressive building codes, requiring net zero energy buildings.
2. City staff should ensure the City's building code is reflective of rapidly changing technology related to energy efficiency, renewable energy, energy or battery storage, and electrification.
3. Provide incentives to builders to construct net zero energy buildings, prior to a net zero energy code requirement. Use these buildings to showcase the feasibility, benefits and innovation.
4. Require large new buildings and new neighborhood developments to submit **carbon neutrality alignment statements**, to increase collaboration between developers and the City and to communicate how developments contribute to the City's carbon neutrality goals.

AZ, NM local climate + building goals: Las Cruces

Approximately 38 percent of greenhouse gas emissions in Las Cruces come from using electricity and natural gas in commercial and residential buildings. Building greenhouse gas emissions are reduced when occupants practice energy efficiency and use renewable energy. Targets for this sector include:

- Decarbonize energy in buildings by 6 percent by 2030 and 70 percent by 2050.
 - Expand residential energy efficiency programs by 18 percent by 2030 and 65 percent by 2050.
 - Reduce commercial building energy use by 30 percent by 2030 and 75 percent by 2050.
 - Reduce energy usage in municipal buildings through efficiency and demand management by 25 percent by 2030 and 75 percent by 2050.
- Las Cruces Commercial Base Code
 - Las Cruces Commercial Stretch Code
 - Las Cruces Residential Base Code
 - Las Cruces Residential Stretch Code



AZ, NM local climate + building goals: Tempe

On Thursday, Nov. 30, Tempe City Council approved the adoption of a voluntary International Green Code that could be used for new commercial buildings. Additionally, Tempe City Council committed to using the International Green Code on all future city facility construction (Resolution [No. R2023.178](#)).

Green codes like IgCC reduce Green House Gas emissions, mitigate heat island effects, reduce water consumption, decrease dependency on fossil fuels, increase building life spans and heat resiliency while promoting native, desert-adaptive landscaping and structural shade.

Read more about this code adoption [here](#).

Find the City of Tempe adopted International Green Construction Code [HERE](#) (Ordinance NO. O2023.54).

[Chapter 5 Site Sustainability](#)

[Chapter 6 Water Use Efficiency](#)

[Chapter 7 Energy Efficiency](#)

[Chapter 8 Indoor Environmental Quality](#)

[Chapter 9 Materials and Resources](#)

[Chapter 10 Construction and Plans for Operations](#)

What makes successful partnerships and collaboratives?

- Shared goals, shared issues, shared context
 - AZ and NM: CO River basin, similar climate risks (issue)
 - AZ and NM: limited state leadership (AZ: challenging legislature) in climate change in past, but lots of leadership at the local level
 - AZ: Home rule state (issue)
- Joint ownership based on expertise; legitimacy of that expertise
 - Jurisdictions – set the foundation for the project as the ultimate “end users;” guide through steering committee with dedicated time commitments
 - NBI – applicant; “owns” net zero roadmap – solid track record of “above code” work
 - ICC – “owns” training; co-owns TAG and regional resilience code development with NBI – owns the I-Codes
 - LISC Phoenix – “owns” equity and engagement, EAP – established capacity building partner with strong CBO relationships
 - IES – dedicated “Energy Solutions” academic entity, but with focus on practical applications; deep knowledge and connections
- Transparency; accountability
 - All milestones are “owned” by specified leads in a detailed PMP
 - Core team – all subrecipients meet monthly to coordinate and set agenda for steering committee
 - Steering committee (41 formal members, 16 informal; more will be added in coming months – new jurisdictions, new subs) – all subs, everyone with in-kind match (jurisdictions)
 - Dedicated project coordinator (.6 FTE) to keep information flowing completely and quickly

Table 2: Select RECI Collaborative Steering Committee Members as of 2/21/24 (22 out of total 41 members)

First Name	Last Name	Organization	Title
Amy	Tressler	City of Flagstaff	Building Official
Genevieve	Pearthree	City of Flagstaff	Resilience Analyst
Laura	Hyneman	City of Mesa	Deputy Director, Environmental & Sustainability
John	Sheffer	City of Mesa	Deputy Director/Building Official
Lena	Spiric	City of Mesa	Energy Conservation Coordinator
Michael	Abegg	City of Phoenix	Deputy Director/Building Official
Jason	Blakely	City of Phoenix	Assistant Director, Plan Review
Don	Brown	City of Phoenix	Chair, AZBO; Team Leader, City of Phoenix
Brad	Mecham	City of Phoenix	Chair, AZBO Education Committee; Field Supervisor, City of Phoenix
Anthony	Floyd	City of Scottsdale	Green Building Program Manager
Mike	Baxley	City of Tempe	Deputy Director Community Development
John	Earhart	City of Tempe	Plan Review Manager
Leslie	Ethen	City of Tucson	Sustainability Manager
Clayton	Trevillyan	City of Tucson	Building Official - Policy
Amanda	Acheson	Coconino County	Sustainability Assistant to the County Manager
Nina	Schmidt	Coconino County	Sustainable Building Program Manager
Sharayah	Jimenez	CUADRO Design	Principal Designer
Stella	Carr	ICC	Energy and Resilience Project Manager
Ryan	Colker	ICC	Vice President of Innovation
Greg	Kinkel	Quest Energy Group	Principal
Christy	Bolognani	SWEEP	Buildings Program Associate
Jonathan	Bean	University of Arizona	Co-Director, Institute for Energy Solutions

Establishing a National Energy Codes Collaborative

Michael Waite

May 8th, 2024



About the National Energy Codes Collaborative:

A nationwide network that empowers states and jurisdictions to effectively and sustainably implement updated building energy codes, driving innovation and generating cross-functional resources through convening and collaboration, technical advisory and assistance, community engagement and capacity building.

aceee.org/codes

NATIONAL ENERGY CODES
COLLABORATIVE

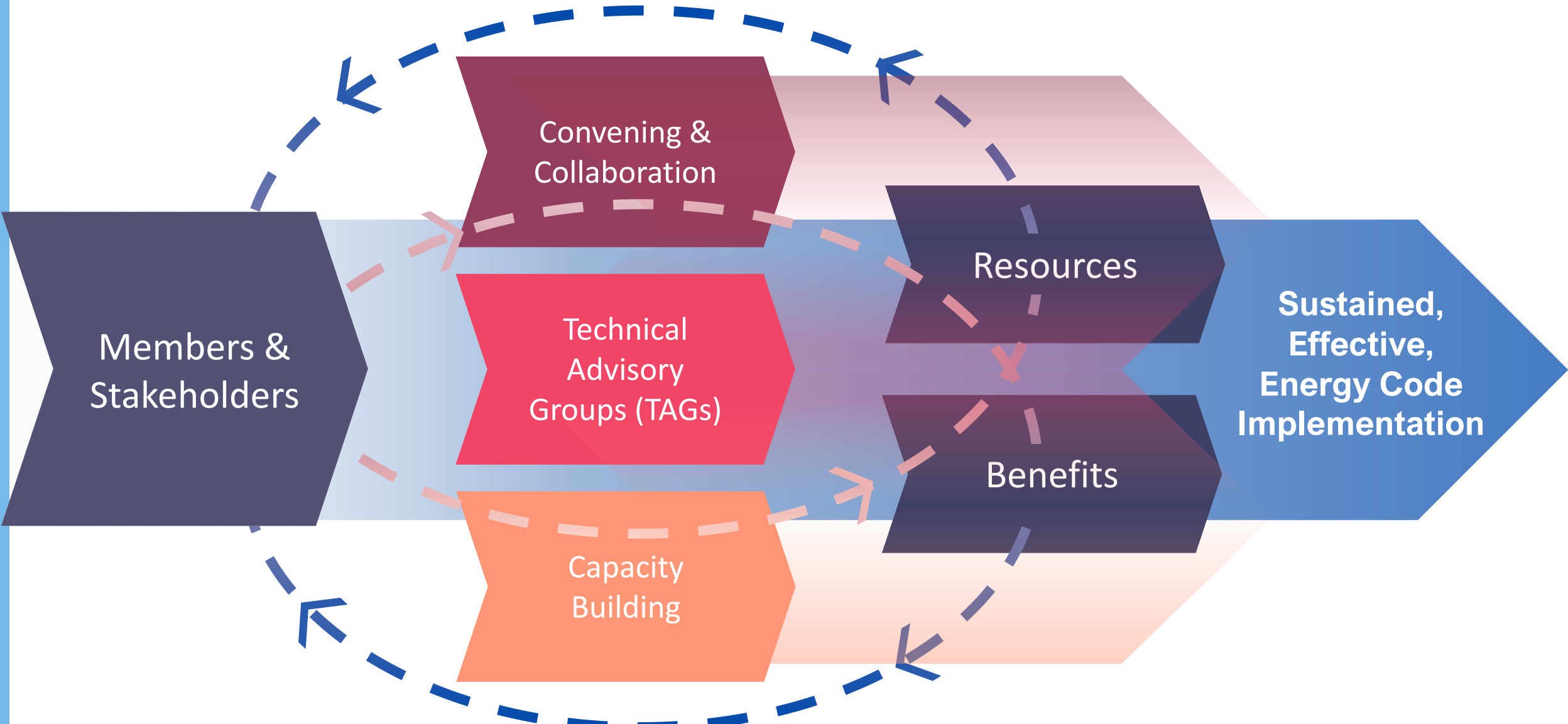
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We're kind of new...

- DOE RECI Award announced Summer 2023
 - And final award received March 2024!
- Introductory Webinar February 29th, 2024
- Kickoff Meeting... 2 days ago



And pretty ambitious...



Members & Stakeholders



Geographical Area/Region

- National
- State
- Local jurisdictions

Professional Expertise

- Code adoption & Implementation
- Technical Assistance
- Capacity Building
- Convening

Organization Type

- Government agencies
- Non-profit orgs & Private sector
- RECI teams

Convening & Collaboration

Annual In-Person Meeting

In-Person Forums & Workshops

Virtual Convening

Collaboration Platforms



Technical Advisory Groups

- Connect stakeholders and identify TA needs
- Peer review Collaborative and other resources
- Provide leadership and strategic direction for members

Workforce Development
Code Official Engagement &
Training
Community Engagement
State Implementation
Equity
Aligning Codes & BPS

Adoption Support
Remote & Rural Jurisdictions
Stretch Codes / Electrification /
Net Zero
Field Studies
Home Rule States
Non-Energy Benefits

Capacity Building Programs

In-State Capacity
Building Program

Cross-Jurisdictional
Capacity Building

Rapid Response
Technical Assistance

Energy Code
Implementation
(ECI) Fellows

What we've learned so far – “who?”

- “Who needs to be in the room?”
and “Who do we need to reach?”
- Resources to support participation and engagement
- Integrate with regional and state collaboratives
- Coordinating policies and offices
- Communications support to reach allies and the public

What we've learned so far – “what?”

- “Early wins”
- “Timely” and “in real time”
- “Commonalities and gaps”
- “Human impacts at scale”
- “Minimize reinventing the wheel”
- Could we have a national code? HUD/USDA (+FHFA?)

Thank You!

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