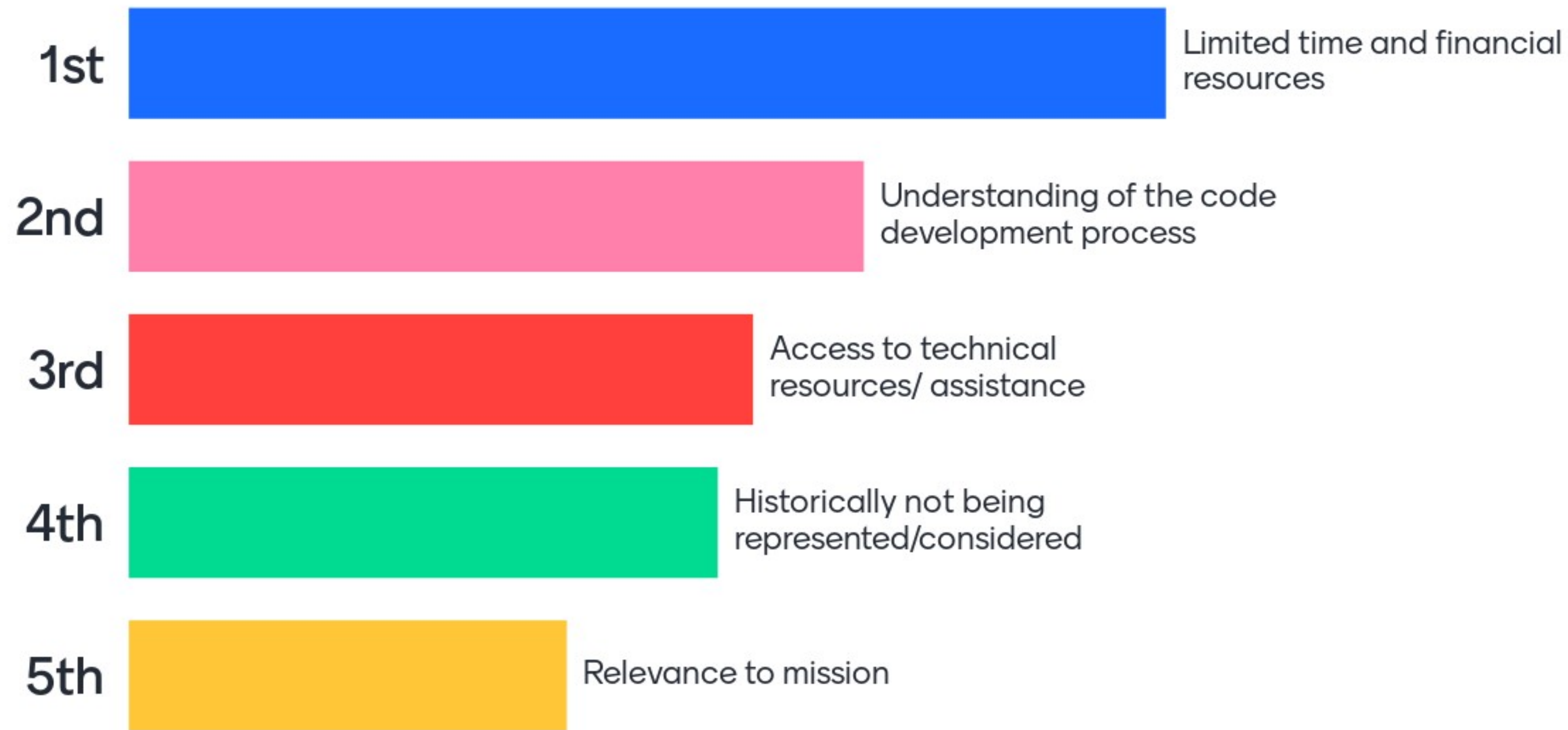


Equity - Breakout #1 - Development

1. What are the biggest participation challenges for representatives from ESJ communities within the energy code development process?



2. What other challenges do you think exist to participate in the code development process?

Not knowing the entry point

Understanding relevance

Lack of technical knowledge to propose changes.

Time

It's hard to learn the unique ICC process and a huge time commitment to take part in ICC and ASHRAE code development meetings.

time to participate

understanding relevance

its expensive and time consuming

seems intimidating and unfamiliar

2. What other challenges do you think exist to participate in the code development process?

Accessibility to Timely notification of the process. It needs to be simple.

Timing of public meetings. Times should vary throughout the day.

They are processes dominated by high-stakes stakeholders

not knowing about it obscure process

No requirement for ESJ engagement

Esoteric discussions compared to larger ESJ concerns

Not feeling like concerns/suggestions will be heard

White supremacist policies of exclusion

how could an disable or an illetrate speak with energy expert and influence their decisions

2. What other challenges do you think exist to participate in the code development process?

awareness

Understanding of the process and procedure

time / cost to participate

Code adoption highly influenced by organizations which do not represent the interests of impacted communities.

Lack of financial resources to have small jurisdictions involved.

Lack of financial interest

Fixed mindset

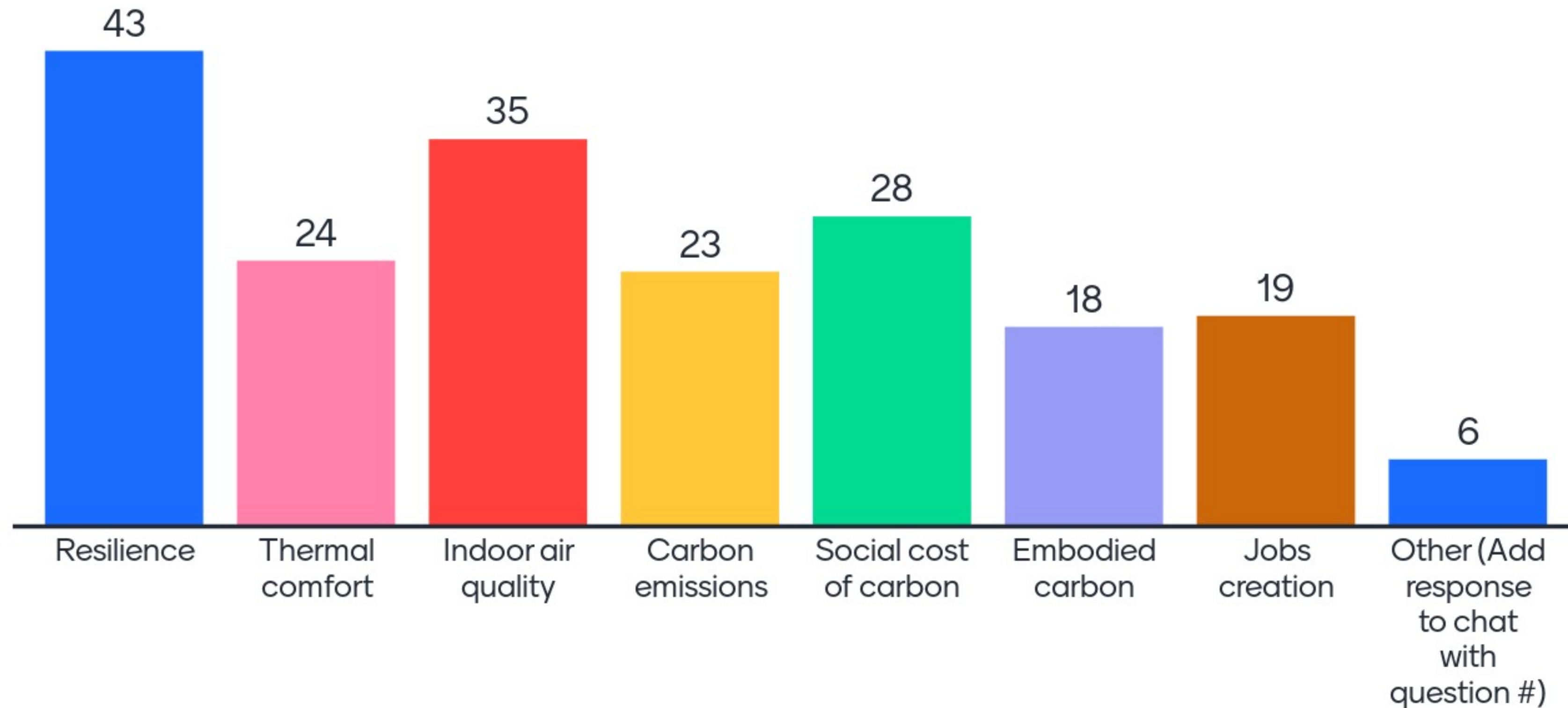
No accessible participation infrastructure and transparency

It's a major time and resource commitment for the code officials that are supposed to vote on the code change proposals and enforce the state/local codes the model codes influence!

2. What other challenges do you think exist to participate in the code development process?

Awareness

3. Which additional metrics aside from energy and cost should be considered in cost-effectiveness frameworks? (check all that apply)



4. Where have you seen additional metrics implemented in cost-effectiveness frameworks successfully?

Massachusetts

no others seen

Washington State - SCC

Vermont

Sadly, only in individual municipal building ordinances

New York City

Multiple NYS Municipalities

Nowhere??? Yet....

Massachusetts

4. Where have you seen additional metrics implemented in cost-effectiveness frameworks successfully?

loan programs.

Washington State

New york

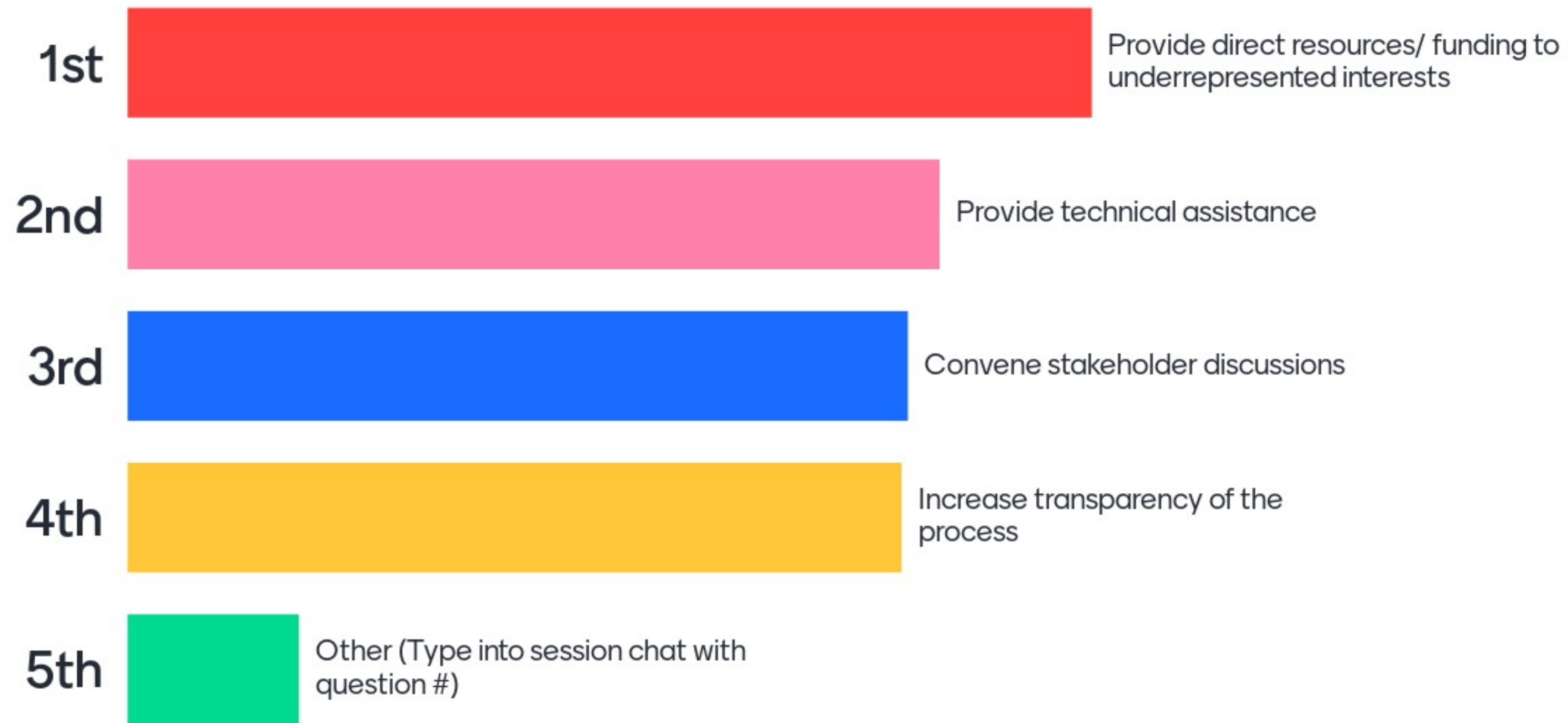
Energy transition program that evaluate conformity to all laws and reglements and carbon emissions

None at the state code development level but I've seen it used at the local level with zoning and master planning

California's BUILD Program for electrification of new homes that require lower bills as compared to mixed fuel homes

Depends on the math and who is doing it.

5. In order of impact, what do you think DOE and other organizations can do to support ESJ community involvement in code development?



6. Any other ideas and/ or suggestions?



Equity and Codes - Adoption

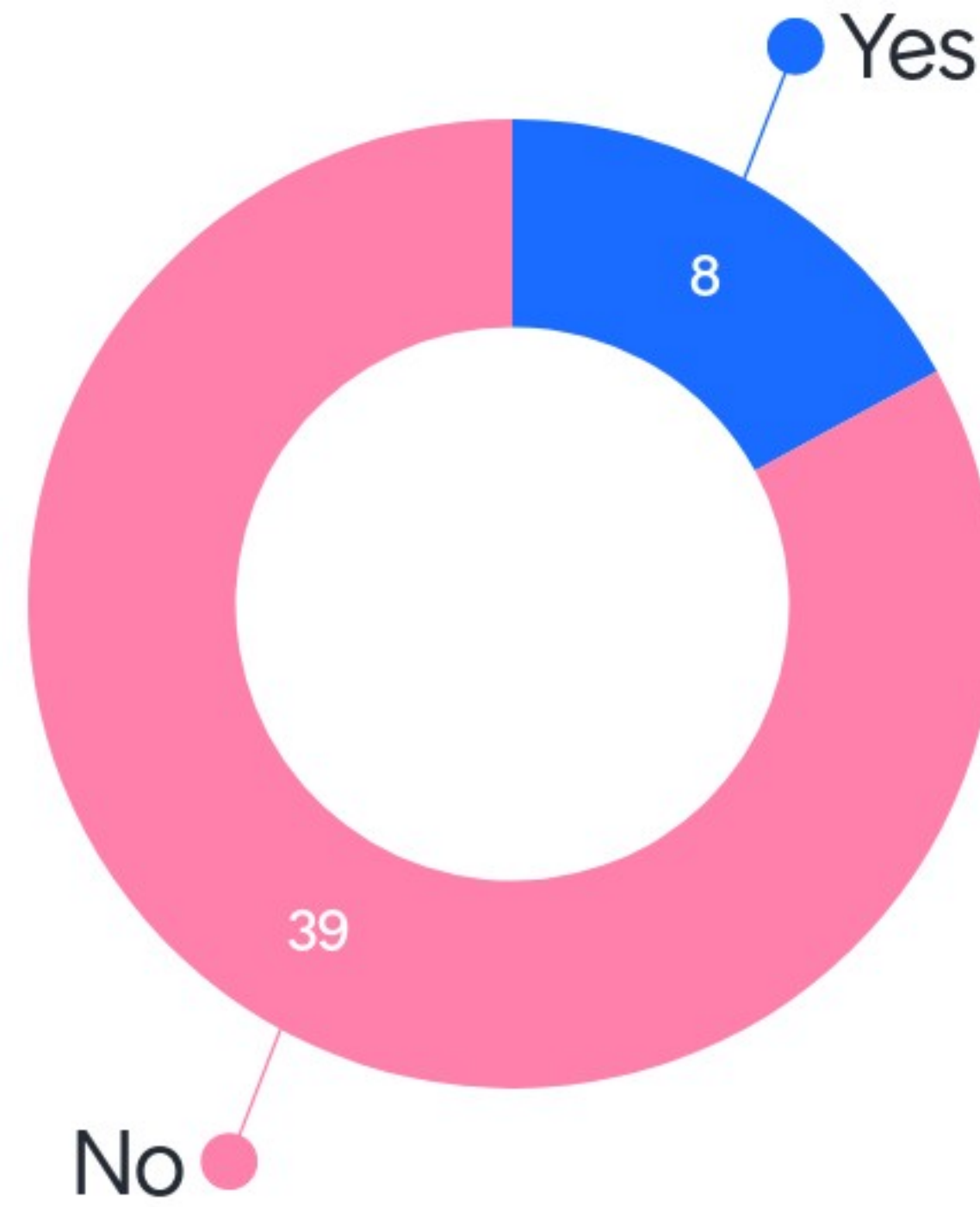
Who do you see participating in the code adoption process? If you haven't participated, who would you expect to see?



Equity and Codes - Adoption

Challenges / Barriers

Do you think the code adoption process is equitable?



What are some examples that demonstrate why you answered the way you did in the previous question?

Money

too technical

pass.

Low-income households are worse off

favors people with resources to participate

Technical and time consuming.

opaque process

IECC overrode public votes

lack of diversity in the code development process

What are some examples that demonstrate why you answered the way you did in the previous question?

Lack of diversity in code development process

Private sector contractors have a lot of weight

Meetings are in-person, usually in the state capital during work hours...

you have to have internet access

The interests of the residents are not considered

Organizations with money can have their voices heard

Too technical for ESJ communities

Politics

lack of awareness

What are some examples that demonstrate why you answered the way you did in the previous question?

building owners drive out poorer communities to support high capital cost for installation

The writings of Thomas Sowell flavor many of my views on equity

Lack of community members that join the meetings (for valid reasons)

Renters, home buyers are NOT at the table

Energy efficiency is expensive

more stringent codes leads to an assumption of higher cost to comply

low diversity in energy industry

lack of access

limited participants, time involved and costs to be involved, lobbyist focus under current system

What are some examples that demonstrate why you answered the way you did in the previous question?

It is hard to collect homeowner feedback, so it is assuming proxies are good enough ie homebuilders, advocates

research on appraisal practices shows inequitable valuation

Meetings are time consuming and require substantial resources for participation.

convoluted and opaque processes

Times

closed meetings / low transparency

difficult to access virtual meetings

The official perspective is short-term (first costs), not long-term

Takes time

What are some examples that demonstrate why you answered the way you did in the previous question?

meetings are not well advertised

The process can be intimidating

Public must meet the same requirement.

too technical

Hidden Agendas

It's highly technical

Anyone can participate.

No coordination between affordable housing market and code adoption

Technical and regulation knowledge

What are some examples that demonstrate why you answered the way you did in the previous question?

opaque process

The meetings are public, but very technical

Legislators understanding the technical aspect of the codes

Standard process limits access

Changed frequently.

Energy Audits

FYI: CT enacted SB 356 a grant program for energy efficient retrofits of affordable housing.

Hasn't been implemented yet, but SB 356 in CT is a program for energy efficiency retrofits for affordable housing and remediating health barriers

What do you think are the biggest barriers to ESJ involvement in the code adoption process?

resources

Time

Time

Politics

time and money

outreach strategy plan

Time

structure of process

knowledge/experience

What do you think are the biggest barriers to ESJ involvement in the code adoption process?

Resources

education and/or long term vision

Politic

awareness

desire, effort, understanding

technical understanding

Money, expertise, people resources

paid-for time

Aparthy

What do you think are the biggest barriers to ESJ involvement in the code adoption process?

cost

Priority - their needs are at a much more critical level to address this

Those who administer the process are not aware of the need to proactively engage ESJ communities

more focus on new construction than existing construction

Technical

Financial incentive

Times

funding to support participation

not priority

What do you think are the biggest barriers to ESJ involvement in the code adoption process?

Limited time to devote to the issue by ESJ communities

grants and low interest loans

free audits

bring in health metrics

consultation with relevant community leaders

Equity and Codes - Adoption

Opportunities / Next Steps

What policy and/or program strategies are important to consider to ensure those who live in older homes have equitable access to energy efficiency?

building performance standards

Grants

rental efficiency standards

Utility Incentives

Incentives

5 year home recertification programs.

incentives for bldg owners to upgrade

strict enforcement

Focus programs, policy to address their needs and challenges directly.

What policy and/or program strategies are important to consider to ensure those who live in older homes have equitable access to energy efficiency?

partnership with utilities to flag these homes

energy audits

Rebates based on income

specific funding

loans

not possible

Tax credits or homeowner grants

developing affordable retrofit solutions

Education

What policy and/or program strategies are important to consider to ensure those who live in older homes have equitable access to energy efficiency?

Increased incentives for affordable housing

Create an official seat for ESJ community members on the decision-making bodies

tax credits for rental owners to improve the EE of their units

building performance standards specific to existing homes

educational resources, community engagement and financial incentives

expanded community grants

federal grants

Utility and local incentives.

High compliance standards

What policy and/or program strategies are important to consider to ensure those who live in older homes have equitable access to energy efficiency?

State level acceptance that older homes are a problem

Bigger incentives for LMI households

waste of time to try. unrealistic as presented

PACE

Community outreach programs

Education about benefits

Relaxing Historical requirements

Energy audit and disclosure

Give BIPOC and advocates for BIPOC a voice in the process

What policy and/or program strategies are important to consider to ensure those who live in older homes have equitable access to energy efficiency?

utility incentives and direct programs

measure it, verify it

Community listening sessions - "experts" go to the community and make it easier for ESL community members to learn about an issue and share their views

Simple and Direct Education for home owners / renters.

Programs with MONEY. Re-work criteria for how incentives are developed. Get out in the field and find the homeowners.

Charleston, SC Sustainability Institute

linking health impacts to EE

Provide incentives to update efficiency of home / appliances.

Denver - Energize Denver Task Force for electrification in existing buildings. It includes stakeholder meetings and equity committees

What policy and/or program strategies are important to consider to ensure those who live in older homes have equitable access to energy efficiency?

Seattle - Utility Discount Program (income qualified households pay half bill)

Where have you seen successful programs or policies? What strategy was used?

Portland Clean Energy Fund

Expedited permitting and inspection program in Sarasota County, FL.

Austin Energy Energy Efficiency Services department!

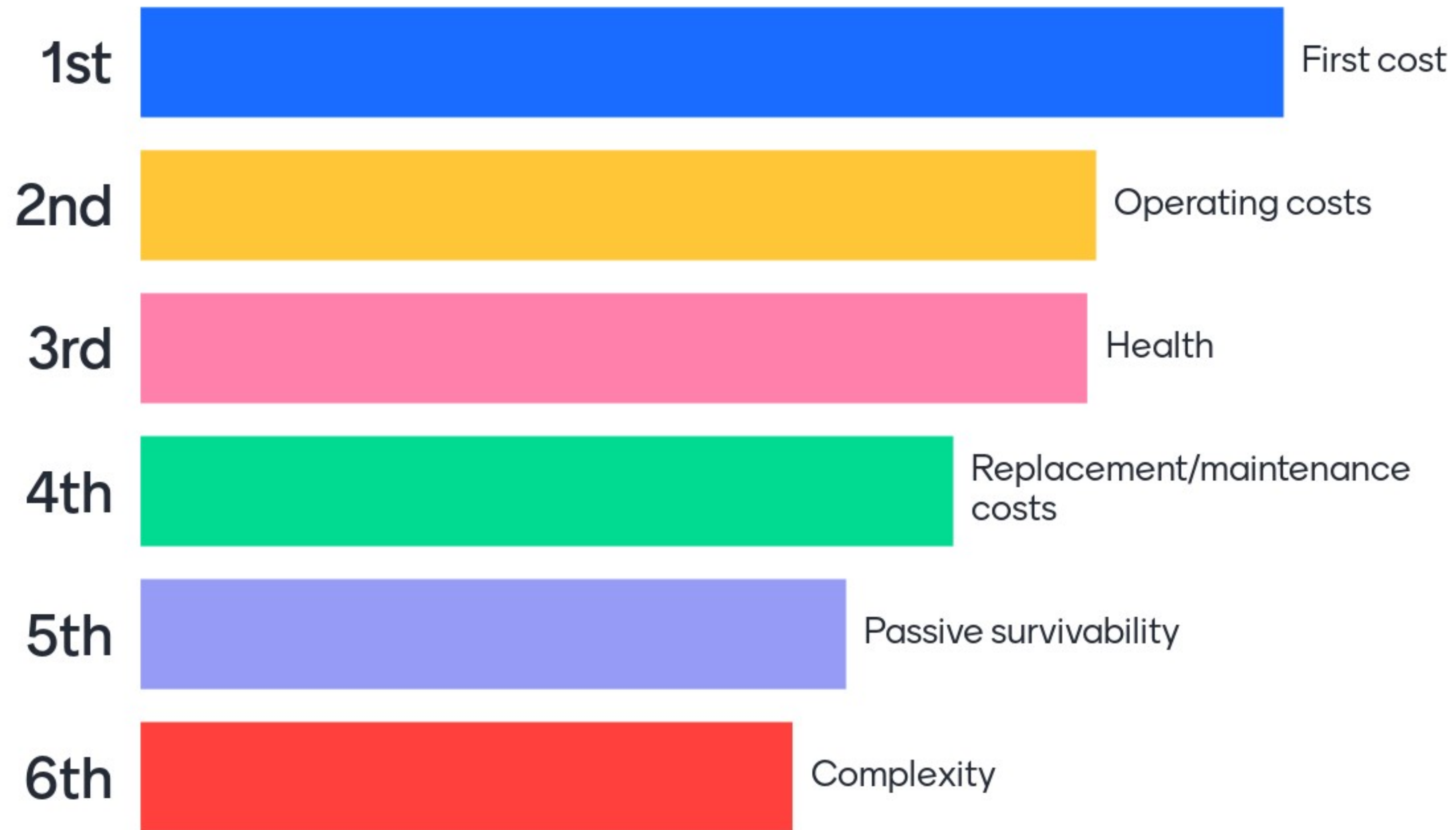
The Houston area has a Centerpointe Energy Incentive program for new Multi-family Buildings to be more efficient.

Arapahoe County
Government Weatherization Division 907
Salida Way Aurora, CO 80011

Boulder's Rental Housing Performance program

Rocky Mountain Power low income multifamily program

What equity considerations need to be accounted for as states begin to adopt Net Zero or advanced codes? Please rank the following options accordingly



What steps can a state or jurisdiction take to ensure ESJ communities and groups are involved in the adoption process?

Create an ESJ seat in the decision-making body

Just Ask

Restrictions

You can't create desire when there is none

Community engagement

long term vision

That self-selected cmtly reps are involved at every step of decision making

free outreach programs

Education about benefits

What steps can a state or jurisdiction take to ensure ESJ communities and groups are involved in the adoption process?

dedicated team to focus on ESJ

Must be on the work plan

Participation and travel stipends

multi-language communication/resources

Advocacy

Seek out ESJ community members for code adoption councils at the state and local jurisdiction level

Structurally integrate their role in deciding on code adoption.

pay for their time and participation

Cover the costs of ESJ community representative to attend the process

What steps can a state or jurisdiction take to ensure ESJ communities and groups are involved in the adoption process?

focus on the energy and cost savings.

Promote non-energy benefits

education and awareness

Make concerted efforts to simplify the issue

Community organization involvement

focus groups

Seek input from local constituents.

Provide multiple forums to engage the ESJ communities, offered at different times and days of weeks to fit schedules.

AHJ representative to represent the interests of the community residents that are not being represented.

What steps can a state or jurisdiction take to ensure ESJ communities and groups are involved in the adoption process?

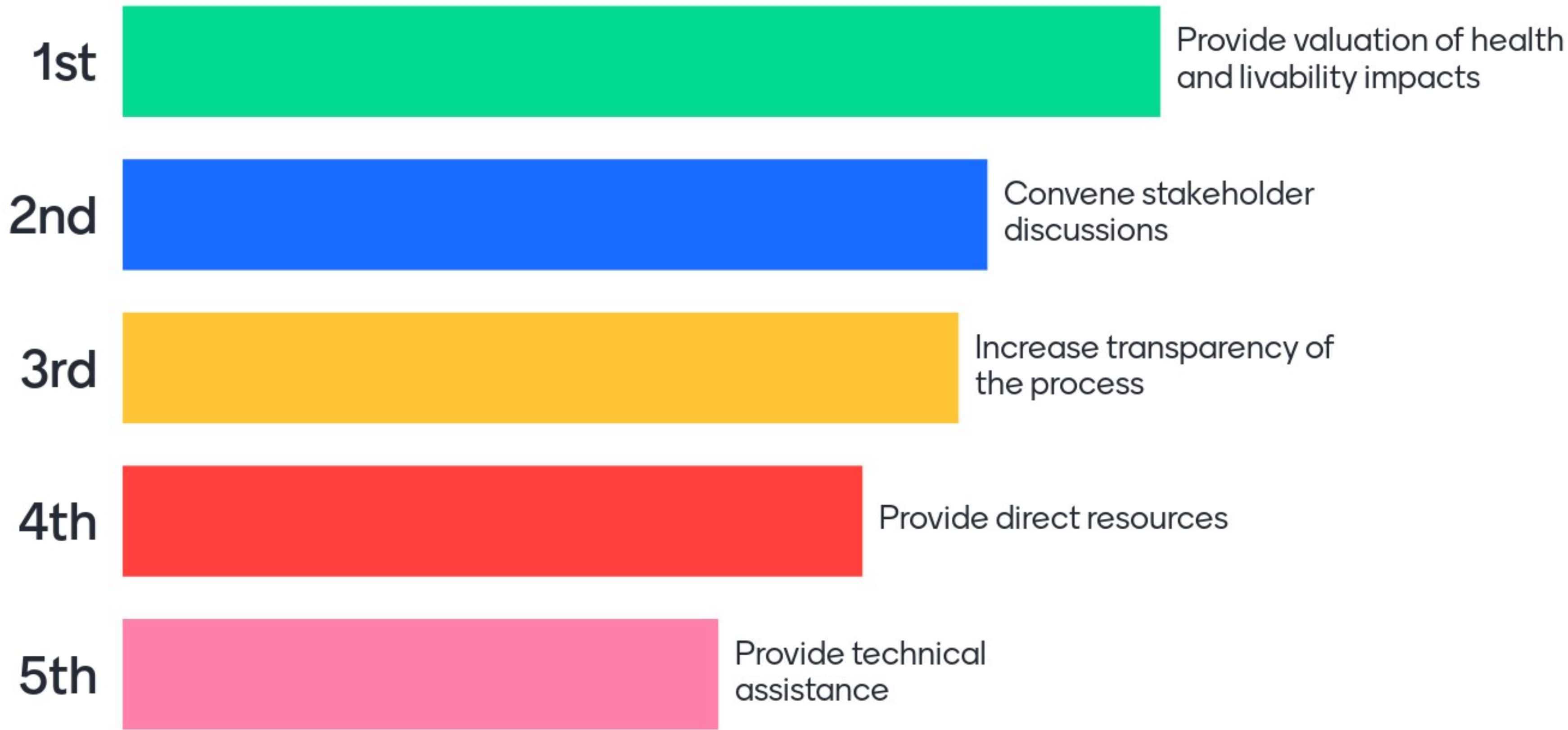
locating meetings and proactive notification to ESJs

Never assume they know exactly what needs to be done

Make is simple and easy to understand.

Those that want to be can easily... google it

In order of impact, what do you think DOE and other organizations can do to increase opportunities for ESJ group involvement?



What other things can DOE and others do?

Just exist (cut at previous administration)

PILOT Projects

Simply all of the regulations for homes and appliances.

rulemak

Provide new funding mechanisms.

Tracking the progress

Cheat Sheets

Develop more partnerships with product manufacturers...

generate informative equity targets/benchmarks applicable to nationwide code processes

What other things can DOE and others do?

help with outreach to rural areas
(indigenous, LMI)

Equity and Codes - Implementation

Challenges / Barriers



In order of impact, what are the biggest challenges with energy code and other building policy implementation in ESJ communities?



What other challenges exist?

Education

awareness

Education of code officials.

lack of awareness

Low priority

Awareness

Widespread embracement and adoption by
builders, owners, and funders

Politics

Insufficient rental housing policies

What other challenges exist?

Education

Poor performance from Third Party verifiers

Age of housing stock.

Not prioritizing energy code requirements

Awareness

Lack of awareness of what codes impact/how they operate?Lack of a seat at decision-making table.

Lack of enforcement of the current codes

Motivation

They don't know what they don't know. Having authentic partners to help, mentor, educate.

What other challenges exist?

The lack of skilled and unskilled labor to construct buildings has a cascading effect. We cant get the basics built to do it better is tough.

More immediate priority needs to meet and awareness

Methods of construction done in a workman like manner. (Pardon on gender neutral word.)

general public buy in

decision making process doesn't directly involve occupant/tenant

Need to coordinate/aggregate construction away from one at a time to blocks at a time.

Poor installation of products and equipment by contractors/workers without proper training and skills. Plus lack of testing of equipment after installation.

local policy makers are unaware of bldg/energy codes as a potential policy lever to effect social/equity policy. this is a big first barrier in terms of funding also!

Equitable distribution of both private and public funding to ensure quality schools, businesses, homes, and communities.

What other challenges exist?

nothing to address existing buildings

Resources required to engage with ESJ communities to train basic code info, so attendees can provide relevant input.

Lack of interest from the local city/county administrations in ensuring that the energy codes are being enforced.

Convincing developers that a more efficient building will be better in the long run.

No statutory or regulatory mandate, which perpetuates societal indifference with respect to these communities in general

EDUCATING THE INSPECTORS/ BUILDING ON REQUIRED ITEMS FOR ROUGH AND FINAL

less construction occurring in ESJ communities due to historic loan redlining, + less opportunity to bring construction improvements

Unawareness

Old & poor condition of existing housing stock mean enforcing existing codes is burdensome to residents

What other challenges exist?

Overly ambitious timelines

Lack of skill set needed.

Building department staff are overwhelmed and underfunded.

lack of energy efficiency requirements for existing housing stock

Perhaps low income communities have other more pressing concerns than saving energy or abstract "non energy benefits"?

Lack of education to the public on benefits of energy codes (i.e. healthy and safety)

Shared data and services across agencies

Political pressure from organizations who do not want to increase energy performance because they cannot point to it and make more profit.

Code officials aren't paid enough. Any given code references 100s of standards.

What other challenges exist?

lacking representation

Landlords' perspective

Prediction, forecast and planning

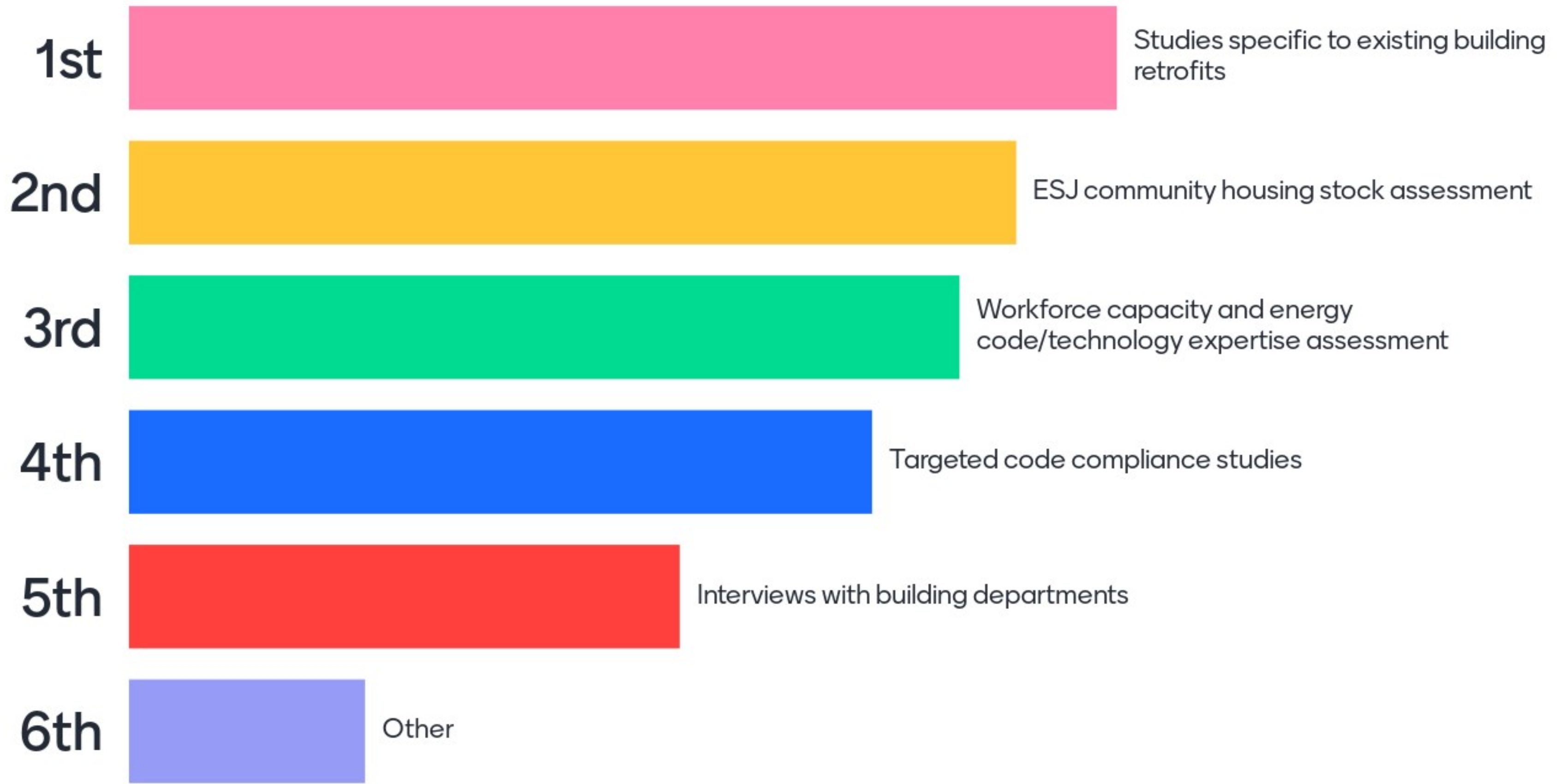
Lack of motivation

Equity and Codes - Implementation

Opportunities / Next Steps



In your opinion, what research is needed to understand problems with energy code implementation in ESJ communities? Please rank options accordingly



Are there example jurisdictions with programs to improve energy code compliance in existing buildings?

No

N/A

NYC LL11, LL97

City of Boulder's Green Building and Green Points Program required that renovations that add over 500 square feet to pre-existing housing also have to meet an energy efficiency requirement that may trigger mandatory upgrades.²²

Haven't seen any.

NYC

New England National Grid Code Circuit rider training

T24 in California?

Nothing comes to mind.

Are there example jurisdictions with programs to improve energy code compliance in existing buildings?

no

no

Any jurisdiction that puts the builder subs architect & code officials in the same room for training.

Gainesville, Florida has a rental unit permit and inspection program that requires rental units apply for permits annually, and demonstrate that they meet a set of energy efficiency requirements.³⁴

Business modelling proactive programs taikered with digital twins live xase

not in arlington, va, that I am aware of.

The state of California is working on this effort.

N/A

Since 2013, the City of Chicago has required multifamily and commercial buildings of at least 50,000 ft² to report whole-building energy use annually according to a custom energy rating system that went into effect in 2019. The rating is required to

Are there example jurisdictions with programs to improve energy code compliance in existing buildings?

Energy code does not apply to most existing buildings. Other policies, regulations are needed.

I can only think of one outside the US.

Not sure

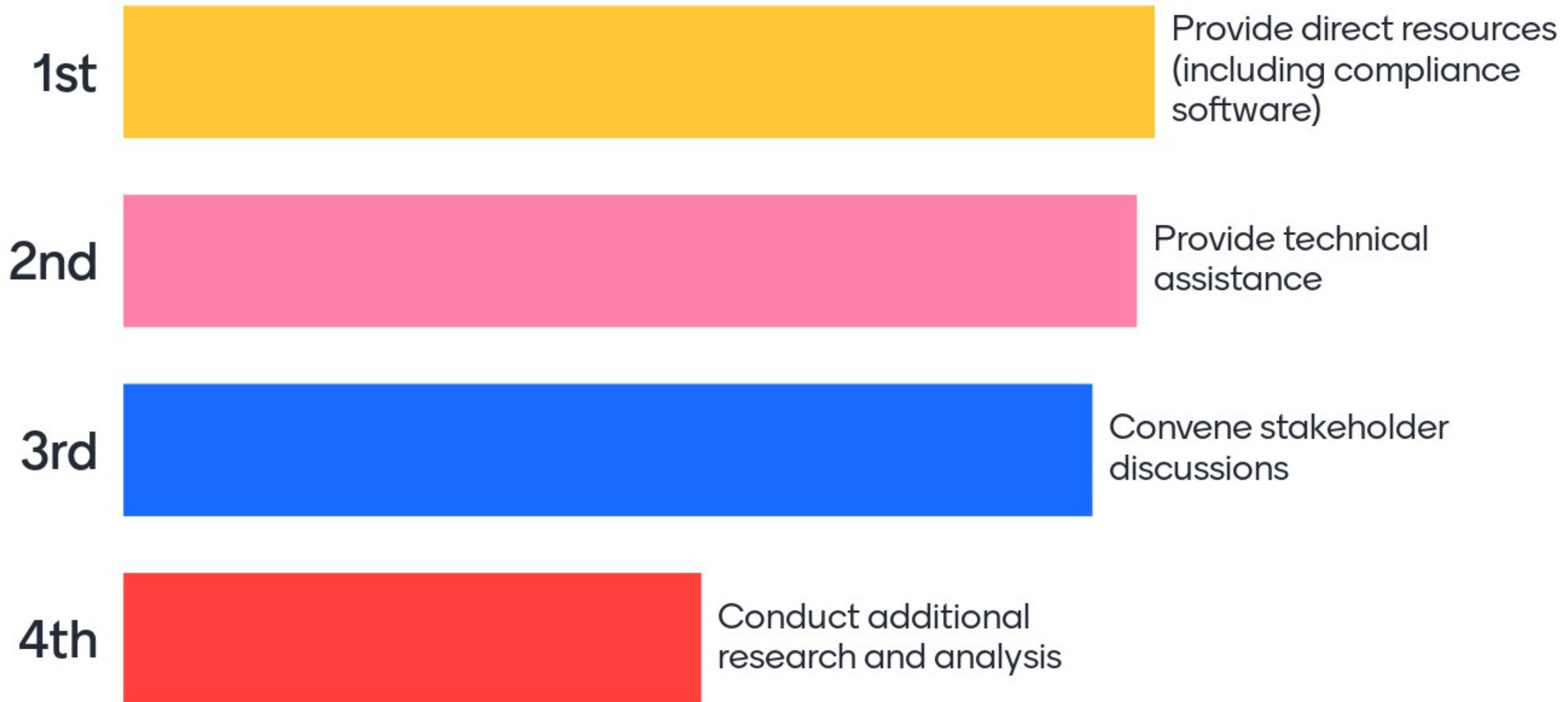
In May 2021, the City of Burlington adopted an ordinance requiring rental units that consume over 90 kBtu/ft² for space heating purposes to implement energy efficiency measures up to a cost cap of \$2,500/unit to complete the initial work, not includi

If Benchmarking counts, many jurisdictions in CA are creating mandates for building upgrades if they fall beneath performance requirements. Colorado just adopted statewide benchmarking requirements.

More balance to allow full compliance, some jurisdictions too strict. College recruiter's 1st home, some off-site out of town examiner wanted more than necessary including removing HVAC for insulation of exsiting

Virginia has gutted the energy code compliance requirements for existing buildings on an "affordability" basis. Needs to be STRENGTHENED!

In order of impact, what can DOE and other organizations do to improve implementation of building energy efficiency policies in ESJ communities?



What other things can DOE and others do?

