

[SQUEAKING]

[RUSTLING]

[CLICKING]

**ZEYNEB
MAGAVI:**

Before I pass it over to our next moderator for the amazing panel on policy, I just want to do a brief moment summarizing our first two sessions. And I know we started with the enormity of the global challenge in front of us from multiple perspectives. And I thought that was a fantastic conversation.

And then we turned to people. And it's easy to skip the people part and to not have the harder conversations about all the different stakeholders and viewpoints and challenges. So I'm glad we did it. And I also felt the-- I don't know. Irony isn't quite the right word. I'm going to misuse it. But I felt the human level of what it is to be in a conversation about people, our emotions and our beliefs, aligning them to take action is probably the largest challenge, larger than that first panel.

And to do that requires a degree of vulnerability and human connection. I think it was mentioned by some of the speakers that HEET likes to say change happens at the speed of trust. It is relationship-based. And so during the lunch break, after that conversation about utilities and the question about trust, I was chatting with a leader in a gas utility. And we ended up-- and I'm going to totally make this incredibly uncomfortable and call her up. Come on Nicki. [LAUGHS] No, you have to stay.

So here's what we were talking about. And we're going to just demonstrate a little bit of vulnerability and trust. We ended up in a very personal conversation about how to deal with waking up in the middle of the night with work issues--

[LAUGHTER]

And challenges. And was diet, coffee, acupuncture, other methods the way to cope with the burden and the exhaustion of trying to lead in this space? I'm just going to hand you the mic.

**GUEST
SPEAKER:**

Well, I'm sure it's a foreign issue to everybody in the room. No one ever has woken up in the middle of the night. But I think where we came out is just the enormity of it all on your shoulders. And goes back to what some of the panels were saying about how do you break that down and help effectuate change where you can? And then detach, really, because if you're working on something that you love, even if you're exhausted, it feels a little less weighty than if you're just putting the paces in, but you don't really care because I get asked sometimes, sometimes by people I love, why do you care so much? It's just a job.

And I said, well, jeez, if I went to work and I treated it as just a job, I would be really bored. I probably wouldn't perform as well. And I know not everybody's wired that way, right? Then you think, do I have this all wrong because then you could detach a little easier. And I know it's not just me. I stand here on behalf of my team. But a lot of us are dealing with that. And I think it's just thinking about the global picture and, to use a word, enormity of it all, but what locally can you control? And what can you do? And trying to do the-- now I sound like a *Frozen* movie, but the next right thing, I think was the song. You can tell how old my kids are.

ZEYNEB
MAGAVI:

Yeah, I was going to say that.

[LAUGHTER]

Thank you so much, Nicki, for volunteering to do that. And I wanted to do that to bring that level of the people conversation in in response to some of the conversation we had before. It's actually just human. And as you get to know other humans, no matter where they are in the system, you will find over and over again that they are just humans and that it is the systems that we must evolve and change to meet the moment. So with that note, I'm turning it over to Andrew Iliff of HEET, who is going to be our next moderator. And I'm so excited for this panel.

ANDREW ILIFF: I'm excited too. I hope you all are too. I think that's a great segue. We spent the morning-- oooh, excuse me-- talking about the high-level and talking about people. And I think policy can seem like a depersonified kind of a thing. It's just out there in the system, in the atmosphere, in the water. But I think we're going to hear in this panel about people making that policy and what is driving them. What are the opportunities? What are the challenges that they see?

We're going to begin with a video from Lorig Charkoudian. She represents District 20 in the Maryland assembly and serves on the Economic Matters Committee. As you will hear, Lorig is a passionate and thoughtful advocate and also runs ultramarathons, which may help explain her stamina in pushing for geothermal networks.

[VIDEO PLAYBACK]

- Delegate Lorig Charkoudian in the Maryland General Assembly. And I am sending my greetings and a little bit of jealousy because I wish I was there with you. But I'm here in the Maryland General Assembly. We are in full session. And I have bill hearings at the time that you all are meeting. So I know you're meeting, and your conversations are probably amazing. And I look forward to hearing about everything that you are learning from each other as I continue to be part of this amazing network of people across the country who are moving legislation and pilots and programs forward to increase network geothermal systems across our communities.

Last year, around this time, I was working to pass the Warmth Act, which is the Working for Accessible, Renewable Maryland Thermal Heat, a bit of a mouthful, but really a brilliant name. Wouldn't you agree? And warmth. Who doesn't want to be warm? And so with that as our entry, we were able to educate my colleagues on network geothermal systems, in our case, utility-owned systems. And we passed the bill in 2024. And so now we've reached a point where the utilities are each putting in their filings working with the community and developing pilot locations, and things are moving forward.

So I'll back up a little bit and tell you about our process. I became really interested in geothermal in general when I was working both on building electrification a number of years ago, working on building electrification, and also simultaneously on looking at grid issues and grid stability and the ability of the grid to handle building and transportation electrification. And that was even before we were looking at load growth from data centers and other manufacturing.

And it was clear to me that geothermal had to be part of our transition because of the fact that it has the ability to do the electrification super efficiently and in a way that really minimizes impact on the grid. And long-term, as we've seen from the DOE studies, really saves an extraordinary amount of money in terms of infrastructure and generation.

So I got excited about that. I had an initial bill in 2021 to create geothermal RECs in the state. But as I was doing that research, I ran across the work that HEET was doing, and I absolutely fell in love with the model because, for a few reasons. One reason is because as I work on energy transition, one of my top priorities is to make sure that the jobs that are being created in our new energy economy are good union jobs and are equivalent to the jobs that are being lost as we transition away from fossil fuels.

And so network geothermal, of course, is the most perfect of those transitions because literally the very same work working on pipes in the ground that could be done with gas is the very same work working on pipes in the ground that is done with network geothermal. So that checked one of my top priority boxes. And then the idea of I do spend a lot of time with legislation that the utilities don't like.

And it's nice to work with the gas utilities and say, look, if you want a future, I don't have a problem with your future. I just have a problem with your current business model and your past business model of fossil gas. And so if you want a future, let me help you have another kind of a future. And really, an opportunity to take what it is that utilities do have, which is an ability and expertise on massive infrastructure projects and access to capital to do that and a system that lets us spread the costs and the benefits across all ratepayers.

And so all of those things made me really excited about network geothermal. So I went up first and met with folks at HEET myself. Learned a bunch of stuff with-- I went up with-- initially, sorry, first I went up with Washington Gas. We took a look at the systems. And then, as I got clearer about the bill that I was putting together, I started a process that I do on most of my big energy bills, which is really bringing together all of the potential stakeholders. So I was working with the gas utilities. I was working with the labor unions, both the labor unions who represent gas workers, so the in-house labor unions for Washington Gas and PG&E, and then also the building trades.

So work that doesn't get done by the in-house unions, construction work that gets contracted out could be done by building trades. I was working very closely with the grassroots groups, the housing justice folks, the climate justice folks who are doing really interesting organizing in my community, where they're going in and measuring NO2 levels associated with gas stoves. And then they're organizing tenants who are then going to their landlords and asking for electrification as a health and safety issue.

So working with Action in Montgomery, Interfaith Power and Light, those were some of the groups doing that grassroots housing justice, climate justice work. And then, also bringing into the conversation groups like the Maryland Energy Administration, the Public Service Commission, the Office of People's Counsel, and then, of course, all the climate groups that do really good work in the state, Chesapeake Climate Action Network, League of Conservation Voters, Sierra Club, and others.

And so I started working with all of those groups, and I brought a group of people up to Massachusetts. And thanks again to HEET for hosting us. We had a chance to see some of the test boreholes. We had a chance to stand there and look at buildings, really, because, as Zeyneb likes to say, there's not a lot to see. But to be able to picture, I think, for folks who were there to be able to learn about what's happening, but also to picture what kind of neighborhoods this could be really effective in.

And then we continued to work collaboratively. And it was exciting to bring folks together who often are not working in the same direction on the same policies working through building trust across those groups of people and making sure that everybody felt like the bill that we finally produced really met the needs of the folks who are going to be required and necessary for implementation.

And so we had the bill last year in the 2024 session. And I'm happy to say it passed in the first year we introduced it. And really, a lot of that had to do with the fact that we essentially had no opposition because everybody was sitting at the table. And in fact, when we went for our hearing, I had the climate justice groups and the Gas Workers Union and the utility and the Office of People's Counsel.

And that's a set of folks that I don't know if they've ever been on the same panel before. But I was telling my colleagues, I was like, just go ahead and take a picture of this. And then move my bill favorable because, obviously, there was still work to be done and education, and so on. But most of the work really was a year and a half of building coalitions and connecting people with each other and making sure that the language really met the needs of everybody involved.

So that bill passed. And then soon after we started working with the gas companies to start to connect them to the grassroots groups and to start to organize and identify potential locations. And that's really where we are right now. We're going through that process with community groups. And the gas companies are working on some engineering studies. And we're excited to have something here in the next few years.

So I'll stop there. I may or may not be able to be on there for questions. I'm not sure how that's going to work. But if anyone's interested in getting in touch with me, we'll make sure that you all have my contact information. I'm happy to follow up and be supportive as I am able. And I do hope to connect with folks and hear more and learn more about what you all are doing all across this country.

[END PLAYBACK]