



In collaboration with
Holmes Hummel,
Founder and Director of Clean Energy Works

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Interviewer: Megan Corey

00:00 Megan Corey Great, wonderful. All right, well I'll just start with an introduction just for the oral history itself. I'm Megan Corey. I am here having a conversation with Holmes Hummel on February 26, 2023, over Zoom. I just wanted to start with maybe a little introduction about yourself. If you could tell me a little bit about yourself, about your name, a little bit about your work, and your connection to the environmental justice movement.

00:40 Holmes Hummel My name is Holmes Hummel. I grew up in Guilford County, North Carolina, in Greensboro. My ancestors trace back ten generations of experience in the North Carolina Piedmont area, dating back to before the United States had revolted against Great Britain, and I bring the experience of a family that was landed from land ill-gotten in a westward invasion from eastern coast of Carolinas into the Yadkin County area, to the privileges that were afforded by the constructions of race that have persisted even since then, and the benefits of the best education that class privilege could access. And with the vantage point that I held, which was undoubtedly distorted and shaped by those experiences, I also came to listen and learn from people that had experiences different from mine in North Carolina that brought us towards a common cause in seeking reparations and recognition for the need for repair when it comes to harms to the environment and the people who are a part of it, not separate from it. That's one reason I'm interested in how North Carolinians in the future perceive the kind of engagement in North Carolina with questions about how human relationships in the past have framed our present challenges.

- 04:01 Megan Corey** **That was great. I did not know that you had roots in North Carolina, which is so interesting to hear. I'm also from North Carolina, so that's a fun connect. I'm wondering: you're not still based in North Carolina, are you?**
- 04:23 Holmes Hummel** That's true. I left North Carolina after high school for the best opportunities that I had as a student interested in energy and the environment as a very strong pressure point. I later expanded that interest to include policy, political economy, and economics, so together, those topics with technology became part of an interdisciplinary course of scholarly study that reflected an interdisciplinary practice of popular education and support for community organizing. I had found those opportunities first in New York and then in California, and after graduation, I found professional opportunities in Washington, DC that led me there for more than a decade serving in the Obama Administration, ultimately, as the Senior Policy Advisor for the Office of Policy in the Department of Energy, and then as the founder of Clean Energy Works, traveling often, though still base camped in Washington, DC. And then this past academic year, I have accepted a position as the Founding Director for Energy, Equity, and Just Transitions at the Institute for Energy in the new Stanford University School for Sustainability. I still do have some of my base in Washington, DC. I'm just here during the academic year for right now.
- 04:20 Megan Corey** **Gotcha. Wow! That is so impressive. So backing up a little bit to what experiences got you interested in energy as a topic of interest, or any people that really shaped what you're doing now and brought you to this point as an environmental activist.**
- 05:53 Holmes Hummel** I was a part of a carpool to school every morning for, whatever it was, more than a decade. Same carpool driver, same carpool, same route, same school, and every morning, especially in the colder mornings, behind the big dumpster trucks that were going to and fro the construction sites around the expanding outreaches of our suburbanizing town, there were always billowing clouds, dark smoke – almost as opaque as a jacket I'm wearing now. And I would peer at those black soot clouds as they would rise and dissipate into the sky, and I would peer until I could not see the last bit of smoke left. And I would ask my teacher, the art teacher, our carpool driver over and over again: "Where does the smoke go? It doesn't just disappear. Where does it go?" And my

art teacher, who was wonderful, tried to explain to me that it just got to be so small that my eyes couldn't perceive it anymore, but it was still there. I had little awareness at that time about the dislocation of peoples that would come with rising tides, intensifying storms, displacements related to floods and fires. All I knew was that I was watching a change in the chemistry of the atmosphere from the backseat of my carpool, and I was barely out of grade school. It doesn't really take a rocket scientist to be able to make the observations that people at any age can accept. And you can see what's happening and think: *Wow! I wonder how that's gonna matter.* When I was 16 years old, I started first going to the fuel station to put fuel in a car. Obviously, I'd been in the backseat of a carpool; I wasn't any stranger to cars or fueling stations, but it's a little bit different when you're the person who's paying a dollar 81, or whatever it was at the time, per gallon to put gasoline in a car. In that same year, the United States whipped up an unbelievable fervor of nationalistic pride in an entitlement to the supply chains of oil to that fuel station, sending people like General Schwarzkopf into our history books as the United States marched across the deserts of Kuwait into Iraq to liberate the export stations that were there in the Persian Gulf. And this was a cause of national interest, but it was also the beginnings of what became a 30-year geopolitical standoff that was used and abused to feed a military industrial complex that costs our nation trillions of dollars. Untold trillions, really, when you add it up. And at 16, I was pretty certain that there was nothing happening through the tanks that were rolling across the desert of the Persian Gulf that would keep the people I love the most safe compared to what we could do right there at home. And one of the things that I did was I took data from the Energy Information Administration, which said that the people in our home state were exporting billions of dollars every year to import refined petroleum products like gasoline into our state every year. Nobody in North Carolina makes gasoline. No one in North Carolina even makes the ingredients that go into gasoline. So every drop of gasoline that was being used in North Carolina was a drain on our economy, and we had options and opportunities to improve our performance – for example, driving farther without as much fuel dependency – but we depended on cooperation from the Federal Government to really drive that into the manufacturing decisions about what kind of vehicles were even going to be made. Those were the decisions called the Corporate Average Fuel Economy standards, or the CAFE standards they call them. But in Washington, DC, there was enough pressure from the incumbents in the

oil industry to prevent those numbers, those standards, from moving for almost two decades. I grew very restless. So as a high school student, I was introduced to a team of people that were building a lightweight experimental vehicle that drove 60 miles an hour off the power of the sun. They used solar panels, lead acid batteries connected to a brushless electric motor on three bicycle wheels, and with a very aerodynamic sheet, raced it from the Indy 500 track in Indianapolis to Golden Colorado in a race called Sunrayce, produced by the United States Department of Energy. I dropped out of school. I became the coleader of the team building that quarter million-dollar experimental vehicle. I taught math lessons on the side and full-time work for this solar car team because I felt like these combinations of technologies – at the time – high performance batteries, high performance, electric motors, and renewable energy, combined with transportation, was our best hope to unlocking the pressure that was compelling the militarism that was defining my early adulthood. After the race was over, I decided to go back to school. I continued seeking out career opportunities in technology. But in college, I saw also other types of insight, and I took classes in modern American Black freedom struggle with Clay Carson, writing by women of color in the twentieth century with Paula Moya, feminist studies with Estelle Freedman. These are people whose views on the experience that I was coming to learn about as a new arrival, a very young adult, listening to the intergenerational insights being offered by historians and analysts who are saying it didn't always look like this, and it doesn't have to be like this now, and the things that made it different in the meanwhile involve these different types of strategies for social change. And one of the books assigned by Clay Carson was called *In Struggle*, and it describes a lot of the amazing histories in North Carolina, Tennessee, and other surrounding southern states, including the instrumental role of the Highlander Center, and so I applied to become a summer intern there. I was very fortunate, extremely privileged, to be selected as an intern at the Highlander Center, where Connie Leeper, who remains a pivotal figure in North Carolina, is climate justice network today was already employed as a member of the Popular Education Team at the Highlander Center, and over the course of that summer in 1997, Connie Leeper and Susan Williams, and a number of other mentors, including, and most importantly, Suzanne Phar, and organizers from Southerners on New Ground, including Pam McMichael, Pat Cherry, Joan Garner, Mab Segrest helped me understand so much more about intersectional natures of oppression and privilege and the ways that you can't abandon

privileges that are socially constructed around you, and that helped me have a healthier attitude towards engagement, solidarity, and leverage. And I have since then, in the 25 years between that summer and now, thought, in every way possible, how I can make myself available to the history that still is yet to be written.

13:26 Megan Corey **Wow! That story is so interesting, and honestly, I learned so much. So you just talked about how you kind of started out with all of your work, and you mentioned before that your work has evolved kind of a lot. You've been in the public sector, in academia, in the field, and I wonder if you had a particular favorite moment, or memory, or accomplishment from all of the work that you've done.**

14:10 Holmes Hummel Well, I haven't really done anything ever by myself, so these are not stories of Olympians that pass through the finish line tapes like Joan Benoit in a marathon moment. There's nothing part of my experience that has that feeling. To contribute to the histories that you're collecting, I would have to offer a narrative that would draw attention to the story of Roanoke Electric Cooperative in Eastern North Carolina – a rural part of the state that is actually defined by incredible history, and it's tied to the land and the quality of the soil, and frankly, the difficulty of cultivating that soil that, in part, helped keep land that had been acquired by descendants of emancipated peoples in the first Reconstruction in the hands of African American land owners for much, much longer than African American landowners, and places where the soil was actually easier to tend from an agricultural perspective, and with a high concentration of African American residents across the service area of Eastern North Carolina. The residents there rolled into the twentieth century with kerosene lanterns and no electricity – not in the 1900s, not in the 1910s, not in the 1920s, really not even in the 1930s. 90% of rural communities in the United States did not have electricity the time the Great Depression struck, and when the president called on the national interest to be recognized in expanding infrastructure for electricity delivery across all of those areas, the residents in the Roanoke Electric Service Area between Roanoke Rapids and Rich Square, Scotland Neck area. They became represented by a group of landowners who formed a private corporation to deliver electricity. 100% of the people who had governing power on the board of that corporation were landed White men. And they maintained the identity of that board for the first 30 to 40 years, almost 50 years (but let's call it 30 to 40 years) of its operation,

even though every single day for all four or five of those decades, the majority of the voters, who had an ownership stake and a right to vote on their representation on the board, were African American residents. So there was a man named Matthew Grant, the son Gary Grant, also has a place in North Carolina's history for environmental justice campaigning. Matthew Grant was a carpenter who, I believe, made his way as a craftsman producing coffins. He was a carpenter-coffin maker and a civil rights advocate and a civic leader. He knew that the electricity bills delivered to every household were mailed from a utility company that was owned by the people that it served and governed by a group of people who were subject to elections every year but didn't seem to have any challengers, and the challengers, if there ever were any, didn't seem to have any good chances of winning. But he also knew about cooperatives, which is a type of corporate structure, I just described, where the shareholders are people who are participating in the company as either producers or consumers. And he knew about that because there were agricultural cooperatives across the Southeast, and he knew how cooperatives should run and how they could produce economic benefits, so he agreed to stand for an election to the board, but before he could stand for election, there were vacancies because of the death of somebody who was already serving, and he was offered an appointment – an appointed seat. And the next time it was time for an election, he ran without opposition, and was re-elected. Matthew Grant became the first African American person anywhere in US history to have a seat on the board of an energy democracy in America's rural landscape financed by the Federal Government. This is a transformative moment in the energy history of the United States, with regard to environmental justice still unfolding to this day. Matthew Grant's story wasn't obscure at the time. In fact, within 15 years or so, he'd been on the board for that long, he was able to accumulate enough allies with him on the Board of Roanoke Electric to seek applicants for the CEO position when it next became vacant. He became the chair of the hiring committee for that position, and they interviewed the middle manager from an electric cooperative in Florida, named Curtis Wynn, and Matthew Grant's leadership on the Roanoke Electric Board led to Curtis Wynn being offered the first job in the country at the CEO level to be held by an African American manager in all of the 865 electric cooperatives have been financed by the Federal Government for, at that point, more than 50 years – billions of dollars every year for 50 years, and never, even in the dozens of electric cooperatives with a majority African American membership had there

been such a board offering such a leadership opportunity. So Curtis Wynn and Matthew Grant became stars on the cover of the United States Department of Agriculture's Rural Development Magazine in the 1990s, heralded by the Federal Government for breaking through what was obviously a barrier unjustly held by white supremacy in practice by any lens cast across the landscape. Curtis Wynn remained the CEO of Roanoke Electric until just this past year, beginning of 2022. He was in that role for more than two decades, maybe 27 years by the time it was all done. Matthew Grant continued to transform the Board of Roanoke Electric, and the board continued to transform the kinds of investments and services it was making. I didn't get a chance to meet anyone at Roanoke Electric until 2014. I just finished serving the Obama Administration, as I mentioned earlier, as the Senior Policy Adviser to the Department of Energy. During that time, the Environmental Protection Agency had defended human health in the United States by addressing the toxicity and the hazards associated with air pollution produced from fossil fuel-burning power plants, particularly coal-burning power plants, and the people that were most affected by those human health protection rules were people who lived in coal-producing areas, in areas where there was a lot of dependence on coal power, and it turned out that the electric cooperatives as a whole, all 865 of them, had more fossil fuel intensity in their resource-portfolio mix than any other category of utility in the United States. They were dirtier than the investor-owned utilities, dirtier than the municipal-owned utilities. They were producing about one ton of carbon dioxide for every single megawatt hour, which I know sounds like an odd unit for most people. It's 1,000 kilowatt hours – that still doesn't mean very much. It's about the amount of energy of one household for one month. But one ton of carbon dioxide, like the weight of a car, in carbon dioxide – 2,000 pounds – is a devastating insult to the atmosphere and life support systems all around Earth, compared to its actual value to the economy which is barely \$40. The cost to society of a ton of carbon dioxide is more than \$40. The electric cooperatives that depended so much on carbon dioxide-producing power plants for their supply were producing negative social value with every unit of electricity that they delivered. How could that be? These were some of the most community-conscious organizations in the energy sector of the United States. They were owned by the people they serve. They should have the best aligned interests for the people who'd be most vulnerable to the hazards and insults of that pollution. But no. But no. In part, because the governance system of the

electric cooperatives had atrophied and weakened with inattention, and frankly suppression, over decades of the active discouragement among the voting population. Why bother voting if there's never a competitive election? Why bother voting if the board has all of the proxy votes? Why bother participating in a democracy that's not really a healthy democracy? So I went to the National Convention of all of the electric cooperatives, and when I was there, it wasn't just because I happened to swing by that day. It was because the Federation of Southern Cooperatives, which knows a lot about cooperatives because of their work for decades with landowners across the Southeast, who were African American farmers primarily, but also people who participated in financial cooperatives, which are credit unions, and other types of agricultural producer cooperatives. The people who knew a lot about cooperatives in the Federation of Southern Cooperatives also knew a lot about electric cooperatives, so they knew about the National Rural Electric Cooperative Association, in fact, they were affiliated members of it. But the fact that the Federation of Southern Cooperatives knew a lot about cooperatives and had a long-standing partnership with the National Rural Electric Cooperative Association on things like curriculum for teaching what cooperatives are to grade school children. They'd never sent a delegation to the National Convention of Electric properties ever. So I asked, would they ever want to go? And their executive director said, "We will only go if you go with us." And so I went, and when I was there, we were accompanied by the late Elandria Williams. Elandria Williams was a bright star at Highlander Center's Popular Education Team, before leaving that team to be the executive director of another popular education and outfit that was doing remote and wide, large-scale learning. But Elandria also had incredible health challenges, including respiratory health challenges and died far too early from those medical complications. Elandria was with us in Nashville, Tennessee for the Convention of Electric Cooperatives, and as Elandria and the Federation of Southern Cooperatives and another colleague named Shandra Pope forced across the floor of the convention center, they asked: "Who could we talk to about healthy energy democracies? Who can we talk to about investments in communities that recognize the importance and the timeliness of clean energy access in distressed communities, the type of repair that's long overdue. Who can we talk to?" Everybody said, "You need to talk to Curtis Wynn." That was how I first met Curtis Wynn. Now this whole interview is not about the relationship that came from it, but I want you to know that thing that you asked me, which is what

would be a bright star moment, wouldn't be considered bright without understanding and appreciating, really having regard for the heroic nature of Roanoke Electric as an organization to stand up under the pressure of 30 years of census-measured levels of poverty that are above 20% prevailing rates that were so high that it was one of the places in the State of North Carolina recognized as a tier one county. All six of the counties that they serve were tier one counties for economic distress, and they were also categorized as persistent poverty counties under the economic development analysis team at the United States Department of Agriculture's Rural Development Administration. But they had 27 million dollars' worth of revenue and expenditures every year pumping in and out of their tiny cooperative with barely 35 staff to deliver electricity and keep the lights on for everyone, even after Hurricane Matthew came through and bulled down lines everywhere. Roanoke Electric have been trying to address high energy cost burden – the burden on families when the peak requirements for staying safe through a sweltering summer or staying alive through a winter that could make you susceptible hypothermia. Those high bills were heard in the call center. 50% of the respondents of their customer satisfaction survey said that their average bills were more than \$200 a month. That's \$2,400 a year – a large portion of the discretionary income of any household in the area. But of course, the ones that were suffering from the stress the most and had housing stock that was the least well-fortified and least well-insulated, and a lot of it was manufactured housing. And so 50% of the phone calls into the call centers was “I can't pay my bills.” And the call center folks did the best that they could, but they said, “Look, we're pretty sure that your bills are not high because you're wasting energy in a pool party. We're pretty sure that you're wasting money on wasted energy, and the only way to stop that to stop wasting energy. But most of the ways that that thermal energy that you're using is being lost is through the box that you live in – the building envelope of your home, and the upgrades that would be required to keep you safe and sound through the sweltering summers and shivering winters would be thousands of dollars of improvements – in insulation, in air sealing, in currently now, in insulation of high efficiency e-pumps. So they did what they could to advise the member owners, *Here's what you should do to make things better*. And, after years of offering them advice, the electric cooperative caught on. Really, nobody was getting the upgrades because they called the first time, they didn't have enough money to pay the \$200 monthly bill. Who was kidding about paying thousands of dollars for a

contractor to come to their rural area and try to fix up that part of their home, as if that was the only thing in their own that needed to be fixed, so they tried to offer low-cost financing. They heard from Environmental Defense Fund that they could offer loans to their membership that were relatively lower interest if it came from a cooperative that was in the Financial Services sector – that would be a credit union. So they partnered with a group called Coastal Federal Credit Union to offer a low cost loan. They marketed the loan to 1,000 customers that all had higher bills, and therefore a higher likelihood of not being paid their bills, and less than 5 out of 1,000 closed on a loan to actually undertake the upgrades that the utility already knew that that customer would be able to benefit from. More than 99% of the people that they knew could be helped said no. That's about when I met the leadership team at Roanoke Electric, and I was arriving, from my vantage point, as a former Federal official who'd been implementing a part of the Farm Bill enacted under the George W. Bush Administration, specifically making it possible for the first time in US history for all of that Federal financing that I mentioned earlier was associated with the fossil fuels that were saturating the resource portfolios of these nonprofit energy democracies. The first time ever to be able to invest in energy efficiency in a real above-board way. They had figured out some workaround. They had worked out some detours like some ways, with some creative accounting, you could put some money into energy efficiency, but the Federal Government had never received a loan request or accepted it, because it was not eligible until work that I and others in the Department of Energy did with the Department of Agriculture in 2013 to finish a five year process – it took a half decade to implement the rules for a law that only added two words to the statute. The two words were, “and efficiency.” I worked with the team to finish that job because a half-decade is a half-decade too long, but when the doors were opened it was still crickets. You'd think there would be a rush. People would say, “Absolutely! We need that money in our community.” But no. So I was there at the convention meeting people who might be interested in being among the first to implement it. You must know by the tone of my voice in the story that it was Roanoke Electric. And it was. Roanoke Electric filed on the first day that applications were accepted with one other cooperative called Northern Arkansas EMC., represented by the president of the NRECA at the time. And those two both received the first awards from the Energy, Efficiency, and Conservation Loan program from the Royal Utility Service, but they were doing very different things. See, North Arkansas

EMC hadn't learned anything from the experience that Roanoke Electric had offered from the data that I just described. 1,000 offers, 99% rejection rate across a landscape where people were testifying to their need and their willingness to act, but also that they were wise enough to not jeopardize their family by further indebting them or causing undue sacrifice, so North Arkansas went ahead, started marketing loans to their member owners. They got approximately the same result: very, very low levels of participation, which translates into really low benefit. On the other hand, Roanoke Electric call for references from a Community Financial Development Institute, or CDFI, in Eastern Kentucky, called Mountain Association. Mountain Association served a 16-county area in its charter that also registered on the Federal Government's map for persistent poverty. As the stories of the Southeast go, the experiences of economic disinvestment in Appalachia and the experiences across the areas defined by the color of soil, called Black Belt, are tightly tied. And when there are interconnections between Appalachia and people who live across the Black Belt, there have been transcendent movement opportunities to change the course of US history, and frankly, I would say, the attitude of the United States towards its own future and its relationship to the world. So I was pretty interested to see this majority African American community that, by this time, had elected a board that represented their membership much more accurately with a management team that by then had promoted to its leadership ranks people who had grown up in that service area, gone to historically Black colleges and universities, come home and taken some of the best jobs that were available in the community, in the energy company, but when they needed help they called CDFI in Appalachia, in Kentucky, to ask, "Hey. We hear you all have a solution for capitalizing home energy upgrades for people who are experiencing extreme distress associated with both the burden of their energy bills or the sacrifice associated with not being able to pay them or not being able to use energy services in order to be able to afford them." Let me unpack that. That means sweltering through the summer and shivering to the winters. And they said, "Actually, we know exactly what you're talking about. We do have people who shiver through the winters and struggle to pay the utility bills. All 16 of our counties have relationships to electric cooperatives, and we've been implementing a program of inclusive utility investment modeled after an electric cooperative in Kansas, and it's working for us. We've already done a pilot. We evaluated our data. We subjected it to so oversight at the Utility Commission. They approved it for permanent use. And now

we are expanding to more electric cooperatives.” That's all that Curtis Wynn and his board needed to hear. Roanoke Electric said that they would do the same, and they opened the program called Upgrade to \$ave. I told you a whole bunch of story without telling you how I got from the convention center to what's happening in the narrative now. You see, I met them in February and March in 2014 in Nashville. In April, I travelled in a borrowed car from my family to their headquarters to sit for a day in the conference room and hear what their interests were and what they wanted to accomplish. In June, I returned with people who are expert in the design of inclusive utility investments, using a system called, Pay as You Save, and between June and July, I helped support the authorship of the application for six million dollars – the first investments that would be made without regard to the household’s credit score, income, or whether or not they were landed people. They were awarded the six-million-dollar opportunity within 60 days, so by August they received notification, by September it was public. It took them until 2015 to select their program operator and start to work with the local workforce. They started making more investments in 2016. It's been stop and start between 2016 and now, but I would say that I've been so humble. Not proud, humble. Incredibly humble to learn alongside the Rural Electric Cooperative leadership of Roanoke Electric as they faced the true challenges of making things right. If that's the fundamental definition of justice, to make something right, to look at what was hurting their community, harming their community in ways that we're unjust, and to use every instrument they had available to them to try to make it right and to use financial instruments that were rarely used outside of the persistent poverty area of Eastern Kentucky for places that had the level of distrust they were experiencing, and then turn around and testify to anyone else who would listen, to offer workshops, to publish open white papers, to sign a letter to anyone in the electric cooperative industry – *If you need help, we will help you. Call us.* They were tremendous stewards of the concept of equity and inclusion in the clean energy economy. And that's why I think they are undoubtedly a bright spot in North Carolina history for environmental justice and the most important thing that I would want to be associated with.

40:51 Megan
Corey

Wow! I can really see what you were talking about before with the kind of collaborative nature of all of this work that you guys do, and it's really interesting that you underscore this really important issue of representation, too. I was hoping that you could expand more on

these connections that you build. They seemed really formative in your story, so I was wondering what your experience was like working with the leadership of these cooperatives like Roanoke Electric, and with specific people in particular, like Curtis Wynn.

**41:34 Holmes
Hummel**

Well, I'm a student of their work, and I have tried to be responsive to each succession of challenges that have been uncovered in their path to achieving 100% clean energy economy for the membership of their company. I've experienced both their efforts and their avid outreach within the community, which is not limited to investments in building energy upgrades, but also, for example, partnering with the Forest Stewardship Council on making sure that Black land loss would be stemmed by sustainable forestry practices that would allow landowners to maintain control of land that was otherwise, being forced into sale by not being able to pay proper taxes due to the state of North Carolina. They were thinking about all types of solutions that were responsive to the membership in Roanoke Electric Service Area, which was not in any way deficient in any amount of resourcefulness, mutual aid, resilience, creativity, industriousness. The people I met were can do people, had done people. And they would defy generalization. There's never a way to describe thousands of people at one time with singular adjectives, but I would say this: only the Federal Government would cast an eye from a distance and say, "This is an area that has experienced poverty that has persisted," and not feel like it wasn't an implication of the Federal Government itself and not of the people who live there. They were made to be disinvested by Federal policies, and yet all of their most beloveds being nearby and thatched and knitted together in intergenerational relations are beautiful – intuitively produced beautiful places and beautiful experiences, made it so motivating to want to say yes whenever they came forward with the next idea. For example, they really wanted broadband for everyone in the community. They wanted not just internet access for the access the internet's sake, but because they knew that it would be a ticket to better health care through telehealth, better education through online learning. They knew that it would be better for the economy, for entrepreneurship, and they knew it would be better for the electric cooperative through smart grid. So we did our very best to help support the ambitions that they had to integrate smart grid functions with their utility grid and that produced a program for demand response. These are jargon terms, so I stutter and hesitate to use it, but I should because Roanoke Electric became the number one provider of demand

responsive capacity in the entire North Carolina electric cooperative system. That's really saying something. There's more than a million households in North Carolina served by electric cooperatives, and this electric cooperative serves barely one percent of them, but they accounted for 90% of the demand side flexibility in the statewide energy system in 2021. That's unbelievable. That's why I wanted to say, my experience in my relationship with the leaders of Roanoke Electric is that just trying to listen to what they wanted to do and leverage whatever resources I could in an aligned way was extremely gratifying and very educational. I should say that, even more recently, they became the first electric cooperative to demonstrate the way that you could interconnect an electric vehicle to a building that they serve on their electric cooperative system and run the electricity stored in the battery in both directions, which in the future, I think, is going to sound absurdly obvious, but it's embarrassing to say that in 2022, it's still novel, but Roanoke Electric, starting in 2020, showed it was possible by partnering with a Virginia company that was making the first UL listed – that's Underwriters Laboratory – listed and certified – two-way charger – certified for safety and performance, and Roanoke Electric installed that cutting edge equipment, they got the electric vehicles, the first electric vehicles anyone in their service area really owned to speak of, and they measured the value of those electric vehicles with the two-way chargers. And then, when they had that data, they were willing again to share it, and share it with the nation, and they partnered with three or four different nonprofit organizations in the project, and took their results to a national conference of the American Council for an Energy Efficient Economy, where the paper on their results was published and brought to the attention of national laboratories that then cited their work later, when reproducing models of similar interest all the way as far afield as Washington State. The people of Roanoke Electric have never lacked, in my view, for anything that could be required in the human spirit, but what was missing was a level of investment that certainly was overdue for the service area, and now requires responsive, creative, innovative, scalable, and sustained solutions, and that's what our team at Clean Energy Works hope to bring.

**47:50 Megan
Corey**

Amazing. It's so interesting to hear about these revolutionary moments and innovations and changes that you and your colleagues have really helped bring about. And I was wondering what you envision moving forward for this kind of movement, for these

changes – what you see as the future of the movement and what makes you excited for the future of the environmental justice movement?

**48:28 Holmes
Hummel**

I'm not really sure, Megan, that I know about any single movement, and I wouldn't be able to make an observation that satisfies a question presuming that there is one, or that I have a vantage point on it, which I don't. So I'll certainly engage your interest, but I wanted to meet you in the moment of the question to say, it's hard for me to accept the question. I think that we're in the midst of many currents of history that are driven by the motive force of people, and the effectiveness of that force is mediated by the deftness of strategies that emerge from it. And I use that phrase – strategies that emerge from it – advisingly, because I like it to be associated with work that has been given the best voice from Adrian Marie Brown in her book called *Emergent Strategy*. And I'd like to say that, based on my earlier study with Clay Carson, that the brilliance of Adrian Marie Brown's *Emergent Strategy* book would have also been appreciated by the young members of the Civil Rights organizations. The 1960s and 70s that were written about by Clay Carson, who had taught me in college to learn about similar concepts, and when I think about what's next, it's about a rapid spread of confidence, not just of ideas. If you want ideas, log into the internet. The internet is full of ideas. You can watch them on YouTube all day. You can listen to podcast about ideas. No one is short on ideas, but the ability to actually select the combination of things that will be responsive to the conditions at a specific site turns out to require a very precious resource called confidence, and one of the reasons that is precious is that the internalization of oppression is strong. The tide of dominant culture messages that say you can't do something, or that it's not worth doing, or that it's futile, is a kind of undertow that requires tremendous amount of reassurance to overcome. But the restlessness of a group of people who know that not only is it possible, it's overdue to achieve not just a fossil free future, but a more fair future, means that when we put those things together we have to ask ourselves: Are we able to get to a fossil free future faster when we center fairness? Than if we just decided, we want to go through and swap out all the light bulbs, swap out all the power plants, swap out all the cars with the same topography of advantage and disadvantage that we have today. That is the slowest possible path to a 100% clean energy future, and because it's slow, it's also then dangerous, and it's dangerous to everyone, everywhere, for all time, and that's not an

overstatement in the midst of the sixth mass extinction. So if it's true that the current topography that gives us this dramatic and unacceptable gradient of wealth and poverty is a feature of the 20th century constructs of monetary policy, global trade, and disinvestment across local economies in the United States and frankly around the world. If that's not acceptable, then what will the generations that face the 21st century accept? And if it is possible to demonstrate in the context of energy democracies where there are paths to ownership for distributed energy solutions that are based primarily on stewardship for the resources by first considering energy efficiency before considering renewable energy and energy storage, we might be able to find ourselves more swiftly at the aims that have been set and, frankly, now promised to the world under the penmanship of the President of the United States that by 2050 will be fossil free, or at least our pollution profile will be fossil free, and it has to start with communities who can accept that vision as a frame that is integrated with every other desire for wellbeing that they have, not separate from it and able to demonstrate that when we center our quest for a more inclusive and equitable home economy – home meaning where we live, work, and play – the relations that are most important to us can sustain us under the most extreme circumstances of distress when we prioritize safety and soundness, not out of here, but out of love. Those communities are likely to move there fastest, and communities that move to reach their goals *apparently* faster because of affluence – whether it's Boulder, Colorado or Berkeley, California – they are ultimately showing us solutions that are opening avenues and insight but not necessarily creating stampedes of people who can follow because the underpinning conditions of what made it possible for them to proceed were frankly not replicable in any meaningful way. But when you can work in the context of people who are living testaments to overcoming all of the statistical descriptors of distress, then you know if it is possible to achieve an environmentally just outcome in that context, that it is surely much more possible to approach it from similar angles with similar expectations of success in many, many, many more places. That's what I hope we see in the next decade.

55:34 Megan
Corey

Yeah, to your first point, you are so right. Honestly, when I wrote the question, I didn't even register it, but it isn't a single monolithic movement, and I think that your points about this work that you're doing, needing the ideas of confidence, and you centering these concepts of inclusivity and equity and fairness in your work, especially moving forward, is so important. And my last question

honestly is just: I know that you've worked on a wide variety of projects and done a lot of different jobs and work, but I wanted to ask if there's anything else that you wanted to touch on, that you haven't shared yet, because you've just done so much, and I wish we could get to all of it.

**56:48 Holmes
Hummel**

Well, I think we should talk a little bit more about racial justice before we close because the oral histories that you're collecting will surely testify to lived experiences that will affirm the social constructs of race have constructed institutional frameworks that produce unjust outcomes, and the opportunities to change the conditions and to do so by changing the institutional policies that are a product of organizational, group, and individual behavior is more attainable in this decade than it has been in my experience in the past in the energy sector alone. I'm just testifying to the energy sector, not to every place else in the economy. But the reason for that is because of a pair of Federal policies that were enacted in 2021 and 2022 that produced a virtually unprecedented amount financial commitment from the Federal Government to the energy sector. But then mapped on top of it, requirements to advance racial equity. And, by the way, not just any equity, racial equity. It's the first words – the first words of the first executive order on the first day of Joe Biden's presidency. He didn't go to sleep one night in the White House before signing an order that said advanced racial equity. And two years later he came back on February the 19th, 2023, barely ten days ago, to write another executive order doubling down on the call for racial equity in the context of his administration implementing two major bills, the Inflation Reduction Act and the Infrastructure, Investment, and Jobs Act, which is primarily focused on transportation infrastructure, including the deployment of 500,000 EV chargers for EV charging infrastructure, for example. It's going to remake transportation similar to the transition to internal combustion cars that we had back in the earlier part of the twentieth century. These are big movements in energy history for the United States. So you might consider that scale of financial commitment that's just in the energy sector proportional to what is typically available from the Federal Government for the energy sector is a kind of reconstruction investment. I would not go so far to extend the analysis of Reverend William Barber, Jr. whose book on the Third Reconstruction, I think to be well read by people who are interested in this series, but could it be that we are entering the window of time that could be seen as a Fourth Reconstruction, but narrowly defined in the energy sector, with 27 billion dollars set aside for a greenhouse gas reduction fund specifically for the benefits of communities that were defined by the Federal Government as disadvantaged, by the way, covers 100 million people – 100 million people and 40 million households. And the map of the climate and economic justice screening tool that defines the areas of advantage and disadvantage where the disadvantage census tracks count

for a third of the population are so dominant in the Southeast that these policies are practically policies for investments in the South, and so the Federal policy to advance racial equity and the Federal policy to clean up the energy sector are coincident in this moment in American history, and the United States voice in the international negotiations about the fate of all people and all living things and their support systems everywhere, for all time in the aftermath of the sixth mass extinction is being written right now. That doesn't make it more important than what's happening on Main Street or in a rural area where there's interests of a different nature, strife of a different kind. I'm not interested in the supremacy of climate change or environmental justice in the energy sector above all, everything else. But I'm not willing to shy away from observing what the widespread implications are of these physical systems. The physical systems really are that big. The physics is unforgiving. The physics won't deny that scale of impact, and so I'm extremely interested in people who are interested in this moment in history of associating the active pressure point that we are in with the convergence of an upwelling of demand for racial equity and an upwelling of a demand for a clean energy economy, and the combination is what gave us our chance to take the next ten years, to take a turn decades overdue, but it can't be delayed, not even one more minute, and environmental justice leaders brought us to this moment, and that's what I hope to be able to affirm in a last remark on the record here that our time is being defined by a quest for racial equity in the quest for a clean energy economy. Not the other way around. That is, I think, a defining part of how we're getting as far as we're getting, which is more or less the Fourth Reconstruction period, but only for the energy sector. How far can we take it? And can it move to more sectors? I don't know. I think that's what we continue to need to track and support the leaders from this era to follow. They will surely bring their voices to successive challenges ahead. They will surely find that their end of our work is not done. When we reach a fossil free economy, there will be more work to do to recognize and repair racial injustice, not only for as long as I'm alive – for generations to come, but I know that we're getting farther and faster now because of this convergence, and that's what I wanted to leave on the record.

**01:03 Megan
:41 Corey**

That is so well put, and I completely agree. It feels like we're at this decisive, really important point in history, and racial equity is so clearly at the forefront of environmental justice work, and it's really interesting to underscore the importance and necessity of giving voices to historically marginalized groups, and I think that this project hopefully aims to uplift these voices and learn more about their stories and histories. So yeah, you said it really well, and that is a great place to kind of leave off as well. But thank you so much for those remarks, and those are all of the questions that I have. I was wondering also, I know I asked you at the beginning, but if any

questions have arisen just after this conversation about the process itself of these oral histories, any other remarks that you have.

01:05 Holmes
:05 Hummel

I remember that William Barber III asked you to put me on this list. I'm pleased to say that as a law school student, he took a summer as of part time intern with the organization that I founded called Clean Energy Works, so I had a chance to work with him then – really impressed and inspired each day when I see things that he's continued to be able to do, and I don't know who else he put on that list, but I did want to note there are some interesting important insights to be gained in the electric cooperative and Energy Democracy Transition stories across the Southeast through a network called the Advancing Equity and Opportunity Collaborative, and that there are certainly more people who could benefit from being heard, and I think the project could benefit from hearing from.