How Building Energy Codes Fit your State’s or City’s Climate Plan
Is your local energy code

- Set by your city/town/county: 26
- Set at the state level: 42
- A combination of local and state adoption: 37
- What energy code?: 3
Do you have a local or state climate plan?

- Yes, and it mentions building energy codes: 51
- Yes, but it doesn’t mention building codes (yet): 5
- We have some climate mitigation policies but not a comprehensive plan: 12
- No, we don’t have a climate plan: 17
Do you have a stretch code available to you?

- Yes, state determined and we adopt it: 16
- Yes, state determined and we DON'T adopt it: 5
- Yes, we have a local city level stretch code: 12
- We are considering working on one: 20
- We have no expectation of a stretch/reach code: 30
What is the biggest challenge you face in adoption of new energy codes?

- Awareness of the value of updated energy codes: 19
- Funding: 8
- Political Support: 21
- Buy-in from the code officials: 11
- All of the above: 25
- Something else (write in chat): 9
What do you think is needed/was important to include energy codes in your local or state climate plan?
How does your current energy code help to achieve climate plan goals?

- Yes
- increased efficiency.
- energy choice
- Not sure
- It doesn't
- Consistent enforcement
- Not well aligned
- directional guidelines
- Focus on decarbonization
### How does your current energy code help to achieve climate plan goals?

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>Close but no cigar</td>
</tr>
<tr>
<td>None yet</td>
<td>embraces renewable energy</td>
</tr>
<tr>
<td>Keeps us on the model energy code path</td>
<td>We're at 2009 IECC - so very little statewide</td>
</tr>
<tr>
<td></td>
<td>Most up-to-date codes in the Nation.</td>
</tr>
<tr>
<td></td>
<td>Needs improvement</td>
</tr>
<tr>
<td></td>
<td>Still lacking - the state's residential energy code is at 2012 levels</td>
</tr>
</tbody>
</table>
How does your current energy code help to achieve climate plan goals?

- Work with multiple states varies with locality
- Solar
- Reduces energy generation demand
- Not sure
- It doesn't
- Prepares buildings for the next step to net zero (ZNE).
- Very important, very effective
- Codes lag behind goals
How does your current energy code help to achieve climate plan goals?

- it doesn't
- Better envelopes
- emissions reduction
- Empowers the Code Official
- Code is only as effective as compliance, which is less than great
- Reduces energy use, but falls short on reducing fossil fuel use in buildings and encouraging a sustainable electricity ecosystem overall
- Reduces emissions
- needs work! And needs reinforcement and needs to progress to the latest version
- Solar
How does your current energy code help to achieve climate plan goals?

- N/A
- Seen as important, but most don't really understand it
- Energy code is far behind for climate goals
- No guidance
- Reduce EUI
- There is a gap between code adoption, compliance and enforcement
- Increased efficiency requirements
- Title 24 moving in the right direction
- N/A
How does your current energy code help to achieve climate plan goals?

- Decouple the two so it can be adopted.
- Carbon reduction
- Includes a gas ban for buildings >4 stories
- it does not, need political support
- Helps local governments
- adoption of the 2015 IECC
- Set goals
- to be improved
- Pretty well even though different agencies are responsible for energy codes and climate goals.
| It doesn't, at least directly. States and local governments should more actively/deliberately align energy codes with energy and climate goals. |
| Energy code is new and just being rolled out so it is not really active. Does not relate to climate plan goals as is. |
| My municipality sends out Energy Inspectors to the job sites to enforce the building plans that were also reviewed specifically for energy code compliance. |
| Well |
| Ensures that new buildings are efficient... though not necessarily future-proofed (no gas, yes grid integration). |
| automatic updates each cycle ensures advancement (if model codes keep up!) |
| small step to the main goal |
| lessens energy demands |
| minor part |
How does your current energy code help to achieve climate plan goals?

- Supporting electrification
- Ditch prescriptive and focus on performance/outcome
- More conversations with widespread players.
- Consistent enforcement:
- Decouple them from climate goals so our political atmosphere will accept energy codes
- energy resilience
- Develop better financial models to include environmental impact
- How to deal with certain building types
- strategies for peak demand
How does your current energy code help to achieve climate plan goals?

increased insulation levels.
Where do you see room for improvement in model energy codes to better align with achievement of climate plan goals?

- Increased data gathering requirements
- Code that impacts existing buildings
- Focus on existing buildings
- Actual movement in the Residential 2024 IECC instead of what is happening now in the process.
- Move away from cost effectiveness metric
- All cost-effective improvements should be included in the base model codes.
- Branching out beyond just buildings.
- Focus on reducing CO2 not energy use
- Model codes need to advance faster
Where do you see room for improvement in model energy codes to better align with achievement of climate plan goals?

- Align with ASHRAE 105
- Compliance: model vs actual performance
- Include more requirements for or incentives for electrification! Also include grid integration. Better envelopes. Emphasis on passive survivability.
- GHG metrics
- Better alignment between the Energy Code and the other Codes
- Controls that normal civilians can understand
- Electrification (or electrification-ready at a minimum)
- Existing buildings!
- Need to dictate a level of performance
Where do you see room for improvement in model energy codes to better align with achievement of climate plan goals?

- Addressing existing building stock
- Have all new buildings run through simulation software.
- Existing buildings
- WWR ratios for residential
- Existing buildings
- Have commercial buildings produce their own water supply
- Existing buildings
Where do you see room for improvement in model energy codes to better align with achievement of climate plan goals?

- Consistent carbon metrics
- Get ICC out from under the thumb of NAHB and AGA
- Existing buildings
- Clarify reasoning for standards to avoid weakening amendments
- States adopting current version of MEC
- Existing buildings
- Increased efficiency in the Residential code
- Passive solar and passive cooling
- They need to be aligned with market capabilities
Where do you see room for improvement in model energy codes to better align with achievement of climate plan goals?

<table>
<thead>
<tr>
<th>Suggestions</th>
</tr>
</thead>
<tbody>
<tr>
<td>all of your suggestions</td>
</tr>
<tr>
<td>Existing building improvements</td>
</tr>
<tr>
<td>resilience</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td>shifting from EUI to total energy consumption / promoting smaller buildings</td>
</tr>
<tr>
<td>Need to link new gas hookups to penalties</td>
</tr>
<tr>
<td>controls, smart thermostats, etc</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional Suggestions</th>
</tr>
</thead>
<tbody>
<tr>
<td>data-driven benchmarking/retrofit funding for existing buildings</td>
</tr>
<tr>
<td>Data comparison on existing buildings</td>
</tr>
<tr>
<td>Cost-effectiveness including need to address climate change impacts in the future</td>
</tr>
</tbody>
</table>
Where do you see room for improvement in model energy codes to better align with achievement of climate plan goals?

- Focus on embodied carbon
- Encourage heat pumps
- Incentives for improving existing buildings
- The whole building as a system, including systems and components – PV, ESS, EV Charging, electrification.
- Renewable natural gas
- Focus on helping the people managing equipment
- Improvements for existing buildings
- Cost-effectiveness metrics need to better account for ancillary effects, including social impacts of GHGs, health, equity, etc.
- Existing residential buildings
Where do you see room for improvement in model energy codes to better align with achievement of climate plan goals?

- Model codes need to advance faster
- No electric resistance as main heating source
- Carbon reduction
- Better inclusion of renewables
- Code metrics should have more emphasis on carbon/GHG. Electrification should be included.
- Decarbonization
- Both existing buildings and new building are critical, and the connection. But first we need funding and processes to implement current code.
- the building code has to be adopted without adding weakening amendments
- Hydrogen
Where do you see room for improvement in model energy codes to better align with achievement of climate plan goals?

- Better alignment with metrics
- Energy choice and availability of several fuel sources
- More comprehensive energy and resilience planning—at both state and local levels—and model plans for them to work with and adapt to their needs
- Consistent Enforcement
- Provide software tools and guidance resources
- Better guides for Code Officials on enforcement
- More aggressive national model codes
- Equity/affordability considerations
Where do you see room for improvement in model energy codes to better align with achievement of climate plan goals?

<table>
<thead>
<tr>
<th>ICC and ASHRAE bodies need to more directly embrace energy and climate goals—those development bodies have traditionally been too agnostic to societal level goals and impacts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal preemption is a big barrier. Need easier exemption from preemption pathways.</td>
</tr>
<tr>
<td>Carbon emissions should be valued on a long-run marginal basis based upon hourly source energy.</td>
</tr>
<tr>
<td>Model energy code development processes are overly burdensome.</td>
</tr>
<tr>
<td>Electrical and solar ready requirements.</td>
</tr>
<tr>
<td>Metrics need be aligned or at least have viable “crosswalks.” For example, model energy codes should use long run marginal GHG emissions but there may not be a clear way to determine whether buildings comply with the GHG emissions limits and how the...</td>
</tr>
</tbody>
</table>
What code enforcement approach do you think would work best for your current or future climate plan?

- Home rule - local energy code adoption: 2
- State minimum code: 14
- State min code with local option to adopt stretch code: 47
- No energy code: 1
- Something else (write in chat): 1
For advanced reach or stretch codes what elements would be most important to support your climate plan goals?

- Electrification (Heat pumps, EVs) 18
- Solar requirements 7
- More energy efficiency (e.g. Passivehouse) 28
- Embodied carbon 6
- Resilience & Grid integration 8
- Other (write in chat) 4
What do you see as the best strategy for improving energy code compliance in your jurisdiction?

- More education on the code requirements: 25 votes
- Using 3rd party inspections by energy specialists: 27 votes
- Making the code more performance-based/flexible: 14 votes
- Other (write in chat): 7 votes