

So now we have an exciting transition, welcoming my leader at PG&E, Patti Poppe and my mayor of San Jose, Matt Mahan.

[APPLAUSE]

Thank you, John. Loved your story. Thank you.

Thank you. Appreciate your comments there. Hey, good morning.

Hey, everybody. Welcome to PG&E second annual Innovation Summit. We're so happy to have you here. The numbers are bigger than ever. We're so glad there's so much demand. Hello to everyone online. And definitely welcome to everyone here in San Jose. I'm pleased to be joined by the mayor of San Jose. And Matt, why don't you just welcome folks to your hometown. Let me get out of the way.

Thanks, Patti. Appreciate it. Well, good morning, everyone, and welcome to San Jose. I understand we are also joined by thousands of people on the live stream. And so I want to take this opportunity to remind everyone that San Jose has what is consistently rated the top mid-sized airport in the country.

So next time, I hope you all join us in person. But for those of you-- we've got a full house here today. A really impressive turnout. For all of you who are here in person, I just want to say a word about San Jose, a city I'm very proud to lead as mayor.

As you explore our city, and I hope you will, you will find a city that is nearly 1 million people and one of the most diverse and innovative cities on the planet. We are 40% foreign born. Over 50% of our residents speak a language other than English at home.

The San Jose metro creates more patents per capita than any other city in our country, including twice as many patents per capita-- actually, sorry-- total patents in AI and machine learning applications. And the story of our city is a place that has been welcoming to people from all over the world and created incredible upward mobility. Just a few blocks from here, we have San Jose State University, ranked the fourth top public university in the country now by the *Wall Street Journal*.

And when you talk to big employers in Silicon Valley, they will tell you they hire more students from San Jose State than the entire Ivy League combined. And so really, our story here has been one of creating upward mobility and economic opportunity for a very diverse city. You don't have to just take my word for it. I'm obviously very biased, but Harvard economist Raj Chetty showed that we actually have, in fact, done a better job of moving people from the bottom income quintile to the top, better than any other city.

And so I believe we embody the American dream. And as we get into our conversation today, the real question for us as a city is, how do we continue to grow? How do we continue to create opportunity and be a city that is a model of what the American dream needs to look like going forward for an increasingly diverse country, in a country that needs to stay economically competitive and innovative? So I'm just honored to have you all here in San Jose. And Patti, I'll turn it back to you.

Thank you, Matt. Let's just sit down and get our conversation started.

All right.

So Mayor, first of all, I'm super impressed with your leadership. You've done a great job of pragmatically shepherding your city, our hometown, through really a big changing time, rebounding the city. It's really exciting to be here. We feel the energy, and we're proud to serve the city of San Jose.

When you think about the future of San Jose and energy and your net zero ambitions for the city, can you share with us what your vision is around that?

Yeah, absolutely. And by the way, I will-- this was not scripted, but I want to just return the complement. I think Patti is doing a phenomenal job of leading the company. You've had a bold vision and been really clear about how focused on the customer you're going to be in delivering value, and I really appreciate that. My job as well is to deliver value to our residents. And we both really, I think, care about accountability and outcomes. So it's great to work with you.

On the economy and our carbon neutrality goals, we became the first large city in the country to pledge to be carbon neutral by 2030, or I believe, our most important responsibility in the long run, intergenerationally, is to ensure that we hand off to our kids and grandkids a clean and safe environment and a planet that is habitable.

And so we're very serious about decarbonizing our economy, but historically, I think that's always come with a trade off. We have generally accepted the reality historically that we can have more economic growth, but it may come at the expense of our environment, or we can protect our environment, but it will mean less growth and less economic opportunity.

And I think it's critically important as the capital of Silicon Valley, if we're going to lead our country forward, that we find a way to no longer have to make that trade off. We want to have our cake and eat it too. And the only way to do that is through innovation. And so that's why I'm excited to be partnering so closely with PG&E and thinking about how we decarbonize the grid in a way that still enables economic growth and innovation. I think that has to be our North Star as we navigate our energy future.

We could not agree more. We call it our triple bottom line, serving people, the planet, and prosperity. And that we say all three all the time. You don't have to make trade offs. You might have to think a little harder, which is why we have all these smart people with us today. They'll help us do the thinking. And so on that front, Mayor, what role do you think AI specifically plays in San Jose, in this innovation future here?

I think AI is likely to be the most important technology platform since the emergence of the internet. And I know that's a bold claim, but to demystify it, I think it essentially is going to enable the automation of so much of what we currently do manually, at great cost, with great friction. It's going to take a lot of the drudgery out of our jobs. It's not going to replace humans.

It's going to enable us to do that higher-order, more creative thinking and build deeper human relationships but have a much more efficient way of delivering services of all kinds. I think about it in the government context. We've been a leader in applying AI to the provision of government services.

In fact, our team at city hall created the GovAI coalition, which now has about 400 members. These are cities and counties across the country who are sharing best practices in the application of AI for the delivery of public services.

We are proactively identifying and filling potholes in an automated way, with cameras on city vehicles, where we're using sensors to optimize bus routes and have actually been able to speed up the routes that we're testing by over 20% and reduce the likelihood of even hitting a red light by 50% on our optimized bus routes. We are improving language translation.

In fact, I talked about how diverse our city is using our proprietary, if you will, language, Vietnamese data at the city. We have actually improved upon Google Translate model. We actually have a more accurate translation service at the city for Vietnamese.

For our residents who are trying to access city services, we're speeding up procurement. I think we can speed up permitting. I think there are thousands of applications of these tools to make government more efficient. You can only imagine how much more we're going to be able to do with all the private sector services that exist out there.

And so, Mayor, here in San Jose, a lot of those ideas are born. I mean, you just talked about this contribution to Google. How do you think about the role of these large tech companies that we're privileged to have in our backyard?

Well, as we discussed with the historical trade off we've faced between a economic growth and the environment, I think Silicon Valley's future prosperity is going to rely on the big innovative employers. And we are so lucky to have companies like NVIDIA, Google, Apple, Facebook. And even companies that aren't headquartered here like Amazon and Microsoft have huge presences here because this is where the talent is.

There's no greater density of talent and innovative capacity than right here in San Jose and the Silicon Valley. But in order for that to continue to be true, the next phase of that growth requires us to figure out how to build a lot more housing, how to invest in infrastructure, to power that economy.

We're running into, as you well know, real constraints around our ability to energize those investments, those data centers and R&D centers, infrastructure for mobility, how people move around. And in fact, I believe one of the best ways to deal with that is to have more people living in places like downtown where they can live and work and walk and not have to sit in traffic for two hours a day.

So I think if we're going to continue to be a city that really represents the American dream, we're going to have to think differently. We can't keep growing out. We're going to have to build in, build up in more mixed-use environments and do it in a carbon neutral way. And we're only going to get there through innovative partnerships.

Well, I love that. And it's a good tee up. Maybe we should invite a couple friends to join us, I think. Would you be open to breaking a little news here on the stage today?

Let's do that.

Let's do that. OK, we've got some friends to join us on the stage.

Welcome, West Bank Founder Ian Gillespie, Founder and Chief Executive Officer Plug and Play Tech Center Saeed Amidi, and Vice President South Bay Delivery PG&E Mike Medeiros.

[APPLAUSE]

[MUSIC PLAYING]

Well, we're excited to announce an important partnership here on this stage at the Innovation Summit, and we're going to start with a video to set the stage. Let's go ahead and roll the tape.

[VIDEO PLAYBACK]

- Data has become the most valuable commodity in the world. And unlike oil and gold, it isn't hidden in underground mines or wells. Our data is stored in the cloud, which sits within large warehouses called data centers. With digitization, we are witnessing an exponential surge in data creation. And recent advancements in AI have accelerated this trend.

A new data center is built weekly, yet many are far from major cities, where most data is produced and used. With distance, data must travel further to reach users who create and use data the most. Meanwhile, our relentless pursuit of data magnifies the weight of the climate crisis. Data centers generate substantial greenhouse gas emissions. In the AI race, speed can come at the cost of sustainability.

We see an opportunity to redefine data centers as vital urban infrastructure, with the same impact as public parks, water treatment plants, or transit systems. Our solution is based on simple physics, the law of conservation of energy. For every unit of energy that goes into our data centers, an equivalent unit of heat energy is generated.

Traditionally, this surplus heat is ejected into the atmosphere through cooling towers, effectively wasted. In an innovative collaboration with PG&E, we've developed a system to power our data centers and the city more efficiently by harnessing every unit of energy PG&E supplies and using it twice. We are delivering close to 200 megawatts of hyperscale data center capacity, paired with 4,000 units of rental housing across three development nodes in downtown San Jose.

With power delivered in phases over the next four years, these nodes will become critical infrastructure for both AI innovation and clean, cost effective thermal energy in the downtown core. By connecting our district energy system, our data center nodes can provide heating and hot water to neighboring homes and businesses, reducing our overall carbon footprint and creating a revenue source to offset energy costs for end users.

This can only be achieved when data centers are placed in high-density urban areas. The city of San Jose has been one of the first to recognize this. Together, we're working to help demonstrate that the future of city building can and must be carbon free.

[END PLAYBACK]

[APPLAUSE]

This is big news. San Jose, as always, is leading the pack. And we've got a great announcement about this important development. We'll share some more details about it but a carbon neutral community where we can both served as needs of compute power and data centers but make them net beneficial to the new housing units that are greatly in demand, Mayor, that you talked about.

This is a big day for San Jose. We're excited to talk about the project. Why don't you share a little bit, Mayor-- I'll ask you first. How does this project fit into your vision that we just discussed for San Jose?

Well, I think it's incredibly exciting because you talked about triple bottom line. This is an opportunity to do all the things we want to do. It can catalyze investment in housing. It allows us to continue to build out the infrastructure for the innovation economy. We know there's incredible demand for computing power, and that's only projected to grow in the years ahead, but we have to do it in a way that is beneficial to society, not destructive.

If we don't figure out how to use those electrons twice, I actually worry about the long-term implications of this ramp. And so the opportunity here is all three. It's to build that district energy system that actually powers our city with clean energy. It enables the infrastructure of the innovation economy, and it unlocks that housing in a clean way. So I think it's an incredibly exciting concept.

Well, we're excited too, and we're excited to power all of that. So Ian Gillespie, an incredible innovator-- I don't know how to say-- a complete visionary. If you've ever been to Vancouver, BC, he did that pretty much. It's an amazing city. And Ian's company runs the creative energy, a district heating system in Vancouver, so they have experience in this zone. I'd love to hear, Ian, your thoughts about this project. What are your goals as the developer and maybe why San Jose?

Thanks, Patti. Thrilled to be here in my second favorite city.

We'll work on that.

Yeah, that's right.

I think it starts with a really simple premise, which is that our cities around the world need to innovate. We need to get smarter, we have scarce resources, and we need to use them in a much better way. Our role in this, as the development partner with you, is to bring diverse housing, inspiring architecture, and a robust response to the climate crisis. And none of that happens without this idea of collaboration.

People use that term and they toss it out a little bit, maybe willy nilly these days, but it really only happens with an incredibly robust collaboration. And we are your partners. We are your partners. We are just here to help make this happen. And none of it happens without that team.

In this case, specifically, what we're really talking about doing is trying to bring a smarter way to build a community. And that starts with a district energy system powered, as the mayor said, from the excess heat that's being generated by these data centers. The key to this isn't groundbreaking technology. What's groundbreaking about it is just doing it-- putting all the pieces together and doing it smarter.

And that starts with understanding that building data centers out in an industrial park doesn't allow us to bring all that thermal energy that's produced by these electrons running through the processing units. It doesn't allow that energy to be consumed by the demand. The demand for the energy comes from the residential. That's where the energy is needed.

So what it is about is bringing the producer of that energy, the data center, together in close proximity with the user of that energy, the residential. That's really all this is about. By bringing those two things together, we produce not only a lower-carbon community, but we actually help produce a tight-knit community. And at the end of the day, that's what this is about. It's about simply producing a low carbon, tight knit, diverse community. And I'm happy to be your partner.

We can't wait for your vision to come to fruition. And it's super exciting. One special feature of this district that we're describing here is a Plug and Play center of excellence for AI. And so Saeed Amidi is here with us, the father of Plug and Play. And if you're not familiar-- I might have lost count, but Plug and Play, for all of you, startup and innovators-- I should know, six-- I think at least six unicorns were born out of Plug and Play.

Only 34.

Oh, sorry. I was off. 34 unicorns were born out of Plug and Play. So all you entrepreneurs and innovators, you might want to catch Saeed out in the hallway after this. But we're so excited that Plug and Play is going to host a COE in this district for specifically focused on AI. So Saeed, why don't you tell us a little bit about that?

Yes. We've been quite lucky to be part of a journey of about 90,000 startups. Just in 2023, we accelerated 2,700 startups, but we only invested in 248 of them. So the rest of the startups come on the journey to meet PG&E and to work with the city of San Jose.

To give you an example, like in Stuttgart, we have been able to build the most mobility platform in the world, where connected car, electric car, and autonomous car, like Mercedes, was way behind, but right now, quite frankly, they announced the level 4 first car in America, autonomous level 4.

So our idea is innovation meets partnership. And if you could take a small startup in AI and apply their knowledge to safety, to-- you talked about molecules. I was just at this ExxonMobil event. They say we just transfer molecules, but we have to do it cleaner and better, like he mentioned.

Quite frankly, for the next 30 years, we're going to need fossil fuels. There is no way out of it, but we just have to know how to use it, and as you mentioned, how to reuse it, and to make a better environment and better world for everybody through innovation-- and I'm kind of selfish-- through startups.

And really, the engine of growth happens to be in our backyard, and we just have to enable the knowledge and the innovation and the passion to flourish. And I'm so excited about this partnership, because if this AI center of excellence in downtown San Jose becomes a model where every big city in the world can copy us, that would be my dream. If I could build something in Stuttgart, we'd better be able to do it nine minutes away from Plug and Play.

Yes, that's right.



I'm very much looking forward to our partnership and to the people in the room. When we build the ecosystem, is not our platform. It is really your platform to get what you like out of it. And this is my best partnership ever.

Oh, awesome. That's what we're counting on, Saeed. Thank you. And so Mike Medeiros, my colleague and pal, my number one guy here in San Jose. Mike, share with us. What does it mean for PG&E? How does our relationship here in San Jose reflect PG&E both of the future and how we best serve Silicon Valley in the South Bay?

You know, Patti, when I talk about this project with colleagues of mine, I talk about two items, and they're both connected. They both have to happen for us to be successful. First, at PG&E, we understand the critical and vital role that we play, ensuring that we have the timely delivery of infrastructure that's in place to support the economic growth, the data centers, this net zero community.

So we understand how important that is to do that timely, to do it safely, and then to make sure that it operates reliably. And we're committed to making sure that we do that, because when we do that, we get a lot of great outcomes. We get economic growth, we get beneficial load growth, we get housing growth, we get job growth, all really good things that happen.

And it's been great working with the partners here. We share our goals. We share the outcomes that we're trying to achieve. We share our challenges. And we work through those because we all want to be successful, because if we're collectively successful, our customers will be successful. That's the first item.

Second item is, it's no coincidence that we're here in San Jose. San Jose is like at the heart of Silicon Valley. And in Silicon Valley, every single day innovation, new technologies are being created. And that's what's driving the economy here in California, the US, and the world.

And San Jose is going to be the testbed. We're going to be able to deploy new, emerging, advanced climate technologies to really drive a new benchmark for like urban vibrancy, sustainability, and energy efficiency. And we're going to figure out what the right combination of products and services that are going to create great outcomes for our customers, affordable outcomes for our customers, ones that they're going to be enthusiastic about.

And for us at PG&E, that's really important because we can then take that success and have a blueprint for how we're going to deliver to all the other home towns. We have the privilege to serve in Northern and Central California, and we can also share it with all of our peers in the industry so they can do the same. Because everybody has to achieve these outcomes if we're going to tackle the climate goals in front of us.

It is absolutely a thrill to be on stage with all of you. I think it's a great example of 1 plus 1 plus 1 plus 1 equals 10. This is a great place to model what the future looks like for the world, and no better place than San Jose to make that happen. Thank you so much. Congratulations! Can't wait to take it to the next level.

Thank you.

Thank you, Patti.

Good job. Thank you, Ian. Thank you, Saeed.

Thank you.