Carbon Captives: The Human Experience

https://www.climateone.org/audio/carbon-captives-human-experience
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Announcer: This is Climate One, changing the conversation about energy, economy and the environment.

Fossil fuels have helped bring people out of poverty around the world. But the industry's success has often come at the expense of people living in fenceline communities near factories and refineries.

Michelle Romero: Some of these companies have been profiting off of the pollution that they're pumping into low-income communities and communities of color.

Announcer: As a result, the cost of pollution has been subsidized by these captives of the carbon economy

Michelle Romero: There's a racial and economic layer to this where they are able to get away with it in some communities and not others.

Announcer: While many workers in the oil, gas and coal industries are also left to fend for themselves.

William Vollman: All the people involved in resource extraction who feel really despised and ignored should be hearing from us, let's make you part of the future.

Announcer: Carbon Captives. Up next on Climate One.

Announcer: How do we make people working in and harmed by the carbon economy part of the clean energy future? Welcome to Climate One – changing the conversation about energy, economy and the environment. Climate One conversations – with oil companies and environmentalists, Republicans and Democrats – are recorded before a live audience, and hosted by Greg Dalton.

I'm Devon Strolovitch. The number of Americans working in the solar industry is double the full and part-time number working in coal. But that doesn't mean many coal workers aren't proud of what they have contributed to the global economy.

Michelle Romero: When I say, you know, we need to build an inclusive green economy, I think about those workers and I think about communities who are bearing the brunt of pollution from oil refineries and other sorts of, you know, coal mines.

Michelle Romero is National Director of Green For All, an environmental justice organization founded by the activist and CNN commentator Van Jones. She launched the Moms Mobilize campaign to fight the Trump administration's budget and dismantlement of environmental protections. Joining her and Greg at the Commonwealth Club was author and war correspondent William Vollmann, winner of the 2005 National Book Award for fiction for the novel *Europe Central.* His latest books are *Carbon Ideologies,* extensive works on the math and the people that drive the global energy system. Here's our conversation about captives of the carbon economy.

Greg Dalton: William Vollmann, you write a lot in your first book about nuclear power. So take us to Fukushima. You went into the dead zones for over seven years after that nuclear disaster in Fukushima. So take us to that, what it's like to go into the site of a nuclear disaster.

William Vollmann: Well at the very beginning it just looked vaguely eerie. You would see potted plants that have just begun to wilt. Maybe somebody's umbrella in the door step that had fallen down. And then as the years went by the vines grew up the radioactive wild boar started breaking into buildings. The windows broke and it just got creepier and nastier.

Greg Dalton: Were you concerned about, you know, radioactive exposure going in there. Do you had some devices to measure the exposure? Should Michelle be concerned about sitting next to you?

William Vollmann: Oh, I don't have a glowing personality. I think you're safe, Michelle. No, I've reproduced so I didn't really care much. And I had a dosimeter and then a so-called pancake frisker. So the dosimeter can measure your crude dose and the pancake frisker can tell you, oh, right where I am right now, this is dangerous, but if I go three steps away from that drainpipe, I'm quite safe. And if only we had things like that that could measure carbon dioxide and methane and all these other greenhouse gases, oh simply, I think we would be a lot better off.

Greg Dalton: And Michelle Romero where are you on nuclear power because nuclear power does not send kids to the hospital with asthma. It is carbon free, you know, there's no emissions, there's the whole waste issue. But wouldn't nuclear power be a good thing for the people that you care about that are downstream from refineries and coal burning factories?

Michelle Romero: Absolutely not. Absolutely not. So at Green For All, it's really about building a green economy that's about more than just climate change. More than just carbon pollution, right. It's about building stronger, more resilient communities that are sustainable and that have good access to healthcare to healthy foods to get around from place to place, right. So when we talk about clean transportation even, we're looking at how do we fight poverty and pollution, mobility access, health access, environmental justice all of these things at the same time.

Greg Dalton: Okay. And we'll get to some of those things. So William on nuclear power, did going to Fukushima change your mind about nuclear. Some people, James Hansen NASA scientist, say nuclear is a solution for climate, we need more of it. What do you think after being in Fukushima?

William Vollmann: I think all four of the major fuels are about the same. Nuclear, coal, oil and natural gas they're all very, very dangerous. And the only solution is to reduce demand. Reduced demand for everything. We can't rest to one or the other of these fuels.

Greg Dalton: But you go to Bangladesh, where you talk to people who say, look they want the standard of living that everyone listening to this enjoys and it's wrong to deny them that. So how can you reduce demand for people that don't consume very much already?

William Vollmann: Well that's a good point. And the Bangladeshis probably emit something like 42 times less from fuel combustion than we do. So one simple solution would be more birth control for Americans.

Greg Dalton: Population is the thing that a lot of environmentalists don't like to talk about. Michelle Romero, does the green economy involve sacrifice, William Vollmann said, reducing demands, you know, living with less. Is that the path?

Michelle Romero: Well, I'll tell you, there are plenty communities living with less already and if we did more to invest in underserved communities, we would actually help bridge the eco divide. That was just out in the Central Valley of California, which is the bread basket for a lot of the nation, right. A lot of our foods and produce come from the Central Valley. And I talked to residents who are on poverty wages. This one gentleman in particular that comes to mind, Emilio, he's in his 60s, he's got two grandkids that he and his wife were raising on poverty wages and it's triple digit weather out there every summer. And so once July came, his energy bill skyrocketed over thousand dollars a month, it's 66% above their income and he couldn't afford to pay it. So their energy, their power was shut off for weeks. They had to send the kids down to some other family to basically couch surf while he and his wife slept in the dirt overnight to try and keep cool, like you would see, you know, an animal or your pets do at home, right. And so, you know, he's been able to get into a Low Income Weatherization Program here in California that's funded by our cap and trade dollars. And so they were able to invest thousands in upgrading his AC which, you know, you can run all day and if it's an old unit it still isn't making your house very cool and it's really racking up your energy bill. So replaced the AC, weatherize the home, you know, the --

Greg Dalton: Weatherstripping.

Michelle Romero: -- insulations, stripping, all of that kind of stuff. And so they've been able to get the power back on. And so when I think of, you know, do we need to sacrifice I think of all the communities who are already sacrificing a lot. And that if we actually think about how we invest our climate dollars in these areas that maybe need to crank the AC, right, like not having AC when it's 120° outside is not an option, it's not safe. So how do we actually make sure they can get off the grid too.

Greg Dalton: But the idea of living with less or, you know, redistribution that some people ought to sort of tighten their belts a little bit, as they've done in past wars, right. Should that happen among the elites who are comfortable to kind of buy a smaller car, eat less meat, somehow change their lifestyle voluntarily for the comfortable?

Michelle Romero: All of these things are important, right. It takes all of us doing our part and literally there is something that every single person can do to reduce our consumption. I think that the overemphasis on the consumer side, right, that this is a problem we didn't necessarily create and now we're being ask to solve it. I mean I see all of these plastic straw campaigns now where everybody's got to now buy the new thing that they're selling, right, which is not the plastic straw but the metal straws. And so much of the onus is being put on the consumer which yes, we can all do our part but how about we all like focus on some of these big corporate polluters who've caused a lot of the problem and profited off of it and stop letting them pollute for free. Actually put a price on pollution and invest in the solutions that are gonna accelerate the transition to an economy into a world that we need

Greg Dalton: William Vollmann, you talked to some CEOs of energy suppliers which Michelle would call polluters, including Archie Dunham, retired CEO of Conoco, big oil company. And you write that you actually like some of these guys who have been oil energy suppliers. Tell us about that.

William Vollmann: Yeah, I personally liked and admired him, and also Sam Hewes, who was a vice president of the Bank of Oklahoma for energy loans. And one of the things that Sam said was, you know, Bill, we're all ideologues. And one thing I've learned in my life is that if you challenge somebody's ideology, he's either going to hate you or walk away from you. And I'm thinking all right, we don't need to hate and walk away from each other because that's not gonna work. My thinking is all the people involved in resource extraction, particularly the lower-level people like the coal miners of West Virginia who feel really despised and ignored should be hearing from us, you know what, we're grateful to you for letting us turn on our lights and air-conditioners for all of these decades, and we want to compensate you for what you've done and we want to retrain you in the solar industry or something like that. West Virginia has I think the third greatest number of trees. And the current governor there, Jim Justice, his name is kind of an oxymoron, wants to cut down a bunch of trees, put in furniture factories. If they're going to cut down some trees why not made in America solar collectors that West Virginians can sell and make some money from and just feel that we care about them. And people like these oil executives they honestly believe that they have worked hard all their lives to give us something that benefits us. And I certainly when I was in Japan writing against nuclear power turned on my nuclear powered air conditioner and ate my nuclear cook pizza so I don't want to be a hypocrite. We have to figure out some way to say let's make you part of the future.

Michelle Romero: Yeah. And I just wanna say, you know, to the point about the coal miners. One of the things that I'm really proud of that our organization to this past year was to actually stand up for the health benefits ever tired coal miners would about to lose their benefits last year. And this is after Trump was elected and 24,000 coal miners were about to lose their healthcare benefits in the United States. And the Democrats didn't really want to touch it because they were Trump voters. And the Republicans didn't really want to touch it because they don't wanna get involved in business, right. It was the company who had and employed them for all of these years who was reneging on their promise to them. And that's something that I'm proud of, you know, standing up and doing the right thing that we actually have a lot more in common with communities who are just trying to put food on the table who are just trying to keep the lights on for us, right. And who go down hundreds of feet into the dirt, right, to dig up what essentially turns on our light bulbs and to do that for so many decades. And so it's absolutely when I say, you know, we need to build an inclusive green economy, I think about those workers and I think about communities who are bearing the brunt of pollution from oil refineries and other sorts of, you know, coal mines. 68% of African-Americans in the United States live within 30 miles of a coal fired power plant.

William Vollmann: Good for you Michelle, you know, and if I could add something to that. The impression that I came away with in Appalachia was that those people think that we have no use for them and so they don't like us either. And I really think we can turn that around and work together.

Greg Dalton: William Vollmann, you say that they are mad that people are angry at them. They really feel like and this, you know, lot of what Trump tapped into. They feel that that coal is a heritage fuel, they're really proud of it and they wanna continue it.

William Vollmann: That's right. And, you know, you folks might've noticed that once you start a war, if you want to continue that war, all you need to do is get some soldiers on your side killed. And then suddenly we have to live up to their sacrifice. That sort of how it works in a place like Appalachia. People will say, well you know my grandfather was killed in a coal mine and, you know,

how dare you say that their sacrifice was in vain. It's really quite interesting.

Announcer: You're listening to a Climate One conversation about captives of the carbon economy. Coming up, Greg Dalton asks about helping coal workers and other vulnerable communities take advantage of clean-energy solutions.

Michelle Romero: For them it's not actually about the pollution issue, it's about the mobility access, it's about the health access. It's about literally being able to do any of their business.

Announcer: That's up next, when Climate One continues.

Announcer: We continue now with Climate One. Greg Dalton is talking about captives of an economy run on carbon with Michelle Romero, National Director of Green For All, and William Vollmann, author of *Carbon Ideologies.* Here's your host, Greg Dalton.

Greg Dalton: Tell us, William Vollmann, about some of the dead coal mining towns. You think that the Fukushima has some parallels to some dead coal mining town because, you know, coal has contracted somewhat in the United States.

William Vollmann: It certainly has. I remember the town of Iaeger and the downtown was just crawling with kudzu vines. There was hardly anybody around and I met a guy who told me, oh yeah back in the 60s you should've seen how it was my mother had a restaurant but now no one comes. And so often I heard from the sons and daughters of coal miners or from the old retired guys, oh you should've seen how great the coal company store was it was so much better than Walmart, you know, I got my wife's prom dress there. But the really nasty thing about the industry I would say is that it has continued to automate. And so it's more and more productive with fewer and fewer workers. And in addition, West Virginia is very proud of its low corporate taxes. So that means that the industry is really not giving back to the community. So these towns just get more and more abandoned. The most typical thing you might see in one of these towns is a dialysis center because, you know, all you can find to buy in the store is junk food. A lot of the water in the southern counties is acidified because coal is often chemically bonded with iron. And the iron turns into fool's gold which then become sulfuric acid. So people drinking tap water will get ulcers, it'll rot their teeth, it also dissolves heavy metals, so that in the rivers the gills of the fish start hemorrhaging. In the town of Northfork, the librarian said that there's been no water there for five years so she has to get in the taxi or wherever and go up to the store just to bring back her bottles of drinking water. So it's quite a nightmare.

Greg Dalton: And William Vollmann, I'm not sure your reporting, you know, how much of it was before and after the 2016 election, but did that change? You know, obviously what you're talking about Trump tapped into but, you know, are you able to see before and after the election the impacts of either the hope of Trump or perhaps some skepticism about whether he's really bringing back coal as he promised?

William Vollmann: Well, Appalachians talked a lot about the so-called war on coal. You know when Obama was in power, you know, oh it's that wicked socialist Obama. And then you just read back in when Clinton was in power, oh it was all the fault of Clinton, you know, just goes back and back and back. And they really thought they were losing the war on coal. So now they don't have to think so anymore. In fact, I think Pruitt went to some place in Kentucky and said the war on coal is

over, so everyone was happy.

Michelle Romero: I mean it's all rhetoric, right? Like I said, when we went to actually, you know, when Trump had his first opportunity to do something for coal miners he wasn't out there saying, we're gonna make sure that you're taken care of and that these companies don't renege on their promise to take care of you, right, into retirement. There was none of that. So I think campaign promises are one thing we've all heard, you know that but I think two things I wanna say. And one is just about this narrative and how the conversation is being shaped nationally. And I wanna make sure we don't fall into the same pitfall here, which is that the environmental movement or environmentalists don't like coal miners, you know, have this problem with the people who are working in the industry and vice versa, right. The folks who are working in these coal mines who come out all of them with black lung disease would prefer that life to one where they could put food on the table, have, you know, a quality job that is not gonna deteriorate their health. And so I just think that there are actually a lot more in common that we have, whether it's the urban cores the rural communities the coasts, you know, the middle of a country, then we have different. And I think that Trump's capitalized on folks' economic fears, right, the economic insecurity that's plaguing the country. And that's certainly true, right. We're seeing the wealth gap widen but one thing that you mentioned Will, was the artificial intelligence component and the technology component. That the job loss isn't gonna come from the green economy we know there's job growth there, right. However, the transition may occur but there's job growth there so it's a net positive. But artificial intelligence and technology sectors, so automation is going to be a risk factor for everybody. And so we need to really, you know, figure out with social safety nets, how are we going to prepare society even the thing about our education system. What do you do when we're no longer automated, you know, human beings who've become automated to play certain functions in our economy and can be freed up a little bit more to think creatively about where we go as a society.

Greg Dalton: I've interviewed a coal activist whose son was working in the mines and he was training to become an EMT. He was planning his path out by acquiring new skills. Other examples of, you know, anecdotes or programs where, you know, what's a 40-year-old coalminer supposed to do? What's the path for them? They can't just suddenly start making solar panels particularly if there's no solar panel factory in their town. They don't want to move. Michelle Romero, what are the paths to go from the brown to the green economy for individuals we know macro states and companies but what's the individual path?

Michelle Romero: Yeah, yeah, there are some examples. So Green For All actually has a great toolkit on its website if you wanna check it out, greenforall.org. We put out a toolkit that sort of share some case studies for how communities in different parts of the country from Washington to North Carolina, et cetera, have dealt with some of these closures of plants and how they've adjust the issues with workers. And so for some, retraining is a viable option and for others nearing retirement and maybe providing a benefit package that will help usher the meant to retirement without having to, you know, think about actually starting a whole new career over which is probably not very realistic, right. And so, you know, some people would say, universal basic income is an idea that comes from the left and don't necessarily have folks like coal miners in mind when you think about universal basic income. I think actually that we're going through such a big shift in our economy that we need to really think about the social safety nets and then also the other opportunities for changing out some of those businesses in those communities like you said. We don't want abandoned towns, right. We don't wanna be driving through and people can remember the glory days were behind them. We want the glory days to be in front of people for all communities.

Greg Dalton: We're talking about the clean economy and the fossil fuel economy at Climate One with Michelle Romero, National Director for Green For All and William Vollmann, author of the

Carbon Ideologies. I'm Greg Dalton. Michelle Romero let's talk about the conversation. Climate is very polarized it's kind of thought to be not brought up in polite conversation kind of sex, politics, climate change. How do you make, talk about climate in a way that's relevant to the communities you engage imagine you don't talk about polar bears and glaciers?

Michelle Romero: No polar bears, no glaciers, no trees. Yeah, you know, to be honest with you, a couple of years ago I didn't consider myself an environmentalist at all. I came to Green For All because I followed the leadership of our CEO, Vien Truong who I had known from prior work, and to be a racial and economic justice advocate. And I said, you know, I don't quite get all of this that you're doing but if you're working on it, it must be good. And four weeks into my stint at Green For All, she sent me to Flint, Michigan, the city that was, you know, plagued by lead-poisoned water and allowed this to go on for over a year, right, without anyone even being notified that they were drinking poison water. And it just became so real, so I think that, you know, the way that we talked to communities about this isn't at all about climate change, right.

Greg Dalton: Climate change is everywhere and nowhere. It's so abstract.

Michelle Romero: It's so abstract, it feels like this thing that's far off into the future, you know, isn't it something someone else can worry about. What do I even do, what can I do to fight climate change today, right. I'm just my individual person trying to make ends meet like Emilio trying to pay his thousand dollar energy bill and get the power turned on. He's not thinking about how to save the planet, he's thinking about how to save his family. And so you talk to them as where they're at, right. And you help them to understand how there are alternative options that can actually help lower their bill in some cases, right, and for talking about solar and things like that. How to get into programs that will help them bridge the gap between what resources they have and what resources they need to enter that economy. And other situations it's not talking about even the pollution. So again going back to this rural community where I just came from, there's a farmworker town of about 7,000 people -- Huron, California -- and there is an amazing Green Raiteros Program, raiteros is a Spanish word for like a rideshare program, right, or someone who would give you a ride. And they're creating this clean shared mobility program that essentially is helping people in this rural farm towns be able to get to a hospital in an hour not four hours. Because the public bus systems currently takes four hours one way to get to the Children's Hospital, which is the hospital that serves any of the kids that have asthma. And so when you think about that, that's eight hours in your day, what hour do you schedule the appointment and they don't run at night. So then you become stranded if you miss your last bus back. And so they've created this rideshare program where people are able to give rides and they're converting it to go green getting into these incentives where they can now have electric vehicles to do. Where they can come borrow an electric vehicle of someone has a driver's license and help on a route. So whether you have a car or not or whether you have a car that's an old clunker and are gonna be able to now get a cleaner vehicle to do this. For them, it's not actually about the pollution issue, although it'll fight pollution too, it's about the mobility access, it's about the health access. It's about literally being able to do any of their business, you know, go to court, visit people in jail, you know, schedule their appointments, any business that they have is in the downtown area, right, it's in the metropolitan area. And so it's talking about how these solutions are gonna meet the needs that they truly have.

Greg Dalton: William Vollmann, you talk to people in coal country, fracking, what do they think about climate change? Do some of them feel guilty for contributing to it, do some people just deny it say it's a hoax. What was the range of views you found?

William Vollmann: Most of the people in coal country don't believe in it. The people in Bangladesh have never heard of it. The guest workers in the Emirates don't really understand it. I went up near the Oregon border to Redding, California to cover the big Carr Fire and the smoke was

really, really thick it actually bothered me more than a lot of the locals. And there was only one person I could find including firefighters who is willing to say there is absolutely climate change. So I know I haven't done my work well enough and I really admire you, Michelle, and there's going to be more and more need for people like you as we all become more impoverished. I think things are going to rapidly get worse and maybe in 10 years we might find wildfires from Mexico to Canada on the West Coast every couple years. We just have a nightmare to look forward to and we're not making any real progress unfortunately.

Greg Dalton: William Vollmann, The New York Times critique in your book was that you are little dark, dark and gloomy.

William Vollmann: Do my best

Greg Dalton: But there is a sense it seems like every year there's a bit of a sense that oh this is a breakthrough moment that, you know, there's hurricane Katrina first and then Sandy and then Harvey. People, Michelle Romero, who talk about this feel like oh this is the breakthrough year. And we're in one of those again in 2018 because of the soaring heat because of the fires, it's turning, people are getting through. Is this the breakthrough year?

Michelle Romero: Yeah, I don't know. I think that people are realizing they need to get up and take part in the action and that the people who make the decisions can really make things better or they can make things worse. And so I would hope to see more engagement this year being the election and all. But, you know, in terms of people all of a sudden getting climate change is, I think they know the weather is doing something really weird. I think they know the weather is doing something really weird. I think though that climate change is really exacerbating a lot of the promise that we've already seen. And so, you know, for folks in Florida certainly not Puerto Rico is a different situation but for folks in Florida who experienced hurricane Maria, it's like us experiencing an earthquake here in California. There's big ones and, you know, it does a lot more damage but the general idea being used to earthquakes are sort of used to that, it's not something completely new. And so there are hurricanes that happen every year. And yes, the severity and the frequency is getting increased but to say that they're seeing dramatic changes, I don't know. I don't know if the weather is going to be enough.

Greg Dalton: Because the weather is always changing. The people in my family who don't think it's happening say, well the weather is always changing.

Michelle Romero: And this is the part where, you know, instead of having a fear-based message using a solutions-based message, you know, are we afraid because it's going to be however many more degrees you know the science. But however many more degrees hotter or colder in these summers and winters, right. Are we going to be fearful of all of the bad things that are gonna happen and will that motivate people or are we going to be inspired by the solutions that can actually help us now.

Greg Dalton: William Vollmann, when you say it's going to get a lot worse it's gonna be painful and it's gonna be poverty created. Where are you in that moment when you say that what do you do with that?

William Vollmann: Well, in the 70s my dad thought that the Sierra Club was a very, very subversive organization. And then Earth First came along and suddenly the Sierra Club didn't look so bad. So maybe if I can frighten a few people, Michelle's solutions will look even better. But, you know, what I think about is the fact that the residence of carbon dioxide in our atmosphere is anywhere from 2 to 8000 years. So if we were to stop all of our emissions today, the oceans would

keep rising, the planet would keep warming at best until something like 2500 A.D. unless we can figure out some way to pull carbon out of the atmosphere with technology that doesn't exist. The comparison I like to make is with say, a young couple who has bought a nice house and they get behind on their mortgage, you know, our planet Earth were getting more and more behind on the mortgage, the interest and penalties are kicking in. So pretty soon, you know, there will be the penalties of biology as more diseases come and the plants die but that's nothing compared to the penalties of physics. We don't really want those penalties. So all I can do is point and whine and complain that's my service. And so it's really not as nice as what Michelle is doing.

Greg Dalton: Michelle is that, you know, kind of each person for their own or is there, what's the other interdependence or more community-based response to this.

Michelle Romero: Yeah, I mean I have a daughter so saying I gave up isn't exactly something I'd like to tell her one day. And that's part of the reason why we launched the Moms Mobilize campaign last year is that everybody has a stake in this fight. And we were able to show it by organizing moms around the country who are raising their kids in some of the most polluted parts of the country that we could actually take on Trump when he was trying to rollback funding for the EPA and win. Something that no on in the environmental community thought was possible. They thought that if Trump wants these budget cuts that were going to be over a third, right, of the funding deeper than any other federal agency that this was gonna be a fight about how to lessen the bleeding and how to have the least amount of rollback. And we were actually able to unite people and show that regardless of whether you're from a red state or a blue state that moms care about their kids and dads do too, right.

Greg Dalton: And lots of Republican legislators who went to bat for EPA and other energy program funding, right. A lot of Republicans came forward in Congress as part of that.

Michelle Romero: And in part because we didn't frame this as a, is it our issue or your issue. It's all of our issue, right. And that this is something that if you care about your kids and your community no matter where you're from, this is something that's going to touch you this is something that's going to affect you. And so it's again talking about, you know, what we have in common, and our shared humanity than about me or them or us or they, you know, all of that. So I say, you know, figure out what you can do in your community, work with the local environmental justice group or a social justice organization that might be working on, you know, clean transportation or energy or closing down a power plant. Working on just transition issues or what might happen with some of the workers, you know. Whatever speaks to you, start there. Because when you think about how big the problem is, it can be easy to say, what's the point, and give up. And I think that's the most common way we give up any of our power.

Announcer: You're listening to a conversation about transitioning to a greener economy. This is Climate One. Coming up, Greg Dalton asks how to spread the clean-energy message more effectively in communities still captive to carbon.

William Vollmann: In West Virginia it needs to be through the churches. And in Bangladesh it needs to be with the local activists and elders. I just think it has to be told differently in each place for people to really feel that it is an issue affecting them.

Announcer: That's up next, when Climate One continues.

Announcer: You're listening to Climate One. Greg Dalton is talking about captives of the carbon economy with Michelle Romero, National Director of Green For All, and William Vollmann, author of *Carbon Ideologies.* Here again is your host, Greg Dalton.

Greg Dalton: William Vollmann, what is a carbon ideologue?

William Vollmann: Well, the coal companies are evil, or God put coal in the ground for us to use. Both of those are examples of ideology. We can't really argue with those in a rational way. And yet those are motivations for going forward in whatever action we take. So, you know, as Sam Hewes said to me, we're all ideologues. And as this issue becomes more and more important to us, we're going to encounter more and more extremists on both sides. And that's why we have to say, alright this is my ideology and this is yours. But let's try and meet in the middle. Otherwise, if we just get more and more Balkanized we're going to have even less hope of addressing this very, very pressing problem.

Greg Dalton: Michelle Romero, how do you ensure that you don't in just a bubble with all your eco-friends. What do you do to try to check yourself, you know, whether it's not participate in certain phone calls or what do you do to try to make sure you're not in an echo chamber with people who just think like you?

Michelle Romero: To be honest environmental spaces are not my favorite places to be. Yeah, you know, and I think just back to myself even two years ago that I, personally am not compelled by some of the same talking points that our own movement put out there. And so just remembering that remembering what actually motivates me talking to my own friends and family. So whether they're my family in Spokane, Washington or, you know, my dad who works for the garbage company and talking to them about some of these things and seeing how it lands with them because they're not activist, they're not, I mean I'm the like lefty one in our family, right. And so seeing how it resonates and does it actually move real people, does it make sense or are we just talking jargon and policies speak.

Greg Dalton: And why are environmental circles not your favorite places to be?

Michelle Romero: I think because we all speak the same language, right. And so it's nothing new and I feel like --

Greg Dalton: Righteousness?

Michelle Romero: It's not that. No, I think that the work that environmental groups are doing is really important. I think that a part of the work that's necessary is to build a broader tent and that using the same messages that we've used for decades that speak to a segment of the community, we've probably saturated at this point, right. And so we really need to get creative about how we reach other segments of the population and motivate them to join this movement because it's not just like the environmental movement needs to be a human movement, right. This is something that affects us all. And so how are we engaging moms, how are we engaging faith communities. How are we engaging black and Latino communities as well who have higher rates of like all of the bad stuff, right, and not the good stuff. And so how do we speak to communities who have a vested interest who are naturally inclined to support but reach them with messages that actually speak to the things that they care about.

Greg Dalton: But a lot of environmental campaigns start with attacks and villainization of often of

suppliers. I'm not sure if Green For All does that but a lot of the way to mobilize someone is have a villain a black hat, you know, this is a bad person, you know, Don Blankenship, you know, coal company whatever, write a check, we'll take down these bad guys. What do you think about those tactics, Michelle Romero?

Michelle Romero: Well, you know, I think that accountability is really important. I think that, you know, we're not anti-corporation by any means. I think there's some great companies that are doing great work. ECOS is one of them, they're a global green products company and they're carbon neutral, water neutral and zero waste in all of their manufacturing. They provide jobs here in the United States and in Greece. You know, and so there's examples of profitable business that can also do the right thing. I think that accountability is really important in this case, you know, when I talk about carbon pricing for example, some of these companies have been profiting off of the pollution that they're pumping into low-income communities and communities of color. Point blank like period, right. There's a racial and economic layer to this where they are able to get away with it in some communities and not others and I think that it's only fair. So I actually don't think about it as villainizing anyone but saying, look, you need to pay your fair share here that the cost of pollution has been subsidized, it's the biggest subsidy we've ever given to these companies, is the subsidy that we're paying in our healthcare in our increased grocery bills even, right, with droughts effect on agriculture in our actual shortened lifespans in depressed property values when these companies come in. And in so many ways when you can't even give your kid clean drinking water. And so I think to say, you know what, you actually ought to pay for the damage here. You actually ought to pay to reinvest in the communities that have been the side effect of your profit.

Greg Dalton: We're talking about the carbon economy and the green economy with Michelle Romero, National Director of Green For All and William Vollmann, author of the Carbon Ideologies. We're gonna invite you to join the conversation our audience questions. Welcome to Climate One.

Male Participant: Hi, this question is for Michelle. You've made a couple comments on universal basic income being a potential solution for our transitioning economy. So my question around that is how feasible do you think that is to implement politically and how will we pay for it?

Michelle Romero: Yeah. How feasible politically, I mean I think that what we need to do to prepare society for economy that goes more and more toward automation, we're not even close to. And I think the politics show that -- because we really need to beef up our social safety net. And right now that's become a racialized issue and a very hot political issue. Republicans don't generally fund social safety net it's not something that they like to do, fund social safety net programs. So what happens then in a situation where everyone needs a social safety net, right, because there just aren't gonna be enough jobs for the number of people. No, I don't think that we're there politically. So I don't know that it's even more entertaining the how do we pay for it question but we need to find a way to get there. And it's everything, it's about how we're even training our kids that in schools it's drill and kill, it's multiple-choice it's remembering facts and regurgitating them. And that works for a society where, you know, after Ford invented the assembly line we've become sort of automated in a way human beings. What happens then when machines actually take over the automation role and we get to free up our own creativity and think about how we solve bigger more complex problems are we even prepared for that. Are we educating our society to even think about those kinds of issues?

Greg Dalton: Let's go to our next question at Climate One.

Male Participant: So we've talked a lot about messaging today. And I'm just kind of wondering how you can improve the messaging towards the issues that are important. So Michelle you mentioned the viral idea of the straw, right. So like how can you maybe take advantage of the

virality for some of the things that you've talked about today so that the focus shifts towards things that I think in all of our views are more important?

Michelle Romero: Well we're a nonprofit and so funding these great ideas to get them to, you know, more people I think is important. This speaks to like the layers of, you know, role that money plays and the systems and structures in place. But truthfully, so the reason that some of these ad campaigns or communications campaigns or messaging work with maybe not the messages that are gonna move new people or the masses even sometimes, have to do with who you have access to, what resources you have, who's giving money there. And so when you ask the question, how do we actually help some of these other messages reach a broader swath of those audiences and bring them in. We need to fund those solutions so that we can actually do this work and get out to more people.

Greg Dalton: But the reality is that when stock markets crash for example, donations to organizations like Green For All and the Commonwealth Club go down, right. After the great recession, philanthropy was really hit. And a lot of organizations were kind of locked in the system that it's really hard to see our way out of it. William Vollmann, 1967 there is a biology textbook that you write about a brown professor talked about present warming of the earth. That was the first time I'd seen that, you know, a college course in 1967 --

William Vollmann: Yeah I was rather surprised because my Encyclopedia Britannica which is from about 1976, '77, there is an article on weather and an article about climate and they're at cross purposes as to whether the earth is warming or not. I think that's by the end of the 1970s it was fairly well established. I read a book by some scientists at Oak Ridge who said, we know that the earth is going to warm and there is more and more CO2 in the atmosphere, but fortunately no one's going to have to worry about that until the 21st century. It's really quite discouraging to see how we just keep kicking the can down the road.

Greg Dalton: And that was the premise of the recent New York Times Magazine article which, "Losing Earth," that decade by the late 70s people knew and it was bipartisan and the information was there.

William Vollmann: But if I could add one thing to what you and Michelle were saying. If we wanted to get the message out I think it has to be a different message in each place. In West Virginia it needs to be through the churches. If we got the various pastors on board with doing something whether or not we called it climate change they would listen. And in Bangladesh it needs to be with the local activists and elders. I just think it has to be told differently in each place for people to really feel that it is an issue affecting them.

Michelle Romero: Yeah, absolutely. Trusted messengers is really key so it's not just, you know, white organization or a corporation, you know, putting a person of color in their ad and thinking that that's gonna work. It's the trusted messengers who's actually speaking to these communities who actually understands these issues because that's ultimately the message comes from the real experience.

Greg Dalton: William Vollmann, you write about natural gas, was sometimes referred to as a bridge fuel less bad than the coal it replaces. Is that, you know, a lot of people would say fracking can be done cleanly, responsibly, natural gas burns cleaner than coal. What's your take on natural gas?

William Vollmann: Well, natural gas has a higher inherent energy value than coal and it does burn more cleanly. However, the problem is that a lot of natural gas leaks from the pipelines. There was

a guy I was talking to he did remediation in Colorado and he said look, Bill, I can't go through a single day without making a mistake. Neither can anyone else. And the main component in natural gas is methane. Methane burned is very clean, unburned, it's something like 86 times worse than carbon dioxide in the first 20 years. Gradually, it turns into carbon dioxide and then it's just moderately worse. So unburned methane is a real nightmare.

Greg Dalton: And America is supplying a lot more oil than it used to. I think it's, you know, by some measure surpassed Saudi Arabia. A lot of that happened under Barack Obama. So William Vollmann, your take on whether that's a good thing because it's produced here where there are stronger environmental regulations. If it's not here it's gonna be in Nigeria, some other country where the environmental regulations are looser. Your take on America's oil boom.

William Vollmann: Well I guess I would say something that relates generally to that what I heard from a couple of these oil executives and also from someone in the West Virginia Coal Association is look, suppose we make these unilateral improvements to our emissions and other countries don't do that. How badly is that going to affect our economy in a way that's like a more fundamental version of the question you are asking and the answer is that I don't know. But I'm quite cynical that people producing any particular fuel in our country are going to do it more carefully. When I was in Weld County, which is supposed to be the most fracked county in the U.S. I could smell all kinds of volatile organic compounds coming out of the various frack pads. I met a guy who with his family was constantly sick every time the kids would go outside they would get a bloody nose. And the company of course was not helpful. So he decided he would maybe bake a bunch of cookies in the house to cover up the smell and sell it.

Greg Dalton: So this is someone who sold the mineral rights on their property and then had remorse for leasing some of their land to fracking?

William Vollmann: Most people in at least in Greeley, Colorado and most people in West Virginia too, do not own the mineral rights.

Greg Dalton: Under their land.

William Vollmann: Right. So they never thought about it, you know, there was a guy in Bim, West Virginia who dug a well and he actually went through three different coal mines on the way down. His coffee tasted really, really bitter and he said, well it's the water coming up out of your coal mine and it's all ruined. Then one day they dug another coal mine under his house there was a big boom and that was the end of his water and he had no recourse.

Greg Dalton: Did you talk to people who had sort of seller's remorse for selling, you know, lot of people have cashed in big time on this natural gas. Do you talk to any people who had seller's remorse?

William Vollmann: No, I just talk with a lot of people who had no idea that they did not own the mineral rights. And so it never occurred to them that it would be a problem until it was too late

Greg Dalton: We have to get close to the end here. Michelle Romero, final words on the path forward. It's dark days, all these fires all these problems what gets you up in the morning get you motivated and excited?

Michelle Romero: Yeah, yeah. Well, you know, we've turned the lights on for decades the way that we have. There's no use in talking about how bad that was and maybe we did or didn't know back then how bad it would be. But there's a better way now and so, you know, fighting for a future

that’s truly sustainable and green for everyone and really getting our way to renewable energy.

Greg Dalton: And William Vollmann, your idea for the path forward. You painted this very dark picture you think the odds are long for us. Your idea for the path forward.

William Vollmann: Well, there should be a Manhattan project for carbon capture. Maybe there is some way to use plants or some plant-based technology to use the sun's energy to capture carbon because we have to find some way to save ourselves and in the meantime, I think that what Michelle is doing is very, very important and what I would like to do is to keep trying to scare people into thinking that it's really time to wake up and put aside our differences.

Announcer: Greg Dalton has been talking about captives of the carbon economy with Michelle Romero, National Director of Green For All, an environmental justice organization and William Vollmann, author of the new books *Carbon Ideologies.*

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Greg Dalton: Climate One is a special project of The Commonwealth Club of California. Kelli Pennington directs our audience engagement. Tyler Reed is the producer. The audio engineers are Mark Kirschner and Justin Norton. Anny Celsi and Devon Strolovitch edit the show. The Commonwealth Club CEO is Dr. Gloria Duffy.

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