



ENERGY FUTURES GROUP

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Vermont Building Energy Code Administration Project Update for Act 151 Working Group

August 20, 2024

Agenda

1. Project Team Members & Roles
2. DOE Resilient and Efficient Codes Implementation (RECI) Project Summary
3. Energy Code Administration Plan
4. Community Benefits Plan
5. Advisory Committee
6. Energy Code Professionals Plan
7. Funding Model
8. Current Status
9. Questions & Discussion

Team Members & Roles

Team Member	Role
Energy Futures Group	Project Lead and Management
Vermont Secretary of State	State Sponsor, Office of Professional Regulation (OPR) Contractor Certification(s)
International Code Council	Contractor Certification(s) Support
Burlington Electric Department	Advisor, Energy Code Implementation Support
Efficiency Vermont	Advisor, Energy Code Implementation Support, Training, Circuit Rider
Vermont Gas Systems	Advisor, Energy Code Implementation Support
Vermont Association of Planning and Development Agencies (VAPDA)	Education, Community Outreach and Support

Resilient and Efficient Codes Implementation (RECI) FOA

- Funded by the Bipartisan Infrastructure Law (BIL) through the Department of Energy (DOE)
- EFG was one of 27 projects awarded through DOE RECI funding. EFG on behalf of the state and the project team was awarded \$1 million over three years.
- DOE final contract award May 2024
- Project runs January 2024- December 2026
 - 3 years broken into 2 Budget Periods of 1.5 year each

Overall Vermont Project Goal

“Develop an energy code administration plan for Vermont, including a proposed funding mechanism, that will lay the groundwork for future implementation of a code compliance mechanism, ultimately resulting in significant and sustained reductions in energy use.”

Project Summary

- Develop “Energy Code Administration Plan”, including:
 - Energy Code Professionals Plan
 - Municipal Outreach and Education Plan
 - Funding Model
- Recruitment, training, and support of an energy professionals workforce to assist energy code administration, including outreach to communities not typically represented in the energy industry
- Develop energy code support materials and trainings
- Training and support of builders, designers, trade associations, and other stakeholders
- Establishment of a circuit rider to ensure widespread information sharing and support
- Municipality outreach training, resources, and support
- Establishment and coordination with project advisory committee, including technical experts and representatives from environmental and economic justice (EEJ) communities

Energy Code Administration (ECA) Plan Elements

- Preliminary elements being considered for the ECA plan
 - OPR certifications
 - Role of energy code professionals
 - Marketing and awareness campaigns
 - Circuit rider providing technical support
 - RBES training and education
 - Potential influence of insurance companies and mortgage lenders
 - Savings for compliance enhancement for Energy Efficiency Utilities (EEUs)
 - RBES certificate documentation and tracking
 - Role of DFS and the PSD
 - Funding model

Community Benefits Plan

- As part of DOE RECI proposal, we submitted a Community Benefits Plan (CBP)
- Purpose of a CBP: (1) support meaningful community and labor engagement; (2) invest in America's workforce; (3) advance diversity, equity, inclusion, and accessibility; and (4) align with the Justice40 Initiative

Our actions to support our CBP include:

- The project team will reach out to at least six organizations representing environmental and economic justice (EEJ) communities about participation in the Advisory Committee and to inform how to engage with these communities.
- The project team will develop and implement a plan to engage with EEJ communities
 - For example, this could be work with boots on the ground non-profits to solicit feedback on the impacts of the Energy Code Administration plan

The Advisory Committee Mission & Tasks

- Provide input and guidance to the Project Team in developing the Energy Code Administration Plan
- Help to develop code administration systems and processes
- Coordinate with the Authority Having Jurisdiction (AHJ) and agencies to provide guidance to the implementation of the plan
- Provide input into Vermont-specific training certification
- Provide input into the education, training, and support tasks
- Provide input into the development of the plan for the role that energy professionals could play in code compliance
- Incorporate EEJ community priorities into the planning process

Advisory Committee Organizations

- Vermont Energy and Climate Action Network (VECAN)
- Vermont Works for Women
- Rights and Democracy
- Vermont Council on Rural Development
- Vermont League of Cities and Towns
- Town of Hartford
- Goodkind Inspections
- Vermont Gas Systems (VGS)
- International Code Council (ICC)
- Vermont Department of Public Service (PSD)
- Efficiency Vermont
- Northeast Energy Efficiency Partnership (NEEP)
- New Buildings Institute (NBI)
- Vermont Association of Planning and Development Agencies (VAPDA)
- Burlington Electric Department (BED)
- Office of Professional Regulation (OPR) within the VT Secretary of State

Energy Code Professionals Plan

- One aspect of the ECA plan is to develop a plan for the role of Energy Code Professionals
- Energy Code Professionals are those that can support compliance enhancement and/or enforcement
 - E.g., Home inspectors, (Home Energy Rating System) HERS raters, energy auditors, etc.
 - Enhancement activities – technical assistance to builders, design professionals, and subcontractors; diagnostic testing, energy modeling, code interpretation, etc.
 - Enforcement activities – energy code inspections on behalf of AHJ
- EFG will be conducting six interviews, including three with underrepresented industry stakeholders to inform this plan

Funding Model

- Research different funding methods from other jurisdictions
- Goal of raising enough revenue to fully support ECA plan implementation
- Consider pros/cons, ability to scale, likely level of potential funding sources, limitations of application, etc.
- Model sensitivities:
 - Construction volume
 - Inspection rate
 - Statewide permit database
 - Permit fees
 - Staffing considerations
 - Administrative staff
 - Code officials/inspectors
 - Third-party “energy code professionals” verifiers
 - Etc.
- Model development and share drafts with Advisory Committee and Act 151 W.G.

Current Status

- DOE final contract awarded May 2024
- National Code Collaborative coordination with DOE and other RECI recipients
- Developing partner subcontracts
- Project Management Plan developed
- Advisory Committee Meeting #1 on August 13, 2024
- Energy Code Administration Workplan
- Trainings planning with EVT
- Contractor registry RBES certification with ICC
- VAPDA municipal work plan
- Coordination with Act 151 Working Group



Questions and Discussion



Appendices

Technical Work Summary

Task Area	Summary & End Result	Period of Performance
Project Management and Planning	Manage team and coordinate with DOE regularly.	Period 1 – Develop project management plan Periods 1 & 2 – Regular team, DOE check ins.
National Collaborative and Technical Assistance Engagement	Coordinate with the National Codes Collaborative and DOE Technical Assistance Networks on identifying the elements of adoption and compliance that need resources and support.	Period 1 – Workshop participation, general coordination, present at national meeting. Period 2 – Meet with DOE.
Project Advisory Committee	Assemble Advisory Committee of local and national experts, including representatives from environmental and economic justice communities (EEJ), to review and guide this project.	Period 1 – Recruit Advisory Committee. Periods 1 & 2 – Meet twice a year, with additional periodic updates.
Energy Code Administration Plan	Develop a plan for energy code administration in coordination with stakeholders and AHJ/ implementation agencies.	Period 1 – Develop plan Period 2 – Develop code administration systems and processes
Energy Professionals Workforce	Develop role, market, and support energy professionals to offer code support and compliance services.	Period 1 – Develop code support role Period 2 - Provide support, coordination, and marketing
Education, Training and Support	Develop and offer materials and trainings to builders, designers, municipalities, and others. Hire and offer circuit rider to support builders and other stakeholders. Develop builder training certification for OPR’s Contractor Registry with ICC.	Period 1 – Develop materials and trainings, offer trainings. Period 2 – Offer trainings. Hire circuit rider. Circuit rider outreach. Municipalities outreach. Implement OPR builder certificates.

Gantt Chart: Budget Period 1, Part 1

Task	Month after contract signing	2024												2025											
		Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4		
		Q1			Q2			Q3			Q4			Q5			Q6			Q7			Q8		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Period 1																									
Project Management (1/2024-12/2026)																									
Monthly internal team meetings				KO																					
Quarterly DOE check-ins																									
Agendas and meeting notes for each meeting																									
Quarterly reports								QR			QR							QR			QR				
Continuation application																									
Finalize project management plan (PMP) and submit to DOE				P																					
National Collaborative and Technical Assistance Engagement (9/2024-6/2025)																									
Participate in a one-day workshop to kick off National Codes Collaborative																									
Coordinate with the National Codes Collaborative and DOE Technical Assistance Networks on identifying the elements of adoption and compliance that need resources and support																									
Present project in a minimum of one National Collaborative virtual meeting of one hour each over the course of the award																									
Project Advisory Committee (2/2024-6/2025)																									
Outreach to not less than six organizations representing EEJ communities about participation in the Advisory Committee																									
Recruit and manage Ad Committee members																									
Convene 3 Advisory Committee meetings in Budget Period 1											M											M			
Energy Code Administration Plan & Implementation (4/2024-6/2025)																									
Development of a workplan for creation of Energy Code Administration (ECA) plan																									
ECA Plan draft submitted to DOE																									
Revised and finalize ECA Plan based on feedback																									
Create a matrix of potential funding models																									
Energy Professionals Workforce (5/2024-6/2025)																									
Not less than six organizations have been interviewed, including three that represented underrepresented industry stakeholders.																									
Draft plan for role of energy professionals.																									
Finalized plan for role of energy professionals.																									

M = meeting
 P = plan
 QR= quarterly report

Gantt Chart: Budget Period 1, Part 2

Education, Training, and Support (4/2024-3/2026)	
Develop list of trainings to be developed	TM
Trainings drafted	TM
Trainings finalized	TM
Post training survey drafted	TM
Post training survey finalized	TM
Not less than 20 trainings held with not less than 200 unique attendees.	
Not less than 100 survey responses received	
Annual summary overview with data	R
Finalized certificate of completion process	
Circuit rider RFP drafted	
RFP published	
Circuit rider hired	
Circuit rider trained	
Circuit rider provides at least 3 presentations and visits 30 building sites in BP1	T
Draft municipal outreach and education plan	P
Final municipal plan	P
Draft training materials complete (not less than 2 presentations, 2 other resources including handouts and fact sheets)	TM
Final municipality training materials complete	TM
Not less than 5 presentations provided to municipalities	T

P = plan
 R= report
 T= training
 TM = training materials

Gantt Chart: Budget Period 2

		Budget Period 2																	
		2025						2026											
		Q7		Q8				Q9			Q10			Q11			Q12		
#	Task	Month after contract signing																	
	# of Quarters	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Budget Period 2																			
7	Project Advisory Committee Cont. (7/2025-9/2026)																		
7.1	Convene 3 Advisory Committee meetings in Budget Period 2			M						M					M				
7.2	Develop a plan to engage with EEJ communities						P												
7.3	Implement the plan to engage with EEJ communities.																		
8	Energy Code Administration Plan & Implementation Cont. (7/2025-9/2026)																		
8.1	Provide energy code education and information to 20 organizations																		
8.2.1	Draft funding model plan.			P															
8.2.2	Finalize a sustainable funding model plan.						P												
9	Energy Professionals Workforce Cont. (7/2025-6/2026)																		
9.1	Build a network of energy professionals of at least 5 organizations to which the project team will provide code support and compliance services.																		
10	Education, Training and Support Cont. (7/2025-12/2026)																		
10.1.1	Not less than 30 trainings held with not less than 300 unique attendees.																		
10.1.2	Not less than 150 survey responses received.																		
10.1.3	Annual summary overview with data.						R												
10.1.4	Annual summary overview with data.																		R
10.2	Circuit rider provides a minimum of 18 presentations and visits 180 building sites in Budget Period 2																		
10.3	Not less than 5 presentations provided to municipalities																		
11	National Collaborative and Technical Assistance Engagement Cont. (7/2025-12/2026)																		
11.1	Coordinate with the National Codes Collaborative and DOE Technical Assistance Networks on identifying the elements of adoption and compliance that need resources and support.																		
12	Overall Project Management and Planning Cont. (7/2025-12/2026)																		
12.1	Continue managing project																		

M= meeting
 P = plan
 R= report