



ENERGY FUTURES GROUP

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Act 47 Building Energy Code Study Committee (BECSC)

REPORT TO THE VERMONT LEGISLATURE OVERVIEW

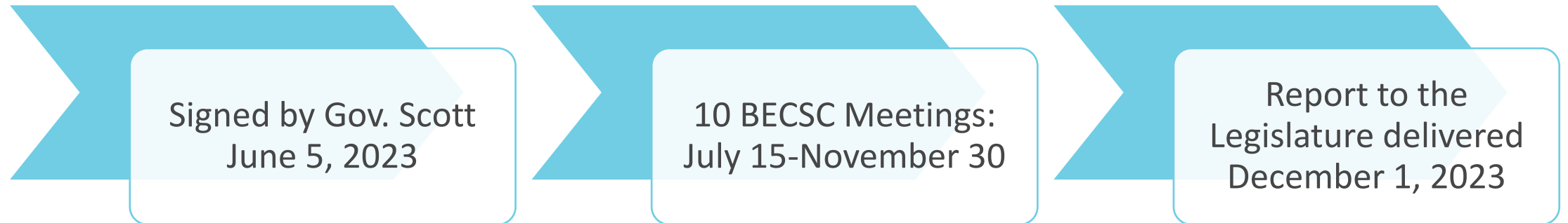
Richard Faesy

May 1, 2024

Committee Members

- Christopher Bray - VT Senate, BECSC Committee Chair
- Bob Duncan - American Institute of Architects Vermont
- Chris Burns - Burlington Electric Department
- Chris Company - Regional Planning Commission
- Craig Peltier - Vermont Housing and Conservation Board
- Jason Webster - Vermont Builders and Remodelers Association
- Jim Bradley - Hayward Design Build
- Kelly Launder - Department of Public Service – Division of Efficiency and Energy Resources
- Matt Musgrave - Association of General Contractors of Vermont
- Matt Sharpe - Efficiency Vermont
- Michael Desrochers - Department of Public Safety - Division of Fire Safety
- Sandra Vitzthum - Sandra Vitzthum Architect LLC
- Scott Campbell - Vermont House of Representatives
- Ted Brady - Vermont League of Cities and Towns
- Timothy Perrin - Vermont Gas Systems
- Richard Faesy and Liz Bourguet - Energy Futures Group (Staff to the Committee)

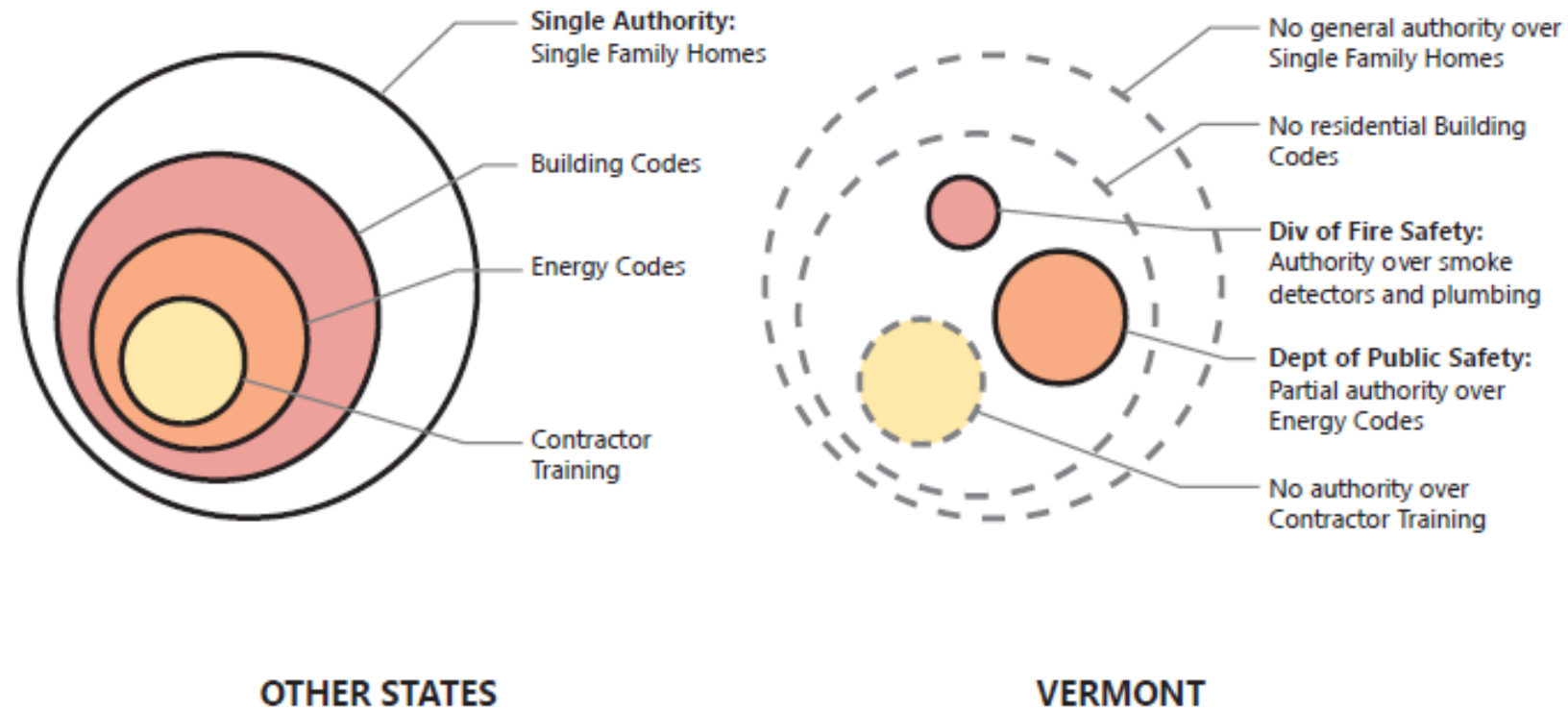
BECSC Timeline of Act 47 (S.100) HOMES Bill



Background: General Assembly Findings

- 1) Vermont established the Residential Building Energy Standards (RBES) in 1997 and the Commercial Building Energy Standards (CBES) in 2007. The Public Service Department (PSD) is responsible for adopting and updating these codes regularly but does not have the capacity to administer or enforce them.
- 2) The RBES and CBES are mandatory, but while municipalities with building departments handle some aspects of review and inspection, there is no State agency or office designated to interpret, administer, and enforce them.
- 3) The Division of Fire Safety (DFS) in the Department of Public Safety is responsible for development, administration, and enforcement of building codes but does not currently have expertise or capacity to add administration or enforcement of energy codes in buildings.
- 4) Studies in recent years show compliance with the RBES at about 54 percent and CBES at about 87 percent, with both rates declining. Both codes are scheduled to become more stringent with the goal of “net-zero ready” by 2030.
- 5) In December 2022, the U.S. Department of Energy issued the Bipartisan Infrastructure Law: Resilient and Efficient Codes Implementation Funding Opportunity Announcement. The first \$45 million of a five-year \$225 million program is available in 2023. Vermont’s increased code compliance plans should include contingencies for this potential funding.

Building & Energy Code Structures in VT & in Other States



Act 47 Charge

- 1) Assess how the building energy codes interact with the fire and building safety codes.
- 2) Consider and recommend strategies to increase awareness of and compliance with the RBES and CBES, including the potential designation of the Division of Fire Safety (DFS) in the Department of Public Safety as the statewide authority having jurisdiction (AHJ) for administration, interpretation, and enforcement, in conjunction with DFS' existing jurisdiction, over building codes.
- 3) Evaluate current cost-effectiveness analyses for the RBES and the CBES, whether they include or should include nonenergy benefits such as public health benefits and the cost of carbon, and how that impacts the affordability of housing projects and provide recommendations.

Charge 2: Strategies to increase awareness of and compliance with RBES and CBES including the potential designation of DFS as the statewide AHJ.

Recommendations for Immediate Legislative Action

Recommendation	Timeframe for Implementation		Responsible Entity	Funding Source	Dissenters
	2024	Phase 2			

A. Make structural, statutory, policy, and programmatic changes to Vermont’s energy code environment.

<p>A.1. Designate the DFS as the statewide “authority having jurisdiction” (AHJ) over all building construction – public, private, commercial, residential.</p> <p>A.1.a. Clarify the chain of authority from the General Assembly, through DFS, to municipalities.</p> <p>A.1.b. Establish an advisory committee to advise on the overall transition to a new AHJ, help with future code revisions and examine building failure cases to improve building science and future codes.</p> <p>A.1.c. PSD continue in role administering the energy codes in support of the AHJ</p> <p>A.1.d. Develop a certification designation for contractors trained on the energy codes and include the certification on the OPR Contractor Registry and DFS website</p>	✓		DFS or other AHJ	Identify	DFS PSD AGC
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Recommendation	2024	Phase 2	Responsible Entity	Funding Source	Dissenters
A.2. Amend the energy code update cycle by changing “shall” in the energy code enabling statute to “may”.	✓		Legislature	Unnecessary	
A.3. Establish a study committee on adopting a statewide residential building code (e.g., IRC)	✓		Legislature	Identify	
A.4. Require OPR to update contractor registry (A) so contractors explicitly acknowledge RBES/CBES legal requirements, and (B) to alert consumers to RBES/CBES and provide filtering functionality, e.g., by specialties, location, and certifications.	✓		Legislature and OPR	EFG’s DOE Grant	DFS VBRA
A.5. Authorize OPR to update their contract requirements and template for contractor-owner agreements to include a clause acknowledging that energy codes are mandatory.	✓		Legislature and OPR	EFG’s DOE Grant	
A.6. Develop a certification designation for contractors trained on the energy codes and include the certification on the OPR Contractor Registry and DFS website	✓		OPR and AHJ	EFG’s DOE Grant	
B. Improve the process for filing and tracking energy code certificates.					
B.1. Expand DFS’s current database redesign to incorporate a statewide, central, publicly accessible repository for all Vermont buildings (including all residential) that includes energy code data. B.1.a. Eliminate filing certificates in town records and the notarization requirement. B.1.b. Establish a certificate application tool for both CBES and RBES that generates an energy code “permit” before construction and a final certificate upon completion that is part of the DFS database.	✓		DFS or other AHJ	Identify	DFS PSD

Non-Legislative and Longer-Term Recommendations

C. Improve workforce training and support.

Recommendation	2024	Phase 2	Responsible Entity	Funding Source	Dissenters
C.1. Coordinate and support energy code trainings and certifications. C.1.a. Develop training materials C.1.b. Conduct regular trainings	✓		OEO, EVT, EFG until there is an AHJ	EFG's DOE Grant	DFS AIA-VT
C.2. Develop "circuit rider" on-site energy code services statewide.	✓		EFG / EVT until there is an AHJ	EFG's DOE Grant	
C.3. Increase training and support for Energy Consultants.		✓	EFG / EVT until there is an AHJ	EFG's DOE Grant	
C.4. Increase and coordinate building science and energy code trainings including weatherization.		✓	OEO / EVT until there is an AHJ	OEO PSD EVT ACCD/DHP	
C.5. Coordinate the Energy Code Support Center (call center) with other code support efforts.		✓	EVT until there is an AHJ	EVT	

D. Increase awareness of building energy codes and requirements.					
Recommendation	2024	Phase 2	Responsible Entity	Funding Source	Dissenters
D.1. Develop and mail out bill stuffers reminding about energy codes	✓		EVT / DUs until there is an AHJ	EVT / DUs	
D.2. Work with lenders and attorneys to include energy information on loan closing checklists	✓		AHJ	Identify	
D.3. Use state, regional, and municipal websites to reinforce energy code requirements.	✓		AHJ	EFG's DOE Grant supports RPCs	
D.4. Create a radio show on building science and energy codes to educate the public		✓	?	Identify	
E. Establish a plan for funding for base-code and above-base code compliance.					
E.1. Develop a funding plan to pay for start-up and on-going costs to support the AHJ and energy code administration.		✓	EFG until there is an AHJ	EFG's DOE Grant	
E.2. Establish a role for EEU's to play in supporting energy codes compliance and incentives.		✓	PSD & EEU's until there is an AHJ	EEU's	
F. Coordinate code compliance grant efforts in Vermont.					
F.1. Coordinate with the U.S. Department of Energy's (DOE) grant to Energy Futures Group for the "Vermont Energy Code Administration Project" to support these strategies.	✓		EFG until there is an AHJ	EFG's DOE Grant	
F.2. Continue the role of the Act 47 Building Energy Code Study Committee as the "Phase 2" Advisory Committee to EFG's DOE grant.	✓		EFG until there is an AHJ	EFG's DOE Grant	

Charge 3: Evaluation of cost-effectiveness analysis for RBES and CBES.					
Recommendation	2024	Phase 2	Responsible Entity	Funding Source	Dissenters
1. Continue calculating energy code "cost effectiveness" as has been done historically.	✓		PSD until there is an AHJ	Unnecessary	
2. Establish a new committee of energy, economic, and housing experts to research and address whether and how to best include the cost of carbon and non-energy benefits in building energy codes for new and existing buildings.		✓	PSD until there is an AHJ	Identify	PSD DFS VBRA



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PRINCIPAL

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