

Oregon Energy Strategy
Policy Working Group breakout sessions —
Building Electrification, Energy Efficiency,
and Distributed Energy Resources

Meeting 4

May 7, 2025, 1:00-4:00

Post-Meeting Notes

Meeting Summary

Rob Del Mar and Ruchi Sadhir (ODOE) facilitated a meeting to review findings from Lawrence Berkley National Lab research and the air quality and Energy Wallet complementary analyses and to discuss potential policy actions drafted by ODOE on the basis of barriers and strategies brainstormed in the prior PWG meetings. Rob requested that PWG members provide final comments as part of the Phase 2 PWG policy discussion process by May 9.

In-Meeting Notes

Participants

ODOE	Oregon Agencies	PWG Members
Hugh Arceneaux	Joy Aldrich OHCS	Mary Rudolph-Knobbe, NWN
Edith Bayer	Sam Henstell, OHA	Laney Ralph, NWN
Joshua Price	Mark Heizer, DCBS	Paul Hawkins, City of Portland
Jessica Reichers	Anne Gire, DCBS	Chris Golightly, CRITFC
Rob Del Mar		Billy Curtiss, EWEB
Ruchi Sadhir		Bob Kaplan, City of Ashland
Stephanie Kruse		Ryan Tran, CUB
Alan Zelenka		Hannah Dondy-Kaplan, BPA
Amanda Welch		Nick Cheke, Community Energy
		Project
		Charity Fain, Community Energy Project
		Dr. Pat DeLaquil, DecisionWare Group;
		Mobilizing Climate Action Together
		Adam Shick, Energy Trust
		Ryan Brown, NEEA
		Jonathan Belais, NEEA
		Jake Wise, PGE
		Ken Morgan, Gensco
		Maddy Salzman, Earth Advantage
		David Heslam, Earth Advantage

	Claire Prihoda, Climate Solutions
	Alyn Spector, CNGC

Introduction

- Rob Del Mar (ODOE) opened the meeting and expressed appreciation for PWG members' participation and input so far.
- Ruchi Sadhir (ODOE) expressed appreciation for PWG members' attendance, reviewed ODOE's
 mission, and provided reminders on WebEx functionality. Ruchi asked that PWB members use
 the raise hand function and chat window to engage during the call and that they introduce
 themselves in the chat. Ruchi also requested that meeting attendees provide input through the
 public comment portal at https://odoe.powerappsportals.us/en-US/energy-strategy/.
- Ruchi reviewed the group agreements reiterating that ODOE wants participants to be comfortable in sharing their perspectives.
- Ruchi reviewed PWG roster and asked that participants introduce themselves in the meeting chat.
- Ruchi reviewed the PWG's purpose and upcoming meeting calendar. Ruchi highlighted that ODOE is asking for written comments by May 9 to follow up on today's meeting.
- Ruchi introduced the meeting objectives:
 - o Review policy recommendation development process.
 - Share insights from complementary analyses.
 - Discuss and evaluate draft policy actions.
- Rob reviewed the meeting agenda; explained that the meeting would review complementary
 analysis key findings briefly, including new Lawrence Berkley National Lab research on data
 centers, co-planning, performance-based regulation, and how to reach disadvantaged
 communities. The meeting will then focus on discussing draft policy actions.
- Existing policies; Rob reviewed EE and BE-related policies on the books in Oregon, saying that many of the strategies and policy actions to be discussed today relate to the current policy tapestry in Oregon.
- Rob reviewed energy pathways modeling results as highlighting the importance of BE and EE
 measures to minimizing the costs of decarbonization in Oregon. Rob also reviewed materials
 highlighting the energy savings related with adopting heat pumps in Oregon.
- Rob reviewed the Energy Wallet findings as an analysis that considered how the modeled scenarios would affect five different representative households in Oregon based on the timing of heat pump and EV adoption. Rob highlighted that the representative households considered included homes with electric resistance heating and some without cooling, which are important factors to considering heat pump adoption in terms of energy savings, cost savings, and the service provided by a given household's technology.
- Rob reviewed the planned Energy Strategy process. He reiterated that the Energy Strategy will be focused primarily on state, rather than federal, policies and discussed the policy timeline under consideration in the Energy Strategy, explaining that it will not directly implement policies and will focus on legislative proposals for 2026 and 2027.
- Policy framing: Rob reviewed the three layers of policy framing as a hierarchy from more general
 to more specific policies to frame in the final Energy Strategy Report, including strategies,
 recommendations, and policy actions.

 Balancing Diverse Needs and Viewpoints; Rob explained that, in some areas, ODOE reviewed strategies on a gradient from very impactful and ambitious policies to minimal policy changes from the prior PWG meeting, raising the treatment of gas heating as an example. Rob explained that ODOE has tried to draft the initial policy actions in a way that provides a starting point to discuss these ideas and better assess where on this gradient ODOE should situate our recommended policy actions.

Policy Actions: Discussion and Input

Ruchi reviewed the plan for discussing the potential policy actions and that the first step would
be to review the policy actions under consideration and asking clarifying questions; then polling
to gauge interest in discussing a given policy action or elevating new policy action ideas; and
then organizing discussion based around that polling.

Recommendation 1: Reduce the carbon intensity of residential and small commercial buildings while maintaining affordability and energy system resilience

- Rob reviewed potential policy actions under Recommendation 1.
- Policy Action 1.1: Develop a revolving loan fund to support low interest loans for heat pumps, heat pump water heaters, and weatherization for households that are not income qualified. Support on-bill financing options. Support applications to USDA to fund programs in COU territories.
 - Bob Kaplan: would like to clarify whether this loan fund would prioritize interest rates or the term of loans
 - Stephanie: this is useful feedback we will be looking for in the discussion phase.
 This feedback is also welcomed in the comment portal.
- Policy Action 1.2: Establish an alternate-pathway compliance path in residential building code that requires increased envelope efficiency measures if electric resistance or natural gas is used for primary space or water heating systems.
 - David Heslam, Earth Advantage; wonders about meaning of "alternative pathway"
 language; would this indicate developers would have an option for different compliance pathways?
 - Stephanie; pathway requirements would be triggered by fuel or energy type, rather than regulated entity election.
 - David; there are ways to get there that are more or less complicated in the Code; Washington had a points-based system with points allotted to low-carbon techs. What might be better would be to establish the goals of the code and be less prescriptive about compliance means.
- Discussion
- Rob's takeaway from polling; PWG members were interested in discussing all actions.
 - o Policy Action 1.1
 - Joy Aldrich, OHCS; wonders about loan logistics and families over income limitations; will there be safeguards for households trying to access these loans with poor credit?
 - Rob; reflects that ODOE heard a similar concern in the EJ and Equity PWG that there's need to support households across the income spectrum.

- from David Heslam to everyone: The Massachusetts MassSaves program offers zero percent interest rate loans for equipment purchases. The state offers the interest buy-down and a loan loss revere for participating lenders, which are primarily credit unions. That program works
- Charity Fain, CEP; regarding "on bill" funding; for some people that works, and for some people that is less desirable. Supports forwarding multiple options, but this drafting seems to call out on-bill loan option as a standalone priority.
 - Stephanie; the intention of this drafting is to reflect a multi-prong approach.
 - Rob; should the drafting call out support for multiple options, including "on-bill" financing?
 - Charity; that sounds helpful.
- from Bob Kaplan to everyone: Appropriate financing is important to bridge the gap between the cost and the incentive
- from David Heslam to everyone: MassSaves loans are zero interest.
- from Bob Kaplan to everyone: Why should we exclude low income households?
 - Stephanie; ideal solution in low-income situations is to avoid financing or loans, so that pathway options may alternate as you go up the income gradient. Stephanie says another prospective recommendation is to shift funding focus towards a sliding-scale system.
 - Bob; agrees with targeting incentives to low-income households. But says that, unless the incentive is 100 percent, some low-income households will be simply excluded where they should have access to subsidized financing to help cover the remainder of technology costs
 - from Charity Fain to everyone: Low income households should never be asked to take out loans.
 - Stephanie: goal is to get to 100 percent funding for low-income households, consistent with Charity's comment.
 - Bob; should account for difficulty in providing 100 percent funding through political process. Recommendation should target rather than exclude populations
 - Rob; this is an area where considering the incentive gradient may be worth clarifying, such as allowing some households to qualify for partial funding and partial loans, whereas higher income households are more likely to receive financing assistance.
- from Paul Hawkins, he/him to everyone: An overall comment, I do think "multifamily" should be explicitly named in policy language as an important and challenging piece of the puzzle, as drafted it's overlooked
 - Stephanie there is a similar measure for developing revolving loan options for commercial entities and landlords in later policy actions.
 ODOE would still welcome multi-family-specific proposals from PWG members, especially those addressing affordability
 - Paul: agrees with Stephanie's response, requests that drafting be more explicit on calling out multi-family dimension

 Bob: regarding financing for rental households, thinks pay-as-you-save loans could be a way of addressing incentive gap for installing new equipment in EE and BE in rental properties.

o Policy Action 1.2

- Stephanie asks that we not get too into the weeds, but instead focus on the pathway we would like our Code to follow; what would we want to hand rulemakers as a starting point?
 - Alyn Spector, Cascade Natural Gas; would have concerns with a code similar to that in Washington; says that WA code ended up being a de facto ban on gas in new constructions and CNGC has concerns about alignment of such as structure with EPCA. Is concerned about implementing codes on a statewide basis generally.
 - David; does not think WA has a de facto ban on gas; in their experience, about 10 percent of WA houses still use gas. This would reflect a shortfall as compared with modeling calling for all 2035 new constructions to be 100 percent electric. Additionally, realizes that these policies may continue to evolve towards 2035 and so thinks this is a minor point and the overall thrust of the policy action here is sufficient. Adds that a state directive that all agencies account for carbon emission reduction can also support progress in the building code area and DCBS' work.
 - from Joy Aldrich OHCS, Energy Svcs to everyone: Draft action 1.2 recognizes the need to retain non-promoted systems while still trying to decrease carbon. 1.3 could cause barriers if electric-only is too expensive or unobtainable.
- From Charity Fain: For this broader category, I don't understand why the comments all talk about incentives do not allow for fuel switching. But these recommendations do not directly address it. Eliminating incentives for natural gas does not mean allowing incentives to go from gas to electric.
 - Stephanie; agrees the policies under recommendation 1 don't address fuel switching; other policy actions being considered might allocate public purpose charge dollars towards BE and EE measures like fuel switching.
 - from Joy Aldrich OHCS, Energy Svcs to everyone: Those PPC dollars allow for our Low-Income Weatherization program to fuel switch here at OHCS.

o Policy Action 1.3.

- Alyn; this could reduce efficiency overall. Cascade has a pilot in Bend for dualfuel systems, putting electric heat pumps in natural gas homes. Thinks cases where gas supports resource adequacy is worth considering. Blanket elimination may be too blunt a policy.
 - Pat DeLaquil, DecisionWare, MCAT; important distinction here is incentivizing expansion of extant natural gas system versus using system as it exists. Hybrid systems can help amortize transition costs. Notes

- there are limitations in duct sizing and other issues that can create difficulties for people switching directly from a gas furnace to heat pump systems.
- from David Heslam to everyone: Regarding Pat's comment about how
 existing ductwork may make it difficult for a heat pump to work
 effectively, that will be true at all levels of operation. Fixing the worst
 ductwork issues should be part of any and all ducted heat pump
 installations, even hybrid installs.
- Rob; a cross-cutting policy recommendation under consideration is coplanning for gas- and electrical-utility planning. Thinks these are important interrelated concepts especially regarding gas' role in alleviating peak demand during Winter.
- from jake wise, PGE to everyone: re: 1.1/1.3 With respect paid to the perspectives shared, if such a policy were to focus on electric resistance heat then the savings will likely offset a no-interest loan payment. Providing home comfort without rate impact.
 - Stephanie agrees.
- Policy Action 1.4
 - from Paul Hawkins, he/him to everyone: RE: 1.4, I don't recall if this group talked about state preemption on local building code standards. Advancing code locally could further the energy strategy if stakeholders can't align on statewide policy
 - Rob; 1.4 is complementary to 1.3; if incentives are removed, need to
 ensure cheapest or lowest grade equipment is not installed. Rob reflects
 that these recommendations may still need work to address these
 concerns.
 - Claire Prihoda, Climate Solutions; clarifying the tie between 1.3 and 1.4 would be helpful; and tying incentives to 1.4 efficiency standards could clarify things. Adds that eliminating incentives for low-efficiency AC would also be valuable.
 - Rob; appreciates we're getting feedback towards a common-sense solution in fuel switching.
- Policy Recommendation 2: Improve the energy efficiency and resilience of existing residential buildings. Prioritize programs to serve Oregon's communities with the greatest needs.
 - Bob; unclear on need for having policy recommendations 1 and 2 distinguished?
 - Rob; first is more closely related to BE, whereas second is more related to EE; but agrees these could be grouped as a category around residential and small commercial buildings
 - Stephanie; agrees. BE only works with EE and BE is necessary for meeting climate goals; so these are interrelated
 - Policy Action Review
 - Stephanie reviewed draft policy actions under recommendation 2.

- 2.2: Establish a grant program with flexible funding for statewide efficiency, weatherization and related deferred maintenance measures. Eligible entities should include CAP agencies and other community partners that provide energy-related services. Consider increased revenues from public purpose charge as a potential source of funding in IOU service territories. Allow direct contribution to community organizations from funding partners such as data centers.
 - Claire Prihoda: This sounds like programs getting off the ground now, like Healthy Homes; is this intended to expand on those or creating a new program or funding for extant programs?
 - Stephanie; a bit of both. Policy action here should maybe underline and bold deferred maintenance measures and role of durable funding for these elements.
 - from Charity Fain to everyone: As an org doing this work, love the deferred maintenance support.

Discussion

- Joy; regarding Policy Actions 2.1 and 2.2; would 2.1 be more like making incentives available to CAP agencies, or would this be a dual-facing/public facing program? Says households often don't have reserve income to bridge gap. Wonders how this program would be implemented.
 - Stephanie; an example would be shifting ODOE's heat pump program to
 focus on providing low-income support to align with other agencies'
 low-income programs, rather than providing more open-ended
 supports. Would also be a direction to promote low-income programs
 across the state and for utilities; however, Stephanie recognizes that,
 especially in the utility space, there's need to balance low-income
 targeted programs with generally-available EE incentives
 - David Heslam: appreciates Stephanie's point, encourages that it be broadened to cover incremental cost of installations that perform in highly efficient ways. So, a lower-performing piece of equipment can provide better service depending how equipment will be installed. Need to incentivize result of higher system performance; encourages reworking recommendation to this end rather than focusing just on equipment efficiency.
- from Claire Prihoda to everyone: Just noting here, that the connection between 2.1 and 1.1. Maybe an argument for combining the broader policy groups? In restricting grant/direct incentives of heat pumps and other solutions to LMI homes (which seems like good policy to me) it makes it all the more important to have corresponding affordable financing options for other households.
- from jake wise, PGE to everyone: There is a trade-off that exists in funding increased or no-cost incentives and deferred maintenance. What we've observed is that we are able to reach a small number of the larger population in need. What are ideas for scaling solutions to increase participation?
 - Claire: To scalability question; says there have been suggestions in California about scaling weatherization projects through utilities or

- larger scale programing that can leverage economies of scale and have greater grid-impacts. Happy to follow up in writing.
- Rob; it's important to recognize funding constraints, so goal is to start to get funds flowing but recognize it is a huge need.
- from Charity Fain to everyone: Yes, we braid funds on most jobs and having more money for deferred maintenance is a major need.
- Stephanie: we heard from EJ and Equity group about importance to sliding scale funding providing a better approach; there is value in considering a more segmented approach to unlock a broader range of participation.
- Sam Henstell, OHA; this sounds amazing and corresponds with their grant programs. Thinking about coordinating between departments can help ensure we're not competing for funds and make sure funds go where they're needed.
 - Stephanie; appreciates the response and would add, in parentheses, this policy action might look like an expansion of the Healthy Homes program as one possible approach.
 - Ruchi; naming policy homes of grant programs that could be expanded, or other details would be valuable in written comments
- Stephanie asks; where are there gaps in these recommendations, other things to consider?
 - David: in near term, embodied carbon in building space is valuable to consider.
 There's ongoing work on this topic with DEQ and other agencies; within 2035 timeframe, that's something we should consider sooner rather than later.
 - Ryan Brown, NEEA; there's a lot of focus on heat pumps. Wonders about refrigerant recapture and disposal is addressed or more activity to manage that would be important. Some research suggests those are often fugitive emissions, which could unwind gains from heat pumps.
 - Stephanie; so, requirements to use lower GHG-potential refrigerants and how to retire/dispose of other refrigerants?
 - Ryan; generally. This is an important concern to address.
 - Stephanie; agrees this is an important area, especially for example, for fluorescent lighting disposal.
 - Rob; this may be a good cross-cutting recommendation, related to EV battery and solar end-of-life decommissioning; a broader concept around disposal, recycling, retirement could be valuable.

Policy Recommendation 3

- Policy Action Review
- Stephanie reviewed draft policy actions.
- <u>Discussion</u>
- o from Alyn Spector to everyone: I think if gas utilities pay in via PPC there should be pathways in support of evolving our businesses. The focus should be on low or no carbon fuels, rather than strictly electrification. As you said, there's no one size fits all. Let's look at hydrogen. Let's look at thermal energy networks. And I bet there's other technologies too. But I do like the idea of the gas utility being at the table, especially if we're investing

- ratepayer dollars. Recovery is good. Grants would be helpful. And most importantly, approaching load distribution companies as a partner, rather than an and adversarial capacity.
- Claire Prihoda; something missing from current drafting is that, where there are solutions available now to reduce emissions and increase efficiency in industrial and large commercial applications, we should have more robust incentives. Additionally, there are many industrial processes that could be electrified today with proper incentives
 - Stephanie; there was no specific incentive policy action for large loads because large energy consumers can work directly with utilities. ODOE did consider an option that didn't float to the top of providing supportive loan financing or longer terms to mitigate cost of financing low- or no-carbon solutions for businesses and could raise this again.
 - from Laney Ralph she/her to everyone: There is also state wide Building
 Performance Standards already rolling out which will drive near term efficiency
 - Rob; this also ties into Low-Carbon Fuels PWG, which focused more on promoting fuel development in Oregon and an end-use purchaser for these fuels could be a policy solution. Rob may bring insights from this PWG to coordinate on Low-Carbon Fuels policy actions.
 - Claire Prihoda: Where a heat pump is a viable option now, does the existing custom utility incentive program work for gas customers to switch?
 - Stephanie: thinks Bonneville has an option to compare code baseline for an electric technology, but they can do a custom incentive, but the incentive ends up being typically much lower for heat pump adoption; it is a wonky pathway, so wouldn't say there is currently an incentive program. So, there's an open question; should there be an incentive on the table for electrification in this space?
 - Claire; would say yes, in some capacity. CPP and BPS already provide policy and some incentives towards businesses and industrial sector, but more help could help businesses transition. Wouldn't necessarily prioritize this above other areas, but still valuable.
- o from jake wise, PGE: Is C&I defined in this context?
 - Stephanie; small commercial uses same equipment as residential buildings; so, it was a binary split on that basis. It's a broad category, here.
 - from Ryan Tran to everyone: quick clarification: this includes small commercial?
 - Stephanie: differentiation is based more on the design of heat pump systems and the end uses they are intended for; so, size of building and type of load are what's most significant.
- from Alyn Spector to everyone: Whatever is developed, it should be in partnership with both the gas and electric utilities to ensure resource adequacy is considered. Combo planning
- Policy Recommendation 4
 - o Policy Action Review

- Stephanie reviewed draft policy actions.
 - 4.1: Direct ODOE, ODOT and Energy Trust of Oregon to catalogue DR ready devices installed through existing incentive programs. Allow additional incentives to be paid for DR ready devices. Develop / adopt equipment standards requiring DR readiness for heat pumps, EV chargers and other consumer energy related devices
 - Adam Shick; what is meant by catalogue here?
 - Rob; first part means it'd be something like ODOE's EV dashboard.
 There would be address-level information, but how information is
 shared would need to be worked out to provided the appropriate level
 of detail; maybe something like DR capacity per utility could provide
 better system-level data.
 - from jake wise, PGE to everyone: With respect, Energy Trust is funded to procure cost-effective energy efficiency and renewables, can you expand on why these entities would catalog DR-ready instead of, or w/o collaboration with, the utilities that fund these programs?
 - Ruchi; wonders if the solution is to add other entities to the those listed in the policy action.
 - Rob; thinks this comment is on point, and the value will be realized based on sharing information with utilities. This action would be targeted more at COUs than anything.
 - 4.3: Consider changes to Oregon net metering laws to promote adoption of small-scale rooftop solar (up to 200kWdc) and battery storage to support energy resilience in rural communities
 - Claire: reads this as a suggestion of no net-metering unless there's battery storage, or that these are additional options?
 - Rob; this recognizes additional value of batteries; not suggesting that batteries are necessary for net-metering
- o <u>Discussion</u>
- Policy Action 4.1; no votes indicating interest to discuss
- o Policy Actions 4.2
- o from David Heslam to everyone: Rob, can you explain what is meant by the opt-out TOU tariffs?
- o from Ryan Tran to everyone: was it meant to be "out-in" TOU?
 - Rob: my understanding is Oregon already has opt-in TOU, and the proposal is that TOU be made the default rate design.
- Ryan Tran; expresses appreciation, says he has some hesitation because, the way rate-making works; what a time-of-use customer sees on their bill would be dependent on on-peak and off-peak pricing, and TOU generally benefits customers able to take advantage of the design, who are often more well-off customers who can afford DERs. IOUs by default don't have TOUs; that seems more equitable at the moment. May submit more thoughts in writing.

- Pat DeLaquil; there's an opportunity in DERs; current utilization rate of current network is about 40 percent. Smart appliances and smart meters could realize dramatic efficiencies. Says DER pilots are essential and will help show this opportunity.
- o from Claire Prihoda to everyone: A potential alternative to a general opt-out, is automatic enrollment of customers who do have Solar + Storage, EV charging or other flexible loads? These customers have the highest grid benefit and highest personal benefit from TOU. it may be that most of those customers are already on TOU though? so maybe not as much of a change from current practice?
- from Ryan Tran to everyone: the monetary incentive for those customers is probably there. the only barrier would be awareness that the TOU tariff exists
- o Policy Action 4.3
 - Pat; this is a tough one to discuss, because specifics will depend on evaluation for solar and storage that captures their value and benefits to the grid at large.
 Devil will be in the details.

• Round-Robin

- Before initiating round-robin discussion, Rob highlighted that the pdf materials shared highlight cross-cutting issues that were not flagged for discussion today.
- Ruchi facilitated round robin, calling on PWG members for input; anything you heard today you want to comment more on, is there anything missing we need to include?
 - Maddy Salzman; appreciated listening in, but she is at a conference. Appreciates the thought ODOE has put into including everyone in this process.
 - Nick Cheke; says the PWG has covered reflections he's had but appreciates the process thus far.
 - Adam Shick, ETO; He sees general alignment with ETO's vision regarding rapid adoption and acquisition of the energy efficiency potential with the specific emphasis on serving low income customers and groups that have been lagging in adoption of energy efficiency measures. Thinks ETO is trying to figure out how to get efficiency out of extant heat pump installations; for equipment already installed, ensuring it can perform as well as it can, is something ETO is interested in. So, provision for heat pump equipment maintenance would be valuable. Also appreciates integrated planning between electric and gas systems.
 - Ryan Brown, NEEA; one reflection, on idea of combining first two recommendations; says the targeted universalism approach that targets highest need and makes incentives accessible is something to consider for framing both recommendations through that lens. Would underscore importance of leveraging what gas system can deliver in near- and medium-term. Finally, there were some comments about funding limitations and the need to prioritize programs; however, in early stages of Energy Strategy process, level of investment that would be needed was a true paradigm stretch; hopes recommendations don't preemptively put themselves in a box based on supposed political feasibility. Thinks the Energy Strategy has ambitious goals and recommendations should be fit and suited to that purpose.

- Alyn Spector; appreciates inclusion and recognizes the amount of work provided from all participants. Appreciates everyone's participation. From natural gas utility perspective, they're at a crossroads; it's helpful to hear perspectives here, and there will be push and pull. Thinks joint electric-gas planning for resource adequacy and pragmatism to support gas utility transitions into low-carbon fuels and invest in TENs; more pathways that are available in collaboration with other stakeholders makes it easier for utility to approach transition.
- Ryan Tran: appreciates the opportunity and PWG process; says that, as a CUB economist, energy affordability is top of mind for their work. Echoes Ryan's concern that affordability needs to be considered while being careful to integrate affordability into means to meaning Energy Strategy objectives. There's been talk about the public purpose charge; all customers pay into this. Customers have been concerned about their energy usage and other surcharges; so, urges caution regarding how funding is collected for these initiatives. Regarding PPCs and natural gas utility pilot projects; reminds him of a recent CUB win where a gas utility would cap a system where feasible to completely electrify those customers. Said they showed thousands of dollars, maybe more, in savings, with 60 year+ equipment lifespans. That project made a lot of sense.
- Paul Hawkins: supports Energy Strategy recommendations being bold and shaking up the status quo. Thinking on the complementary analysis; EV-ready construction is an important part of buildings discussion, as is V2G as a DER. That is an opportunity to address, especially in terms of up-front costs.
- from Alyn Spector to everyone: 4:01 PM
- Sharing this study in case folks haven't seen it.

 https://www.nwga.org/files/uqd/669a08 9b44a1e39d6d43ddaf98c6c4016a80

 e6.pdf
- Ruchi expressed appreciation for PWG members' involvement and highlighted upcoming plenary PWG meeting. Stephanie asked that members submit comments through the portal and Ruchi adjourned the meeting. Ruchi shared the following prompting questions for comments and adjourned the meeting.
 - What additional suggestions (if any) do you have on the policy actions discussed today?
 - What policy actions were NOT discussed today that should be surfaced in our list?
 - What benefits or risks exist for policy action (or inaction) on the following areas: cost, feasibility, energy burden, environment justice, land use and natural resources, resilience, community benefits, economic effects, and employment? If any, what additional suggestions to those action or additional policy actions would you suggest to mitigate risks or leverage benefits?
 - Do you have any supplemental information (reports, analysis, testimonials, etc.) related to these policy actions that you could share?

Virtual Meeting Chat

Hugh Arceneaux, ODOE	All	Public comment portal:
	Participants	https://odoe.powerappsportals.us/en-US/energy-
		strategy/
Josh Price, ODOE	All	joshua.price@energy.oregon.go
	Participants	
Josh Price, ODOE	All	joshua.price@energy.oregon.gov
	Participants	
Ruchi Sadhir she/her - OR	All	Please share the following with the group, in the chat:
Dept of Energy	Participants	Name Affiliation Share something you're looking forward
		to this summer
Charity Fain	All	Charity Fain, CEP, Taking my daughter to her ballet
	Participants	summer intensive at the Cranko School in NYC in July
Paul Hawkins, he/him	All	Paul Hawkins, he/him, City of Portland, looking forward
	Participants	to a summer trip to Italy.
Alyn Spector	All	Alyn, Cascade. Looking forward to visiting friends in
	Participants	Michigan.
Sam Henstell she/her	All	Sam Henstell, Oregon Health Authority, looking forward
	Participants	to a friend's wedding in Oakland this summer
Joy Aldrich OHCS, Energy	All	Joy Aldrich, OHCS Energy Services Business Analyst; I'm
Svcs	Participants	looking forward to fresh watermelon and nectarines
Adam Shick- Energy Trust	All	Adam Shick- Energy Trust of Oregon. Looking forward to
	Participants	sitting around a campfire
Ryan Brown - NEEA	All	Ryan Brown, NEEA, finally installing a backyard art studio
he/him	Participants	we've been talking about since we moved in 5 years ago
Billy Curtiss	All	Billy Curtiss, EWEB, sunshine!
	Participants	
Anne Gire	All	Anne Gire, Oregon Building Codes Division, spending time
	Participants	in the forests and by cool rivers
Mary Rudolph-Knobbe	All	Mary Rudolph-Knobbe, Environmental policy analyst at
	Participants	NW Natural, celebrating my 1 year wedding anniversary
		on the Oregon Coast!
Claire Prihoda	All	Claire (she/her), Climate Solutions, Paddleboarding and
	Participants	late sunsets!
Ruchi Sadhir she/her - OR	All	Ruchi Sadhir (she/her), Oregon Dept of Energy, a road
Dept of Energy	Participants	trip to CA for a cousin's big wedding and time on the
		beach with our kids.
Jonathan Belais NEEA	All	Jonathan Belais, NEEA. Really looking forward to some
	Participants	backpacking trips.
Bob Kaplan	All	Bob Kaplan, Ashland City Councilor. Looking forward to
	Participants	outdoor theater at the Oregon Shakespeare Festival
		opening at the end of the month!
Chris Golightly, she/her,	All	Christine Golightly, Columbia River Inter-Tribal Fish
CDITEC	Participants	Commission, camping!
CRITFC	· ·	
David Heslam	All Participants	David Heslam (he/him) Earth Advantage, hikes in the emountains

Laney Ralph she/her	All	Laney Ralph, NW Natural (covering for Mary Moerlins),
	Participants	looking forward to camping!
Ruchi Sadhir she/her - OR	All	Feel free to ask clarifying questions here!
Dept of Energy	Participants	
Alyn Spector	All	How do I access Menti? Is there a code?
	Participants	
Nick Cheke - CEP	All	I also missed the codes. Could someone please provide it
	Participants	
Josh Price, ODOE	All Panelists	https://www.menti.com/aljygghr367z
Josh Price, ODOE	All Panelists	www.menti.com 8312 5899
Nick Cheke - CEP	All	Thank you, Josh.
	Participants	, ,
Alyn Spector	All	It won't let me access it.
, .	Participants	
Josh Price, ODOE	All Panelists	I also sent an email at the start of the meeting with the
,		QR code and links
Claire Prihoda	All	FYI the poll is working for me already on my phone, but I
	Participants	am getting the same "closed" message in my browser
Bob Kaplan	All	To illustrate my point, a \$15,000 loan with a 5% interest
	Participants	rate paid over 10 years means a monthly payment of
		\$159, which is much more affordable than a 0% interest
		5-year loan with a \$250 monthly payment
Charity Fain	All	I just have the same question twice
	Participants	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Charity Fain	All	i tried to answer adn it said you already replied
	Participants	, , , , , , , , , , , , , , , , , , , ,
Charity Fain	All	okay
•	Participants	,
Charity Fain	All	yes
,	Participants	, and the second
Bob Kaplan	All	Why should we exclude low income households?
•	Participants	, ,
David Heslam	All	The Massachusetts MassSaves program offers zero
	Participants	percent interest rate loans for equipment purchases. The
		state offers the interest buy-down and a loan loss revere
		for participating lenders, which are primarily credit
		unions. That program works
Bob Kaplan	All	Appropriate financing is important to bridge the gap
•	Participants	between the cost and the incentive
David Heslam	All	MassSaves loans are zero interest.
	Participants	
Bob Kaplan	All	David, what's the term of MassSaves loans?
•	Participants	·
David Heslam	All	7 years
-	Participants	,
David Heslam	All	https://www.myheatloan.com/landingpage
	Participants	

Paul Hawkins, he/him	All	An overall comment, I do think "multifamily" should be
	Participants	explicitly named in policy language as an important and challenging piece of the puzzle, as drafted it's overlooked
Charity Fain	All	Low income households should never be asked to take
	Participants	out loans.
Charity Fain	All Participants	For this broader catagory, I dont understand why the comments all talk about incentives do not allow for fuel switching. But these recommendations do not directly address it. Eliminating incentives for natural gas does not mean allowing incentives to go from gas to electric.
Joy Aldrich OHCS, Energy Svcs	All Participants	Draft action 1.2 recognizes the need to retain non-promoted systems while still trying to decrease carbon. 1.3 could cause barriers if electric-only is too expensive or unobtainable.
jake wise, PGE	All Participants	re: 1.1/1.3 With respect paid to the perspectives shared, if such a policy were to focus on electric resistance heat then the savings will likely offset a no-interest loan payment. Providing home comfort without rate impact.
Joy Aldrich OHCS, Energy	All	Those PPC dollars allow for our Low-Income
Svcs	Participants	Weatherization program to fuel switch here at OHCS.
Joy Aldrich OHCS, Energy Svcs	All Participants	Our Energy Conservation Helping Oregonians (ECHO) Program, for PGE and PPL customers, supports this. https://www.oregon.gov/ohcs/energy- weatherization/Pages/weatherization-services.aspx
Paul Hawkins, he/him	All Participants	RE: 1.4, I don't recall if this group talked about state preemption on local building code standards. Advancing code locally could further the energy strategy if stakeholders can't align on statewide policy
Bob Kaplan	All Participants	Good point, Paul!
David Heslam	All Participants	Regarding Pat's commentabout how existing ductwork may make it difficult for a heat pump to work effectively, that will be true at all levels of operation. Fixing the worst ductwork issues should be part of any and all ducted heat pump installations, even hybrid installs.
Alyn Spector	All Participants	Could there be an exception for gas backup paired with electric HP? It would be nice to encouraging pairing the best systems together for a hybrid approach where appropriate.
Laney Ralph she/her	All Participants	1.3 - Would eliminate ability to pursue new gas heat pump technology which would have a large benefit of reducing gas load and not exacerbating electric grid
Ryan Brown - NEEA he/him	All Participants	+1 to Alyn's comment. Feel 1.3 needs to be more specific about what "new" means and whether this can be extended to allow/support/encourage incetives that were previously going to gas now funding combined system efficiency opportunities like the HP + gas backup

Jonathan Belais NEEA	All	Is there a level of efficiency that would override the 1.3
Solidinal Boldis IVEEN	Participants	intent? For example, if natural gas heat pumps were to come to market, would the efficiency jump be worth
		incentivizing for those consumers that still chose to use natural gas?
Mary Rudolph-Knobbe	All	1.3 needs to consider the resiliency that natural gas
	Participants	brings to households. During cold snaps, electricity is
		typically affected due to downed powerlines. Removing
		incentives would take away from energy system resilience during peak times.
Charity Fain	All	I wouldn't agree there is agreement on that. We at this
Charley Fairi	Participants	point do not agree with that. Dont assume me not
	i ai di di parito	commenting now means agreement
Pat DeLaquil	All	Gas heat pumps alone cannot get us to zero emission
	Participants	from our buildings.
Pat DeLaquil	All	They're not worth incentivizing
	Participants	
Charity Fain	All	Agree with Pat
	Participants	
Bob Kaplan	All	Regarding Pay-As-You-Save approaches:
Al . C	Participants	https://eeivt.com/wordpress/
Alyn Spector	All Participants	I would agree there's no one solution, but a lot of pieces that can come together effectively. Hybrid systems, gas
	Participants	HP, RNG, pursuit of thermal energy networks, etc.
jake wise, PGE	All	here
jake Wise, i de	Participants	THE CONTRACT OF THE CONTRACT O
Sam Henstell she/her	All	Back!
•	Participants	
Alyn Spector	All	Back
	Participants	
Ken Morgan	All	Back
	Participants	
Pat DeLaquil	All	I'm back
Day dal Hardana	Participants	the beat
David Heslam	All	I'm back
Bob Kaplan	Participants All	im back
bob Kapian	Participants	IIII Dack
Mary Rudolph-Knobbe	All	here!
	Participants	
Claire Prihoda	All	back
	Participants	
Adam Shick- Energy Trust	All	Back
	Participants	
Charity Fain	All	back
	Participants	

Joy Aldrich OHCS, Energy	All	Here
Svcs	Participants	
Ryan Tran	All	back
	Participants	
Jonathan Belais NEEA	All	Here
	Participants	
Paul Hawkins, he/him	All	back
	Participants	
Ruchi Sadhir she/her - OR	All	Feel free to add clarifying questions here as Steph talks
Dept of Energy	Participants	through these.
Charity Fain	All	As an org doing this work, love the deferred maintenance
	Participants	support.
Josh Price, ODOE	All Panelists	www.menti.com 8312 5899
Bob Kaplan	All	Gotta run. See you in two weeks. Thanks!
	Participants	
Claire Prihoda	All	Just noting here, that the connection between 2.1 and
	Participants	1.1. Maybe an argument for combining the broader
		policy groups? In restricting grant/direct incentives of
		heat pumps and other solutions to LMI homes (which
		seems like good policy to me) it makes it all the more
		important to have corresponding affordable financing
		options for other households.
jake wise, PGE	All	There is a trade-off that exists in funding increased or no-
	Participants	cost incentives and deferred maintenance. What we've
		observed is that we are able to reach a small number of
		the larger population in need. What are ideas for scaling
		solutions to increase participation?
Charity Fain	All	Yes, we braid funds on most jobs and having more money
	Participants	for deferred maintenance is a major need.
Sam Henstell she/her	All Panelists	Thank you!
Alyn Spector	All	I think if gas utilities pay in via PPC there should be
	Participants	pathways in support of evolving our businessess. The
		focus should be on low or no carbon fuels, rather than
		strictly electrification. As you said, there's no one size fits
		all. Let's look at hydrogen. Let's look at thermal energy
		networks. And I bet there's other technologies too. But I
		do like the idea of the gas utility being at the table,
		especially if we're investing ratepayer dollars. Recovery is
		good. Grants would be helpful. And most importantely,
		approaching LDCs as a partner, rather than an and
		adversarial capacity.
Laney Ralph she/her	All	There is also state wide Building Performance Standards
	Participants	already rolling out which will drive near term efficiency
Claire Prihoda	All	Where a heat pump is a viable option now, does the
	Participants	existing custom utility incentive program work for gas
		customers to switch?

jake wise, PGE	All	Is C&I defined in this context?
	Participants	
jake wise, PGE	All	e.g., size, industry, etc.
	Participants	
Ryan Tran	All	quick clarification: this includes small commercial?
	Participants	
Ryan Tran	All	thanks
	Participants	
Alyn Spector	All	Whatever is developed, it should be in partnership with
	Participants	both the gas and electric utilities to ensure resource
		adqueacy is considered.
Alyn Spector	All	Combo planning. :)
	Participants	
Ruchi Sadhir she/her - OR	All	EV Dashboard - https://www.oregon.gov/energy/Data-
Dept of Energy	Participants	and-Reports/Pages/Oregon-Electric-Vehicle-
		Dashboard.aspx
jake wise, PGE	All	With respect, Energy Trust is funded to procure cost-
	Participants	effective energy efficiency and renewables, can you
		expand on why these entities would catalog DR-ready
		instead of, or w/o collaboartion with, the utilities that
		fund these programs?
Claire Prihoda	All	that's helpful, thanks for clarifying
	Participants	
Claire Prihoda	All	It seemed perfectly possible that I zoned out and missed
	Participants	it! so wanted to be sure
Ryan Tran	All	was it meant to be "out-in" TOU?
	Participants	
Ryan Tran	All	opt-in
	Participants	
David Heslam	All	Rob, can you explain what is meant by the opt-out TOU
	Participants	tariffs?
Claire Prihoda	All	A potential alternative to a general opt-out, is automatic
	Participants	enrollment of customers who do have Solar + Storage, EV
		charging or other felxible loads? These customers have
		the highest grid benefit and highest personal benefit
		from TOU. it may be that most of those customers are
		already on TOU though? so maybe not as much of a
		change from current practice?
Claire Prihoda	All	(sorry that was a late thought on the last one! didn't
	Participants	mean to delay us moving on!)
Ryan Tran	All	the monetary incentive for those customers is probably
	Participants	there. the only barrier would be awareness that the TOU
		tariff exists
Charity Fain	All	Its 4pm, and I have to go. Thanks.
	Participants	

Alyn Spector	All	Sharing this study in case folks haven't seen it.
	Participants	https://www.nwga.org/_files/ugd/669a08_9b44a1e39d6
		d43ddaf98c6c4016a80e6.pdf
Ruchi Sadhir she/her - OR	All	Thanks Alyn! Recently talked to Crystal and Dan about it -
Dept of Energy	Participants	- really helpful read.
Ruchi Sadhir she/her - OR	All	Encourage others to take a look too.
Dept of Energy	Participants	
jake wise, PGE	All	Thank you for leading this conversation.
	Participants	
Ruchi Sadhir she/her - OR	All	THANK YOU!
Dept of Energy	Participants	
Hugh Arceneaux, ODOE	All	Comment portal link to be handy:
	Participants	https://odoe.powerappsportals.us/en-US/energy-
		strategy/
Josh Price, ODOE	All	https://odoe.powerappsportals.us/en-US/energy-
	Participants	strategy/
Claire Prihoda	All	Ruchi, can you send those questions for guiding
	Participants	comments to the group?
Ruchi Sadhir she/her - OR	All	Deadline for additional comments related to today's
Dept of Energy	Participants	meeting What additional suggestions (if any) do you have
		on the policy actions discussed today? What policy
		actions were NOT discussed today that should be
		surfaced in our list? What benefits or risks exist for policy
		action (or inaction) on the following areas: cost,
		feasibility, energy burden, environment justice, land use
		and natural resources, resilience, community benefits,
		economic effects, and employment? If any, what
		additional suggestions to those action or additional policy
		actions would you suggest to mitigate risks or leverage
		benefits? Do you have any supplemental information
		(reports, analysis, testimonials, etc.) related to these
		policy actions that you could share?