

## ***Small Group Discussion Questions***

### **Stakeholder Meeting #2: Energy Efficiency**

#### **General Discussion Questions for ALL Small Groups**

- 1) There are a variety of energy efficiency related goals and targets to consider (80,000 homes weatherized by 2020; all new buildings built to net-zero design by 2030; 14% reduction in heat usage by 2050; and keeping future electric use in buildings at the current level).
  - a. Are these targets reasonably achievable (focusing on those goals of particular interest to individuals in the group)? How would goals such as these impact your organization/ work?
  - b. Should there be different target/goals? If so what should they be or where would you shift emphasis? (For example: more emphasis on the use of biofuels and less on electrification/cold-climate heat pumps)
- 2) Given the existing state goals and targets to reduce energy demand for both electricity and heat/process fuels, what strategies would you propose to best achieve these goals? Consider a variety of lenses; program, policy, awareness, etc.
  - a. In terms of implementation, what is working now that needs more support, what is not working, and what new initiatives are needed?

#### **Specific Discussion Questions for Small Groups by Breakout Group**

##### **Thermal Efficiency – Residential:**

- 1) Building codes play an important role in energy efficiency. The state's energy codes are required to be updated every three years. What are the most important aspects to focus on when updating the energy codes?
- 2) Should the focus for Net-Zero constructed buildings be "net-zero ready" versus achieving net-zero performance? Should there be a net-zero goal for existing buildings as well as new construction? If yes, what should it be? Should there be a road map to reach the Net-zero goal through increasingly stringent energy codes (therefore mandatory versus voluntary)?
- 3) Currently there are voluntary efforts being employed to further building energy disclosure through building ratings and labeling. Should building energy disclosure be made mandatory in Vermont? Why or Why not?
- 4) The PSD is currently leading a process to create a statewide information clearinghouse for thermal energy. The Clearinghouse will be a webpage-based portal that will provide access to materials about thermal efficiency and thermal renewable energy services and resources; and links to service providers and entities having information about associated environmental issues such as the presence of asbestos in existing insulation. What do you think is the most important information and/or functionality for the clearinghouse/website to include?

### **Thermal Efficiency – Commercial:**

- 1) Building codes play an important role in energy efficiency. The state's energy codes are required to be updated every three years. What are the most important aspects to focus on when updating the energy codes?
- 2) Should the focus for Net-Zero constructed buildings be "net-zero ready" versus achieving net-zero performance? Should there be a net-zero goal for existing buildings as well as new construction? If yes, what should it be? Should there be a road map to reach the Net-zero goal through increasingly stringent energy codes (therefore mandatory versus voluntary)?
- 3) Currently there are voluntary efforts being employed to further building energy disclosure through building benchmarking/ratings and labeling. Should building energy disclosure be made mandatory in Vermont? Why or Why not?
- 4) Commercial buildings hold more potential for thermal retrofits than residential buildings (and at a lower cost per unit of energy saved). However 10 VSA 581 has a discrete goal that focuses limited thermal funding on residential buildings. How can both sectors be served to balance investments in high yield commercial savings and continue to make progress towards 581's residential housing retrofit goals.
- 5) In addition to more efficient use of fuels, waste heat recover from a process can also be used to reduce overall energy expended in a building's systems, should this be a voluntary design consideration or a requirement? Should this be process specific or general to all commercial building types?

### **Electric Efficiency – Residential:**

- 1) In order to meet a 1/3 energy reduction goal, traditional EEC funded energy efficiency investments (such as based load, lighting, and other upstream appliances) will need to keep relative pace with load growth associated with new development and as electric demand increases due to increased switching from fossil fuels to electricity (electric heat and electric cars).
  - a. How can Vermont build on the existing platform of Residential programs and services to deepen and increase benefits associated with energy efficiency/ savings?
  - b. Based on your experience what programs and/or markets hold significant untapped potential?
  - c. Are there barriers to developing new programs and/ or accessing new markets that the CEP could help remove? Are there programs, specific initiatives, and/or R&D that the CEP could emphasize and support?
- 2) For most of the state, the Residential and Commercial EEC collections as a percent of total are approximately 50% Residential and 50% Commercial. However, spending is more heavily weighted towards the Commercial sector because of its ample savings opportunities and relatively low-cost savings.
  - a. What is the best way to balance sector contributions with equitable sector spending? (focus on dollars spent, savings achieved, etc.)
  - b. How might the CEP address strategies for creating and maintaining sector equity?
- 3) What role might smart meters play in enhancing the state's energy efficiency efforts?

### **Electric Efficiency – Commercial:**

- 1) In order to meet a 1/3 energy reduction goal traditional EEC funded energy efficiency investments (such as motors, pumps, HVAC equipment and process improvements) will need to keep relative pace with load growth associated with new development and as electric demand increases due to increased switching from fossil fuels to electricity (electric heat and electric cars).
  - a. How can Vermont build on the existing platform of Commercial programs and services to deepen and increase benefits associated with energy efficiency/ savings?
  - b. Based on your experience what commercial submarkets hold significant untapped potential?
  - c. Are there barriers to developing new programs/ accessing new markets that the CEP could help remove? Are there programs, specific initiatives, and/or R&D the CEP can emphasize and support?
- 2) For most of the state, the Residential and Commercial EEC collections as a percent of total are approximately 50% Residential and 50% Commercial. However, spending is more heavily weighted towards the Commercial sector because of its ample savings opportunities and relatively low-cost savings.
  - a. What is the best way to balance sector contributions with equitable spending? (focus on dollars spent, savings achieved, etc.)
  - b. How might the CEP address strategies for creating and maintaining sector equity?
- 3) What role might smart meters play in enhancing the state's energy efficiency efforts?

### **Low-income Weatherization, Affordable Housing, Healthy Homes:**

- 1) What should be the priority strategies for reducing low-income Vermonters energy burden and ensuring safe/healthy homes/buildings?
  - a. If increased funding is needed, how much?
  - b. Is financing an option? If yes, what's the most important aspects to include (For example: zero-interest loans, loan loss reserve to allow more risky/less secured loans, easy/simple application process, etc)
  - c. Are there strategies that should be developed and/or increased that cost less direct funding, such as energy coaches, DIY, etc?
- 2) There is a gap in the eligibility requirement for low-income energy efficiency services and those who are unable to afford to pay for efficiency measures, how can that gap be best addressed?
- 3) Beyond funding, what are the barriers for building owners and developers in meeting energy codes and adopting efficiency measures?

### **Financing and Funding for Energy Efficiency:**

- 1) Discuss the following programs/policies:

- a. PACE – How might the state improve implementation of the residential PACE program? Should the state consider a Commercial PACE program, or is that not needed right now?
  - b. Energy Savings Guarantees – Should the state explore supporting Energy Savings Guarantees as part of an overall finance strategy?
- 2) What, if anything, is needed to coordinate the existing financing options and institutions (Heat Saver Loan, Banks/Credit Unions green/efficiency loans, PACE, Neighborworks financing, VEDA, etc.?)
- 3) What challenges need to be overcome in order to make on-bill financing possible for residential and commercial EE investments?
- 4) Over the past three years, the state has increased its engagement with private finance institutions to support new commercial and residential energy efficiency lending programs (e.g., Heat Saver Loan for home owners; VEDA's Energy Efficiency Loan Guarantee Program for commercial entities). In these, the department deployed credit enhancements (e.g., interest rate buy-downs, loss reserve funds) to expand private lending into the energy efficiency market. This new set of tools complements funding policies such as grant making and incentive payments.
  - a. Is this a direction the state should continue to pursue or not? Why or why not?
  - b. If not, what suggestions can you offer to help residential and commercial property owners make necessary investments in energy efficiency to meet state goals?
- 5) What steps would you suggest to encourage more banks and credit unions to participate in financing investment for energy efficiency?