Oregon
Kate Brown, Governor

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MEMORANDUM

To: Members of the Resilient Efficient Buildings Task Force

From: Maya Buchanan, Senior Climate Specialist
Blake Shelide, Facilities Engineer

Date: April 22, 2022

Re: Response to Questions - April 19th Task Force Meeting

Question:
What information can be shared about the Oregon Global Warming Commission Roadmap to 2035 process with the Task Force?

Response:
The greenhouse gas emissions model will build an understanding of how current policies in the state will reduce emissions as well as identify a suite of ambitious, financially realistic, and equity-centered economy-wide decarbonization actions and pathways that could be used to reach Oregon's target of reducing greenhouse gas emissions by 45 percent by 2035 (below 1990 levels). The resulting analysis from the modelling effort will be used to inform the Oregon Global Warming Commission's *Roadmap to 2035*, which will provide options and recommendations to meet Oregon's greenhouse gas emissions reduction goals to the Governor and Legislature. Several presentations on the process, model, and analysis are available on the Commission's website, including the current version of the list of potential future actions.

Question:
How can task force members follow the Oregon Global Warming Commission Roadmap to 2035 process?

Response:
The next Oregon Global Warming Commission will include a status update on the Roadmap. In addition, the Roadmap project management team would be happy to meet with members from the task force to discuss intersections in our work.

Question:

Can we share any information about the actual/observed use of heat pumps? Are hybrid and gas heat pumps on the future action list?

Response:

The NEEA reports are one of the best available resources being used to reflect observed uptake of heat pumps. Yes, renewable natural gas-powered heat pumps are included on the list of potential future actions.

Question:

Do the low-carbon scenario action assumptions reflect the changing make-up of the grid (e.g., the fact that emissions per kwh in 2022 vs in 2035)?

Response:

Yes, grid dynamics are captured in the model. In particular, HB 2021 (the 100% Clean Electricity law) is included as an action in a business-as-planned scenario. Additional information on the model is also available in Roadmap (TIGHGER) meeting presentations available on the OGWC website.

Question:

Can we provide information on the cost/benefits of changing building codes and existing building stock and how the Oregon Global Warming Commission and the Roadmap to 2035 consultants will think about MAC curves in terms of improving the building stock in Oregon?

Response:

Yes, once the database of financial assumptions and the marginal abatement cost curves are finalized, they will be made available.

Question:

Describe the interaction between DOE analysis and Building Codes, specifically around the context of requiring heat pumps when replacing existing air-conditioning equipment. In that context, what is the interaction between DOE analysis and Building Codes for making those types of cost benefit recommendations?

Response:

The Oregon Department of Energy (ODOE) works closely with the Oregon Building Codes Division (BCD) to evaluate energy code development options. ODOE has not performed any specific analysis on statewide opportunities for requiring heat pumps in place of air conditioning systems upon replacement. In general, code development is a multi-stage process that involves public proposals, review by various building code boards, committees, and staff at the Building Codes Division, with multiple opportunities for public input along the way. The Oregon Energy Code Stakeholder Panel, hosted by ODOE and BCD, is a great venue for discussing energy code development supplementary to the formal code development process at BCD. More information about the BCD code adoption and review can be found at the following websites:

Building Codes Division : Code adoption and review : Codes and standards : State of Oregon

Building Codes Division : Energy Code Program : Codes and standards : State of Oregon

Related to heat pumps, and as presented at the Task Force meeting on April 19, Senate Bill 1536 in the 2022 legislative session funded multiple programs to incentivize and encourage heat pump installation. Heat pumps can provide the dual benefit of supplying efficient heating and also providing access to cooling. Specific requirements and rulemaking for these programs will begin soon.

Question:

What are the minimum efficiency standards for gas furnaces in Oregon?

Response:

Please note that we misheard this question and thought the question was about gas fireplaces/hearths, not gas furnaces, in part because we have considered potential state efficiency standards for hearths. Unlike hearths, gas furnaces are regulated at the federal level, and states are preempted from having any standard that is different from the federal minimums. Federal standards require furnaces with an 80 percent Annual Fuel Utilization Efficiency (AFUE) rating. The Oregon energy code has some innovative pathways for encouraging higher efficiency (such as including high efficiency furnaces in a "pick-one" options table, which ends up being a frequent selection). But in terms of requiring higher efficiency furnaces in all new construction and replacements, states are preempted by federal regulation.