



# February 13, 2025 Climate, Resilience, and Land Use Committee Agenda

**The meeting will be VIRTUAL because City Offices are closed due to winter weather conditions.**

Councilors will attend remotely by video or teleconference. The City makes several avenues available for the public to listen to and watch the broadcast of this meeting, including the [City's YouTube Channel](#), the [Open Signal website](#), and Xfinity Channel 30 and 330.

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**Thursday, February 13, 2025 9:30 am**

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**Session Status:** Adjourned

**Committee in Attendance:**

Councilor Candace Avalos

Councilor Sameer Kanal

Councilor Dan Ryan

Councilor Angelita Morillo, Co-Chair

Councilor Steve Novick, Co-Chair

Councilor Novick presided

Officers in attendance: Rebecca Dobert, Acting Council Clerk

Committee adjourned at 11:28 a.m.

1

[Committee member priorities \(Presentation\)](#)

**Document number:** 2025-018

**Introduced by:** Councilor Angelita Morillo; Councilor Steve Novick

**Time requested:** 30 minutes

**Council action:** Placed on File

2

[Portland carbon emissions briefing \(Presentation\)](#)

**Document number:** 2025-019

**Introduced by:** Councilor Angelita Morillo; Councilor Steve Novick

**Time requested:** 90 minutes

**Council action:** Placed on File

Portland City Council, Climate, Resilience, and Land Use Committee  
February 13, 2025 - 9:30 a.m.  
Speaker List

Name	Title	Document Number
Steve Novick	Committee Chair, Councilor	
Rebecca Dobert	Acting Council Clerk	
Candace Avalos	Councilor	
Sameer Kanal	Councilor	
Dan Ryan	Councilor	
Angelita Morillo	Committee Chair, Councilor	
Vivian Satterfield	Chief Sustainability Officer	2025-019
Andria Jacob	Climate Policy Manager, Bureau of Planning and Sustainability	2025-019
Kyle Diesner	Climate Policy Analyst	2025-019
Kristin Hull	Planning and Project Delivery Group Manager, Portland Bureau of Transportation	2025-019

## **Portland City Council Committee Meeting Closed Caption File**

**February 13, 2025 – 9:30 a.m.**

This file was produced through the closed captioning process for the televised city Council broadcast and should not be considered a verbatim transcript. The official vote counts, motions, and names of speakers are included in the official minutes.

**Speaker:** Good morning. I called the meeting of the climate resilience and land use committee to order. It is Thursday, February 13th at 9:30 a.m. A website. And I forgot that by making it sound, it sounds like a door being knocked on. My dog goes nuts. Barley come down. Barley. It's okay. I'm sorry. That was me. Rebecca, could you please call the roll?

**Speaker:** Of course. Good morning. Avalos.

**Speaker:** Present.

**Speaker:** Canal.

**Speaker:** Present.

**Speaker:** Ryan.

**Speaker:** Here.

**Speaker:** Morillo here.

**Speaker:** Novick here. Claire, could you please read the statement of conduct?

**Speaker:** Good morning. Co-chairs and committee members, welcome to the meeting of the climate resilience and land use committee. I'm reading this statement also. Even though we're virtual and we don't have public testimony today, but reading for good measure to testify before this committee in person or virtually, you must sign up in advance on the committee agenda at w-w-w. Gov council agenda, climate resilience and land use committee, or by calling 311.

Registration for virtual testimony closes one hour prior to the meeting. In-person testifiers must sign up before the agenda item is heard. If public testimony will be taken on an item, individuals may testify for three minutes unless the chair states otherwise, your microphone will be muted when your time is over. The chair preserves order. Disruptive conduct such as shouting, refusing to conclude your testimony when your time is up or interrupting others testimony or committee deliberations will not be allowed. If you cause a disruption, a warning will be given. Further disruption will result in ejection from the meeting. Anyone who fails to leave once ejected is subject to arrest for trespass. Additionally, the committee may take a short recess and reconvene virtually. Your testimony should address the matter being considered. When testifying. State your name for the record. If you are a lobbyist, identify the organization you represent and virtual testifiers should please unmute themselves when the clerk calls your name. Thank you.

**Speaker:** Thank you. Claire. Committee procedures are expected to be discussed at the governance committee and adopted by council. Until that time, the committee is operating under current council rules. Today and our first meeting together, we'll talk about our interests and the work that we are planning to and hoping to take on in the committee. And then we will hear from city climate and sustainability staff on Portland's greenhouse gas emissions and ongoing climate action efforts. With ample time for committee questions and discussions. After the presentation. Rebecca, could you please read the next item, which I think is rather short?

**Speaker:** Yes. Agenda item one. Committee member. Priorities.

**Speaker:** Welcome to the first meeting of the climate resilience and land use committee. The committee will meet every other Tuesday Thursday from 930 to 11:30 a.m. And the weeks the council does not meet. Typically, this will be the

second and third and fourth Thursday of each month. Councilor marina and I have discussed some initial areas of focus for this committee, and at this point, I think each of us will hold forth on those for a couple of minutes and then invite the rest of you to jump in. One is to advance climate action and emissions reduction. The climate crisis is the greatest crisis that humanity has ever faced. Human beings have survived plagues, wars, dictatorships, but have never lived in the kind of climate that we are creating. So although what we do in Portland is only a small piece of what the world needs to do if we do not do our part in trying to reduce our greenhouse gas emissions, then in my view, we will be complicit in the misery, destruction and death of millions upon millions, upon millions of our fellow human beings for hundreds of years to come. We need to do our part. We need to ensure climate and environmental justice. We need to do our part to ensure that our the most vulnerable Portlanders, are shielded from the ravages of climate change and are integrated into what we hope will be a newer, greener economy. We need to adopt land use policies that help us address both our housing crisis and the climate crisis. Because land use policies significantly influence our greenhouse gas emissions. Fortunately, the kind of policies that address greenhouse gas emissions also help address the housing crisis, and land use policies also address environmental justice. We can make sure that polluting facilities are not concentrated in areas that are already overburdened with pollution. We need to include, as a city, our climate resilience and our general disaster preparedness. We will be talking about the earthquake. We'll be talking about the critical energy infrastructure hub, and we want to strengthen coordination and collaboration with partners such as the state and pge and pacificorp, which we should partner with in reducing carbon emissions, and with trimet, which we can partner with on land use and transportation and therefore climate decisions. So we also and I will take up

the question of the future of our parks. As you know, they we've divided responsibility for parks between recreation, which is in the arts and economy committee, and parks, which is in our committee. The parks, as we all know, face very serious financial issues. And the parks are also a major general fund bureau. And therefore, we will need to talk about the parks in terms of our general fund deficit. So we will be spending some time hearing from parks and talking about what the best way forward is in terms of the future of the parks and their financial challenges. And you'll note that we have passed out sort of an initial work plan, ideas. We need to flesh out what our work plan needs to be. As far as parks are concerned. Councilor morillo.

**Speaker:** Thank you so much, councilor novick. I'm really excited that we're here today. I think everything that councilor novick said is correct. We are. This committee is going to be handling one of the toughest challenges that the entire world is going to face over the next few years, and I feel very prepared to do that with all of you here as much as we can to stave it off locally. I also want to add that we have we have the answers from a lot of people that we haven't listening, we haven't listened to before. There are local tribes. There are people who have stewarded the land for a long time who can show us the way. A lot of community members, a lot of researchers, a lot of the folks at the city who we have the privilege of hearing from today have researched things and put together policies and ideas and community things that we can do together that are going to actually lead us in the right direction. And I was really struck by, frankly, our equity training yesterday where we talked about how in the urgency and pace of city government, it's really easy to continuously look inward and only continue to talk to each other. But we have expertise within the community that we can consult, and I'm really looking forward to our next climate committee meeting, where we can have more

testimony and more input from the community to hear about what it is that they're looking for from us as well. I think that there is while this is a big challenge, there's also a lot of hope, and I think that we have our role to play in it, no matter how small or large it is. So I look forward to getting into that. And the only thing I would add is that I think we really have a duty with all of the items that we listed here, to make sure that we're looking at them through an anti-racist lens, that we're always making sure that we're checking in with communities that are historically excluded. We know that folks in east Portland, particularly in district one, are going to be the ones first facing climate impacts. We know that it's ten degrees hotter over there when we have emergencies and that we need to make sure that we are looking at all of these items through that lens and everything that we do. And I look forward to doing that with everyone here. Thank you.

**Speaker:** Councilors Ryan Avalos and Canal which of you would like to jump in first to discuss your priorities for the committee?

**Speaker:** I can go first. Thanks for everyone for bearing with us as we do this on on zoom. After getting into the habit and in person. First, thank you to the co-chairs for the work plan. I really valued this and enjoyed getting a chance to read it and see how it aligned with a lot of my values as well. I support the five areas of focus here. Speaking. You know, from the perspective of within the document, I think the climate resilience and disaster preparedness component of it really spoke to me. I also intend to be a strong partner as co-chair of the community and public safety committee, which councilor Novick co-chairs with me, in which councilor Morillo is also a member of yesterday. Sorry day before yesterday that met for the first time and the CEI hub, for example, came up several times in that first meeting. So I imagine this is a place for partnership. I'll also mention the net program as another area of collaboration on that side. Whenever we have disasters or extreme weather

events, including situations like today, net volunteers are often the first response when first responders can't get there. Yet we've seen examples of net volunteers standing by downed trees and power lines, for example, while just to keep other people away from them. While first responders are not yet there. And then I also want to reaffirm something that co-chair morillo just said about reading what's already, you know, been prepared for us and looking at what has already been done. I think you noted it as review previous climate assessments down in the later part of the document. And I think focusing on implementation of the conversations we've already had, the practice component of it, to use councilor Ryan's term will as opposed to new planning will, will do us better in the long run. I have some more thoughts, but I think i'll leave it there for now. Thank you.

**Speaker:** Thank you.

**Speaker:** I can jump in. Thank you so much. Co-chairs, novick and morillo for just setting the tone. You know, it's definitely really heavy. And it's important to note that yes, our jobs are really important because this is our new reality, right, as you all described. And but we have ways that we can prepare, be resilient as a city and make good policy decisions that can shift those tides. And we have to, you know, I know the whole issue of climate change is obviously global and feels very out of reach. So we cannot forget that our local impact makes a big difference on tackling that for our residents. But then just being part of the larger movement for environmental justice, as far as my priorities, I appreciate councilor morillo for highlighting the stark challenges that district one has as it relates to environmental injustice, and I think that there's going to be some cross-cutting, cross-cutting issues between this committee and the transportation and infrastructure committee and the housing and homelessness committee as it relates to infrastructure, as we're building housing and making land use decisions and trying



to create vibrant communities that won't displace people and are going to be climate resilient, I really believe that energy efficiency is the next frontier. On the fight against climate change, and we have some really amazing tools at our disposal, including the Portland clean energy fund, to be able to activate dollars, especially in communities that have long been neglected and are going to need the most support to protect themselves from the impacts of climate change. I overall am really excited to continue hearing from the Portland clean energy fund. I feel very passionately about their work and being sure that they feel they have the tools they need to be successful, and really protecting the goals of sf and making sure that we are delivering on getting those dollars into the hands of communities that most need it. So that's going to be high priority for me and going to be a very much a pcef watchdog to ensure that that's happening. Overall, I think the last thing i'll say is everything in city hall, everything that we're doing, all the committees require deep community engagement. But I think this one in particular is going to require some some more voices, in my opinion, because the impacts that people are feeling locally in their neighborhoods from climate change, we need to understand that from first person perspective. In my opinion, we can pontificate all we want about what the impacts are, but talking to community members and actually asking them what the direct impacts are will be able to make decisions on how to move quickly. That's the experience that I'm bringing from my work at verde. That's something that I think we do really well, is being able to translate community voices into a tangible policy agenda. So I'm hoping that that's the expertise I can bring to this space, and we'll be always pushing for us to engage community in meaningful ways so that they can communicate to us where we should put our priorities and our limited resources. So with that, i'll leave it there. Thank you so much.

**Speaker:** Thank you.

**Speaker:** Good morning, and thank you so much, co-chairs. It was very easy to listen to everything that you said and to say thank you for setting that tone. What can I say that would be additive or perhaps a different type of tone to consider? I'm not in disagreement with anything I heard. I do think this the critical energy hub conversation is too isolated is my been my experience, and I haven't had the bandwidth or the opportunity to be in a role that could do something about that. And I hope that by being on this committee, I just want to put voice to that, that I haven't seen the federal delegation, the state, the county and the city all in. I haven't experienced them all coming together to talk about this, and it's not going to happen without that. And we also have I'm trying to pretend the person in the white house doesn't exist to cope with life right now. But the fact is, we did pass an infrastructure bill and there is money in there, and I can't think of a better use for it than big projects like the ci hub to try to leverage those funds. So I hope that we have all the arrows get aligned eventually with what needs to be done there, but each entity doing it in isolation isn't going to get it done. So I wanted to just say that obvious statement. And that really is true with the electrical infrastructure. We want to move there, but we don't have the infrastructure. So how do we all come together to do that? The city can't do that alone, and i'll probably be a voice on this committee that will say that the community should also include industry, those that are utilities, those that are often the boogey people. For the activists who I respect, I'm pretty comfortable with having oppositions at tables I call healthy tension is truly that healthy. And you don't build capacity and you don't move forward without it. I'm really tired of lawsuits that just get us nowhere and keep us in the same bad er situation that we're in, so I will now and then ask if someone was included in the conversation, or hope that they are included, even if some don't appreciate what they have to say they are, they do exist and they provide a lot of

bandwidth and infrastructure and capacity. So who says they won't keep evolving their infrastructure to meet the demands of reality that is also market driven. So I think metrics is always something I'm going to ask for. I don't know what our what. I hope that at least in the committees that I have some leadership roles in, I want to make sure that we have, like the digestible community wide dashboard that we're tracking. And I think early on it would be good for us personally to come up with what those maybe ten digestible community dashboard metrics would be so we can, as a community, all track how we're doing. And it's always about the big picture goals that was mentioned by the co-chairs. And i'll just end with something locally sourced, as always, been my own little personal thing. I was born into a family with a my dad was a poor dirt farmer that that moved away from that, but he loved farming. So I've been a gardener my whole life, and I just love the engagement that I'm seeing that the that, the, that piece that is provided for more of that organic, literally word that's taking place, especially out in east Portland. I'm a big fan of that. And I also know it's really good for teaching and learning. So I like hands on learning. That occurs when elders are working with kids in the farms and in the dirt. Okay. Happy day. I'll go off now by. I haven't done one of these meetings in so long. I just it's like bad ptsd. This is my first two years and it was a nightmare. So I know today and this isn't going to be our new reality. Thanks.

**Speaker:** Yes, I hope it's not a new reality either, although it is perhaps fitting that the first meeting of the climate committee will be is forced to be virtual by extreme weather.

**Speaker:** I know, but come on, can I just say that I miss real snow days? Like I'm with somebody that's having a real snow day because they're an educator and here we are. But anyway, just had to vent that I needed to experience that joy of snow day, because here we are. But I get to hang out with all of you. I'll shut up.

**Speaker:** On the point about the ci hub, you're absolutely right, of course, that we need to partner with deq, which supposedly is drawing up regulations to force the ci hub facilities to take action to make their retrofit their tanks, etc. We need to talk to the county, which is talking about forcing them to the facilities to acquire risk bonds. So when we take up the ci hub, I hope that we'll have representatives from both those entities and maybe others there. We have vivian satterfield and her team.

**Speaker:** I think folks.

**Speaker:** Have a few questions maybe, or follow ups. I know I do.

**Speaker:** Okay.

**Speaker:** It's I see my hand raised and then I see councilor kanal hand raised. I just wanted to ask.

**Speaker:** I'm sorry. I'm not.

**Speaker:** Seeing everybody's hands at once. I'm sorry.

**Speaker:** Oh, no. It's okay. I think you have to change your view. It's all. Very confusing. I just had a follow up question for councilor Ryan, because you've talked about these community metrics that you've referenced in a few of the committee meetings that we're on together. And I was wondering if you could define what you mean by that and sort of what you're looking for, just because I think sometimes I hear stuff and I don't know what it actually means. And I think a second thing that I want to say is that, of course, we will have to have a variety of voices at the table to make sure that we're passing policy that is well rounded and legal and all of that. We are subject to legal requirements as councilors and the things that we pass and that when we center all voices equally, it's not really equal, depending on who historically has had access to the table, who's historically been the ones lobbying our offices versus who has been kept out of these spaces. And I just want us to

keep that in mind in everything that we do within this committee, because it is so critical. Thank you.

**Speaker:** Yeah. What I mean by thank you, first of all, co-chair morillo, i, I think for me, what that means is it's first of all or a collective process. So the how we'll do it in arts and economy is for us to come up with what those would be. We'll have some great dialog about it, hopefully some good tension on what those will be. And we will then figure out how to measure them. So it'll be a process. I think the room is smart. I don't think one individual is. So I think it's always about a collective effort. And I also want to say that usually they're the ones that you'd expect. Like, of course the whole big picture idea is cleaner air and all sorts of items that were presented by both of the co-chairs. So I think they're probably the, the probably there in what both of you said already, but it's usually the subindicators below them is where you can really get more concrete with action. And so it's like watching paint dry, like when we did, you know, graduation rates. Okay. Duh. Everyone wanted them to improve. But what were the subindicators below that? So it was like six credits. Your freshman year is like one of the best indicators that you might be on track to graduate. And then what gets someone to do that? Well, if they don't, if they have activities that are helpful between eighth and ninth grade studies indicate research indicated that they'll launch into the freshman year better. So I think what's most important is not to think just after we do that, that that's it. Because it, again, can be like watching paint dry with little influence. It's more like drilling down below that to figure out what the action could be. And so that's just because I'm a continuous improvement nerd and that's what I've learned moves, population results. It's kind of methodical. Not always. It's the meetings are really great, but they get very, very granular in terms of how you can actually measure the impact. But I've found that unless you measure something, unless you put it out

there, that that's what you're focused on and that it's difficult to keep communities focused on goals unless you stay like that there in front of them. And so that's that's why I'm a big fan of that. And I know that's something that I say a lot. So I apologize that you heard me say it before, but I appreciate you asking me to explain it better. And I hope I did a decent job. I'm really plugged up right now, so I'm I just want to say that if I go off camera to sneeze or something. The other part, I appreciate what you just said, and I understand that. And I just think we can't be afraid of, you know, democracy, having those tension moments that I want to try to help build as we're as we're doing this work. And I think this space has some opportunities for that in a healthy way. And so I just wanted to say that I look forward to listening and being a part of how we can keep the table together when we have inevitable conflicts about points of view. I think that those moments of conflict is often where the real work is going to be done, and we often ignore those, and we go into our, our, our echo chambers and then stay there and the other one stays there, and then nothing ever moves. So I'm just kind of a I'm a radical moderate, if you will. I like to just throw everything in there and then let things percolate. And, and so I'm less attached to the ideology as much as I am just trying to figure out methodically how we can keep moving things towards cleaner air and better climate justice for all.

**Speaker:** Councilor kanal.

**Speaker:** Yeah, I think I was I had a couple things that I left out earlier that I wanted to mention, but but first, just kind of on this topic that's that's being explored here, I generally support the idea that we're talking about nothing, nothing about us or whoever the us may be without us. And I also think that it's really valuable to have as many folks in the room as possible. There's also the fact that, you know, when you're accustomed to privilege, equality feels like oppression. And so recognizing

the historical impact of some groups and other groups is really important to and sort of laying, I think, creating an expectation that this is going to be a level playing field, which is not necessarily a status quo playing field. I'm being really philosophical here, but I guess what I'm trying to say is the principle that I've always kept in mind when having controversial conversations, sometimes controversial, about issues where there has been a legacy of historical harm is voices, not vetoes. Meaning we're going to have folks at the table, but they don't all necessarily have to agree, especially in the context of, you know, folks who have been or entities in this case, historically part of the problem. And so we'll get to that more in a more applicable practical sense, I think, as we go forward. But that was just kind of where I'm at on it. I wanted to mention just two quick things on things that I'd like to sort of explore. As we go further from the document. One is on the electrical vehicles, and I wanted to just note that, you know, we have there's another committee, transportation infrastructure, we'll be talking about this. And electric vehicles have trade offs that we need to look at, both in terms of sources for batteries and infrastructure for charging, as councilor Ryan mentioned, but also the impact on our roads. They are often heavier and are and don't necessarily pay in to the budgets that we use to repair our roads, you know, gas taxes in particular. So that that's just something to keep in mind. It's not a reason to be against it, but just I'm sure a lot of us have have explored that or thought about that already. But I felt it's important to daylight it and also to say that public transportation remains the best way to help people get around. Electrical. Electric vehicles are often a stopgap measure. And then with relation to. The other, there's a part about community engagement up top where there's some specific priorities, priority populations to talk to. And I just wanted to add youth to that. All the decisions that are ultimately made here are going to impact them for longer than than folks who are not youth.

And wherever you draw that line or those lines, I think that's true. And then in terms of things that that aren't necessarily in there, but maybe were implicit, I wanted to mention that addressing the impacts of not just fossil fuels, but but any fuel that can burn, explode, you know, as it relates to the cei hub and some of our recent conversations, liquid fuels in general have some health risks that are worth mentioning. I'd like to see us also look at aligning the zoning code more with the comprehensive plan. We had a conversation about the use of words like prevent versus limit and the legal implications of that. When we're looking at how the administrative part of our city applies policy to specific applications. And I think that's worth us looking at, because often we're going to be using what's in the zoning code, which should ideally have more practical direct definitions as opposed to more sweeping goals, which might be more appropriate for the comprehensive plan. And so I think there's something there I'd like to explore. I just wanted to add that to the conversation. Thank you.

**Speaker:** Thank you. Well, I think we are almost right on time. Rebecca, will you please read the next item?

**Speaker:** Item two Portland carbon emissions briefing.

**Speaker:** So we're very pleased to welcome vivian satterfield. Vivian, I can't remember what your official title is. I think of you as climate czar, and you have your own fiefdom. You're no longer with, housed within one of the dca units, as I understand it. So I'm going to ask you and your team to take it away.

**Speaker:** Thank you so much. Good morning. Councilor. Our co-chair novick co-chair, morillo, members of the committee. I have the presentation being pulled up right now. Thank you so much for that. Andrea. Yes, my name is vivian satterfield. I use she, her or my name as my pronouns, and I'm so pleased to have been invited here today at the first meeting of the council committee on climate resilience and



land use. I just want to acknowledge co-chair novick, as you mentioned this morning, I think it's a bit fitting that today's session is being held virtual due to the inclement weather. It's closed city buildings and our educational institutions, and it has required emergency shelters to stay open for those seeking warmth. But this cold snap that we're experiencing today, right now is in the context of what the data shows. And that's that this January was a full degree fahrenheit warmer than last January here in Oregon, and this was the warmest winter on record overall for the contiguous united states. Next slide please. My role, the chief sustainability officer that I was hired into in February of 2023 was previously embedded as councilor novick mentioned at the bureau of planning and sustainability. Soon thereafter, my position was moved into the city administrator's office because of council action, approving a new organizational structure designed to unify our bureaus, programs and services. This new structure includes my role as one of four city wide practices aligning sustainability and climate action with city wide goals. I'm responsible for leading centralized coordination and strategy for the city's policies, programs, and plans across service areas. Overseeing development of the city's next climate action plan, and developing and managing strategies for climate practitioners across the city. As the keeper of the city's climate work plan and responsible for enterprise wide solutions to achieving the city's climate goals, I maintain coordination with staff, along with leaders like yourselves, to be in sync on work that transcends individual service areas and maintains a one city perspective. As a member of the city's leadership team. I conduct this work through the climate practitioner workgroup, which has existed in a few prior iterations for a number of years. So unfortunately, I don't have a fiefdom. I didn't get a sash or a funny hat, and we're still building this system as we are standing up our new form of government. This work group is made up of employees who serve as conduits between bureaus and

my role, and who have direct connection to climate and sustainability work within the city. The group is convened by and receives direction from me. I am currently leading a rechartering of this group to clarify the roles, responsibilities and scope of the work group and to outline what dual accountability looks like in this new city structure. With a cso, the chief sustainability officer in the city administrator's office today, i'll be joined in this presentation by my colleagues, andrea jacob, climate policy manager at the bureau of planning, sustainability, and kristen hall, planning and project delivery group manager at the Portland bureau of transportation. They're key partners in this work, and I'm glad that they made the time to be here today alongside other staff. However, I want to acknowledge the partnership and dedication from all service areas of our city that contribute to our shared climate and sustainability efforts. I've said it before, I think I have the coolest job in the city. I get to work with everyone and every single service area, and I'm excited to continue doing this alongside you all.

**Speaker:** Vivian. Yes.

**Speaker:** I apologize, but maybe it's just because I'm old, but you're somewhat muted. You're so if you if you could yell or something. I mean like I can hear you quite as well as I would like to.

**Speaker:** That sounds great. I'll go ahead and put my microphone.

**Speaker:** A bit closer to my face to replace the headphones. I just wanted to mention. Additionally, I will facilitate and be advised by the sustainability and climate commission. The commission is comprised of 20 community members, including four dedicated youth seats. So councilor kanal I believe, was mentioned on the importance of youth participation before to talking to you more about the composition of that committee. Those folks will be serving in a volunteer capacity alongside six non-voting city staff from the climate practitioners workgroup, and

together that group will be developing, monitoring and holding the city accountable to adopted climate goals. As members of council, you'll have an opportunity to hear more about the commission later this spring when we work to select the commissioners and then confirm them through a legislative process. Next slide please. This is a nice beauty shot of Portland for what's otherwise a fairly white cafe. So today's presentation content is focused on Portland carbon emissions. These are the hard numbers the data and how that's directing the necessary actions to meet the goal of eliminating carbon emissions, what's called net zero by 2050. And to me, our climate benchmark of reducing emissions to 50% below 1990 levels by 2030. And that's five years away from today. So top line, we've accomplished much already since being the first us city to create a local action plan for cutting carbon in 1993, and many have taken our lead across the country. This is a good thing. But as I wrote to our city leadership in the 2024 climate emergency work plan progress report, we are not on track to meet our climate goals. The city of Portland is signatory to multiple national and international climate agreements, and that's not going to change. And we participate robustly in membership organizations and networks to ensure we're learning from others and sharing strategies with one another. Because as cities, we have a critical role in addressing climate change. The bureau of planning and sustainability, and all of its prior iterations in years past has been collecting local carbon emissions data for more than 30 years. And my hope is that after today, you'll be grounded in the same data that city staff use to direct our actions. Our presentation today is intended to give you all a working understanding of the data, and I fully expect you to have questions, but if we're able to hold those until the end, I hope that we've prepared will address some of what may come up for you along the way. And as mentioned in your opening remarks, I don't need to tell you all that we have no lack of smart,

dedicated people here in Portland with the right ideas about how to steer our emissions downward. But we need to find our role as a city in some key partnerships on some tricky large issues. And this is the hard work ahead. I truly look forward to your leadership, your partnership and activation of this new form of government to chart the path ahead. And with that, i'll hand it to andrea jacob, the manager of climate policy at bts. The next slide. Thanks, vivian.

**Speaker:** Good morning, committee members. For the record, my name is andrea jacob. I use she her pronouns and I am the manager of a nine person climate policy team at the bureau of planning and sustainability within the community and economic development service area. We have historically been responsible for leading the climate action plan for developing and implementing equitable decarbonization policy, and monitoring and reporting all of our climate data. And while vivian mentioned many people at the city work on climate, their primary focus is on decarbonizing or making more resilient our assets, our infrastructure and our operations. My team is the only one at the city that really focuses on economy wide and community wide decarbonization. So to do that, we work very closely with the state, with the utilities, with many community based organizations, with industry and businesses, with nonprofits and academia. Personally, I joined the city in 2005 at the Portland office of sustainable development, and I've been with bp since the beginning. My background is in energy efficiency, so I was very grateful to hear councilor avalos say that energy efficiency is the next frontier. I completely agree, and I've been the climate policy manager since 2021, and I'm genuinely thrilled to be here to talk about this work. So we're going to jump in. What this chart is showing is what vivian mentioned. Just a graphic depiction of our two at highest level, our two climate targets. So by 2030 a 50% reduction. And then our 2050 goal which is called net zero emissions, that just means by then we need to be removing

more carbon from the atmosphere than we're putting in. These are science based targets. They were established by Portland City Council in 2020. In the climate emergency declaration. A couple things I want to mention about our inventory. First of all, you see Multnomah County emissions reduction goals. Our jurisdictional boundary of our inventory is Multnomah County, not just the city of Portland. It's important to know that the decision for that goes back to the early 2000.

Leadership at the time wanted to partner with the county, so that is why we look at it in this way. We have a baseline year of 1990. So every time we're talking about reductions, we're comparing it to that baseline year. And as Vivian mentioned, city staff have been tracking carbon emissions since 1993. The last thing I want to mention on this slide is that inventories run two years behind. So when you see this we are here dot. That's 2022. And all the data I'll be presenting is as of 2022. So here we have our local emissions trend line on the bottom. It's just a different depiction of what you saw on the previous slide. But it's compared to the US as a whole, which is that top line. And you can see that our line is steeper, our trajectory downward is steeper, but it still follows the shape of the national trend line pretty closely. And this is because of the influence of national economic trends. When we have boom times, emissions go up, they go down during recessions. The other thing that explains our variability here in Portland is, is whether so today or as of 2022, Portland is 21% below our 1990 baseline emissions. So we've declined from our peak in 2000 for all of the reasons that are all the things that Portland and Oregon are really well known for our land use planning for healthy, connected neighborhoods that enable more walking, biking, our use of transit. We've made good progress at the state level in switching to lower carbon energy sources and our electric grid, wind and solar replacing fossil fuel generation and also biofuels. We've had Energy Trust of Oregon investing in buildings and appliances, and the

federal standards have also helped quite a bit. And then we've also reduced methane emissions from landfills through more composting and recycling. So it's all good stuff, really. A lot of wins there and a lot of the easy stuff that we could do has been done. But the trajectory that we're on is insufficient, as Vivian said, to meet our carbon reduction goals. So our 2022 inventory shows a 2% increase over 2021. And while that might seem like a small increase when you have to be reducing 6% or more year over year between now and 2030, we're we're going in the wrong direction. And I guess the top line takeaway that I'd like to leave is that without significant economy wide action beyond what the city of Portland can do, it's unlikely that we can hit our 2030 target at this point, which is different than when we published the climate emergency work plan in 2022. Things have changed, and not necessarily for the better. So Councilor Novick you asked some specific questions about per capita emissions in Portland compared to other cities, and with the caveat that that makes our data analysts very uncomfortable, because it's very hard to compare apples to apples when we do that. We did assemble some numbers. These are per capita annual metric tons. So the best performing cities are Seattle and San Francisco. And there's some clear reasons for that, including their utility system control over building codes, land use patterns and things like that. Portland comes in, you know, not kind of in the middle of the pack. We're better than Washington, D.C. We're better than Houston. We're not as good as Los Angeles. We're not as good as New York. So again, we have a county wide jurisdictional boundary. We have a different land use pattern. All of those things add up. But the cities that are doing the best definitely have more control over their utility system and more control over their building codes.

**Speaker:** I thought New York was number one. That's interesting.

**Speaker:** Not with the data that we were able to assemble. And in the time, you know, they're number one. I think if you look at different sectors like transportation, perhaps, but overall and Seattle and San Francisco both have a lot of hydro. So again, back to their utility grid.

**Speaker:** Great.

**Speaker:** So Portland and Multnomah County, we track our emissions using what's called a sector based inventory. This is very widely used in local, state and national governments. It meets the global protocols that we need to meet. And the sectors as you can see them are. Transportation is our biggest share at 41%. We look at residential and commercial together to get a sense of buildings and energy emissions. So when you look at those, that's 39%. So buildings makes up our second largest share and industry comes in third at 13%. So transportation that's why pbob is here to talk about those emissions tends to deal with the buildings and industry side of things. And then and we also have the landfilled waste part at the, at the, at bts as well. So to dig a little deeper, again to respond to questions from councilor novick, you asked a little bit more about the building sector emissions and the split between commercial and residential. And so what I can tell you is that residential accounts for 44% of the emissions from the building sector, commercial is 56%. Both of those have been trending downward since 1990. And that, again, is largely due to the decarbonization of the energy going into heat and power those buildings. You also asked about on road transportation and the split between commercial and residential there. So of total transportation emissions on road is 76%, excluding air travel and of those on road emissions, the vast majority, 72% are residential and commercial is about 28%. There were also some questions about emissions from food waste, so emissions from food account for 16% of the total waste sector emissions. And these are in that landfilled waste category that 2%.

And then so that includes emissions from food composting and from emissions from land landfilled food waste and landfill food waste emissions are much greater than emissions from composting. So that's our basic look at the sectors. We also within a sector based inventory, look at the sources. So you can see that we have four primary sources of emissions and a handful of smaller ones. So electricity is our biggest. And we're going to talk about electricity considerably more because of that gasoline natural gas and diesel. So diesel is the fourth major chunk of our source of emissions. And this gets at all the issues around renewable fuels, which we can also talk about. So the electricity sector is really important, not just because it's the biggest source of our emissions, but also just because the collective endeavor of decarbonization rests entirely on the electric sector becoming emissions free. We can't decarbonize buildings, we can't decarbonize transportation without clean, emissions free electricity. So councilor novick you asked, how sure are we that the state renewable energy targets, which are very aggressive, will be met? And thank you for that question. It's the exact right question, because we are not at all sure that the utilities can meet those targets in house bill 2021. That commits them to an 80% reduction by 2030 and 100% reduction in emissions by 2040. So they've they've already signaled that they will have trouble meeting the 2030 objective. And they've said that they cannot meet the 2040 target without new technology. So current technology, they don't see how they are getting to 2040. So our ability to meet our carbon targets rests on the ability of the utilities to get to theirs. And if you look at the climate emergency work plan, our action number one was to work with pge and pacific power to get to 100% clean electricity for Portland by 2030, ten years ahead of the state target. And we worked for two years more with pge to come up with a product and a program design that would make the default option for Portlanders just 100% clean



electricity through the form of a tariff. It's a wonky thing. It's called a community wide tariff or a municipal green tariff. We tried to work with them for a couple of years. We were not able to get to a deal with pge, so that took a pretty big chunk out of our strategy and our ability to meet 2030 goals. So we really want to continue to talk about that. How do we continue to work with the utilities to ensure that they are going to meet the goals, even if it's not the goals that we set in the in the climate emergency declaration? So this is a little bit deeper. Dive into the emissions by utility, which is another question from councilor novick. So what we have here is residential emissions and commercial emissions. And by utility. So the green is northwest natural. The other two are both the electrics. So you can see that in the residential sector emissions from electricity and gas are roughly even gas emissions slightly edging out electricity. By contrast, the commercial sector produces more emissions from electricity use, and this generally has to do with how commercial buildings are heated and powered. And they have a bunch of end uses, electric loads that we don't have in residences. So that is roughly how that breaks out. And I know we said we would take questions for the end. I just threw a lot of stuff out there and I my next thing is to hand it over to kristen to talk about transportation. But if there are any clarifying questions or anything that I can answer right now, I'd be open to that.

**Speaker:** Yes, i'll just.

**Speaker:** Speak up because I can't see. I don't know if folks can see all of us on the screen. Thank you so much for this presentation. This was incredibly helpful. Councilor morillo here. And I was very curious about what you said a little bit earlier in the presentation that, you know, there are things happening nationally that are obviously impacting the how much we're decarbonizing locally and that we have, you know, we've taken there's been a downward trend as far as the progress that

we're making a little bit because of those impacts. What what are we seeing at the national level or what is impacting us locally? That's kind of out of our control as far as those impacts that that change, the progress that we're making.

**Speaker:** I what I recall saying was that things at the federal level, I was talking about more in a positive light. So like federal cafe standards, appliance standards, those have helped us make progress. I I'm sorry if I miscommunicated I what's happening right now obviously is hugely problematic. That's not what I was referring to. I was really talking about things that the federal government has done that have advanced decarbonization.

**Speaker:** Oh, okay. I guess I was referencing the 2% increase that we've seen.

**Speaker:** Yeah.

**Speaker:** That's that is due to our local patterns. That is not due to federal.

**Speaker:** Oh, okay.

**Speaker:** What changed locally that made that increase is there I mean is there a way to pinpoint that or is it. There is. I'm going to call in kyle meissner, our climate policy analyst, who helps with these numbers. Kyle, would you like to answer that?

**Speaker:** Sure. For the record, my name is kyle dessner at the bureau of planning and sustainability. The increase that occurred this last from 2021 to 22, was largely driven by weather. We had a particularly cold winter and a hot summer, so that increases building energy use significantly. There was a very interesting dynamic that occurred that counteracted some of that increase, which was that gasoline and diesel fuel prices hit their record highs in July of 2020. And so we actually saw a decline in the transportation sector emissions, which you'll see in the coming slides. But that tempered the impact of weather that year. So we do see this sort of interaction between the sectors that plays out. I would also note going back to your original question, that some of what we see in the interplay between local

emissions and national emissions have to do with economic trends nationally. And I think that's one of the points that andrea was making. So, you know, when the economy is down, we see emitting activities in the city decrease as well. When the economy booms, we do all kinds of other things, like we build more and we go out and we spend more. And so that that's where Portland is really subject to sort of those national conditions that influence consumer and business behavior here in the city.

**Speaker:** Councilor kanal. Yeah.

**Speaker:** Thank you so much for being here. Thank you to everyone for your work. I think especially in light of federal actions, I can imagine that working in this space must be a little demoralizing right now. But you're appreciated locally, including by this council. So I wanted to start with that. There's a question I had on the slide that showed the comparison between us and the united states broadly that, yeah, that one. It appears that most of the gap or was created in 2000 or by 2004 from 99 to 2004, and then has roughly stayed constant from then till now, between our progress and progress of the united states as a whole, obviously there's a little bit more boom and a little more bust with looking at an individual city, especially around like 2012 to 2016 there. Then when you look at the country as a whole, why? Why has the country kept up, kept up with us for the last 20 years when they didn't keep up with us for the five before that? What changed? Is it that we're failing to innovate and move faster, or is it that they caught up to something else? Yeah.

**Speaker:** Kyle, do you want to take a stab at that?

**Speaker:** Sure, kyle, for the record, that is an excellent question and certainly would need to do some specific analysis to give you a solid answer. My sense from having worked with the data is that there's a few factors that are playing out here. First, that really steep decline that we see in the early 2000 has to do with a number

of things that happened in the city, both around land use, around transportation, around energy efficiency. So the tax system coming online, we had significant changes in Multnomah County industrial users. So some really energy intensive industries like aluminum smelting went away in Multnomah County around 2000. So a lot of changes kind of here locally that that led to that sharp trend. I think nationally, you really don't see emissions start to peak until 2000, where they start to come down at the national level. And that's I'm sorry, 2007, I think is when the national emissions start to decline. And that really had to do with federal policy that was passed around cafe standards, around manufacturing standards for appliances, efficiency standards. So the federal government really started to begin regulating large emission sources around that time. And obviously, that has continued, you know, into the Biden administration as well. So. I think that.

**Speaker:** That started. I'm sorry to interrupt this. This is Novick. I thought that the vast majority of the decline in national carbon emissions was due to the switch from coal, which is horrible, to natural gas, which is bad, but not as horrible as coal.

**Speaker:** Yes, certainly the grid emission factors are even at the local level, almost always the biggest driver in emissions going up in town, as you saw locally. You know, electricity currently today is our largest source of local emissions and nationally. So those changes to grid emission factors have a huge impact, whether we're talking locally or nationally.

**Speaker:** Councilor Ryan.

**Speaker:** Thank you, co-chair, Novick, and thanks for this information. Could you go to the one that shows the emissions at residential and commercial for gas and for. Yeah, that one. So I was just thinking when was it did I get those offers to switch from electric to gas high up? Because the Oregon department of energy offered rebates for energy gas efficient natural gas furnaces from 2002 to 2017. You all

know this, correct? Some of my younger colleagues might not know this. And so there was a time where there were meetings like this in the not so distant past, where converting to gas was, was supported with financial incentives. And so I wonder if that is one reason why it appears that gas is high in this area. I don't know, but I just wanted to put that into the record because it's the truth. I actually googled it to make sure. And of course you can trust that, but it looks like what I remember getting that rebate and converting because I thought it was the right thing to do for the environment based on all the smart minds at that time. And I think it gets to a point that councilor kanal was making, which is we must really look at electrification deeply. I'm old enough now to know that we bounced to what's the new best source, and then we don't always look at the consequences. And so I just, for the record, had to bring some truth to why those numbers could be high. I'm sure I'm not the only Portland Oregonian that took advantage of that rebate. Thanks. And I was shocked that it was all the way through 2000 2017.

**Speaker:** So I can't see if there are any more questions, but I would, I think is a good point to turn it over to kristen hall to talk about transportation sector.

**Speaker:** Good morning.

**Speaker:** Actually, andrea, just just for a second, for a second. More on that point. I mean, you were talking about the uncertainty of pge and pacificorp meeting their targets. And as the councilor morillo was just saying, I mean, the goal of electrification is a great goal. If the electricity is coming from cleaner sources and we, you know, we want to move away from methane gas to electric to electricity, if the electricity comes from cleaner sources, if we're having trouble getting to cleaner sources of electricity, that picture becomes more muddled. And one question I had for you is right now, which is the most carbon intensive? Which company is the

most carbon intensive source of electricity, or what's the order between pge, pacificorp, which, you know, depends on coal, and northwest natural?

**Speaker:** Well, between the electrics. Pacific is more carbon intensive for the reasons you just stated. And then on a btu basis, I believe, kyle, that electricity is still more carbon intensive.

**Speaker:** Correct.

**Speaker:** So I mean, councilor novick you it's the exact thing that we struggle with. It's that we need to transition. Transition off of gas. The electric grid isn't ready. There is this and this is true in in fuels too. There are these bridge periods where we do have to acknowledge that we can't get off of everything all at once. And what we, what we should be doing is a managed transition off of gas. And what we need for that is state leadership. And we haven't had it at all. So there's things that, when we talk about this in the action section, that the city could probably do, but truly, what in states that are doing this well, like in california, the state commissions are taking a lead role in working with all the stakeholders because it is a justice issue. You have to make sure that the workers have places to transition to. It needs a whole infrastructure to be able to get people from one industry to another. It's not just about the fuel sources, it's about the people. And so we just haven't had I don't believe my personal opinion is that we haven't really had the leadership at the state on that conversation, but we do need to do everything we can to advance electrification and start doing things, to start making that gas system more manageable and in an equitable way, so that the burden doesn't fall on lower income customers or on workers.

**Speaker:** Okay, can I just I appreciate all that. I just the reason I brought up my point earlier is that, like you were probably, maybe in some of those meetings, like when was the epiphany that natural gas is suddenly bad, stopped the rebate? Let's

move to this like I just I can't be the only person that wants to know that. And so I just want to make sure that I understand that because that it they were making these payments story going into this is 2018 was the last one. So that was that's not that long ago right.

**Speaker:** Yeah I know.

**Speaker:** It's bad. And you know I'm trying to find enough money to convert again. But it's like I just want to hear if you have any insight into that. I want to make sure we don't get stuck in those same spin cycles.

**Speaker:** Yeah, I was in some of those meetings long ago. It's true. I think what we started to see is a pathway to decarbonization on electricity, even though it's stumbling and it's got a lot of obstacles, we know we need to get there. So then the shift started. Well, where are the remaining emissions? And the remaining emissions are all from methane. So it's a it's a both. And so.

**Speaker:** You know, we.

**Speaker:** Didn't know that when we were giving out the rebates to convert to it.

**Speaker:** We didn't.

**Speaker:** Know that. That's more of a political issue with the utility.

**Speaker:** Well, the democrat you know, it's just confusing, you know, because I thought my friends that were pro-environment were down in salem advocating for that. And then the switch came. So I'm not trying to do a gotcha. I'm really just like a voter and a consumer that's wanted to just ask a question of a smart person on this point. Thanks, councilor.

**Speaker:** If I may speculate, I think that for a while we were focused on the fact that methane gas is, I think, 40% less carbon intensive than coal. And so it's better than coal. So we want to encourage people to switch to it. Then we start realizing.

**Speaker:** Incremental step going from coal to okay. Yeah. And that was.

**Speaker:** Then we then we then we start realizing two things. One, that we need to decarbonize entirely. And two, wind and solar begin to seem more viable. So we started thinking more about, okay, let's get the entire renewables. But it's a clumsy process. Kyle, what were you going to say?

**Speaker:** Partially what you just said. Councilor novick. In addition, I would note that it depends on what your adopted goals are. Remember, we only adopted net zero goals in 2020, and the state has yet to adopt net zero targets. So in 2018, the state was looking at a much lower emission reduction level. And what that is that, you know, you could still have 20% of natural gas in the system and meet those targets. When we're talking about net zero emissions, the conversation changes. And you really have to look about how we remove all that from the economy. So I think the goal is both at the local and state level have gotten tighter due to the climate science that has advanced, really since the paris agreement adoption.

**Speaker:** Thank you kyle. That's what I thought of it. It was it was great to hear you say that. Appreciate it.

**Speaker:** I guess I'm up next. Good morning. Co-chairs and members of the committee. Thank you for including me in this presentation today. My name is kristin holt. For the record, I use she her pronouns and as vivian mentioned at the beginning of this presentation, I am the planning and project delivery group manager at pbot within the public works service area. In my role, I oversee the full lifecycle of our projects from planning through capital delivery as well as transportation policy, new mobility, electrification and public space activation work. So I have a full and fun portfolio, which means I am not an expert at anything. So I have eric, who is our supervising planner for our policy team here. If I need to phone a friend, I also have a colleague in my house today, a small one who is on a full snow day, so I have begged for no interruptions. But if I get interrupted, I



apologize. I'm going to start by just giving you a brief overview of transportation sector emissions. When you look at this overall trend graph, you see that our overall emissions have declined since 1990, but not nearly fast enough in the transportation sector. And our most recent reporting year, 2022, we do show a decline in greenhouse gas emissions. When I first saw that, I got really excited and then I was told this is largely due to higher fuel prices. And so while this may not endure, it does remind us about the importance of price signals as well as other types of interventions in driving that behavior change. On a hopeful note, though, the 2022 data from odot does show that we're starting to see some statewide reductions in emissions based on changes to the vehicle fleet overall and the fuel mix in that vehicle fleet pulling up from the year over year data. I think it is important to acknowledge that study after study at the state, local and national levels demonstrate that we must both reduce the number of miles driven by 20 to 30% per capita and rapidly transition to low or no carbon fuels for the remaining miles. To meet our climate goals in the transportation sector. And so we get into actions. I will talk a little bit more about the book and strategy, but I think it's really important to acknowledge that up front. And moving to my next slide. Andrea, can you advance to the next slide for me?

**Speaker:** This one.

**Speaker:** Yes. Thank you. When you look across the last two decades of data, transportation remains a large source of carbon emissions in the county. We have not seen reductions on par with other sectors. And probably why I am here as part of the presentation today is because transportation emissions remain stubbornly high, and we know it's going to take really focused interventions to change the trajectory the transportation requires changing the way our cities work, upending entrenched land use and mobility patterns at a city scale. It requires changing our

urban fabric and individual choices. These are really hard shifts to make. It doesn't mean we aren't making progress. It doesn't mean we shouldn't focus on it. But it's it is hard, hard work. And finally, it requires changing our funding model. Our funding model is largely dependent on fossil fuel taxes and parking revenues. Both are at odds with our goals around mode shift and electrification. So as we are improving our as we are making progress towards our greenhouse gas reduction goals as a transportation sector, both locally at the state and national levels, we are seeing fewer revenues for transportation, and even in our current state, we are not resourced in a way that will allow us to meet our climate goals, either from a person or an infrastructure standpoint. So there's a lot of complicated and interrelated factors happening here. I will come back and talk at the end about willamette transportation actions. So those are my first two slides I'm handing back to andrea.

**Speaker:** All right. Well that kind of concludes the sector based look at our emissions inventory.

**Speaker:** Everything that we just talked about is that one form of looking at emissions. But Portland is one of the few cities in the country that examines emissions from the consumer demand perspective. These are consumption based emissions. And it turns out that if we don't look at emissions in this way, we underestimate emissions significantly. So when you take them together, you basically double the emissions pie. So this graph or this chart is a little bit complicated. But if you kind of look at the red and the green that represents our sector based emissions, all the things we just talked about, and then that the larger circle with the white and the blue, that is our consumption based inventory. So that's basically things that are produced elsewhere that we consume here. Everything else is either the green is what we produce locally and the red are

emissions from things that we produce here that go elsewhere. So consumption based emissions are really important. And they unlike the inventory, the sector based inventory, they are a snapshot in time. So this represents 2015 inventory. We've committed to update those. And we work very closely with the state with deq to do to look at consumption based emissions. And I'm going to go into it a little bit more on the next slide actually in two slides. So this is looking at this is from the state of Oregon. And this is really comparing the consumption and sector based emissions over a 30 year time span. And you can see that you know while we are making progress on sector based, we're not really making progress on the stuff that we consume. So just to keep in mind that this is a difficult area to address and is a challenging place for government in particular to get into in terms of, you know, talking to people about what they consume and how they consume. So this is. Just just my notes. The consumption based inventory allows us to break out emissions by life cycle phase. So this helps us analyze the types of interventions that might be required for different sources. So for example, this consumption based inventory includes over 500 different commodities goods and services. And you can see the life cycle emissions at at a much more granular level. But basically what we're seeing here is that the vast majority, 62% of emissions, consumption based emissions come from the production phase. The next one is use. And then the pre-purchase pre-purchase transportation, wholesale and retail. So to get a little bit more in depth with this, this chart shows a breakdown by category, spending category and life cycle phase. And it just shows you that unless the product in question uses energy like an appliance or a vehicle or electronic, you see a lot of purple there. That's that production phase. It's just it's the same data as the previous chart, but just broken down by these different commodity types. And so obviously, like an appliance has a lot of emissions associated with its use. But a lot

of these are really in the production phase. And I think one thing that people aren't always clear about, they think there's a lot of emissions associated with throwing things out or postconsumer disposal that that blue color. And you can see in this schematic that that's very small in comparison to both the production and use categories.

**Speaker:** If I may break in for a second, I just want to underscore the point that transportation of goods is, as you said in the previous slide, overall, about 9% of emissions from consumption. I think that there's a widespread belief that buying local is a way to reduce our emissions. And it that is of limited value. I mean, just to give one example, you're better off buying lentils from vietnam than beef from next door because the methane that the cattle next door belches far outweighs the transportation emissions associated with transporting the lentils.

**Speaker:** That's for sure.

**Speaker:** Very true. I just wanted to add a couple of other little, I guess, details about this, because I think you asked for emissions from food consumption divided into production versus transportation. So it's again, 91% of the emissions are from the production of food products. Food and beverage emissions are 14% of total consumption based emissions and only 7% are from supply chain emissions. So just underscoring exactly what you just said, you know, if we stopped eating beef and replaced it with lentils, you know, we would we would see significant, you know, vast reductions, 90, 98%, you know, of emissions from beef and pork. So that's just a little bit on the consumption based inventory. I'm going to switch gears yet again and talk a little bit. You know, everything that we've talked about and specifically the sector based inventory are backward looking. Right? They are historic. We can use that data, though, to model scenarios that inform our strategic direction going forward. And we did do that. And we worked with some great

consultants with capua consulting and good company, I believe, at the time. And we built a scenario modeling tool. We call it pathways to illustrate how we get to the 2030 and 2050 goals. Sometimes this is called a wedge analysis in the old days. And I want to note that this is based only on the sector based emissions. The consumption based information is not in here. There's a reason for that. We can explain later. I'm going to hold on that for now. I just want to be clear that all of this relates to the sector based emissions that we're talking about. So this graphic this is an interface is what the tool the pathways tool. It's an excel spreadsheet. It's on our website. Anybody can go play with it and toggle different assumptions. Each wedge really corresponds to a high level strategy. And there's a corresponding set of assumptions with each strategy. So residential energy efficiency is a strategy. Transportation electrification is a strategy. And you can toggle how much what percentage we think we're going to get, you know, by 2030 and 2050 to come up with different scenarios. So it is a tool. It's a visualizer. Within most of those wedges there are multiple actions that you can take. Energy efficiency. Residential energy efficiency, a variety of things that you can do. It's not true in every case, but I will I will say that most of those wedges have specific actions, and we are going to spend the last part of this presentation talking about the high impact. So for modeling, the main thing is that there are no single really silver bullets. There are the solutions are interdependent. They need to stack on each other. We need to do them all, and we need to do them all at a scale and a pace that we have not even come close to achieving yet. So it's like when we did this modeling in 2022, we saw a pathway to get there to 2030 and 2050 without some of the electric grid work that like we said, we've said throughout, that's a little bit more challenging. But some of these strategies are and some of these wedges are higher impact than others. So I just want to call out a few. The first big dark blue wedge that you see that is electric grid

decarbonization. So we already talked about that. The dark brown wedge. That's the renewable fuel standard. This is another a significant in in meeting our 2030 goals was to take a big chunk. This goes back to that source slide that showed that diesel is the fourth largest source. And unlike many of the other wedges which have multiple possible actions, the renewable fuel standard is one of the examples that where a single policy takes a significant bite out of the emissions pie. So it was there's a lot of strategy to that and why we chose to do that. So, you know, I've made the point since we published the cw, the climate emergency work plan, our odds of meeting the 2030 goals have diminished significantly, in a large part because we couldn't advance that clean energy, municipal clean energy tariff. But we're pressing on. So I just wanted to talk about this, because this is the version of pathways that we published in the climate emergency work plan. So the tool is a tool. It's very wonky. You can like I said, you can play with it online. But we got a lot of feedback that when we were putting out the this climate emergency work plan for public comment or for review, that it was not very intuitive for a non-technical audience. They really wanted to see, you know, how the wedges go to zero over the 30 year span. So we kyle did a tremendous amount of math to get us to this, and I won't go into it. It's basically the inverse of, you know, of the previous slide. This is the gray area. Here is all the reductions and the colored stuff is our remaining emissions. And the point of this slide is just to show that our buildings transportation industry, where are the emissions come from that is connected to the action. So this is color coded in the climate emergency work plan. All of the electricity actions are a color. All the transportation actions are a color. It's just trying to make it a little bit more digestible for the public. And I think the last thing I want to say about the climate emergency work plan, in addition to showing the analysis and what the actions were, is we attempted to show at a high level what

actions were funded, which had gaps and the relative size of those gaps. And, you know, it wasn't super scientific. It was more like, you know, one, two, three chilies. This is hot, not hot. And that is not shown on this slide. It's just a comment about the climate emergency work plan that we're not funded to do all the work that is in the climate emergency work plan. So a lot of the actions that we're going to be talking about in the next section, you'll just hear a theme about about that. So I just wanted to note it here. So I am going to move us on unless there are some clarifying questions at the moment.

**Speaker:** All right.

**Speaker:** All right I get to kick this one off. So I'm going to talk about transportation actions for a minute. I'll note that the numbers under each of the photos refer back to the climate emergency work plan, just to help you play along at home. If you want to look at the work plan and see how we are talking about those items here. Transportation actions generally fall into three categories. The first is we absolutely need to shift more trips to biking, walking, and transit. This is really slow, hard work. It means changing the behaviors of individual Portlanders every day, but it is absolutely the most critical thing we can do. To reducing vehicle miles traveled. And it has important safety and equity benefits, as well as being essential to meeting our climate goals. The 20 to 30% per capita reduction in vmt that I mentioned earlier needed to meet our climate goals is also critical to creating a safe transportation system and a vibrant city. Our work in this area, pbot, is about reallocating and reactivating roadway space work, like our new protected bike lanes on boulevard or fourth avenue that you can see under construction right now. Work to activate streets as plazas and places for people to gather. It's about shifting behavior with people based programs like safe routes to schools, Sunday parkways, those kinds of transportation demand management programs, and sending price

signals to encourage people to drive less. Second, something that already came up in this meeting is shifting our fuels to be less carbon intensive. We know that many people will continue to drive, and we need to electrify those trips to meet our climate goals. This is part of the both and strategy I mentioned earlier. Pbot focus is on policy, program and infrastructure support for electric vehicle adoption, for individual trips, for high mileage fleet and for goods movement. The city has active programs around public and curbside ev charging, as well as the ability to ensure that charging is available for more people through multi-family and workplace electric vehicle charging requirements. I'm particularly proud of the partnership between the bureau of planning and sustainability and pbot to put Portland on the leading edge of city, supporting electrification. However, the transportation sector and I said this earlier, i'll say it again because it's so important, is widely dependent on fuel taxes. Meaning as we make these transitions, we will see already limited transportation revenues dwindle. Finally, freight and goods movement is another critical piece. Freight, while only accounting for 5% of our vehicle miles traveled, represents nearly one quarter of greenhouse gas emissions. As we've seen urban delivery explode with the rise of e-commerce that has both greenhouse gas impact emission or greenhouse gas impacts, as well as safety and livability impacts. So really intervening in the goods movement space is critical to both our ghg emissions and the quality of our communities. But changing urban delivery practices requires rethinking the entire urban freight ecosystem. It requires close partnerships with the private sector and considering strategies for the first, middle and last mile of deliveries. For urban delivery, we can leverage publicly owned property to pilot micro consolidation hubs. We can manage access to loading zones at the curb. We are currently in the tail end of a zero emission loading zone pilot in the central city, and support delivery companies as they transition to small electric



delivery vehicles for more of the delivery activity. Pbot funding crisis will impact our ability to advance this work. Even since the time I gave this last presentation in December, the funding landscape that supports this work has changed many of our federal grants to support capital projects. Ev charging and zero emission freight are currently under review and may be canceled. It's been kind of a hard few weeks in the transportation sector, and we already need more needed, more resources to accomplish that goals, those goals. So without a federal funding partner, we will need more local support to make progress on our transportation sector decarbonization goals.

**Speaker:** Oh no. Okay.

**Speaker:** So I'm going to talk a little bit about buildings. So this is a big area for most carbon emissions from the built environment come from buildings that are already here, already built. So historically have focused a lot on retrofits. These are the hardest and most expensive to do, but also have the potential to deliver the most benefit to people of color and low income Portlanders. And pcef is playing a super important role here on the residential side. On the policy side, we still have a really big opportunity for the largest buildings in Portland. So what you see here is in fact carbon and temperature standards. This action b1 this is work that did really led by a people of color group collective called build shift to center, equitable decarbonization and center climate justice in our in our climate work. And so this is this would be regulation standard put on building owners to reach carbon targets at a specified on a specified time frame, ending up with zero emissions from their buildings by 2050. This came out of, like I said, years of engagement with community members that, you know, we really wanted to focus on a multi-family housing that's not regulated, affordable housing. There are a lot of interventions already for regulated affordable housing, and the part of the market that gets

missed, which community members identified as their top priority, which we adopted is naturally occurring affordable housing, multifamily housing temperature standards are not necessarily carbon related, but they are health and resilience related and was a very big priority of the community members that we worked with. So the you know, the issue here, we have a policy proposal that's been in various iterations of development. It does carry a cost for building owners, even with all the subsidy in the market we looked at. We have recently completed a financial and market analysis of what it costs to do these retrofits, what it's likely to cost, how it's likely to impact rents, and what the what funding sources there are. There are even with state and pcef, there is still gaps. This makes it politically difficult. And, you know, that's sort of where we have ended up. But we have a policy proposal that we would love to continue to work with, with the council and with the different committees to reinvigorate, because it is something that community has identified very clearly as a strong priority. Number two, from a climate perspective, this gets at the questions earlier from councilor Ryan. We as we are working on decarbonizing existing buildings and trying to work with, you know, limiting the gas system and transitioning the electric system, new construction as we're building new stuff and we're putting in new gas hookups every day, is just making the problem bigger and worse and more expensive and more costly to solve in the long term. So this is definitely something that the state regulates through building codes. The city of Portland could take a couple of different actions. They all carry some legal risk. They are innovative. They are sort of cutting edge. Not a lot of cities have done them. But if we if we don't start talking about it, and because I mentioned that we're not really seeing the leadership at the state, this is an area of the city could lead in if it's willing to. And there are a lot of pros and cons to that. We would love to talk about that with folks.

So, you know, we just want to start the conversation. And then finally on buildings, this sustainable construction practices. This gets at embodied carbon or consumption based emissions as we decarbonize the grid and we start making our buildings more operationally more efficient and less carbon, producing the amount of carbon that goes into the materials that we make buildings out of becomes even more important. So we have a beautiful picture of pdx and all of that mass timber. That's a great example of a sustainable construction practice. This is really nascent right now. There are only, you know, it's sort of reminds me of the green building, green building industry circa 2000. So there's a program to be built around here in a lot of technical assistance and things that we can do to work with the building industry to advance these and policies that we could put in place. This is not funded work, but it is something that is in the climate emergency work plan that we know we have to get to as we reduce operational emissions. These embodied emissions are becoming more and more important. And now i'll turn it back. I'll turn it over to vivian to talk about our industry, our clean industry work.

**Speaker:** Thank you, andrea, and thank you, christine, for your presentation so far. Councilor clean industry is the newest piece of our decarbonization portfolio, and it focuses on ghg emissions from the manufacturing and industrial processing that exists here in Portland. Portland's had an active industrial sector for over a century, starting with shipping and timber, thus the nickname stumptown, and eventually growing into this thriving metals and food manufacturing industries. More than 1 in 5 local jobs here in Portland are in industry, and therefore it makes it a critical piece of our local economy. Industry produces about 13% of our local ghg emissions. It's been a really difficult area to reduce emissions due to the availability and cost of green industrial technologies. However, industrial decarbonization is advancing rapidly and we can expect to see major investments at both a national and global

scale in the coming years. Pardon me? Our clean industry work is focused on identifying decarbonization pilot projects that will reduce ghg emissions, air pollution and waste. So the past two years, we've partnered with Portland state university and prosper Portland to secure funding for clean industry. This has allowed us to conduct technical assessments at industrial businesses. We were successful in securing funding from the us department of energy and the epa to do this work. And so with that, those resources secured, the check was in hand. We are in the process of launching a \$20 million clean energy fund program for clean industry that will advance decarbonization projects while delivering meaningful benefits to communities. We're also pursuing transformative approaches such as industrial symbiosis. And that's just a circular economy model in which one manufacturing facilities waste becomes the input for another facility. It's been a bit fascinating to see in the room. Getting these businesses together typically don't sit across the table from one another, start talking about their processes and discovering that there's opportunities to start exploring what symbiosis could look like between the two. This type of approach is fundamentally different from the status quo, which is industrial pollution, and that's the future for our local industrial sector. Industry is a super challenging area to reduce ghg emissions. I want to emphasize that for a lot of these processes, some of the technology simply is not there quite yet. But our work to start creating the ecosystem and the conditions to create this, this, the opportunities that might come in the future, it does put us ahead of the curve. Nationally, we have been intentional about also about taking an equity centered approach to this, but the loss of federal funding has made our local efforts even more important than before. That's really where you're seeing the safe injection into this, you know, bolstering the ability to work directly with community to identify that just transition for both the workforce as well as adjacent

communities alongside industry. The next slide, please. And then we have to look at our own house. So the community expects the city as an organization to lead by example and walk the talk that we are asking for others. And it's true that emissions from city operations is small as a percentage of our overall community wide inventory. But I believe there's power in leadership. I know you believe that as well. And in showing proof of concept, there are also some real operational savings that can accrue from having the right investments. Energy efficiency remains the most cost effective basic intervention that we can bring online right now. And while the city has made some improvements to our operations, there's still a lot that we can do. This new form of government presents an opportunity to centralize and systematize building energy upgrades across the portfolio, instead of rather like by bureau that bureau. Councilor Ryan, do you have a question?

**Speaker:** I was going to wait till you're done with this area, vivien, but under city operations, I when I was in drilling into the permitting system challenges, it became a very active sidebar. And it was very embarrassing how our our behavior, our practices around solar permitting. And here we are wanting to be the leader in green industry. Yet we as a city have some of the biggest obstacles to allow residents to put in solar panels. So I just wanted to lift that and put it into the record that that I think should be part of something we connect with another committee on to make sure that we're tracking that. I'm sure you know all about this, vivien. So I wanted to make sure we brought it to you, to the group's attention.

**Speaker:** Yeah. Thank you, councilor Ryan. It's also a challenge for city assets as well. As anyone knows, you wouldn't want to put a new technology on a roof, for example, that you need to replace in a few years as well. And for, you know, city owned assets, we're experiencing those same sort of challenges.

**Speaker:** Yeah. And but my thing was that people that live here that are trying to put on solar panels, they face so many and contractors and trying to do that here is much more challenging than our neighboring municipalities.

**Speaker:** Noted.

**Speaker:** Yes.

**Speaker:** I mean, there's people that contractors say they won't work in Portland anymore, just in solar in the solar lane. And how are we going to meet our goals if we have such operations in place?

**Speaker:** Yeah. Agreed. I do think that this new form of government is an opportunity for us to tackle these cross-cutting issues that traditionally have been housed bureau by bureau and really siloed.

**Speaker:** Trust me, we've been on this for a while. It's a it's like a lot of culture change, right? Slow. But as long as we I know that you're you're aware of it and on it. Thanks.

**Speaker:** Yeah.

**Speaker:** Thank you for bringing it up. Just to add one more component on this energy efficiency component. It's kind of wonky, but you know, you all actually can get it. The enterprise wide energy savings performance contracting is something the city should be pursuing more intentionally, and it could save the city a couple million dollars annually on utility bills as well. Andrea already mentioned that we're not building many new buildings, but everything we do build should be all electric. And then one aspect that we're already able to lead on, thanks to investment from the Portland clean energy community benefits fund, is to reduce emissions, create community benefits, and leverage existing capacity for immediate implementation through decarbonizing city fleet, which is the.

**Speaker:** Can I can I ask you to scream? I'm sorry. I'm still having a hard time hearing you.

**Speaker:** Sure, I'll speak up a bit louder. City fleet is the state's largest municipal fleet. The investment that pickup was able to make not only supports workforce training and ev infrastructure expansion, but it also improves air quality.

Additionally, it offsets costs for city bureaus as city fleet services are funded on a usage basis. This ensures that city operations transition to cleaner vehicles without imposing additional financial burdens on individual bureaus. So when we discuss all the low hanging fruit as been mentioned throughout this presentation, those easier climate actions to take and how we've already done those already, I want to highlight that this and transportation electrification overall remains one area where we have the available technology. We understand the best practices to address both private and publicly owned assets and the right of way. And we know we can reduce transportation related carbon emissions and increase local air quality right now, while simultaneously making it easier for people to walk, roll and take public transportation and a few other areas to mention here on city operations that I didn't put on the slide, but just want to mention includes sustainable procurement and the internal cost of carbon. The sustainable procurement program runs a low carbon concrete policy, which is an important step towards reducing embodied carbon and consumption based emissions. City Council also adopted an internal cost of carbon policy in 2020, as a response directly to climate activists requests. Internal cost of carbon is an accountability mechanism for evaluating project alternatives on their carbon impacts, and it's part of the larger toolkit around climate budgeting, which is a best practice for cities with advanced climate action goals like Portland. And we're in a community of practice alongside other cities that we can tap into if we want to continue to pilot this and think about how to use it.

Implementation of these two, however, is something my office should be well positioned to help with in the future, but will require staffing and resources that historically we haven't had long term. I believe that concludes the presentation slides. And it's you've all been so engaged and asked wonderful questions. But that does conclude our presentation for now.

**Speaker:** Thank you. I can stop.

**Speaker:** Sharing if that would be preferable.

**Speaker:** Councilor kanal.

**Speaker:** Thank you so much for all of that, I have a couple questions slash comments. I hope I don't tread too far on that for the pbot portion of this, and I think there was a approach about trying to use incentivization of individual Portlanders decision making as the primary methodology for reducing transportation related carbon emissions. That was kind of concerning to me. In particular, the part about incentivization. And this kind of goes back to the whole carbon footprint as opposed to let's actually work on systemic solutions kind of question. I don't think pbot's approach has addressed the time needs of individual Portlanders. Portlanders generally do the climate friendly thing, as long as it doesn't, as long as they're aware of what that is and they're able to do it without a substantial cost of time or money. And I think that the bike focus for folks who might need to make a trip that would be 20 minutes while driving, but an hour while biking, is a way of getting around the conversation about actually investing in public transit. And that's not to say that bikes are bad and not saying that at all, but they're not necessarily the only solution. Same thing with walking and all that. So I was pretty concerned about why we're investing so much effort into that, as opposed to public transit, which will get you from places in in district two or district one, frankly, all over the city, downtown, for example, a lot faster than saying, hey,



bike this entire way, especially when we're also building those bike lanes on major thoroughfares and creating the safety risks associated with that.

**Speaker:** I can respond to say that I think we are in an all systems go approach. Biking, walking and transit are the three most important ways we can help people make different transportation choices. And our transportation wallet, which is one of the key ways that we provide support for particularly low income Portlanders. Our Portlanders, who work in a parking permit zone to support choices, offer incentives for transit, transit, ridership and tickets, as well as access to the electric bike town fleet. So it's not a it's not a one or the other. It is an all systems sort of approach. Pbot, in addition to being a close partner with trimet in advancing our public transit system, where we've made investments in the rose lanes, in particular, where we've made transit priority investments that are pbot led to benefit busses operated by trimet. We also operate the Portland streetcar system and are looking at ways to expand that system. So I wouldn't say it's about one or the other. It's about all of those things. And representing the different kinds of trips are best served with different modes, and I think that's exactly the point you're making.

**Speaker:** Yeah. I mean, maybe this has to do with the order of prioritization as well. But, you know, you can't take transit if it's not near you. And so getting to where, you know, you're within half a mile of a, of a max line or a streetcar line is going to be really significant down the line. And I we haven't I'm not sure when the last time we had a substantive expansion to the max within city limits, but it's been a while. On the other hand, I do approach, I do I like the approach to reducing deliveries and the emissions from that. And I wanted to ask if we've looked into the delivery fees, like colorado and minnesota have applied to large retailers, this would apply to small businesses, but to large retailers.

**Speaker:** And that's been discussed at the state level in the current legislative session and is something we have been learning more about how it could be applied in the local context.

**Speaker:** Okay. Thanks. I'd love to hear more about that as you get that information.

**Speaker:** Councilor morillo.

**Speaker:** Thank you. Thank you all so much for this presentation. I feel like I learned a lot and it was incredibly helpful. I think just to answer a little bit of what councilor kanal said, I feel very lucky that in district three, we have a decent amount of bike lanes and a decent amount of bus infrastructure, and as someone who is does not have a car and does not have a license, it's I rely on public transportation and my bike and I actually had to get a bike to go grocery shopping because the busses come so infrequently that it was becoming an issue to do some of those day to day tasks. It was easier to ride my bike lugging a bunch of heavy groceries, which I'm not that good of a bike rider, so it's actually quite hard. So that should say something. And I think that we, we do need investments all around to give people as many options as possible. And I wanted to add to that it's I would say as an anti-hunger policy advocate, before I got elected to City Council, when we worked with unhoused people, something we heard a lot from them was that they deeply relied on their bikes to get around in order to go to the dhs office to update their snap benefits. All of those things, because it's the only mode of transportation that is free. And so that was something that was really critical for them to access services. I also, you know, I've heard from a few folks, andrea and vivian, at this point that some of the low hanging fruit for climate, for all the climate work that we can do, is done. And now we only have some of the tough questions left to ask. And I'm very interested in doing more of the I guess I want to hear a little bit more about what

it's going to take to get our electrical grid up to date, in order to actually be able to transition into more electric in the city of Portland. I don't know about the other offices, but I've been getting 10,000 emails about the pge development project that will cut trees down in forest park, and that seems like, you know, environmentalists are upset about the trees being cut down. And then also, we're going to need to update the grid to make sure that we have more infrastructure to do this. And I'm just as someone who doesn't know as much about this, I would love to hear from you. Your take on that issue overall. And are we identifying areas of land in the city where we can develop more of the grid? What's the next step for that? Thank you.

**Speaker:** And do.

**Speaker:** You want to say.

**Speaker:** Councilor morillo? I do not have the answers to all your questions, but can make sure that staff do respond to some of the details, especially when it comes to the siting and permitting for expanding the transmission lines and grids. However, I will say that in the push to electrification, this is something that staff are grappling with all the time. It's an all systems approach. It is including, you know, residential and continuing to ensure that state incentives and other incentives continue to happen. Recognizing with councilor Ryan's comments about permitting that we can bring on new technology like solar panels onto residential homes, making that accessible to multi-family residential buildings as well. Working with the commercial sector. Also, you know, even considering this snow that's happening today and having flashbacks to the last time that we had it to having battery storage, these are all sort of multi-sector, different jurisdictional components that we're all grappling with and thinking about how to layer them in order to ensure that our communities can be resilient and can continue to make the transition happen to electric mobility and electric buildings as well. I'll go ahead

and pause there and see if kyle or andrea, you have any additional comments to follow up with?

**Speaker:** I do, i.

**Speaker:** I think that transmission is a huge issue. The utilities, the biggest issues that they are facing are have to do with siting, permitting and opposition. Almost anywhere they want to put anything, they get opposition and that we have to get into a mindset of yes, we have to build. And if we continue to block building wherever it's happening of infrastructure, we're not going to we're not we don't have a chance. And that's not just a Portland issue. That is a national issue. Utilities across the country are facing those issues in addition to supply chain issues, labor issues. You know, there are all of the things that are sort of post pandemic problems. Now. There's going to be tariff issues. So, you know, there are a lot of constraints. We talk a lot with the utility about trying to find different parcels of land. They've looked at the city over and over again. Are there places that we can offer? Our options are actually fairly limited in terms of that. So that makes it it makes it really hard. But we have to solve transmission issues and we have to get comfortable. And this is the collective us with building.

**Speaker:** One additional point I wanted to add on is also ensuring that we're entering with leadership in the conversation with utilities to ensure we understand what transmission lines and the load capacity is being built for, and the rise of data centers and other intensive energy uses. I believe that we should be continuing to pursue clarity about how Portland businesses and residences are getting these sort of transmissions that we need to Portland's first.

**Speaker:** Absolutely agree with that. Thank you so much for bringing that up, vivien. Yeah, thank you for answering my question. I think it's going to be a big issue. We're going to have to keep looking into in this committee, and I apologize if

I'm going off camera every once in a while. It's because I'm hearing, like, car crashes directly outside my apartment building. So I just think the snow is kind of intense right now, but I am here and listening.

**Speaker:** Thank you.

**Speaker:** Since we're coming to the end of time councilor and forgive me, I'd like to hear from councilor avalos who, because following the council president's decision to make sure that everybody has a chance to speak one thing, I want a question I want to ask that I don't expect there's time to answer here is to have the team elaborate on our renewable fuel standard. I know that we've heard, you know, the zenith conversation. A lot of folks feeling like there is no such thing as renewable. Liquid fuel. So maybe, you know, subsequent conversation, you could, like, talk to us about how what our renewable fuel standard is based on and why we've come to the conclusion as a city, that there is such a thing as some fuels that are more renewable than others. Councilor i.

**Speaker:** Can do that.

**Speaker:** Great. Thank you. I wanted to just quickly ask about rose lanes, and i'll just share a little bit about that. For folks that don't know, you know, the rose lanes were created specifically. They were designed to reduce black Portlanders time spent in traffic because data showed that they spent literally an entire week in traffic more than their white counterparts annually. And it's my understanding that, you know, I know that was an initiative of former commissioner chloe eudaly, and it seems to have been sputtered since. So I'm curious what the plan is for that expansion. And it kind of speaks to the concerns that councilor kanal was bringing up.

**Speaker:** Thank you so much for that question. Pbot has continued to invest in transit priority, and we can follow up specifically on the buildout of the rose lane

plan. I haven't had a briefing for a while on our current status, so I could follow up with that, but I will share that we are working really hard with trimet metro right now to look at a transit priority treatment on 82nd avenue as part of an upcoming potential fcs line. So that is the place where I have personally been spending. Most of my focus on transit. Priority is there, but we are also making investments in transit spot improvements all over the region, and recently actually had an allocation of Portland clean energy funds to help with match for state funding. That will allow us to do a number of transit signal spot improvements, which is really another way of saying the kinds of improvements we're making, those high value transit priority improvements at particular places on transit lines that have high levels of passenger delay.

**Speaker:** Councilor Ryan.

**Speaker:** Yeah, thanks. Thank you. Real quick. Just one, I really appreciate the conversation about the tough trade offs that we the conversations about tough trade offs. That was really smart to bring that up. I have two really quick requests for information. I want data on ridership on trimet and also bike ridership. The eye test and the reports that I've read do indicate it's down. My experience is it's down, but i, I just like to see real time data on that. And then look at why that is. The last one is about because we're in budget season. The climate investment budget for everything we're talking about. I, I need to understand the transparency about how much are we looking at flowing from funding for these investments, how much from general fund? I just want to make sure, as we're in budget season, that we pivot to making sure that we lift the budgetary revenue streams for everything we're talking about. Thanks.

**Speaker:** Councilor kanal.

**Speaker:** Yeah, I think the other thing is, is that I wanted to ask about and maybe this is for a future conversation is variable, increasing the degree of to which variable pricing is used for. This is related to the comment that was about data centers and ensuring that if your electricity usage is high, you are paying not only the additional cost of it, but but ensuring that that scales appropriately and what is appropriate seems like a future subjective conversation, but I'd love to have the information necessary to talk that through.

**Speaker:** Thank you.

**Speaker:** By the way, I want to profusely apologize to andrea for confusing your name and kristen's a while ago. I'm completely mortified. Thanks for not scolding me. Let's see. This has been a phenomenal presentation. Like we all hugely appreciate it and we look forward to numerous other exchanges. And as you know, we have. Kind of a problem with the public meetings law in that we're not able to talk to each other very much in between public meetings about these issues. But we can we can talk to you. So we look forward to hearing your domain, to seeing your written responses to some of the questions we've asked today. But also, I think that I can speak for all of us when I say that if something comes to your mind that you thought that you should share with all of us and just feel like sending us an email, please go ahead and do so.

**Speaker:** We'll be following up. Thank you for all the insightful questions. I could tell you were all following along, and we are here as a resource for you, and I look forward to frequent interaction with this committee.

**Speaker:** And I think it's also worth mentioning that, I mean, we this work interacts with the work of a lot of other committees. I mean, and in particular, councilor morillo is the vice chair of the transportation committee. So I'm she's going to be carrying a lot of the thoughts that are generated in this committee to that

committee, so that that's and I mean, obviously, that the work of this committee also interacts with the housing committee, the public safety committee. Et cetera. So when you're presenting information to us, you're presenting it to those other committees as well.

**Speaker:** Yeah. And can I just say thank you in advance to councilor morillo, because I'm going to be leaning on you in the housing committee to talk land use stuff and cross committee. But I do think that's an important point. And I think as a council, we should discuss more how we expect the committees to interact. Maybe we need to be calling joint committee meetings at times for certain topics. So I know we're still working through those kinks, but I think this is one committee in particular where the crossover is really immense, and we'll want to get coordinated with the others. So thanks to councilor morillo, who's going to be kind of running back and forth as the messenger along with all of.

**Speaker:** Us, but especially.

**Speaker:** Yeah, I was not lost on me that we spent a good amount of time talking about transportation in this committee, so I'm excited to carry that forward. Thanks for highlighting that. Thank you everyone. Councilor novick, I think you got a gavel us out.

**Speaker:** Well, I mean, i, I hate to lose three minutes, but is there anything that anybody councilors, staff, anybody any thought that you have that you want to share with us in the last three minutes?

**Speaker:** Go play in the snow now because it'll turn into ice later. And it sucks.

**Speaker:** Yeah.

**Speaker:** All right.

**Speaker:** Very far away. So I'm about to go venture and find my shovel. So wish me luck.



**Speaker:** Good luck.

**Speaker:** That's an.

**Speaker:** Important point. Portlanders are responsible for the sidewalks in front of their home, and I'm proud to live on a block that does that. And that allows people to actually walk and especially elders. So please always walk the talk and do it yourselves. Thanks.

**Speaker:** Well, with that, even with two minutes to go, thank you all very, very much. And I will use my makeshift gavel, which will of course brought my dog to bark us out of this meeting. We are concluded. Thanks, everybody.