Zoe Haseman:	The urgent need for us to tackle the climate crisis.
Jens Nielsen:	Yes, so it's really a crucial decade.
Zoe Haseman:	Impacts of climate change and the risks that these pose to our society.
Jens Nielsen:	We need specific plans and actions to drive the CO2 emissions down in the short term.
Zoe Haseman:	The climate crisis is the world's most critical challenge right now.
	Hello and welcome to the Sparks Podcast Series. I'm Zoe Haseman-
Jens Nielsen:	And I'm Jens Nielsen.
Zoe Haseman:	And we'll be your hosts throughout the special edition podcast series, brought to you by the World Climate Foundation and Jacobs. Come with us, as we take you on a journey around the world, to explore how different countries are tackling their climate challenges, sparking ideas and inspiration. From clean energy innovations in Scotland, to sustainable buildings in Dubai, we'll be interviewing Global Green leaders, financiers and entrepreneurs, about the policies, investments, and innovations that are accelerating our progress towards a resilient and sustainable world. Our podcast hopes to educate and inspire, sparking real conversations with the intention to collaborate, act, commit to real change.
Jens Nielsen:	Within the next 30 years, it's estimated that close to 70% of the global population will be living in urban areas. As this transition starts to place greater demand on critical infrastructure and resources, how can cities achieve sustainable growth and reach net zero emissions?
Zoe Haseman:	In this episode, we discuss the challenges in decarbonizing cities and how the city-state of Singapore is addressing this challenge head on through its Green Plan, a set of initiatives to advance progress on key sustainable targets related to their energy, buildings, transport, food, waste, and water industries. We'll also explore the role of green finance in accelerating decarbonization, and the sustainability agenda in both Singapore and across Asia.
Jens Nielsen:	Singapore has seen impressive growth over the last 50 years, transforming the city-state into a thriving hub for trade and innovation. With the increasing global focus on decarbonization, we wanted to start this podcast by first unpacking Singapore's Green Plan and follow up with insights on how the investment community could play into this plan and broader opportunities that net zero cities could provide.
Zoe Haseman:	Joining us today is the wonderful Lauren Sorkin, Executive Director of Resilient Cities Network. Thanks for being here today with us, Lauren.

Lauren Sorkin: It's great to be here. Thanks for having me.

Zoe Haseman: So let's start off with what is Resilient Cities Network's mission and what is your focus on decarbonization and net zero cities?

Lauren Sorkin: So we are at Resilient Cities Network, the foremost global city led urban resilience network. And we have a growing city membership that currently represents about a 100 cities, in 40 countries and 6 continents, or about 220 million city dwellers. So our network is busily bringing together knowledge, practice, partnerships, and funding to empower cities, really to strengthen them from the inside, to deliver solutions that build a safe, resilient, equitable, and sustainable future for all. So we support the leaders of cities, mayors, and chief resilience officers around the world, to put in place systems that can survive, adapt, and thrive ahead of disruption. We live in an increasingly uncertain world and so we want to prepare cities to deal with interrelated shocks and stresses. And why focus on net zero? Well, we're involved in the net zero agenda because we represent cities and cities are always called on to deliver results.

> The reason they're called on to deliver results is because they represent scale. Two thirds of global carbon emissions come from cities. Most of the world's population, over 50% heading towards 70%, live in cities. And cities are the hotbed of innovation. So it's a place to pilot and develop solutions that can make really big difference. Cities really are where action happens and they can operate in real time. City leaders can make decisions in real time. So this is not an either or agenda for us, in terms of resilience and climate change mitigation, or the race to zero. You have to address them at the same time, because we want to avoid the worst impacts of climate change. But we also know that some of those climate impacts are already baked in, because of historic emission. So we see net zero as this incredible opportunity to leverage investment and to build resilience as we work towards a net zero world.

- Jens Nielsen: Thanks. Asia is a very diverse region and many cities face the same issues when it comes to decarbonization. What are some of the main barriers in decarbonizing Asian cities, as you can see it?
- Lauren Sorkin: Well, you gave part of the answer in the question there, Jens. Asia is a hyperdiverse region, which is one of the reasons it makes it such an exciting place to work. It also makes it a challenging place to work, because you have incredible diversity in terms of language, in terms of government structure and in terms of resource base. You have city-states like Singapore, where I work and live, who don't have a lot of natural resources, sitting next to countries like Indonesia or Malaysia that have incredibly diverse natural resources, whether that's natural gas or coal reserves, timber. And then cities in [Asian] who have hydro power and incredible potential for renewables like solar, because of where they are and the amount of land area they have. So that kind of diversity means there are no silver bullets for the region. It's not a one size fits all approach.

Then you also have a lot of different regulations around what kinds of types of entities can produce and sell power to the grid and different systems for transmission and distribution. So those are some of the challenges that exist in the region. I think at the same time, what you can't escape is the same excitement around cities in Asia, which is scale. You cannot walk away from the opportunity to make change in cities in this region because of how quickly they're growing and because of where they are, in terms of their infrastructure journey. There's this incredible potential that you can actually make changes at the right time to build better, not build that better as people have been talking about with COVID, but actually build better the first time.

- Jens Nielsen: And do you see any opportunities for engaging the financial community more in that development?
- Lauren Sorkin: Absolutely. And I think that's where resilience is a good friend to climate change mitigation, because if you understand the risk that you potentially have, you're much better able to address that skittishness or that reluctance to take a leap forward. When we talk about those new energy technologies, we're always talking about leapfrogging. I was having a conversation with the mayor of Rotterdam a few weeks ago about net zero and resilience and he said the famous adage, "We didn't stop using stones in the stone age because we ran out of stones." And this is a famously used analogy for the energy sector. And this much is true: we need to move forward and make these game changing investments in the energy space, in the decarbonization space, because the risk of not doing so is so high.

Now, when I started, I should say we started because I think the three of us have been working in the climate space for about two decades, there weren't the kinds of down-scaled models, the kinds of climate information that tell you, in my city, this is what it might look like in 5 years or 10 years or 20 years. And now we have that information and when we can understand and communicate risk, in a way that's place based, we can influence investment. And so, having conversations with those who are in the insurance industry and the banking industry is absolutely critical because they can help influence, both with their modeling as well as with their balance sheets, the kinds of investments that we make in resilience and in decarbonization.

- Zoe Haseman: Thanks Lauren. Moving on to the Singapore's Green Plan specifically, so Singapore published its Green Plan 2030. Can you talk about what does it seek to achieve for Singapore more broadly, for the advancement of Asian global and the global decarbonization agenda?
- Lauren Sorkin: So Singapore's Green Plan really puts Singapore's ambition on the map, which is an exciting move for the city-state. And I think, as someone who's been working here for the better part of five years now, living here, but also been coming here for much longer than that, you know that when Singapore commits to something, they will achieve it. This is not a place where we make ambitious

targets and we risk falling short. No, no, no! If Singapore sets out an agenda, it's because Singapore is confident that Singapore can deliver on that agenda. And I think what's exciting about that is, there are real measurable targets as part of that agenda, both for decarbonization as well as for issues like food security, as well as issues like circularity, that are really the important challenges of our generation.

And I think what's also really exciting about the plan is that it engages the community, it engages the population quite clearly. And so, what we see is you've got a comprehensive plan to engage folks from small and medium enterprises, to children, and it sets out a 2030 horizon for the Green Plan. And so, some of the high level goals that we see, is to quadruple solar energy development, expand an EV charging network and have at least 60,000 stations nationwide, to decarbonize 20% of schools, to increase the green building regulations and mandate them for all of the new buildings. So I think what's exciting about this, is that it takes a really holistic approach, it goes beyond hard infrastructure and it really engages people. It has this public and community awareness component that's critical. And so it makes reaching these net zero goals strategic and citywide and it gives this kind of opportunity for ground up action and for communities to be involved. And I think, as someone who also has a family here and who is deeply invested in building the capacity here from a young age, it's exciting to see how much the community and schools are being involved.

- Jens Nielsen: How do you think we can achieve the targets set out in the Singapore's Green Plan? And do you foresee any particular challenging aspects that will need to be overcome?
- Lauren Sorkin: I think the plan is achievable. I think Singapore may even beat these targets and expand them further. I don't see any major threats to achieving what's in the Green Plan. I think the community engagement and the approach of the plan is comprehensive.
- Zoe Haseman: Do you see... Have you noticed a difference since it was published in terms of how it's activated all levels of society? So obviously the government has published to put the plan out, but do you see... You mentioned the community engagement. As somebody living on the ground, and you said sort of engaging in the communities in Singapore, has that plan actually shifted the culture, that the way people are approaching life in Singapore, for example?
- Lauren Sorkin: In a peri-COVID society, it is a little bit hard to give a conclusive answer on that, because we're not going out in the way we used to, we're not gathering in the communities the way we used to, but certainly in terms of the dialogue, it has become much more mainstream. What you see in the business community as well as in schools, is a lot more common parlance. What is our shared language about going green? What does that actually mean for us? Right now it has this full of Singapore meaning and these broad based goals that each of the

individual organizations and entities can relate to in some way. So I think that's a positive. I think you have heard folks come out and say, we can go further, how do we go further? And I think that's a question that we'll continue to hear from those who are really pushing this agenda on the ground and have been advocating for even more ambitious action.

Jens Nielsen: Do you think that Singapore's Green Plan can be a role model for the rest of Asia, or is Asia too diverse for that?

Lauren Sorkin: I think one of the things that we've learned through our work is while cities can have a lot of superficial differences, a lot of the challenges that they're dealing with are the same. And that if you really boil down approaches to issues to principles and frameworks, then you can apply them quite widely. And I think in that same way, Singapore's Green Plan, if you boil it down to the principles of the plan, which look at where are the areas that we most need to advance in order to respond to our sustainability challenges and continue to grow our economy, those principles in that approach resonate across the region. And then looking at that holistic and whole community, whole business, whole government approach, that will resonate everywhere. How successfully it can be applied, I think, has a lot to do with those same challenges that we spoke about before, Jens.

I think Singapore is a very special place, in that we have limited land area, of our city-state and so it is easier to coordinate, when you have essentially one government structure with lots of entities and lots of agencies operating as one. Where you have places that are more distributed, we know that in Philippines and Indonesia, we actually have legislation around decentralizing from the center to different provinces, different regions, different cities. So it's a different way of doing business. You could take the principles and the approach and the issue areas and bring them to those cities, but you would have to think about how it is that those countries and cities actually are set up in terms of how they access funding and the regulatory environments that they operate in.

- Zoe Haseman: What's your view on the broader benefits of transitioning to a net zero city? So what are some of the opportunities for Asia's economic development and transformation of local and international industries, for example?
- Lauren Sorkin: On this one, it comes down to one word and that's equity. Really integrating equity into investments that are delivering net zero, is essential. And I think we saw this in such high relief during the worst of the COVID 19 pandemic and we're continuing to see it. I think this issue of inequitable access to services, is something that we can actually address, if we target investment in net zero in the right way. If we are mindful of how we are investing in energy, I think that we can create a lot of new jobs. And it's not just what I think; we work very closely with the Rockefeller Foundation and they've been working with the United Nations and Sustainable Energy For All, with IKEA and with a number of other partners, and we're very happy to be working with them on this issue of

scaling up distributed renewables, as this response for the energy transition and also creating more equitable access to energy infrastructure and creating jobs, that service that more distributed infrastructure.

We have seen a number of examples across our cities, where if you have a single point of failure in terms of a single kind of energy and typically, more fossil fuel based energy, and then that source of power is knocked out because of some kind of shock, you are very vulnerable. Your community's very vulnerable. Whereas when you have an investment in a more distributed and resilient and energy infrastructure, you create more jobs, you create more resilience and you create more equitable access to those resources. So I think, the jobs of the future are there in terms of investing in net zero and resilience and in particular, if we put a focus on equitable access. And people don't give enough credit to resilience jobs or net zero jobs, for what they can offer. I think very often we're afraid of what are the losses, if we move away from the systems we know. But I think a lot of people are starting to ask more question; what are these jobs look like? What are they going to be? And I think they're far more diverse and meaningful than people give them credit for.

Jens Nielsen: Thanks. What are you looking forward to about the future? Are there any current promising developments that you think could accelerate the city's progress to net zero?

Lauren Sorkin: As you can probably tell from my responses, I think there's a lot to look forward to. I'm an optimist, and I think when I was working on climate issues 10 years ago, even 5 years ago, people would ask me, why? Why resilience? Why are we going to talk about carbon? Why are we going to talk about emissions reduction? What does this mean? Natural capital, ecosystem service payments? What is she talking about? And now there so many incredible partners coming together on this agenda, you see the UN, business leaders, countries making clear, measurable targets, and this is something that we can actually move towards even more manageable and quantifiable targets. Now that there's enough of a critical mass and people are motivated to achieve net zero. And I think the other thing that I'm looking forward to is being here in Asia.

> Asia is the place to be. The cities here are growing the fastest. And climate battles will be won or lost here in the next few decades. So, urban infrastructure is going to be built. There is over 50% of the needed infrastructure here that hasn't been built yet. So it has this vast potential to accelerate clean technology. And there are a lot of innovations coming out in this region. So these are kind of domestic or even regional innovations that are increasingly being shared to meet these ambitious targets. So I think, it puts Asia in a really great position to capture the opportunities of a new green economy. And, the UN says it will create 24 million new jobs, boost economic growth. I think that's conservative. I think that we're talking about the new green economy in very specific ways. I think when we add in the resilience economy and protecting people from inevitable change, I think that number skyrockets. So I think, building on these

efforts and sharing best practices, Asia can actually emerge as one of the leaders in facing down these challenges.

- Zoe Haseman: Fantastic. Thanks Lauren. So we mentioned COP26 before we jumped onto the podcast, and you said you were going to be going. What are you looking forward to about COP26? Obviously at this time of recording we're about 9, I think 18 days away from it, how are Resilient Cities Network using COP26 as a platform or an opportunity to sort of drive the climate agenda?
- Lauren Sorkin: Thanks Zoe. This is such an important meeting. It really is. I think whether you're going to be there in person or virtually, this is a time where commitments turn into even deeper partnerships, deeper partnerships turn into deeper action agendas, and from an international perspective, this is the place where national governments are going to solidify their commitments in terms of what they're going to deliver and what they're going to finance. So with that as the potential for this conference, it's a really critical meeting. And so Houston City Mayor, Sylvester Turner, who is also the chairman of our board, and I will be there to really advance a few messages which I'll share with you because I think they're really critical.

First and foremost is that climate resilience and climate mitigation need to be on equal footing. The work that we're doing right now in terms of net zero, in terms of mitigation is excellent. But the benefits that we will feel from it are not immediate. And those climate change impacts that are baked in, need to be addressed. And we need to be building safer and more equitable cities as we make the transition, as we make the investments in net zero.

The second thing is that, the cities are a scale, where we can make a difference, where we can act and we can deliver. And we will be showcasing, from the network, the kinds of initiatives that cities are already delivering. And I think what's exciting about working across the city network, is that ability to scale solutions.

The third is that, resilience can create a lot of jobs, net zero can create a lot of jobs and they are similar jobs and then there will also be different components of that new economy, and they're both incredibly important. One other that we've also talked about, I think in a lot of detail, is that without equity, there really cannot be resilience to climate change. And so as we journey towards net zero, we have to not compromise on these issues of equity and inclusion, because we will then compound climate impacts going forward.

And then, finally, and it may sound like a common refrain, but I think the urgency is in how it actually gets done, and that's that we have to take a multisector approach and that public private partnerships are key. I think we've talked about how that can look different in different regions, in different places, it must, but that to scale up necessary decarbonization efforts, governments only have a fraction of the funding here. We need the global financial community to get involved and to really get a degree of harmonization around the climate risks that we face and around how we're going to finance net zero. So the time's now, it's on our generation to deliver, no one is going to come and bail us out, we have to be our own heroes, as they say. But I think it's a good time to be working on these issues and together we can actually address these challenges of net zero. We have a lot of the solutions that we need.

Zoe Haseman: Excellent. Thank you very much, Lauren. Thank you for joining us and sharing your expertise and experience. Been an absolute pleasure to have you as a guest. And of course, thank you to our listeners for joining us for another insightful episode. We hope you enjoyed the podcast and we look forward to next week's episode, when we head to Dubai. Sparking real conversations with the intention to collaborate, act, commit to real change. We look forward to seeing you then. Thank you.