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[Climate-Conscious Tech Workers: Turning the Tide from Within](#)

Speakers: Eliza Pan and Tamara Kneese
Moderated by Khari Johnson

Transcribed by Sarika Ram, Law Student, New York University School of Law

Khari Johnson (00:00:11):

Hello and welcome to Databite 162: Climate-Conscious Tech Workers Turning the Tide from Within. I'm Khari Johnson, and I'll acknowledge from the start that I'm a little under the weather, so please excuse me for occasional sniffles, but I'm nonetheless very excited to be here with you all today. I'm a tech reporter at CalMatters, and I've reported on how artificial intelligence impacts people and communities for nearly a decade. And I'll be your moderator today with support from Associate Producer Tunika Onnekikami and Senior Producer Rigoberta Lara from Data and Society's Events team. For those joining Data and Society events for the first time, Data and Society is an independent research institute studying the social implications of data and automation. They produce original research and regularly convene multidisciplinary thinkers to discuss the power and purpose of technology in society. During our discussion, we'll use the chat feature to post links and ask you to share your experiences. To ask a question or upvote someone else's question, use the Q and A feature at the bottom of your screen.

We'll leave about 20 minutes at the end for Q and A. So for the next hour, we'll be discussing the ways climate conscious tech workers have attempted to reform the tech industry from within while applying external pressure through policymaking and activism. These topics are examined at length in Turning the Tide: Climate Action In and Against Tech, the latest report by Tamara Kneese. It's a topic that gets at, as Tamara puts it, tensions between workplace organizing and corporate sanction sustainability interventions. Our speakers today are Tamara Kneese and Eliza Pan. Eliza is a co-founder and organizer with Amazon Employees for Climate Justice, and she's worked at Amazon for six years and helped organize thousands of Amazon employees to take public actions, including a walkout that won Amazon's climate pledge. She's been organizing at Amazon ever since. Tamara Kneese is the director of Data and Society's Climate, Technology, and Justice program, and the author of the report we're discussing today, Turning the Tide: Climate Action In and Against Tech. I have

personally turned to Tamara on several occasions to learn more about the environment and technology and data centers and a lot of the topics that we'll be getting into today. But Tamara, I wanted to start with if you could tell us what you found in the 12 months of research that you did for this report in conversations with climate conscious tech workers, and also can you tell us a little bit more about your own background working for tech companies?

Tamara Kneese (00:03:00):

Totally. And yeah, thank you so much for being here, Khari, despite having a cold. I feel you. And yeah, so the report is based on, as I discuss in the report itself, many interviews with a variety of tech workers across the industry. So I had conversations with tech workers at large companies including Microsoft, Google DeepMind, but I also had conversations with people who are at smaller startups and who are attempting to implement some kind of sustainability measures in a startup environment. And then conversations with many tech workers who left the tech industry, who were really disillusioned by the ways that corporate management would obfuscate their true impacts on the environment and on communities, and essentially greenwash a lot of the actions that they were actually doing in the world. And so the report itself also happens to coincide with a massive political and technological shift.

So a lot of the interviews that I conducted were done before Trump was reelected, but the temperature had already changed within tech companies. And the arrival of ChatGPT in November of 2022 did shift some of the conversations that were happening around the political and economic states of technology and really changed the priorities within tech organizations around what kinds of technology they wanted to invest in and how they thought about labor. But I would say that a lot of the things that we're seeing play out within large tech companies today, the seeds were planted before the launch of ChatGPT. So I want to be clear that there had already been a temperature change when ChatGPT arrived, and we already had seen the beginning of mass layoffs within the tech industry, and a lot of that did have to do with tech companies wanting to undo the labor gains that had been made during the early pandemic.

And I think a lot of what we're seeing right now is an attempt to discipline labor and a desire to ignore a lot of the climate pledges and other social impact commitments that companies had made during the height of the Net Zero era and in the wake of George Floyd's murder. And so I think it's very important to try to tie what is happening within tech companies and the day-to-day workflows that are happening and how tech workers are going about trying to do anything around sustainability within companies and get traction and get C-suite support for that kind of work. At the same time, we're also

seeing these much larger shifts that are happening outside of the tech workplace.

And I guess to speak a little bit about my own trajectory, so I am an academic, I have a background in media studies, that's what my PhD is in, and I worked as a professor at the University of San Francisco. I then left my academic job for a sustainability-focused role at Intel, which I had had a relationship with before. And there were many former academics working there on sustainability issues. I was working under Melissa Greg, who was really an advocate for circularity and thinking about reuse and trying to prevent e-waste from ending up in landfill and really thinking about the complicated relationship across the entire tech supply chain and impacts on the environment and on communities. But there was also another side to the way that corporations were really thinking about trying to monetize and create markets for particular kinds of carbon accounting software.

So as net zero pledges became more popular and companies were kind of competing with each other over who could have the best sounding climate commitment for 2030 or 2040 or 2050 (that all seemed very far away at that time), you also had a rush to figure out how to create tools that could be part of that marketplace. So how do you account for all of the emissions within a massive tech organization and think about not only the emissions attached to their operations, but to downstream markets and customers that are using the technology that you're building. And so there were a lot of conversations around how to build the right tools for people to adopt and use in order to meet new regulatory compliance issues as well. So as reporting around things like ESG or Environmental Social and Governance requirements became also more normal and more popular, there was an attempt to think about really how to effectively measure certain things that would help companies compete with each other. And that has all rapidly shifted. I would say we're at a point now where companies no longer have to really pretend to care as much about these kinds of net zero commitments that they once made. We have the CEOs of major tech companies out there saying, net zero was a moonshot. We never really thought we would make it, and it is just too important that we invest now in AI. And AI may eventually fix the problem way down the road. And it's a way to really deflect from the massive environmental impact that AI technologies are having in the here and now.

Khari Johnson (00:09:57):

Thank you. And I wanted to-- I'm excited to get Eliza here, but I wanted to make sure I asked you first though I feel like the report gets deep into the lab mindset and the organizer mindset. Can you talk a little bit more about that history of the lab mindset and the limitations that it has and why our climate conscious tech workers like Eliza

evolving into what you call the organizer mindset?

Tamara Kneese (00:10:40):

So in terms of the lab mindset, it kind of makes sense, right? Because technical work is definitely prioritized within tech companies. And if you don't have data and you don't have metrics to show people, then you're not being very effective. And that is true up and down the line. I mean, when it comes to individual and team-based performance reviews, if you're thinking about demonstrating your impact, it's really about quantitative forms of measurement. And so being able to show, if we do this work, we will reduce the carbon emissions of our operations by X number by X year. That is what management wants. They want hard numbers, and they need that in order to also show shareholders that they're doing something. This is how anything kind of becomes viable within a tech environment. So the idea also is that there are employees who are so committed to achieving climate goals or who are excited about working on kind of side projects that they take on extra volunteer work.

And so there has been historically a practice within tech companies where people join employee resource groups around particular issues. Some of them are identity based, but you also do have climate groups for tech workers. And that can be a way for them to participate in the production or design of tooling or particular guidelines or systems that could be helpful within their own workplace. And there's a relationship also to innovation, that these are technologists who are kind of doing it on their own time. They're passionate volunteers, and that's where the real magic of innovation happens, when people are kind of doing that on their own time. And I think a lot of tech workers, and I'll let Eliza talk about her particular story, become frustrated when they realize that they're not actually making a big difference. You can measure something all day and worry about exactly what the carbon intensity of a particular AI model is, but unless you actually have decision making power, and there's a way to change the way that model works to stop a product from launching that might be really harmful. If there's no leverage in terms of your power within the workplace, especially as an individual, there's not much that you can do. And so I think what we see is that people do end up kind of pivoting from this more volunteer mentality where they're joining in employee resource groups and doing volunteer work on the side, or attempting to maybe call out things that they think are problematic, but in a way that is still not going to rock the boat too much. But then people pivot to actual whistle blowing, to quitting publicly their jobs or to workplace organizing and really collectively working together to force management to make a change, to put pressure on shareholders and to build relationships outside of an individual company. So I think it's also really important to think about the importance of cross industry forms of organizing and groups like Tech Workers Coalition, which I've

been part of since 2017, is one group that really does try to foster conversations across the industry on a global scale, and also thinking about relationships with people who are not in tech at all. So it's also really important for tech workers to be in conversation with environmental justice groups and other labor organizers and to understand strategies that may be distinct from the kinds of things that make sense within a corporate tech environment.

Khari Johnson (00:15:09):

Yeah, thank you. And just a reminder to everyone, please throw your questions in the Q and A area, should any come to mind. Eliza, I'd like you to walk us through your current work with Amazon Employees for Climate Justice. But first, I really love asking this question to people who feel compelled to act. Was there a seminal event or moment that got you started working with Amazon Employees for Climate Justice?

Eliza Pan (00:15:40):

Yeah, I mean, it's funny because I feel like everything that tomorrow was saying is kind of like my journey is just a case of microcosm of everything. So what really got me into especially activated around climate is I got a job at Amazon, and I moved to Seattle where Amazon's headquarters are to work at Amazon. And I grew up in southern California, in Ontario, in the Inland Empire in Pomona where there are a lot of warehouses. It's a very polluted region from logistics. And it's the kind of thing that I did not realize until I left that that was the case, seeing a different place like, oh, it's actually not normal to have warehouses everywhere down the street from your house. And so moving to Seattle, working at Amazon, it made me really realize, oh, this tech company that I'm working for is actually responsible for a lot of the pollution in my hometown, and how do I relate to that? It's a lot of cognitive dissonance. At the time when I joined the company, this was still during tech's "Don't be evil" era of tech is going to, tech was like, oh, well, you're not going to Wall Street. You're not a consultant. You're trying to make the world better through tech. And pretty quickly that kind of fell apart for me. And so I was looking for ways as Tamara was saying of, okay, well I'm here. What can I do to make tech better to make this company less evil?

And I also got involved, initially, I got involved with climate groups outside of Amazon. And at the same time, again, as exactly what Tamara was saying, I was volunteering for side projects in my spare time while at Amazon because I was like, okay, I'm going to make my org track carbon in our weekly monthly reporting so that we can actually assess that alongside all the other metrics that we're being assessed on. And I joined an employee affinity group that actually what happened is that there were a group of us

at Amazon who we all cared about climate, and we were all starting to meet to just talk about, "Hey, I'm in this org. You're in that org. How can we make climate a part of our jobs?" And that group, it got co-opted by Amazon to become an employee resource group around, they called it the sustainability ambassadors. And how it got co-opted was Amazon had people come in from the sustainability org and turned it into a program where everybody was working on helping your team get better at recycling, literally getting better at separating your trash so that stuff goes in compost, goes in recycling, and oh, stop--tell people to use the actual mugs and not the disposable cups. So I obviously was like, this is bs. This is not what I wanted to do. And that continues to this day, the kind of corporate-approved sustainability ambassadors program at Amazon.

And I was on my side projects too. I was hitting brick wall after brick wall after brick wall. And it wasn't that people were evil or anything like that, it was just that nobody had time because everybody else was being measured on other metrics that were not sustainability metrics. And so I was just by myself trying to push this rock up a hill and everybody's like, oh, what a cute little side project you're doing. Yeah, let's talk about it in six months. And so eventually, as I was saying, at the same time, I was also volunteering for a climate organization here in Seattle. And through that I met other employees at Amazon who also cared about climate, and we were experiencing similar frustrations. And so that's when we started coming together to think, talk about, well, what else can we do? We are all hitting the same roadblocks.

We all care about climate. We know that Amazon is not doing well. At the time, Amazon didn't even report a carbon footprint. And so we decided to through, and this took months, right? Months of living and living rooms, having coffee chats with tons of people. And eventually there was a core group of us that through lots of coffee chats, it became clear like, oh, these are the people that are really wanting to fight and are really wanting to do something to change the priorities of the company. Because at the end of the day, what it came down to is we realized that we were allowed a sandbox. And as long as you stayed within the sandbox, sure you can work yourself to the bone and make some small incremental changes as long as they are in here. But if you want to actually address the core issue, which is that the company is always going to deprioritize sustainability and is only going to allow this much, you have to change the conditions under which our leadership are allowing these decisions to be made.

You have to change the priorities of leadership to actually prioritize sustainability and not just see it as a bonus project. And so I've been organizing since 2018, so there's a lot to say in what we did, but to make a long story short, we started organizing to put pressure on the company in ways that the company did not approve of. We did things like open letters, we disrupted meetings, we spoke to the press, and we publicly

criticized the company in the press, all sorts of things. We hosted panels where we criticized the company internally. And all that to say is that that's ultimately what worked. We did win one of our first, actually, it was not our first victory. Our second victory was winning the climate pledge back in 2019 after we organized a walkout.

To Tamara's point, things have shifted a lot since then. Companies are now, Amazon is going backwards on its climate pledge, and that's happy to talk about that and kind of how our thinking on that has shifted. But at the time, and still to this day, even the fact of the existence of the climate pledge is a way for us to hold the company's feet to the fire in terms of, you made this public commitment and now you have to follow it. That has proven to be a very agitational point for other tech workers. As Tamara was saying, this is not a fight that any single tech worker can win by themselves. It has to be a collective effort to put pressure on these companies and getting people involved. That's the organizing challenge. And in the tech industry, it has been useful for us to say, well, Amazon made this public commitment, so all we're doing is saying follow through on that.

And that is something that as a way in the door for people who might not be thinking about power in the ways that we now think about it, because we've been through these fights, but for a lot of people in the tech industry, they came to the tech industry from technical backgrounds, from academia, from a place of really being really interested in the craft of tech work, but having not as much background in political and social leverage and social power and history. So that is our challenge in organizing the tech industry is how do we add that understanding about how power works and that shifting power is not about writing papers, unfortunately, because that is what we are trained to do.

Khari Johnson (00:24:27):

Yeah. Oops. Yeah, and it sounds like things started to change for you once you realized that you were in that sandbox with limitations. Can you talk a little bit more about some of your more recent actions, your group's more recent actions? And let's get back to what you were talking about before about how Amazon Employees for climate justice has shifted in your thinking about Amazon's climate pledge.

Eliza Pan (00:24:55):

Yeah. Well, right now, as we're both saying, right, the political environment we're in has shifted dramatically with Trump being in power. And what we're also seeing is that the tech industry is, it's a mask off moment. They are very much throwing themselves in line

behind Trump offering all sorts of donations and public praise. And for us, what I see, why are they doing this right? It is because they see, they have locked themselves into--the tech CEOs have locked themselves into an AI race, and I say they have locked themselves into it because it truly is. They are the ones who have created this race, and they are selling this race to the public as a race for kind of technological progress. But really what it is, it's a race for land, and it's a race for water and power and electricity and political power.

These are limited resources that data centers need. And so once land is taken, once water is taken by a data center, that cannot be used by another company because that capacity is taken. And when I say water, I mean fresh water. This is water that people drink. And so what we're seeing, what we're finding ourselves in is that these tech CEOs are throwing everything, all the values, all the promises they made after George Floyd, the DEI promises, the climate promises, they're throwing them out the door because they have trapped themselves into having to pursue this limited land and resources for AI data centers. And so what we're currently campaigning on is to bring some common sense into this AI hype driven cycle. Because what's happening is the public is having to give up so much of our water and resources and for what, what is this AI actually getting us?

And it's not getting us a solution to the climate crisis. And it's actually resulting in not in people getting to work less, it's people getting to work more because now there's layoffs. What we're seeing at Amazon is that teams are getting smaller both because of layoffs and because they're not hiring, but the work expectations, the scope of people's work, the deadlines are getting shorter and their people are being told, well, you have to make up the difference with AI, but the AI tools are not good enough to actually replace people yet. And so what's happening is that people are just literally just working more, working 12 hour days, working on weekends. And so what the AI race actually is shifting more work onto workers, shifting water and land resources away from the public into the hands of the tech oligarchy. And that is a future that I don't think any of us want.

And so our current campaign, and just two weeks ago we hit a major milestone, we've gotten over a thousand Amazon corporate workers to sign an open letter calling all this out, and would love to share this with everybody who's watching. We're also collecting solidarity signatures from people across--whoever, including across the industry. As Tamara was saying, it's important that we kind of all come together in this age, in this dawn of AI because we're the ones who are giving up everything that we care about. So we have an open letter that we're currently still gathering signatures on. We've gotten over a thousand signatures from Amazon employees. We're also getting signatures from people outside of Amazon. So if you work in the tech industry or know somebody

who works in the tech industry or you just want to sign on, we've gotten signatures from people at Microsoft, at Meta, at Apple, but also students from many dozens of universities, people who work at Walmart, at Costco, at Starbucks, because this AI race, we're talking about it because we're the ones in the companies who are taking over our land and resources, but it affects all of us.

Khari Johnson (00:29:38):

Yeah, it sounds like you're describing counterbalance to empire as Karen Hao so aptly puts it. I have so many questions for both of you. I wish we had another hour, but Tamara, to continue in this, I'm curious, how do you view our current political situation, techfascism, as you put it, investment in data centers and energy infrastructure? How does that change how companies talk about themselves as they abandon their own net zero carbon emission goals?

Tamara Kneese (00:30:16):

Yeah, I mean, as Eliza just described, right, there's so much pressure on tech workers within companies to somehow increase their productivity and to show that this AI con is doing what they're all claiming it can do. And I think the combination of this fantasy, which is really technofascist in nature of replacing highly compensated labor especially, so this is a way to replace the cushy coder jobs that for a while in the early 2020s, companies were competing over talent and everybody was offering perks and salaries were going up. And this is a way of disciplining labor and a way of making anyone who felt like they had any modicum of stability to feel precarious because of course that gives them much more power. And on top of that, the massive investments in AI data centers and related energy infrastructures, looking at how this project is really about, as Eliza put it, it is a land grab. It is about amassing as many of the earth's resources as possible. And there's also this kind of end times aspect to it as well. It's like climate change is actually maybe not something that we can turn around, so let's just get as rich as we can while we can and kind of hope that maybe some of us can flee to Mars or something. And that is, I think where a lot of the technofascist billionaire class is at. And they're so disconnected from the working class, which does include coders, right? If you're working for a living, even if you're making 300K, you are definitely not a billionaire. And so I think there's a lot happening in terms of really trying to ensure that wealth inequality continues to grow and that only a handful of people attached to very powerful companies really control most of the resources and the wealth.

And it does sound like a conspiracy theory when you talk about some of the belief systems that are guiding the practices that we're seeing, but it is quite telling. So there

were a few interviews that I conducted with venture capitalists who focus on sustainability and ESG in particular, and it didn't make it into the report. I couldn't put everything in there. It was already too long. But looking at how the political climate has led to the erasure of particular kinds of commitments on company websites, the politicization of things like ESG, which should be kind of like a vanilla thing. These are not reporting out your social impact and feel good stories about what you're doing for the environment and like, oh, at our tech campus, we have a rooftop garden or something, or talking about recycled water in your data centers, which yeah, we can talk about how that doesn't actually help that much. But anyway, I mean there's all these different ways that companies historically have used corporate social responsibility and reporting norms as a way to kind of greenwash and ethics wash and make themselves look attractive, but they don't really need to do that anymore. Not as much. And what I'm hearing from venture capitalists behind the scenes is that on the one hand, you do still have people within companies who understand that some degree of sustainability and thinking about the long-term future is a smart business move, so they should actually be investing in that.

But there also is a lot of fear around figures like Peter Thiel who has been railing against ESG and talking about how it is a Chinese communist conspiracy since well before the arrival of ChatGPT. And so the way that all of these things are kind of coming together, so we have AI is the reason for investing in massive data centers, which do rely on huge amounts of land and water, other resources. We have also the entire supply chain. So thinking about how this will also inform new investments in critical minerals and thinking about mining operations, manufacturing, how to accelerate a lot of the processes of production across the supply chain and resource extraction.

And at the same time, particularly from the Trump administration, we're seeing a lot of eroding environmental protection. So we're seeing federal lands opened up to data center development. We're seeing much more drilling happening. We're seeing an investment in things like critical minerals in places that ordinarily would not have really been a site for critical mineral mining and production. So we have just an acceleration of all of this happening at the same time, and it is very well aligned with a particular kind of ideology, which is coming from the very top. And what was once in the shadows is now very upfront.

Khari Johnson (00:36:38):

Yeah, thank you. A reminder to all of our participants, if we've got a nice batch of questions showing up in the Q and A, and if you'd like to up upvote any of those or share your own question, please jump in and do so. I've got one or two more on my side. I

mean, insofar as time goes, I have very many more in my head, but I'm curious, one of the things that sticks in my mind, and you talked about it a little bit there, Tamara, with Peter Thiel and some of the conversations you had with venture capitalists. How does this power of, you've got tech workers and you've got tech companies, and the other major stakeholder here is your investors and shareholders. And so Eliza, how is your organization thinking about this? Tamara, how are you seeing it in your interviews? Are folks who are thinking about organizing attempting to reach those people in order to make systemic change?

Eliza Pan (00:38:03):

So yeah, I think what our strategy is at this time is, I mean, everything that Tamara is saying, right? It does sound like a conspiracy theory because it's so scary, but that is exactly what we are seeing too at Amazon and at other tech companies. This is real, sadly. And I think about also Mark Andreessen, who is this huge Silicon Valley VC hedge fund guy, he did a series of interviews where he talked about this at length. He was pretty open, and part of what their strategy is, and part of what he's reacting to is he was saying explicitly in the kind of 2000, 2010 time he and other CEO friends of his is that they felt besieged. They felt like they were under so much pressure from their own workers and from the public to do a bunch of social things like DEI, like climate, that they felt like they were the smartest people they knew. They did not like having the public or their own workers tell them, you have to do this thing. And so in part, the crackdown, as Tamara was talking about the mass layoffs, the fear that has instilled, the mandates at Amazon, that we see that workers are being required to use AI and saying, well, if you don't, layoffs are coming. And that's resulted in this environment of fear. People are so afraid. And that's compounded obviously with the Trump administration, especially for workers who are on visas. And that is all intentional. That's all part of this. And that's intentional because it was effective when workers and when the public put pressure on these titans of industry. They felt the pressure and they didn't like it because they were forced to do things that they did not want to do. But that's exactly the moment that we are in now.

And there is absolutely still a case to be made financially that sustainability is a good long-term investment, but at least what we're seeing at Amazon is that the leadership, their calculus of what is a good long-term investment has changed dramatically, and they're counting on one thing that's that I find really disturbing about this AI race and conversations about the AI bubble and whether or not AI is good enough. And those are fine discussions, but they're almost distractions because no matter what happens with whether the AI bubble pops today or tomorrow or next year or it doesn't pop at all, the end result is still the same in that these companies are still going to retain a lot of

power, a lot of land, a lot of resources, and the conversations about, well, is AI even good enough? Is there even a business use case for AI? What I'm seeing the pattern play out at Amazon is that Amazon will find a use case for it, and these other companies, they will. No matter, it doesn't matter if the public doesn't want it, they're going to force it and have the public pay for it because they've invested so much in these data centers. And because they will then have the power to integrate it in every part of our lives to surveil us, to not just surveil the quote criminals, but also to surveil all of us at work, as Amazon has been doing to its warehouse workers in the warehouses, monitoring every single movement as they're beginning to do in the corporate workforce monitoring how often people are using AI, how often people are badging into the building and leaving the building. That is all already happening. And that will only, the AI is very wrapped up with surveillance technology and they're already doing that with governments abroad. So all of that to say is from our perspective, we have to push back. And the power that we have is as workers, but also as the public, there are data center fights popping off all over the country and even the world where communities are saying, we don't want these data centers in our hometown. And some of them have been very successful. And I think those are a really critical front of this fight too, in addition to the worker front.

Khari Johnson (00:42:56):

And wealthy companies are able to amass more of the resources you talked about and build empire, but available to, all of us of course, is the power that organizers harness of people power. I want to make sure that we have space for questions from the audience. Really quick. Tamara, if you could pull two recommendations from your report that you think workers inside tech companies should remember and take with them today, what would they be?

Tamara Kneese (00:43:27):

Yeah, so I talk a little bit about the idea of viable counter data and how important that really is, particularly as communities do rise up and fight back against data center encroachment. And so within companies we've talked about there's a lot of focus on technical skills and knowledge and quantitative metrics, which you do need. You do need a combination of quantitative metrics but also qualitative. And so a lot of the local, embodied impacts that data centers have on communities are not necessarily going to be captured when you're just talking about water use or energy use. So I think for people within tech companies to start talking to people who are experiencing these impacts firsthand, who are dealing with horrible air quality, who are dealing with health impacts ranging from asthma and cancer to miscarriages to talk about what it really means to

live next to a data center and be dealing with noise pollution, to really think about the visceral impacts of the infrastructures that are facilitating the AI models that they're designing, building and deploying.

And so I think that keeping that in mind, and then also along with that, forming much broader coalitions and having many more, not just interdisciplinary conversations, so people from across civil society, environmental justice organizations, academia as well, along with former tech workers who have that insider knowledge, but also to make sure that these conversations are transnational in nature. Because one issue that is really beginning to emerge is that as anger over data center development grows and there's a lot more pushback in places like the US, the data centers will move somewhere else, and they are also popping up in many other places, in places like Mexico and Chile and Argentina. And so how do you ensure that one data center site fight or a moratorium in one particular location doesn't translate into data center growth in another place that maybe has less political and economic power?

Khari Johnson (00:46:01):

It does get pushed over there. Yeah. To dive right into our questions from the audience, one of the most upvoted questions was, Eliza, can you talk about how you organize or communicate across workers who work at Amazon HQ and workers who work in warehouses or in delivery? Relatedly, how do you connect with workers who are employed under different kinds of contracts?

Eliza Pan (00:46:30):

Yeah, it's grown increasingly hard because Amazon has been really cracking down on the ways that workers can communicate with each other internally over the last couple of years or so. So for example, Amazon requires moderators now on email lists, and those moderators have to go through a training where they're trained to flag anything that looks like organizing. So lots of other examples like that. And so we've been organizing for many years, so we have built up our networks, but it does require a lot. It requires people talking to each other, talking to their coworkers about these issues. And I think Amazon's culture is maybe especially so, but I think it's the same in a lot of tech companies where the culture is one where you don't really talk about political matters or social matters. And a lot of it is having to break through, having to train ourselves and train other workers on how to have those conversations. And with our current campaign, right, with our open letter, we've had to experiment with reaching tech workers outside of work because it has been so repressive internally.

I think probably a large part of the audience, a lot of people in the audience here today probably know tech workers, whether they're at Amazon or not, and you are all part of the network that tech workers are part of. And so these conversations need to be happening in all of our social circles about, because this is a future that we're all being forced into, a very dystopian one. And so how do I reach people? We do still reach people on Corp via people's networks, and we're also experimenting with how do we reach people off Corp, like flyering and stickering and social media and all of these things have helped. And also leaning on allies and people who are in solidarity with us to spread the word. And again, appreciate everybody sharing about our open letter. Or again, even if they don't work at Amazon, there's people who have reached out to us from other tech companies saying, yeah, these are the same issues we're facing here too. How do I get started? What can I do? And we want to connect all these people, right? Yeah. And sorry, what was the second part of the question?

Khari Johnson (00:49:08):

Let me bring it back up. I think it got moved.

Eliza Pan (00:49:18):

Maybe I got it all.

Khari Johnson (00:49:21):

For the sake of time, I suppose we'll jump to the next one, but thank you. Oh, I apologize. Here's the question. Oh yeah, you did answer it. How do you connect with workers who are employed under different kinds of contracts? One of the other most upvoted questions was, when selecting tools for a task or project, how can tech workers practice sustainability or harm reduction? The person asking the question said, for example, I saw a paper on archive that compared several AI models by energy consumption.

Tamara Kneese (00:49:59):

Yeah, I mean, I think there certainly are ways to think about harm reduction when it comes to choosing smaller models, choosing more energy efficient models. And companies like Hugging Face I think have done a really good job of showing the differences between different models and trying to come up with ways for people to make better decisions. So I think the problem is, and as I talk about in the report, a lot of the tools that help developers make better choices and have them think about the relationship between the model that they're training and the energy grid, and maybe trying to train their model during a time of day when there's more renewable energy

available, they don't necessarily get to make those decisions, especially now. And so unless you have a manager who's really open to that and you can somehow justify that as part of your workflow, it may not be a high priority for you.

And so while I do think that there's work that individual developers can do, even people I spoke to in a startup environments who are trying to build tools to help developers really think about carbon awareness, it was really hard for them to get management's approval and for the projects to get any traction. And so I think that while there is a way to think about certainly a form of harm reduction, it is really hard to fight back against the overall systemic problem. And this is something that people like Will and Holly Alpine, who are also interviewed in the report, that disconnect between trying to do things more efficiently when it comes to an AI model that a company is producing, and then the contracts with the oil and gas industry or using AI to enable further oil and gas drilling or exploration, and also military applications that lead to even more emissions. And so how do you disconnect the energy use of the model and harm reduction that way? How can you really fully disconnect that from these larger systemic problems?

Khari Johnson (00:52:34):

And this is bringing to mind as well the portion of the report that you mentioned, the importance of local and state agencies to push for more transparency for the data and efforts. And certainly you and I talked about Assembly Bill 93 here in California, which was vetoed, which tried to compel the data center operators to share more information. One of the other most upvoted questions here in the Q and A asks, given these macro shifts, is the era of working from within slash you can change things from the inside over? And how much cognitive dissonance can employees live with?

Eliza Pan (00:53:23):

Yeah, that's a great question. So the way that I think about working from within, and I think Tamara does an amazing job at talking about this in her report. There's ways of trying to do things according to the processes that are allowed internally. Like at Amazon, it's like writing papers and getting buy-in from different teams to get your papers pushed up to the next level up. And I do think there's, in this era, there are a lot of limitations with that approach. But I want to say I don't think the answer to that though is for people who care about the environmental impact or sustainability, I don't think the answer is to quit and to leave the tech industry because then we're going to leave the tech industry in the hands of people who don't care. And that's truly scary. And so from my perspective, this is a time where we have to act collectively, like the kind of individual lone wolf actor has limitations, even for people who are thinking about whistle blowing

and that arena, I would say, how do you do that in a way that is collective? How do you do that as part of a larger movement, a larger effort to put pressure on these executives? And the era of working the system, it has limitations. It always has. And it's even more so now. And we still absolutely need people who are passionate, who are principled, who are wanting to fight to be in the tech industry and to gather with other people who are willing to fight and gather with the public too. There's all these data center fights everywhere and would love to figure out cross industry, how do we gather together and really take action? And that is actually what in this era, it is really scary and repressive, but it's scary and repressive because those people in power are afraid of exactly that. They're trying to prevent us from coming together because they know it is how they will have to respond.

Khari Johnson (00:55:48):

Yeah. Thank you. I think we have time for one more question, and I suppose this was the one that came in before the other one that got two votes. How can tech workers push back or counter pushes by management to embrace AI? Are there questions we should be asking management or frameworks or procedures that we should demand?

Eliza Pan (00:56:22):

Sorry, I'm sorry. Can you repeat that question? I got distracted by the chat.

Khari Johnson (00:56:25):

No problem. Yeah. How can tech workers push back or counter pushes by management to embrace AI? Are there questions we should be asking management or frameworks or procedures that we should demand?

Eliza Pan (00:56:41):

Yeah I'll give a quick answer and then Tamara, if you have a fuller answer. Some of the ways that our members have pushed back is by asking questions about what are the guardrails around when we should be using AI and what use cases we should be using AI? And also asking their managers about the environmental impact of, hey, what is us using this? How are we measuring the environmental impact of using this tool or this model for all of these use cases, especially in Amazon where AI is being forced on every problem even when it doesn't necessarily need to be. And I think in our experiences with our members asking their management these questions, often there are no good answers because there's these top-down mandates to use AI without actually having thought through what are the guardrails. And so even asking those questions can help

surface other people who feel similarly but maybe are afraid to voice it. And that's when you can start surfacing like, okay, there are other people here who want to think about this. Let's grab coffee, let's talk about it.

Khari Johnson (00:57:51):

Tamara.

Tamara Kneese (00:57:52):

Yeah, it's interesting because I think I've been talking to people who are trying to create guidelines for AI use and raise questions around the efficacy of using AI for a lot of different things within the workplace, within a city government as well, and with other kinds of tech places and in workplaces. And so I do think being able to collectively raise questions and maybe have ways of also documenting how the AI tool is not actually saving time or enhancing productivity. So yeah, I think this idea of raising the environmental impact question, it's something that seems to be coming up again and again for workers across different industries and in academia as well. And yet, so I think there is so much that is happening that is really outside of just the tech workplace. And that really again, points to the need for having conversations across the board and really across sectors around how to organize against AI use in the workplace. And it'd be interesting to see what has been effective in say a healthcare setting versus an education setting versus a tech setting versus a city government setting.

Khari Johnson (00:59:26):

And in the great tradition of journalists never telling the truth when they say it's the last question, I really wanted to get to this last one here because we're at time, but this is a great question. What are small wins workers and tech companies with little to no climate sensibility can pursue in order to turn the tide as it were internally?

Eliza Pan (00:59:58):

Yeah, I would love to know whoever asked this, what they mean by small wins, but how I think about that is bringing these issues out into the open. At tech companies, there's so much, at least at Amazon, and I think this is the case at other companies too. There is this kind of wall of professionalism and also a wall of what are acceptable topics to bring up at work. A small victory in that case is I think breaking through that wall, breaking through and speaking openly and vulnerably with people you work with about your concerns. That is a small win if you're able to help create the space. As one of the folks in the chat was saying, as Maddie was saying, create a space where people feel

like they can speak honestly about their concerns about the climate impact. And hey, with our letter campaign, one of the things that was really I think meaningful for me is what I heard from folks. Like, wow, this is exactly what I've been thinking and feeling, but I just have never dared to say it out loud. I feel like I'm being forced to use AI, and I feel like at the same time I'm burning our climate and it sucks, but because I feel like I'm forced to do it. And so just creating a space for people to speak openly, I think is a small, it's not even a small win. It is a win because ultimately at the end of the day, what we're talking about is changing the tech industry and shifting the culture to have this not be acceptable. And what that means is changing what is considered acceptable, and that means being more open, being more human, being more aware about consequences on other people and the planet.

Khari Johnson (01:01:50):

Any final thoughts, Tamara?

Tamara Kneese (01:01:52):

Yeah, I mean, I agree with everything Eliza just said. And I think political education. So a lot of radical action including at Amazon Employees for climate justice early on was about reading groups. It's about, so maybe you don't know that much about the relationship between tech and environmental justice, but now it might be harder to organize over official company sanctioned channels, but you can start a Signal chat group and figure out a way to connect with your fellow workers at a coffee shop, or if you all work in the same place or arrange a virtual meeting off of a company owned property and have an informal conversation. And this is where the idea for the Tech Workers Coalition webinar on labor and climate issues around data centers came from. It was basically tech workers being like, we want to know more about these intersections and we want to have a conversation about it and share it with other tech workers. So I think there's a lot that happens on that kind of informal level.

Khari Johnson (01:03:05):

And if I may add in terms of small wins and such, they can be small or big, but you can feel free to contact a journalist, khari@calmatters.org. Please join me in thanking today's panelists, Eliza Pan and Tamara Kneese. And thank you all for joining us for the conversation today, both the conversation we had here on Zoom and the lively conversation happening in the chat. You can read the report, Tamara's report at the link in the chat, and take good care.

