Draft Report

Resilient Efficient Buildings Task Force

November 29, 2022

Introductory Information

- Task Force Member Names
- Staff Names and Contact Information

Executive Summary

- Task Force Mandate
- Membership
- Process
- Outcomes
- Link to Full Report

Task Force Charge and Background

- Senate Bill 1518
- Member Appointment
- Sustainable Solutions Group

Task Force Process

- Building Foundational Understanding
- Discovering and Sharing Policy Ideas
- Understanding and Prioritizing Policies
- Modeling, Analyzing, and Measuring Support

Building Foundational Understanding

- Presentations on existing policies, programs, and topics that were relevant to the Task Force's charge, including:
  - Building codes
  - State policies
  - Federal policies
  - Energy efficiency
  - Co-benefits

Discovering and Sharing Policy Ideas

- Over 100 individual policy suggestions provided via:
  - Policy ideas from other states
  - Brainstorming on a virtual white board
  - Task Force member comments during meetings
- Suggestions grouped into 25 policy categories

Understanding and Prioritizing Policies

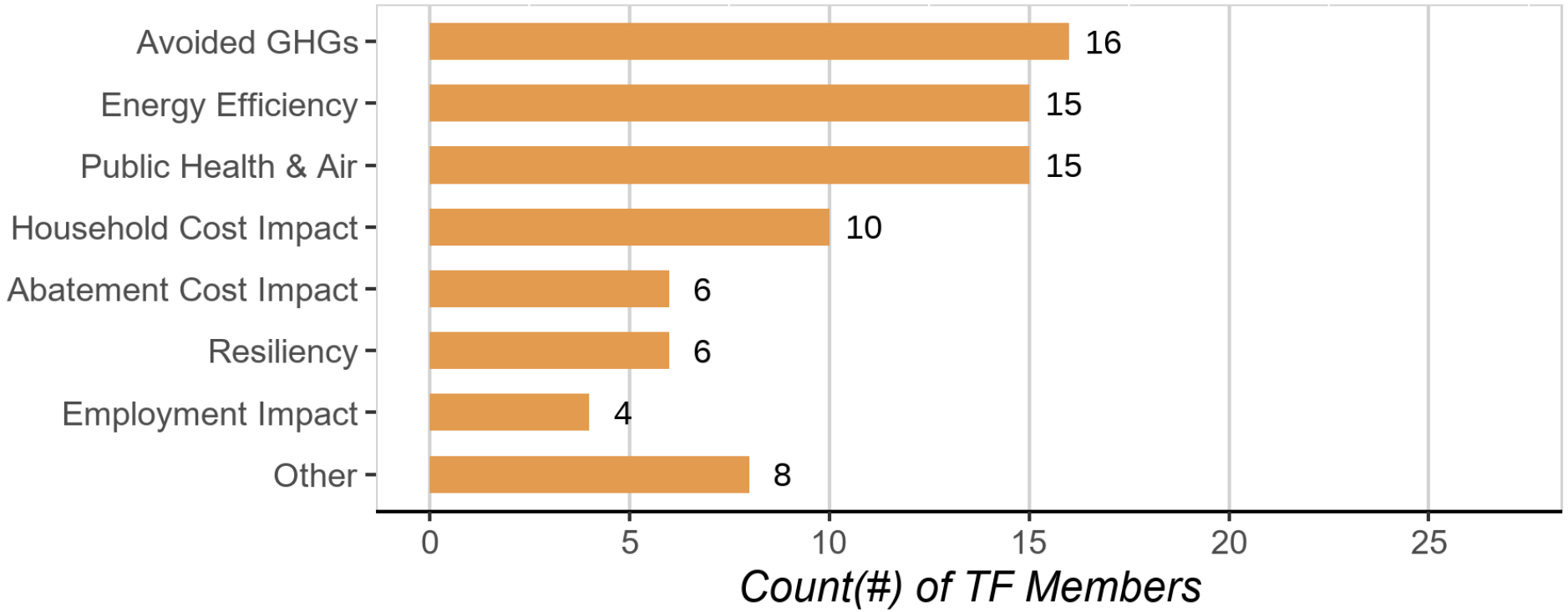
- Details of 25 policy categories provided in two memos, which were applicable to new construction or existing buildings
- Two surveys gathered Task Force member feedback

Modeling, Analyzing, and Measuring Support

- Sustainability Solutions Group (SSG) modeled six and analyzed three policy concepts
- Task Force provide details for each policy in a survey
- Final Survey on policy concept alignment

Policy Outcomes

Most Important Considerations for Task Force Members



"Other" Most Important Considerations

- whether a policy concept includes a broad range of fuel sources (3 members)
- impact on affordability to own or rent shelter
- incentivizing the market to create adoption
- the cost vs. benefit (in costs and avoided emissions)
- whether a set standard or goal is attainable
- stabilization of current building codes processes

Promote, incentivize, and or subsidize energy efficiency and heating/cooling

- Energy efficient installations for existing buildings may include weatherization and energy efficiency upgrades and retrofits.
- Potential IRA funding opportunities
- Levels of alignment

Promote, Incentivize, or Subsidize Energy Efficiency and Heating/Cooling	Alignment with policy direction in general				
	Do support in general				Do not support in general
Count of Task Force members	25				2
	Policy Scenarios				
	Lower ambition		Higher ambition		
Scenario reference number	2a	2b	2c	2d	
Emissions abatement goal	50% of buildings are retrofitted by 2050, thermal energy requirements reduced by 15%		100% of buildings are retrofitted by 2035, thermal energy requirements reduced by 50%		
Building type	All building types				
Commercial building size that scenario will apply to	Buildings ≥ 50,000 ft2	Buildings ≥ 30,000 ft2	Buildings ≥ 50,000 ft2	Buildings ≥ 30,000 ft2	
	Alignment with modeled policy scenarios (Count of Task Force members)*				
Love it	0	0	1	1	
Like it, but have some reservations	6	6	16	16	
Don't like it, but I'm willing to stand aside	3	2	2	2	
Cannot support this policy scenario	14	15	5	5	

Promote, incentivize, and or subsidize heat pumps

- Heat pumps use electricity to transfer heat, cool, or warm a space depending on the season and are efficient.
- Potential IRA funding opportunities
- Levels of alignment

Promote, Incentivize, or Subsidize Heat Pumps	Alignment with policy direction in general		
	Do support in general		Do not support in general
Count of Task Force members	24		3
	Policy scenarios		
	Lower ambition	Higher ambition	
Linked scenario reference number	4a	4b	
Emissions abatement goal	80% of covered buildings have a heat pump installed by 2040	100% of buildings that are covered have a heat pump installed by 2035	
Building type	New and existing residential and commercial buildings		
	Alignment with modeled policy scenarios (Count of Task Force members)*		
Love it	1	15	
Like it, but have some reservations	18	0	
Don't like it, but I'm willing to stand aside	3	2	
Cannot support this policy scenario	1	4	

Decarbonize institutional/public buildings

- Institutional and public buildings can be decarbonized through retrofits and operational strategies.
- Levels of alignment

Decarbonize Institutional/Public Buildings	Alignment with policy direction in general		
	Do support in general		Do not support in general
Count of Task Force members	23		4
	Policy scenarios		
	Lower ambition	Higher ambition	
Scenario reference number	3a	3b	
Emissions abatement goal	New buildings after 2035 are carbon neutral	New buildings after 2023 are carbon neutral	
Retrofits	50% of buildings are retrofitted by 2045; thermal energy requirements reduced by 15%; plug load reduced by 15%	100% of buildings are retrofitted by 2035: thermal energy requirements reduced by 50%; Plug load reduced by 50%	
	Alignment with modeled policy scenarios (Count of Task Force members)*		
Love it	2	0	
Like it, but have some reservations	2	14	
Don't like it, but I'm willing to stand aside	15	2	
Cannot support this policy scenario	3	6	

Promote, incentivize, and or subsidize energy efficiency and air purification systems

- Several strategies may improve indoor air quality, including source control, improved ventilation, and air cleaners.
- Levels of alignment

Promote, Incentivize, and/or Subsidize Air Purification Systems

Target
• Promote, incentivize, and/or subsidize air purification systems. • Use only an approved product list of effective air cleaners. • Prioritize efficiency upgrades and clean air systems in Oregon schools. • Further prioritize schools that serve diverse or disadvantaged communities

Alignment rating of policy direction in general			
Love it	**Like it, but have some reservations**	**Don't like it, but I'm willing to stand aside**	**I don't support this policy direction in general**
15	8	2	2

Assess and Disclose Material-Related Emissions

- There are two categories of efficiency that are concerned with material production: material efficiency and energy efficiency.
- Potential IRA funding opportunities
- Levels of alignment

Assess and Disclose Material-Related Emissions	Alignment with policy direction in general			
	Do support in general			Do not support in general
Count of Task Force members	21			6
	Policy scenarios			
Scenario reference number	5a	5b	5c	
Emissions abatement goal	Reduce embodied carbon from construction by 20% by 2030, compared to 2015	Reduce embodied carbon from construction by 60% by 2030, compared to 2015	Reduce embodied carbon from construction by 100% by 2050, compared to 2015	
Building type	Residential and commercial buildings			
	Alignment with modeled policy scenarios (Count of Task Force members)*			
Love it	3	13	0	
Like it, but have some reservations	15	2	13	
Don't like it, but I'm willing to stand aside	2	3	3	
Cannot support this policy scenario	0	3	5	

Modify Energy Trust of Oregon's mission

- The Energy Trust of Oregon's mission is to help utility partners and their customers acquire cost-effective energy efficiency and install small-scale renewable energy projects.
- Levels of alignment

Modify Energy Trust of Oregon's Mission

Target
• Change Energy Trust of Oregon's (ETO) mission to lead with greenhouse gas (GHG) emissions reductions and equity instead of leading with fuel-neutral energy efficiency • Direct the PUC to consider GHG reduction in Energy Trust/utility conservation programs. • Remove barriers to customer choice through ETO funds and other programs that provide efficiency incentives to replace bulk fuels with a more efficient electric system (rather than a forced switch). • ETO programs should be made available statewide.

Alignment rating of policy direction in general			
Love it	**Like it, but have some reservations**	**Don't like it, but I'm willing to stand aside**	**I don't support this policy direction in general**
15	6	1	5

Building Performance Standards

- A building performance standard (BPS) establishes specific performance levels that buildings must achieve.
- Potential IRA funding opportunities
- Levels of alignment

Building Performance Standards	Alignment with policy direction in general				
	Do support in general				Do not support in general
Count of Task Force members	19				8
	Policy scenarios				
	Lower ambition		Higher ambition		
Scenario reference number	1a	1b	1c	1d	
Emissions abatement goal	Direct emissions need to reach 5% below 2025 levels by 2030		Direct emissions reduced by 40% of 2025 by 2030		
Building type	Existing residential, commercial, industrial, and multi-family buildings				
Commercial building size that scenario will apply to	All building sizes	Buildings ≥ 35,000 ft2	All building sizes	Buildings ≥ 35,000 ft2	
	Alignment with modeled policy scenarios (Count of Task Force members)*				
Love it	1	1	14	15	
Like it, but have some reservations	2	2	1	2	
Don't like it, but I'm willing to stand aside	1	1	2	0	
Cannot support this policy scenario	13	13	1	1	

Align energy efficiency programs with State's climate goals (EO 20-04)

- Executive Order 20-04 directed state agencies to take certain actions to reduce and regulate GHG emissions.
- Levels of alignment

Align Energy Efficiency Programs with State's Climate Goals

Target
• Ensure energy efficiency programs align with other policies such as HB 2021 and CPP • Ensure demand response programs delivery and enable GHG emissions reductions

Alignment rating of policy direction in general			
Love it	**Like it, but have some reservations**	**Don't like it, but I'm willing to stand aside**	**I don't support this policy direction in general**
15	4	2	6

Enact energy-efficient building codes

- Building energy codes can require new construction and major renovations in existing buildings to meet minimum energy efficiency requirements.
- Potential IRA funding opportunities
- Levels of alignment

Energy-Efficient Building Codes	Alignment with policy direction in general	
	Do support in general	Do not support in general
Count of Task Force members	18	9

Energy-Efficient Building Codes		Policy scenarios				Do not support
		Lower ambition		Higher ambition		
Linked scenario reference number		6a	6b	6c	6d	
Existing buildings	Emissions abatement goal	50% of buildings are retrofitted by 2050, thermal energy requirements reduced 15%		100% of buildings are retrofitted by 2035, thermal energy requirements reduced 50%		9
	Commercial building size that scenario will apply to	Buildings ≥ 50,000 ft2	Buildings ≥ 30,000 ft2	Buildings ≥ 50,000 ft2	Buildings ≥ 30,000 ft2	
New buildings	Emissions abatement goal	40% reduction in new building energy consumption from the 2006 Oregon codes by 2050		80% reduction in new building energy consumption from the 2006 Oregon codes by 2035		
	Commercial building size that scenario will apply to	Buildings ≥ 50,000 ft2	All buildings	Buildings ≥ 50,000 ft2	All buildings	
Building type		Residential and commercial buildings				
		Alignment with modeled policy scenarios (Count of Task Force members) *				
Love it		0	2	3	2	
Like it, but have some reservations		3	1	12	12	
Don't like it, but I'm willing to stand aside		0	0	0	1	
Cannot support this policy scenario		15	15	3	3	

Appendix

- Comments

Table A2: Comments about Promote, Incentivize, and/or Subsidize Heat Pumps

Why I do not support policy direction /What would need to change to support this policy direction	Why I do support policy direction
"We should support energy / emissions savings - we should not predetermine the winner. Let's incentivize the target goal and let the community find a solution. Heat pumps could be one of several menu choices." *"No emissions or cost benefit analysis for*	*"This has the largest impact of all of our goals and is an easy win for Oregon. We have four big macro conditions that help this goal rise in importance.* *1. Our electric grid is getting cleaner, and the cost of renewables is dropping faster than forecasted. This increases the carbon impact of any heat pump*

Table A4: Comments about Promote, Incentivize, and/or Subsidize Air Purification Systems

Love It	Like it, but have some reservations	Don't like it, but I'm willing to stand aside	I don't support this policy direction in general
"We want more resilient, healthy buildings for Oregonians. Improving air purification can have multiple benefits for communities, including public health and climate resilience benefits by purifying air during wildfire	*"I would need more details"* *"Not sure where to funding will come from"* *"With wildfires becoming increasingly common, and with concerns being raised about indoor air quality*	*"This is another one of those 'details' concepts. It appears to be only focused at plug-in air cleaners in schools? I appreciate the potential additional resiliency and health benefits for occupants that appropriately managed*	*" Air purification as a stand-alone effort doesn't make much sense because it can be integrated with upgrading HVAC systems."* *"This is good, but falls outside the scope"*

Process Steps

Nov 23rd	• Draft Task Force report emailed to Task Force members and posted to OLIS
Nov 29th	• Task Force Meeting to Review Draft Task Force Report
Dec 5th	• All significant changes where you feel that the language is not an accurate summary of the Task Force's process/action due at 5 PM.
Dec 9th	• Proposed Final Report Emailed to Task Force Members and Posted to OLIS
Dec 13th	• Task Force Members must be present for official action to adopt Final Task Force Report

Resilient Efficient Buildings Task Force