

Energize Denver Task Force – Meeting #6

June 17, 2021 – via Zoom

Prepared by the Consensus Building Institute (CBI)

Meeting in Brief

The Task Force provided feedback on the proposed policy for the Renewable Heating and Cooling (electrification) aspects of the Building Performance Policy. Task Force members also provided input on how to best align the building policy with the Green Building Ordinance, and on the final plan to engage the public in late July to discuss and get input on the proposed building performance policy.

Click [here](#) for the full meeting presentation and materials, Task Force Charter and membership, a video recording of the meeting, future meeting announcements, and other Task Force materials.

Background Context

Katrina Managan, Denver's Buildings Team Lead, reminded the Task Force of where we are in the process and how the City and Climate Solutions workgroup came up with the three proposed Renewable Heating and Cooling options for Task Force consideration. She updated the group on the labor policy being developed by the Workforce workgroup (to share and discuss at the July meeting), and on the City's most recent work on develop a social/racial equity index to target policy benefits and incentives as well as policy implementation and evaluation. The City's presentation is available on the Task Force [website](#).

Katrina reviewed three broad electrification options for the Task Force to consider. The options are discussed further below and were developed in consultation with the Climate Solutions Work Group. One of the questions for the Task Force, in addition to which policy strikes the right balance between being sufficiently ambitious and attainable, is how to ensure the policy delivers benefits and avoids unintended consequences to people of color and low-income communities. This will primarily happen through improved housing quality, creating safer spaces with less carbon monoxide (data shows that there are carbon monoxide leaks in 30-40% of low-income homes, with 95% of those homes lacking detectors), and reduced exposure to indoor air pollutants from electrifying buildings.

In July we will begin to bring together the different aspects of the policy, including Energy Efficiency and Renewable Energy, Electrification, and Incentives, Supports and Targeted Outreach using data from the Social Equity Index.

Renewable Heating and Cooling (Electrification) – 3 Policy Options

The City reviewed the three policy options that were outlined in the meeting materials and reviewed at the pre-meeting Briefing on April 12. The full presentation is available on the Task Force [website](#).

- 1) **Full electrification** (most ambitious). Under this policy, in 2023, electrification would be required for all buildings and systems at the end of system life, with electrification required by 2040. This option would require significant incentives to be feasible. It would save 5.5 million tons of CO₂ emissions through 2040.
- 2) **Partial Electrification with Capital Cost Parity (ambitious)**. Under this policy, electrification would be required for end-of-life system replacement starting in 2023 for most building types, with the exception of boiler systems. Cost parity would be achieved through large incentives. This policy would

save 4.2 million tons of CO₂ emissions through 2040, still going a significant way to achieving Denver's climate goals for buildings.

- 3) **Partial Electrification with Capital & Operating Cost Parity (least ambitious).** This policy would have to electrify partially starting in 2023 at end-of-system-life, but it would not start the transition for PTACs (Packaged Terminal Air Conditioners), boilers, or any water heating typologies. It would fall short of meeting Denver's goals.

General Comments and Questions

- It would be helpful to share real-life examples of these policies.
- In general, the Workforce Workgroup believes the labor force is available to accomplish these policies, assuming there will be an increased pipeline of jobs oriented toward HVAC. There are ongoing questions about the availability of materials and the supply chain.
- Under any of these policies, it will be important to update Denver's permitting process if/as needed to facilitate whichever option the City adopts.
- As previously underscored, whichever policy we adopt needs to incorporate flexibility to allow for new technologies, including through the permitting process..

Small Group Discussions

The Task Force broke into groups to discuss the three proposed renewable heating and cooling policy options. Below are the notes from the discussions, starting with a summary of 'key principles' that emerged from the small groups.

Option 1 – key points

- **Positives** include big climate benefits and the focus on end-of-life system replacement
- **Concerns** include the fact that increases in *both* capital cost and operating costs, with the burden falling on the on lowest-income buildings. It also requires enormous incentives for cost parity and would pose challenges in terms of labor/workforce, technology, and materials.
- **Additional considerations** include a perception that 2023 feels too aggressive for this policy.

Option 2 – key points

- **Positives** include the substantial distance it would go to achieving our climate goals and appears to be the 'Goldilocks' (middle ground) option. It gives owners an opportunity to evaluate what could be most cost effective regarding their own operating budget.
- **Concerns** include questions about whether this option goes far enough to achieve the Task Force's climate goals. Also, the costs are higher (though manageable with incentives), and cost parity is only practical if AC is replaced as well.
- **Additional considerations** include the suggestion of a 2025 start date, with incentives for those starting earlier, with a waiver of permit fees and a streamlining of permitting so heat pumps are easy for any building to permit. Another suggestion was to start with partial electrification and in 2050 move to full electrification, which would include boilers as well.

Option 3 – key points

- **Positives** – some Task Force members saw this option as more realistic. It could include electric feasibility studies with water conservation options.
- **Concerns** included a sense by most Task Force members that this option does not go far enough to reach the Task Force goals.

- **Considerations** included the suggestion to add water heating back into this option to make it somewhat more robust while still being achievable.

Incentives and Supports / Racial Equity Considerations

- **Permitting** – make permitting heat pumps fast and easy to permit; this is low hanging fruit
- **Incentives** will be crucial. The Task Force will hear from the City regarding its initial proposals, as well as from the Workforce Workgroup about the potential workforce development aspects of the policy. There will need to be tools to help building owners across the board.
- **Incentives for buildings that serve people and communities of color**, in particular. This should be as automated as much as possible for the permitting and application process. The Social Equity Index should highlight buildings for default expedited permitting and incentives, as well as strong targeted outreach and education. Incentives to building owners should pay for the upgrades, so costs are not passed to tenants. Some Task Force members suggested exploring the possibility of direct financial assistance to tenants to avoid displacement from increased rents, though this would be challenging administratively.
- **Technical assistance and workforce training**, including education, custom analysis and investing in training and support organizations, will be crucial.

How to Align Policy with Green Building Ordinance?

The Task Force discussed the need to align the new building performance policy with the aspects of Denver’s Green Building Ordinance (GBO) that provide for alternate compliance pathways, in order to streamline the requirements for building managers, avoid them having to jump through unnecessary extra hoops, and to facilitate the smooth transition to Net Zero Energy. In general, the Task Force recommended (with City in agreement) that, where there is overlap, the GBO should be amended to remove any duplicity, but that the intent and main focus of the GBO should be preserved. To that point, the City reported that relatively few buildings have had to have their roofs replaced, so as to trigger the green space requirements under the GBO. Task Force members recommended that the City consult with the GBO Technical Advisory Committee about 1) preserving the delicate balance of interests within the GBO itself, and 2) more effectively creating green infrastructure in the City, since it appears that the GBO has not been able to have this effect.

Final Approach to Community Outreach in July

Following up with the May discussion, the City the final plan for outreach in late July to build initial community awareness about the Task Force's work and proposed policies and gather input on policy options to help shape the final Task Force recommendations. This approach is outlined in the meeting presentation on the Task Force [website](#).

As discussed in more detail in May, the outreach effort will include public webinars with a survey for attendees to take at the end. The City has been, and will continue to be, in touch with Task Force members individually and collectively about promoting these efforts and convening their own stakeholder discussions. Please see May meeting summary on the Task Force [website](#) for more detail.

Task Force members are supportive of the proposed approach and shared the input below.

Survey questions (which the City will circulate for further input)

- Add a qualifying question, to contextualize the answers, regarding the respondent’s view of the urgency of the climate crisis.

- We may want to have separate surveys for multi-family and commercial spaces, as they involve different issues and the responses will vary accordingly.

Individual Task Force members’ plans for direct outreach include:

- NRDC will convene a climate justice group to discuss the policy changes.
- Sierra Club has a Denver energy/climate team; Emily will invite them to the public webinars.
- The unions will discuss this at their monthly meetings. Also, we should engage Chris Markuson, maybe the AFL-CIO, Jason Wardrip (from the building trades, which represents every union) and Sean White from the plumbers’ union.
- Some members plan to gage participation in the webinars and assess if more outreach is needed.
- BOMA would like a multi-prong approach, in partnership with DDP. Stephen and Jon will work with Beth to do a joint convening. (E.g., senior executive forum to discuss upcoming changes; sending the team to areas outside downtown.) They will also send a mailer about the upcoming changes and hold 2-3 meetings in neighborhoods, with food and beverages. Stephen will recruit sponsors. The goal is to hear some from buildings we don't always hear from. To generate excitement, let’s include a project from a Denver building, illustrating benefits to both the owner and tenants.
- Apartment associations should be encouraged to invite their members.
- Downtown Denver BID has thousands of members; suggest getting specific input from this group.
- Steve and Celeste will act as conduits to engineers and have thoughts about input to request.

Wrap Up & Next Steps

The next Task Force meeting is Thursday, July 15. The pre-meeting briefing for Task Force members is Tuesday, July 6.

The Climate Action workgroup will meet before the next meeting to help the City develop a final proposed option for the Renewable Heating & Cooling policy, for the Task Force’s decision-making in July. The Workforce and Equity workgroups will also continue to meet in the interim.

Meeting Attendees

The meeting was attended by the following Task Force members, City staff and consultants:

City of Denver – Office of Climate Action, Sustainability and Resilience

Katrina Managan, Buildings Team and Task Force lead
 Amber Wood, Energy Program Administrator
 Jan Keleher, Building Electrification Lead
 Maria Thompson, Buildings Program Administrator
 Jarrett Vigil, Buildings Intern

Ryan Golten, Consensus Building Institute (facilitator)
 Sean Denniston, New Buildings Institute (City consultant)

Task Force Members

Present			
	Arellano	Frank	LBA Realty (sent alternate for June meeting)
x	Barstnar	Kathie	NAIOP Colorado
	Brinker	Christine	Southwest Energy Efficiency Project (SWEEP)
	Buerge	Jon	Urban Villages
x	Bustamante	Eddie	LiUNA! Local 720
	Cappelli	Jonathan	Neighborhood Development Collaborative

	Cizik	Celeste	Group 14 Engineering (sent alternate for June meeting)
X	Clark	Jolon	Denver City Council District 7
x	Cordova	Sergio	Pipefitters Local Union No. 208
	Dyers	Monique	Ensign Energy Consulting, LLC
x	Fletcher	Angela	Denver Housing Authority
x	Gonzales	Jennie	IBEW 68
x	Gonzalez	Ariana	Natural Resources Defense Council
x	Gremmert	Jennifer	Energy Outreach Colorado
x	Knaizer	Sam	BPX Energy, BP America
x	Kruger	Mike	Colorado Solar and Storage Association (COSSA)
x	Martinez	Aaron	Urban Land Conservancy
x	Mayhew	Amie	Colorado Hotel & Lodging Association
x	Morgan	Steve	Rocky Mountain Association of Energy Engineers
x	Muccio	Peter	Apartment Association of Metro Denver
	Pace	Lori	Denver Metro Association of Realtors
	Prestidge	Scott	Colorado Oil and Gas Association
	Smith	Tyler	Xcel Energy (sent alternate for June meeting)
x	Shephard	Stephen	Denver Metro BOMA
	Gideon	Emily	Colorado Sierra Club