NOW Podcast

BONUS EPISODE TRANSCRIPT

Fighting Fire: Investing in Climate Resilience

Host: Karina Funk, CFA, Portfolio Manager; Chair of Sustainable Investing
Guest: Kate Gordon, Director of the Governor's Office of Planning and Research and Senior Advisor to California Governor Newsom on Climate

00:00:02 Ken Stuzin: Hello. This is Ken Stuzin. I'm a partner at Brown Advisory. Welcome to a special Climate Week edition of our NOW 2020 podcast. NOW stands for Navigating Our World. Through this podcast, we are trying to understand the world better, to navigate some of the most pressing questions that are shaping our lives, our culture and our investment challenges. We are committed to sharing the views of CEOs and other leaders so that we can all learn from their perspectives on how to navigate the future. As we get ready to launch season 2 of the NOW Podcast, let us know if you would like us to send you future episodes as they drop. Just fill out the form on the NOW website so that we can be in touch. As we look to the future, whether we agree or disagree with each other, the one thing we know for sure is that none of us can figure this out on our own. At Brown Advisory, we are focused on raising the future, and we hope these NOW conversations will help us do just that.

00:01:12 Karina Funk: This week has marked the start of autumn 2020, yet little of this fall season rings familiar. Whether you're sending kids back to school or stretching out the final days of warm weather, many of our routines are unrecognizable, and it's the backdrop of COVID-19. The pandemic has squashed what we once took for granted, like greeting a colleague with a handshake or a carefree afternoon at the ballpark. And if the greatest loss in the last six months was a sense of normal and not a family member or a home or a job, we were one of the lucky ones.

00:01:49 Yes, while we all struggle to make sense of what comes next because of COVID-19, it doesn't mean that the problems that came before COVID-19 have conveniently disappeared. California is on fire to prove it.

00:02:03 Media Clip #1: Breaking news out west, where firefighters are battling dozens of massive wildfires.

00:02:07 Media Clip #2: As the wildfires waging throughout the state --

00:02:10 Media Clip #3: For folks up and down much of the West Coast, this has been a week of fire and destruction.

00:02:16 Media Clip #4: The August Complex fire has become the largest fire in state history.

00:02:20 Media Clip #5: Never in the American West has so much burned so quickly.

Climate change remains one of our world's greatest threats. It makes fires like the ones the West Coast is battling today spread more quickly. It makes 100-year storms a more common occurrence. It makes the gaps in inequality that many Americans are impacted by steeper. Some argue that the damage climate change will cause could make the COVID-19 chaos seem tame. While the fires and the floods we increasingly see at the top of our news feeds have raised awareness of climate change, connecting the impacts of a warming planet to investment risks and opportunities is difficult and often neglected.

But in this abnormal fall season, the fires that started on the West Coast are making their consequences felt around the world. What does a wildfire in California have to do with economic growth in the rest of the nation? How does all this impact global investors, and how can we focus on solutions without falling victim to alarm?

My name is Karina Funk, and I'm a partner at Brown Advisory. We wanted to bring in someone who is uniquely qualified to address all angles of the seemingly intractable questions. We're honored to be joined by Kate Gordon, a foremost authority at the intersection of climate change, clean energy, business and economic growth. Kate's experience is not as an observer. She is active as a thinker, a leader and a doer, working tirelessly to achieve a sustainable economic model given the practicalities of our incumbent infrastructure, cultures, industries, workforce skills and all of this against the uncertain realities of climate, COVID and whatever comes next.

Today, Kate directs the California Governor's Office of Planning and Research. She's also senior policy advisor to Governor Newsom on climate and, I'm very pleased to say, is a former member of our own Sustainable Investing Advisory Board here at Brown Advisory. Welcome, Kate. It's always great to speak with you.

00:04:19 Kate Gordon: Thank you so much, Karina. Great to see you and hear you.

00:04:24 Karina Funk: Well, Kate, I'd love to articulate your background, because it's kind of impossible to say in one sentence. You've built a career that really seems perfectly curated to adding value in light of the economic and environmental duress that the state of California is in. This isn't the first time that you've managed through crises. You were greeted by it in your first week in office. Can you tell us about that?

00:04:47 Kate Gordon: Sure, absolutely. And, first, just thank you, again, to Brown Advisory and to you, because it's always great to talk to you and connect with those who are really trying to make all this stuff work out there in the real economy.

I started my current role with the state of California running the Office of Planning and Research, which really does long-range planning and advisory work for the governor and the cabinet. I started this work in January of last year, and the first week that I was on the job was the week that PG&E declared that it was going to file for bankruptcy because of the impacts from the wildfires in 2018. And immediately thereafter, the ratings agencies downgraded all of the ratings for our three major publicly owned utilities. So it was this very stark moment where the climate impacts themselves came together with the fiscal impacts to the state and to the budget — frankly, to our state budget — of those impacts and sort of all came crashing down together to really, to me, you know, set the stage, frankly, for this first term of Governor Newsom's governorship.

00:06:00 Karina Funk: You must have done some of that scenario planning, I mean, just given your expertise, right? So the bankruptcy of PG&E obviously surprised so many stakeholders, but I would image that in your scenario planning, that wasn't out of the question, although perhaps not specifically. Tell me about how this evolved.

00:06:17 Kate Gordon: You know, PG&E, or Pacific Gas & Electric, which is our largest publicly owned utility in California, and I believe actually has the largest territory of any publicly owned utility in the country, is interesting in that, you know, from a sort of traditional ESG, or environmental, social, governance perspective, they had been really celebrated as a leader for a number of years. They'd really done a lot to, you know, bring down their carbon emissions, to participate in California's sort of leadership position on climate. What they had not adequately done is to think about the physical impact of climate change to their actual systems, to the infrastructure, to the grid, and that is something that, I think, should have been more predictable.

As you know, a lot of the work that I've done has been in that space of looking at infrastructure investments, looking at physical risk to those investments, and utilities are sort of at the frontline of that. They have very expensive, very exposed infrastructure. So I think we could have seen it coming. But one thing, I think, I really want to make a point on is, again, they had been seen as a leader in this space, but they'd sort of left out this huge piece of the puzzle.

00:07:31 Karina Funk: Well, I think we all have a lot to learn from this. I mean, you're clearly dealing with some mammoth consequences of the situation and of climate change in general. You went into a situation where people were losing their homes, their jobs, and there was obviously a big loss of investment capital, and this chaos was even before COVID. Now, because of your background and my focus on the private sectors and hopefully the audience's interest, let's talk more about those investment implications. And to do that, let's go back a little further in your career and talk about the Risky Business Project. You were the lead author on a couple of reports. The first one was written in 2014, I believe, which, in my humble opinion, were — this was the first and the most extensive and the most relevant articulation of the business case of why should businesses understand and take action regarding climate change.

00:08:26 Kate Gordon: Well, thanks for the kind words about the Risky Business Project. First of all, it was a real labor of love for many people, including our three co-chairs, Hank Paulson, the former Treasury secretary; Mike Bloomberg; and Tom Steyer out in California, who I was working with at the time. And what we tried to do with that project was really exactly what you just said, which was to translate what had been pretty much exclusively a science and policy conversation about climate change into an economic and finance conversation about climate change.

We had noticed that in the United States in particular, we really had had a hard time breaking through and getting out of the sort of political space on climate change and into just a data-driven discussion of, you know, what does this actually mean to our economy today and into the future. And what we did in Risky Business was to take very detailed and downscaled climate modeling, so looking at the physical impact out through the end of the century, but also in the near term, in the midterm, in the long term. Taking that modeling, downscaling it to the county level, also adding in a layer of sector-specific econometric impacts from those same kinds of climate events in the past.

So as a good example of that, one of our big sectors we looked at was agricultural production and crop yields. What we did was we looked at, for instance, the projections from the science of extreme heat increasing in southern Iowa over the course of the century. And then we look backward through econometric modeling to say, what have been the impacts on corn yields when there have been heat impacts in the past? How can we project that forward given the potential of extreme heat and the likelihood of extreme heat going forward? That, I think, was the first time that that had been done at that intensity.

We took all of that huge amount of data. We took all of that, and then we paired it with a very intensive campaign to have our risk committee, led by those three co-chairs, but including, you know, three other former secretaries of the Treasury and a number of former CEOs as messengers, combined that with a very intensive communications campaign. So the whole thing was like best data combined with the best communication combined with the most effective messengers. And I think really it made a difference in some of these communities where climate change had just not been top of mind except as a political issue.

00:11:00 Karina Funk: Right. Not only that, but I think these reports are still relevant. You and your coauthors did a great job clearly linking climate risk to what's likely to flow through the income statement and balance sheets of private corporations. And you mentioned, you know, that galvanized some key messengers and messages, so I imagine that that started some good conversations, hopefully, in corporate boardrooms. Tell us how that's been going. Is it continuing?

00:11:28 Kate Gordon: Yeah. I mean, I think that Risky Business focused just on a few sectors. It was really — we really focused in on areas where we had really good data and good ability to do backward-looking econometric analysis. And in those sectors, we absolutely found that some of the big sectors with the most kind of capital investment in what we call play-spaced infrastructure, so infrastructure that's in a particular place and very hard to move. Think about centralized power plants. Think about major manufacturing facilities. Those companies really did, I think, move early to start to do much more detailed and sophisticated modeling of the impacts on these investments because they're so exposed. I mean, really, a huge a piece of their budget is capital investment. They can't afford to have those under water, on fire.

One of the things I hadn't thought about but became a conversation that we had all the time was, you know, on the energy demand side, what you see is because of extreme heat increasing across the country, really in almost every region of the United States, you see increased energy costs as a result of that. Of course, people are doing more air conditioning. At the same time, our energy system is less efficient when it's really hot because our central power plants have to be cooled more often and our transmission lines actually lose power. There's a lot of line loss is what they call it, because electrons, like, jump off of the transmission line when it's extremely hot. So you have less sufficient supply, much increased demand, and as a result, these escalating costs.

And we're starting to see manufacturing companies in particular really start to take that into account when they're thinking about location decisions of their plants, because all of a sudden, energy costs, which were low for a lot of decades, have become a rising piece of their puzzle and, in a lot of cases, eclipsing labor costs, especially with automation. So I think there's a really interesting dynamic.

00:13:30 Karina Funk: So those industries make sense as early adopters. They are impacted by climate change today. Has the conversation broadened to other industries?

00:13:39 Kate Gordon: It's broadened both in terms of geography. I mean, I think is obviously something that is true across the globe. We did Risky Business from a U.S.-only perspective for political reasons, frankly, but also because the modeling is just incredibly data intensive. It was 20 terabytes of data that went into that project with only a few sectors modeled. But it's become a global conversation and, you know, we're starting to look at global supply chains. Just about every industry we have in the U.S. has global supply chains that have some kind of capital-intensive piece to them somewhere in the world. And so that's certainly an issue, but we've also seen the technology firms, for instance, which you don't think of as exposed, right, as, like, agriculture. They do have buildings, and they have people. And what we found is in conversations, for instance, with Google, who we've spent a lot of time talking to, their people are such an important asset to their whole system. Like, the fact that they've got these buildings and people coming in and out of these buildings and, you know, the transportation networks that those people depend on, the broadband that those people depend on, the power grid that those people depend on, all of that is actually part of their operations. So they've gotten much more interested in sort of how do we plan our own design/build standards for our buildings, how are they getting more involved in climate resilience across the entire infrastructure that their people depend on, because they're so people-centric as a company. So I think that's an interesting example.

00:15:04 Karina Funk: And you started to mention some of the price signals, like the rising cost of energy. California has clearly suffered a lot of price signals that, in many cases, you know, continuing to build as if we're invincible to climate change is no longer an investable option. So here's a leading question. Did those price signals send -- were they sent at the right time and directed to the right pools of capital?

00:15:30 Kate Gordon: We're seeing more and more of the price signals become part of the market, but it's still early, honestly. I mean, California and the wildfires are a great example. So one of the things that happened last year is that we saw -- and we're seeing it even more this year --

insurers leaving the market in California, putting rates extraordinarily high on the secondary insurance market or leaving the market all together because of the inherent risk of the wildfires in certain regions of the state. We have these very high-fire-risk zones that the California Fire Department, Cal Fire, has identified. The nature of the kind of fires we now have, which is that they are, you know -- they're a combination of very dry conditions from climate change, among other factors, very high winds. Those fires, you know, you can have embers jumping a mile in front of the fire itself, creating some of these wildfires. And even if one house is beautifully built and what we call hardened, right, against fires and, you know, the five next to it are not, the neighborhood is not going to be saved by that. So we're seeing a real impact on the insurance industry and starting to see pricing signals from bond raters and bond issuers as well on the underlying infrastructure.

But those are still sort of early signals. I think it's starting to get into the consciousness of people making kind of individual home decisions, but, more important from my perspective, the state itself, we're starting to think through, okay. How can we start to really build differently? How can we start to really provide incentives for lower-risk housing development outside of these zones, but how do we start making more housing in safer areas more affordable, more accessible, because ultimately, these signals, I think, will be a much larger part of the conversation. I think we're starting to see the ratings agencies, insurers, you know -- BlackRock is analyzing the physical risk of its assets. This is becoming part of the sort of mainstream conversation about asset management and material risk, and I think that is going to change the pricing, the underlying pricing of all these decisions.

00:17:46 Karina Funk: So I want to get to some of those investment risks and opportunities, and some of these vehicles, like the bonds you mentioned, in a little bit. But first, I want to bring this back to the business case, to some of what you're working on literally today and what you announced this week. Can you tell us the exciting announcement that you just made?

00:18:03 Kate Gordon: Yeah, absolutely, and I'll put it in terms, actually, since we were just talking about sort of financial risk and physical risk. You know, under the really good framework from the Task Force on Climate-Related Financial Disclosures that's been put out to look at how we think about climate risk in the financial sector, there's two big types of risk, right? There's physical risk, which I've been talking about a lot, which is risk to things from physical climate impact. But there's also transition risk, which is what's the risk that you're investing in something or building something that will be stranded or will lose value? The transition risk point has been for a long time top of mind in California. We have groundbreaking, world-leading standards on reducing emissions. We have been pushing the envelope on new technologies for a long time. We went even further this week.

00:18:47 Media Clip #6: Let's go over to this huge announcement that will affect us all here in California. Governor Newsom is pulling the plug on new gas- and diesel-powered cars and trucks by 2035. That makes California the very first state in the entire nation with this kind of ban.

00:19:03 Kate Gordon: Just yesterday, the government announced a new executive order that requires all new vehicle sales for passenger vehicles by 2035 to be zero-emission vehicles. So basically, no more sales of internal combustion engines in this state by 2035 and then

2045 for medium/heavy-duty trucks -- a huge deal, a huge signal and a recognition, frankly, for us that in California, as in many places, transportation is our single biggest emitter. Our transportation sector is 41% of our carbon emissions. And if you add in our oil production and refining, which we have a fair amount of, it's 51%. So it's a very large part of our emissions picture. A big piece of that is vehicles and fuels, and we've just essentially, you know, put our marker on the table on this one.

00:19:53 Karina Funk: I should give you credit that this actually isn't just -- well, it is a new announcement, but it's not just an announcement. It's actually implementation of what you started to put in place last year, is that right?

00:20:02 Kate Gordon: It's directing our California Air Resources Board, which many people know, because it runs our cap and trade system, as well as our low carbon fuel system, directing them to make this happen. So it's a regulatory direction, which is why it can happen in an executive order. We're able to do that, I should say, because California has waivers under the Clean Air Act and is able to set our own vehicle standards. That is the reason we have the legal authority to do this. It also continues work that we put in place last year in an executive order that went to another piece of our transportation sector, which is our vehicle miles traveled, or how much do we drive. So this order basically combines a couple of things: strong standards on vehicles and vehicle sales and operation, along with some really good moves forward on transit and active transportation -- bike, pedestrian, compact development -- that came out of last year's executive order. It's really meant to be sort of a comprehensive look at the entire transportation sector in California and the need to move it forward to reduce that transition risk I talked about, and also to send a really strong signal on innovation.

00:21:12 Karina Funk: How is this executive order an example of government providing companies with the political landscape that they need to succeed in reaching climate goals?

00:21:21 Kate Gordon: In California, I think on vehicles in particular, our market signals, our policy signals are really strong because our market is so big. Just as an example, you know, somebody was telling me on a panel yesterday, or asking, you know, "Why didn't you do 2030? All these other countries have done 2030. Why 2045?" and listed out all these countries that had done 2030. And I think, you know, Scotland is on the list at 2032, I think. And I was doing a little bit -- sort of research in real time. I looked at Scotland, and Scotland has 2.5 million cars. California has 26 million cars right now on the road -- and more. In fact, that number is growing. It's an interesting relationship between COVID and this conversation, which is that because transit agencies are so strapped right now, they've lost so much ridership. They've lost so much revenue. People are leaving transit. They're buying vehicles.

So we have a huge number of these on the road. And so we are a massive market for vehicles. We're a massive market for passenger vehicles. We also have an incredibly active freight and logistics sector. About 20% of all the warehouse space in the country is in California -- huge amount of consumer goods. And so it does send a massive signal to vehicle manufacturers, frankly, that this is the market.

00:22:44 Karina Funk: It's a huge market, yes. That's very enticing and among the big corporate commitments that we've heard this week in Climate Week. I mean, you know, Tesla announced significant battery technology improvements. Even earlier this year, Ford had already committed to net zero emissions, granted, by 2050. Now, both companies obviously want to sell a whole lot of electric cars, but they can't do this alone. We need the infrastructure for charging, right? So this is a classic chicken-and-egg problem. Consumers are hesitant to invest in electric vehicles or zero-emission vehicles, citing the lack of charging infrastructure, and utilities need to see greater adoption. This is where the public sector has to step in, right, like not just with this executive order, but in facilitating financing.

00:23:27 Kate Gordon: Yeah. I think the public sector just has to step in in a couple of places, actually, to make this really an accessible and inclusive policy and to scale the market, because new vehicle sales are a smallish piece, actually. Used vehicle sales are a huge piece of vehicle sales. And so one thing that's in the executive order is the governor directing a number of U.S. agencies to create a zero-emission vehicle road map that really focuses on that used vehicle market and comes up with better policies for the secondary market. We in California already have a pretty good vehicle retirement and replacement policy that's aimed specifically at the parts of the state that are not in clean air attainment, so the places with the worst air quality. You could bring in your old car, and you can get a used or new much, much cleaner car, and you have much higher incentives to have that be electric. So we're going to scale that up.

On the infrastructure side, you're absolutely right that without the ability to charge, this is a much harder proposition. And one of the challenges we've all had in that space is that the ability to charge has to be there for people who don't live in single-family homes or don't have garages. So what is the public charging infrastructure piece of this? That's another part of the executive order. It really calls for that to be scaled up. We already do a fair amount of financing in that space, actually, through our California Energy Commission, which provides loans and grants on charging.

00:24:51 Karina Funk: Right. I wanted to mention -- yeah. Was it last year that it's the largest utility program to expand charging infrastructure? There was a California Public Utilities Commission issue of $437 million, right, for 40,000 electric vehicle chargers, right? That's what you're talking about?

00:25:10 Kate Gordon: Well, I was talking about another one of our agencies, which is the Energy Commission. But both the Utility Commission and the Energy Commission have provided financing -- the Public Utility Commission through utility-based programs, and the California Energy Commission through a program it has called EPIC, which actually does financing for grants and loans for kind of new technologies. So we actually do a fair amount in this space.

We also created a new program this past year in our infrastructure bank, which is called the California Catalyst Fund. What that does is provide a place, a vehicle for low- and zero-interest loans to de-risk projects in the private sector and help to catalyze private-sector investment through various mechanisms from the public sector. That's a program that I'll just be really honest. In our January budget, we proposed that program and proposed $1 billion from our general fund to be put into that program, and that was moving forward, and then, of course, the bottom fell out of our budget. We went from a $6 billion surplus to a $54 billion deficit in three months because of COVID. And so the general fund piece of that fell away, but the mechanism still exists, and I'm really excited about it, because, you know, across-the-aisle bipartisan support in Washington for green bank/infrastructure bank-type programs. I think we're really likely to see that kind of program be funded through some kind of a stimulus at some point, and so now we have a vehicle that can receive those funds.

00:26:40 Karina Funk: I just want to say that some of those debt issuances for this green infrastructure, it crosses the table of institutional investors like our firm. We participated in some of these deals. And, frankly, I think that a lot of institutional investors can stand to invest and benefit on both sides of that equation. So, in other words, debt issuances from those who are building infrastructure and that capital commitment benefits corporate holdings, right, that are helping to develop zero-emission vehicle technology, whether it's the makers of microprocessors for electronic vehicle controls and communications or auto suppliers that are enabling the long-term plans for Ford and Tesla and others to make vehicles lighter, safer and drive more miles per charge. So there's an example of, you know, more public and private partnership, I believe.

00:27:32 Kate Gordon: I think that there's examples across the board. I mean, you've really pointed to a lot of them, but, you know -- so we do the market signaling through our regulatory policies. We also do it through our procurement standards, which was a big piece of last year's executive order. We also do them through, you know, where we can, once the policy is in place and the market is moving through de-risking, those investments particularly in places that are underserved in the state. One of the interesting things about EV infrastructure that we've found is that although it's a great bet and a lot of folks are investing in it in places like San Francisco, where there's a lot of electric vehicles, the concentration in the state really is in the Bay Area and LA right now. We don't see a lot of investment out there in, for instance, Kern County, which is an oil and agriculture county but has the fastest-growing city in California in it, Bakersfield. So if Bakersfield as an urban center, with a lot of startups and a lot of opportunity, is looking at EV infrastructure to support this sort of new market, they have had a hard time traditionally getting financing, because it's just not seen as a place where EVs are, you know, going to happen or going to scale up. I think this order changes that dynamic, and also, it's a place where the state can help step in and, you know, really push for infrastructure and for investment in some of these areas.

00:28:54 Karina Funk: Kate, I want to ask you a broader question about investment risks and opportunities. I mean, in some cases, capital is conscientiously being withheld from business activities and projects with a lot of climate vulnerability. I mean, those are the price signals we were just talking about. This can wholeheartedly change the economics of everything from the long-term investment in California's pension funds to real estate, where the private insurers no longer want to be involved. Of course, we just talked about the automotive industry as well. Where should that capital go in practical terms? I mean, where can it go? It should be easy to invest in climate solutions, right?

00:29:31 Kate Gordon: Yeah. I mean, I think there's a couple of things to say to that. One is, you know, I do think we have to guard against this potential outcome of places that are already vulnerable, and I'm thinking globally as well -- you know, the global south, already very vulnerable to climate impacts, already have a very high risk of vulnerability from an economic standpoint as well. We have to guard against sort of a wholesale withdrawal of capital from these places. One way to avoid that, I think, is that the signals should be sending a message also that we should be investing in sort of forward-looking companies that are doing interesting things on the solution side. And on the solution side, I think sometimes we're a little too narrow. We tend to think about the solution side as being all about technology on the emissions reduction. But what's also important is technology innovation that's about climate resilience in the face of these impacts.

So all kinds of really interesting companies in the traditional agriculture space that are looking at water reclamation and desalination, just super interesting stuff going on in ag innovation that I think we sometimes forget to put on the table in terms of climate solutions. CarbonCure is a great example. They just got a huge Amazon investment, taking concrete -- sequestering carbon dioxide into concrete, turning it into a new building material that we can then use as we're looking at sort of urbanization all over the world. So I think it's really important to think about these, like, different types of companies and different types of solutions that are on the emission reduction long-term climate mitigation side, but also new technologies and adaptation, new technologies and resilience.

00:31:13 Karina Funk: Yes. There's the high-growth startups with innovative, environmentally focused business practices. But, for example, we just participated in a land conservation partnership with the Nature Conservancy that actually gets higher yields, you know, because of the sale of carbon offset credits. But, you know, Kate, many of the most significant energy transition projects are highly capital intensive. They require scale and large capital commitments. I mean, that's what I wanted to bring up -- the broader investible opportunities that include stocks and bonds that are much more widely accessible than private placements. I mean, according to the UN, the required comprehensive multilateral response to fight climate change will amount to at least 10% of global GDP. So we need these basic stock and bond investments to be a part of that solution. Otherwise, we're not going to get to the investments required to achieve our climate goals.

00:32:09 Kate Gordon: I totally agree, and I would also say that it's really important to remember that we already spend a huge amount globally on infrastructure, and some of this is redirecting. It's looking toward climate risk disclosure so that we have more transparency into what kinds of investments are being made. It's redirecting particularly public money and bond capital to projects that are lower risk and higher value from a long-term climate perspective. So I think there's a really, really important point to be made about the amount of money that's already moving around the economy that could be spent differently.

The other thing I wanted to say about your point about the capital intensity of these projects is I absolutely agree. You know, one reality is that some of the companies that have been out there already with the biggest capital budgets are going to be part of this solution. One of the things the executive order does that the governor signed yesterday is that it makes a strong point about the need for what we call and many people call a Just Transition road map. Just Transition is an old term. It really just means how do we do a transition from industries that are in some kind of decline for some reason -- often it's market forces, like globalization, into, you know, a diversified set of industries that provides real benefits to people. We, of course, are looking at that in California all the time. We are looking now at the real impacts of what's happening in the oil market on our oil and gas sector. Two of our major refineries are closing, actually. Phillips 66 and Marathon are closing major refineries in the state. What they're doing though is they're transitioning those refineries to renewable fuel.

And I think that's a really important part of the puzzle, because oil and gas companies, big agriculture companies, utilities have big capital budgets and R&D budgets. How do we have them be part of the solution and really investing in that expertise, that capital into these new at-scale, capital-intensive projects you're talking about? They know how to do big physical infrastructure at scale. How do we capture that expertise?

00:34:10 Karina Funk: Kate, we can't talk about climate change without acknowledging the additional challenges of COVID-19 as well and, in the same breath, recognizing the impact that both disproportionately have on low-income folks and people of color. You just commissioned a report that sheds some light on how a transition to climate solutions could continue to leave workers and vulnerable communities behind if we're not thoughtful about the economic growth that all of these investments can catalyze. Now, granted, a government's responsibility in serving vulnerable populations is clearer than a company's. But still, what should companies learn from California's trials and triumphs on the broad notion of climate justice?

00:34:57 Kate Gordon: The COVID-19 crisis, I think everywhere and particularly speaking from California, has really put in stark relief the fissures and the vulnerabilities in our current economy. It has demonstrated that the economy itself is not resilient, and that's true from a climate perspective in many cases, but also just from a kind of, you know, quality of life, justice and moral perspective. And so we're thinking a lot about this. The report we just put out was a report that came out of a piece of legislation a couple of years ago and asked the state to really examine what has been the job and economic output from our climate programs, particularly our cap and trade program. We found, you know, two, I think, really important things out of that. One, just because something is a green job doesn't necessarily mean it's a good job, and I think that's really important for those in the climate policy world to think about. We need to be going hand in hand on sustainable products that also are creating sustainable jobs with family-supporting wages, with pathways into career advancement for everybody, because if that doesn't happen -- you know, it's kind of like the classic Ford thing. If you don't pay people enough to buy your product, you're ultimately not creating a big enough market for your product. So I think that's really, really important.

The second thing that the report really highlights is, you know, that there's really no such thing as a green job. We're talking about greening the entire economy. This is about every sector of the economy becoming more sustainable, becoming more resilient, becoming more inclusive. And as a good example, we found that California's policies since 2006, 60% of the jobs we've created have been in traditional construction from those investments, not boutique kind of green job environmental services, but really basic traditional construction. And that's really important, because done right, those are actually family-supporting jobs that create really good career pathways through apprenticeships. So I think there's a lot to be learned there, particularly in ensuring that when we're thinking about climate policy, when we're thinking about economic and workforce policy, we are providing in-roads and access from our most vulnerable communities, and particularly those who have been left out.

00:37:11 Karina Funk: In your report, you have some thoughtful metrics around what you call high-road jobs. I think that's something that we as investors can really learn from. On my team, we do grapple with the conundrum that companies can make a lot of money by treating workers well, and they can also make a lot of money by exploiting workers. And while both can be true, we will get retention data, opportunities for internal promotion, customer satisfaction, access to benefits and all this to try to understand if a company is avoiding some of the reputational and financial risks of worker exportation and, better yet, seizing the opportunity to offer those high-quality careers. Now, we've talked about several industries, and in addition, the technology giants are in your backyard. In thinking about those kinds of companies, what are some of the accountability mechanisms for companies to support their workforce appropriately?

00:38:12 Kate Gordon: Great question. The tech sector is, of course, a huge player in California, and particularly regionally in the Bay Area, and it's actually been interesting, because the tech sector, direct employees of those companies, have been less harmed by COVID in some ways. They have the highest rates of the ability to telework, so they're not coming into the office, tend to be paid a fair amount, but I'm talking about the direct employees. One of the things about the tech sector that we in California have spent a lot of time thinking about, I'm sure your listeners know this, is how many of those employees are contract employees. Most of the contract employees, particularly, you know, in the cleaning area, in support services, in food preparation, in, you know, all of the just myriad supportive industries that go into the sector, most are not seeing the kinds of wages, the kinds of benefits, the kind of professional development, the kind of career opportunities that the direct employees of those companies are.

And so I think one of the things we've been thinking about a lot in California is how do you hold companies accountable for that, for deciding who is and isn't a contractor, which is a legal decision, but also for recognizing that that ecosystem of workers is what makes their work possible. And I think that goes -- that's very similar to our climate conversation. It goes to their whole supply chain. How do you think about the risks and vulnerabilities across your supply chain and make your supply chain more resilient? How do you think about the risks and vulnerabilities across the major asset, which is your people, and how to make that more sustainable and more resilient, I think, is really, really important.

We're also starting to see some of the disclosure and some of those metrics take into account, you know, labor standards, some things that are very quantifiable. Health and safety violations, labor violations, wages in comparison to the rest of the industry, opportunities for advancement -- these are things that are actually measurable and manageable and are beginning by many countries to be seen as just a core part of what makes a company a high-road company, which, in our case, basically means, you know, more likely to get extra points on procurement contracts, more likely to be a place where we're going to look for doing state business and, ultimately, I think, you know, more likely to be seen as part of an economy that's really moving forward. It goes to the larger question that many are talking about now about what is the corporate social responsibility? What is the responsibility to be a productive member of a larger society as a corporation? How do we break out of this model that shareholders are all that matters?

00:40:52 Karina Funk: Right. I mean, almost 200 CEOs have signed off on that business roundtable discussion around what the purpose of a corporation is. And shareholders are just one of several stakeholders. That, you know, includes customers, employees, supply chain and communities. And isn't that a precedent for businesses actually wanting accountability to do the right thing, right? I mean, there's probably better examples, but, I mean, how many companies, you know, wanted to stay in the Paris [Agreement], you know, the global agreement that nearly every nation signed to reduce climate change, to reduce climate-changing emissions and to strengthen those reductions over time? Are there other examples of business proactively seeking that accountability to do the right thing?

00:41:39 Kate Gordon: Yeah. I think those are great examples. There are lots of them, actually. There is -- on the climate side, there's Climate Action 100+, which is a coalition of companies that are kind of holding themselves accountable to looking really directly at reducing their risk and looking at advancing climate goals. I think that the climate metrics are, in some ways, cleaner and clearer for people, because it's -- we have a fair amount of predictability on physical climate risk, and emissions can be counted. It's been a little harder to think about what those metrics will look like on the sort of social and governance side.

But, you know, honestly, the Black Lives Matter movement, they've really focused attention to, of course, something that is not new, which is decades of impacts from systemic racism and structures that were put in place here and in other parts of the world. That renewed focus and attention and critical thinking, I think, is changing this conversation. I think that there is a recognition of a responsibility to our customers, our communities, to shareholders themselves that companies are starting to have and investors are starting to have. The challenge, honestly, on both of these is how do you put that into operation? I think there are companies that are a little afraid of being the first mover. It's scary to say, "I'm going to do detailed disclosure of all my risks and all my vulnerability" if no one else is doing it. That's why the public regulatory system is so important and why so many people have pushed for the SEC to really clarify how climate risk is material risk, for instance, and how we disclose that and how we talk about that, because you do need those structures in place, you need consistency, you need clarity in order for companies to feel like they can be part of that solution.

00:43:29 Karina Funk: Well, it's great to hear that there's so many different activities that are leading to collaboration and hopefully building that future that helps us get past those risks that you talk about -- the physical risk, the transition risk -- and helps us, you know, invest properly in our future opportunities as well. Given all of that complexity, Kate, it strikes me that it's not just California that needs a senior advisor on climate like you, but corporations need a senior perspective on climate action given their own goals, even if their one goal is as simple as achieving a long-term durable business model.

00:44:05 Kate Gordon: Just really quickly on that, because I think it's really important. The Task Force on Climate-Related Financial Disclosure has governance as one of its key areas where companies should be moving. And I just want to underscore that climate change is as significant as globalization when it comes to how we do business and how we invest in this world we live in. It is imperative to have that be part of the conversation at the C-suite level, at the manager level, at the director level. I mean, it's critical that that become part of the conversation at a high level and as part of a mainstream approach to investment and to asset management, because otherwise, if it continues to be a niche issue, companies and investors will see the impacts of not paying attention to those risks.

00:44:50 Karina Funk: Kate, thank you for sharing that expertise and for sharing your time with us, and for your work that's providing a positive path forward to understand these risks, to create good jobs, economic growth and investable opportunities that, frankly, an increasing number of investors, I think, can consider. So thank you so much for your important work. I wish you, your family, your colleagues continued strength, health, innovation and resilience, all the things that California stands for.

00:45:20 Kate Gordon: Thank you so much, Karina. Great to talk to you.

00:45:24 Ken Stuzin: Thank you for joining us for this special Climate Week edition of the NOW Podcast. If you'd like to explore this issue in more depth, visit the Sustainable Investing section of our website, where you can find thought pieces written by our ESG analysts. We look forward to season 2 of the podcast as we continue our effort to understand our rapidly evolving world. To stay up to date about future podcasts, please fill out the form on the NOW website. We look forward to being in touch. Until then, be well and stay safe.