

JENIFFER: This is The Premise, and I'm your host, Jeniffer Thompson.

CHAD: And I'm Chad Thompson, the host.

JENIFFER: Today on The Premise, we're celebrating the 50th anniversary of Earth Day in a pretty unusual way. From home and at a safe distance from one another. According to a study in the San Francisco Bay area, because people are staying home, and not driving to work, we are seeing an improvement in our air quality all over the planet due to reduced air pollutants and fewer emissions.

50 years ago, people were literally dying from smog. Action was needed. The first Earth Day brought out nearly 20 million Americans, which was 10% of the population at the time. Today we continue to celebrate Earth Day, but we continue to face a whole new set of environmental challenges on a global scale, and some may say the time is running out for planet Earth. Our guest today, author Jerry Yudelson, helped organize that first Earth Day from his college campus, Caltech in Pasadena. Today he holds civil and environmental engineering degrees from Caltech and Harvard. He has been a key figure in the U.S. and global green building movements. He is the author of 12 professional books in the field of green building and sustainable design and he is known as The Godfather of Green, which is also the title of his latest book, available today, The Godfather of Green: An Eco-Spiritual Memoir.

Jerry Yudelson, welcome to The Premise. Yeah, this is pretty awesome. So, it's Earth Day. Your book is available today, and congratulations.

YUDELSON: Well, as I like to say, "in love, war, and business, timing is everything." And I planned three years ago that this book would be released on the 50th anniversary of Earth Day and lo and behold, it happened.

JENIFFER: When you were a kid, you said you wanted to be a physicist or an astronomer. You wanted to make a difference in the world. At what point did you decide to pursue civil and environmental engineering?

YUDELSON: I had a professor at Caltech, Norman Brooks. As a junior, I first got acquainted with him. He was also my academic advisor -- and he was very interested in social problems that could be solved by engineers, and kind of drew me into his orbit and had me research a proposal to build two

more dams in the Grand Canyon. You may know there's Lake Mead, Hoover Dam, which was built in the '30s, and another one called Glen Canyon Dam, which was built in the '50s or '60s, and they wanted to build more.

Environmentalists thought that was a bad idea, but I decided to research it and find out for myself. So I did, and I wrote this long report that Brooks eventually gave to our local congressman saying that this was a very bad idea for a whole lot of reasons.

JENIFFER: Wow, that's pretty cool.

YUDELSON: I was just an engineering nerd, but that awakened a little bit of social awareness in me, and at the same time, the Sierra Club was running ads in the New York Times, full-page ads, against these two dams. That was the beginning of the Sierra Club's political activism – these dams in the Grand Canyon.

I decided in graduate school I would delve into this more and study pollution control engineering and that put me on a path over the next few years which made me more aware of what was happening when Earth Day came along.

JENIFFER: Was this a popular way of thinking back then? You know, social engineering and taking a look at the environment? Was that at the forefront of young peoples' minds then?

YUDELSON: No, I mean, we were protesting the Vietnam War. We were protesting racism, and we had the Civil Rights Movement and riots in all of the big cities. I mean, really race riots like we don't have anymore, but we had them then, and then we were at the beginnings of the "tune in, turn on, drop out" hippie culture, the *counterculture*.

JENIFFER: Sure.

YUDELSON: So, this was the ferment that was going on. And in 1968, the Democratic national convention erupted in chaos when the Chicago police started beating up anti-war demonstrators -- peaceful demonstrators -- in the streets of Chicago. So everybody was against something, but what really kicked off the environmental movement, certainly in California, was a

massive oil spill in Santa Barbara in 1969, which was at that time the largest in U.S. history and the most dramatic personally in a way, because not only were the beaches that I would go to on occasion covered with oil, and all of the seabirds and sea mammals, the sealions and so forth, were dying because they were coated with oil, and crude oil is very poisonous.

JENIFFER: So you saw physical evidence of what was happening to the environment due to these --

YUDELSON: Well, it was more than that. I mean, I was living in Los Angeles. We had one day out of every two was a Stage One smog alert, which meant you shouldn't be breathing the air, as if you had an option.

That was one out of every two days, and then I was an athlete -- a basketball player in college -- and when I worked out, you could see the haze from one end of the gym to the other. It was that thick.

JENIFFER: In the gym?

YUDELSON: Inside the gym. And after I finished a workout, my lungs would ache for hours from the pollution, and --

JENIFFER: Oh my god.

YUDELSON: There was a macabre joke then: "I wouldn't want to breathe any air I couldn't see." So, that was smog. If you look at photos from that time, you can see visibility was at most a couple hundred yards in downtown Los Angeles, which should have shown nice, bright, blue, sunny skies, but that was what we had--

The air pollution, the beach pollution, the water pollution in the ocean such that the beaches were closed a lot -- those were the things that got everyone's attention in the late '60s, and of course the excuse was well, that's just the price of progress. And we can't do anything about it. Of course, young people who were then protesting the war and protesting racism, etc. -- they weren't going to take that for an answer: "Well, we can't do anything about it."

It needed a catalyst, and Earth Day became the catalyst.

JENIFFER: Yeah. Can you take us back to that first Earth Day in 1970? What was it like? Describe the overall excitement and energy of people involved.

YUDELSON: Well, it had started the previous fall, when a U.S. senator, Gaylord Nelson from Wisconsin, announced this Earth Day and a few months later, he recruited a young guy who was a Harvard grad student named Dennis Hayes and they set up an office in D.C. Nelson went out and raised the money and they eventually had like 80 people in that office. They renamed his original idea (of an environmental teach-in) as Earth Day, and then they ran this big ad in the New York Times: Earth Day, April 22nd, protect the planet, that kind of thing.

All of a sudden, all of the colleges in the country -- 1,500 colleges and universities, students like myself -- started saying well, we should do something for Earth Day.

JENIFFER: Yeah, right.

YUDELSON: And then, you know, this several dozen people in Washington D.C. started putting out ideas for going beyond the original vision of a teach-in. You know, that was a Vietnam War-era innovation where if you wanted to get people to come out against the war, you had to educate them first about what the issues were and so forth, and that had started kind of in the radical San Francisco Bay area, at UC Berkeley and so forth. The teach-in was a good idea, but at the same time we wanted to do a political protest. We wanted to show people -- politicians particularly -- that this had a lot of popular support, that ending pollution, protecting the planet --

One thing I learned about politicians over the years, they may not have a lot of practical skills but they can count --

JENIFFER: And 20 million Americans is a big number.

YUDELSON: And when they saw 20 million people and the godfather of the news, Walter Cronkite, said it was real -- you may have heard some of his recordings of the first moon landings and so forth -- and if Walter Cronkite said it was real, it was real.

JENIFFER: It's real. Yeah, yeah.

YUDELSON: And so he did this incredible program (on the CBS Evening News at the end of Earth Day), but fundamentally it was young people and then the community around those young people came out and there was something like 8,000 to 10,000 secondary and elementary schools that did things, and at Caltech we had these educational booths and we had speakers -- our local congressman was one of the speakers.

What happened was they actually cancelled Congress because something like 250 congressmen and congresswomen were out giving speeches that day, so they couldn't hold it -- so that shows you how all of a sudden -- you know how politicians like to watch which way the parade's going and run around and get in front of it -- all of a sudden, even the Republicans were for it -- because the first environmental laws were signed into law by Richard Nixon as president --

CHAD: Richard Nixon.

JENIFFER: That's right, yeah.

YUDELSON: -- and Ronald Reagan as governor of California at the time. So, this had a tremendous amount of popular support and everything that we -- most of what we have today as environmental laws came about in the five years after Earth Day, the Clean Water Act, the Clean Air Act, the Endangered Species Act.

JENIFFER: Yeah.

YUDELSON: You can have a whole list, and it was the political power -- at that time, the Republicans held the Presidency, but the Democrats ran the Congress -- both houses -- and had for the previous 15 years, so once the Democrats in Congress decided to do something, the Republicans in the White House went along with it because it had such popular support.

So, that's what Earth Day really generated. It was a mass demonstration, it was a massive educational effort, and those two things together gave it both a short-term and a long-term effect.

JENIFFER: Do you think they intended for it to be an annual event at the time of its inception?

YUDELSON: I don't think anybody thought that far ahead. You know, we were young. It was like hey, let's go do something positive, let's go have some fun.

JENIFFER: Yeah. Right.

YUDELSON: And then everyone says my god, this is so big, we can't just let it die, so we started having these annual Earth Days, but really, nothing had that much *oomph* to it, because you know how students are -- you organize something, you do something, and then you move on.

JENIFFER: Sure. Right. What's next?

YUDELSON: Well, and then you leave and then somebody else has to --

CHAD: Yeah, and they're only around for four, six, eight years.

JENIFFER: Right, yeah.

YUDELSON: Keep counting, but it's --

CHAD: Some people are students for 10 years, 12 years.

JENIFFER: That's right.

YUDELSON: Well, you know, in Europe and places like Italy where college is free, students never leave, so --

JENIFFER: Yeah, you actually talk in your book about -- at one point you'd thought about following in your father's footsteps, joining the military and going to West Point and had you done that, you would have ended up on the frontlines in Vietnam.

YUDELSON: Yeah, I mean -- you know, I couldn't have worn contact lenses in Vietnam, so I don't know, I had some -- my vision was bad in one eye, but in any case, my father had been in World War II and he had a lot of respect for the military and I had his example -- like the oldest son is always looking to the father for examples -- and so, you know, that was an influence and our local congressman was a good friend of my father's and you need a congressional appointment to get in, so I probably could have gotten one, but you know, at the same time -- the space race was going on,

and I began to be much more interested in science and -- as you said earlier -- wanting to be a physicist.

Once I got into classes with real physicists, after two years they said why don't you try engineering, so --

JENIFFER: And the rest is history, right?

YUDELSON: The rest is "his story."

JENIFFER: You know, Ed Begley Jr. writes a very moving forward to your book. He talks about how that first Earth Day in 1970 affected him deeply. In fact, he went out and bought an electric car and I didn't even know electric cars were a thing in 1970, but he makes a joke about how kids on scooters would pass him and laugh, which I love that visual.

YUDELSON: Well, you were looking then at something that wasn't much more than a golf cart, you know, so --

JENIFFER: Right?

CHAD: Battery technology was not very good back then.

YUDELSON: But what I liked about Ed is from when I first met him in 1988 as a candidate for Congress -- another story I tell in the book -- Ed was driving an electric car then and his problem was he lived in the San Fernando Valley, in Studio City, and he had to go on auditions in Hollywood and other parts of L.A. and to get over the Cahuenga Pass, which is only like 1,200 feet or something, drained a lot of his battery.

JENIFFER: Right, I bet.

YUDELSON: So he always worried after an audition whether he'd get home again. But he was committed.

JENIFFER: Yeah, he talks about how he wanted to personally reduce his environmental footprint, even though, you know, he knew personal actions alone weren't going to save the planet. And I hear that a lot from people today. What can I do? I'm only one person.

I wonder, do you have advice to people who feel that their actions are meaningless and the cause is hopeless?

YUDELSON: Well, when you throw a stone in a pond, you get ripples.

JENIFFER: Indeed.

YUDELSON: And when you do something, people notice, you know -- and now, of course, with Facebook and all of the social media, sometime this spring, people are going to start posting photos of the produce from their garden, and I'm in a smaller place now but I've had a garden almost every year since the early '70s, and so it isn't that it's going to feed you -- you might need a couple of acres for that -- at least an acre -- but it connects you with different rhythms and I think that however you do it, connecting with the earth, getting dirt under your fingernails is an essential activity for any person, whether it's forest bathing that's now popular -- what the Japanese talk so much about -- or in our case, living here in southern California, ocean bathing --

Getting into nature, feeling the earth or the sand under your feet -- it does something for you psychologically that makes you willing to consider larger-scale activities. It doesn't mean that you should just grow your garden like Candide and the rest of the world is going to be fine, but it does mean that you affect other people. They start to think well, I really should be doing that, and of course, some of them do.

Ultimately, where we are now with respect to things like climate change, the climate crisis -- is we have to act both individually and collectively, and I think one of the messages of Earth Day is you do need to have a collective consciousness raising to get things done. And that, I think, is what the COVID-19, coronavirus crisis is going to do not just for healthcare and emergency preparedness, but it's going to force people to think about well, how come I got to breathe this awful air year-round when I don't have to breathe it now?

And obviously the reason is because we've shut down so much auto traffic, airline traffic, and industry -- but couldn't we have this clean air and still have a thriving economy? And the answer, of course, is yes we could, but we'd have to do a few things differently.

JENIFFER: Right. Yeah, COVID-19 has changed the way we look at things. I mean, Chad and I started a garden. We typically have gardens anyway, but I got to tell you, it's a much larger scale than I would normally have.

CHAD: It's crazy because it's not just a larger scale, it's now that we look at every single piece of trash that we produce --

JENIFFER: As a possibility. Yeah.

CHAD: And it's like oh, we could plant something in that or that then becomes something for seed starters, or everything is reused as opposed to just chucked into the recycling bin.

JENIFFER: Yeah, we're really looking at everything through new eyes.

YUDELSON: Well, you know, if you go to a lot of poorer countries -- India, which I've been to, and Kenya -- you don't find as much trash. People find ways to make use of everything. And you know, that's a mentality that's obviously born from their poverty and as soon as they get rid of that poverty they start generating trash just like Americans, but there is a different consciousness going on now, and you've probably seen these videos of beach cleanups in Mumbai where just one guy starts out with a few trash bags, cleans a little section of beach, and the next day a few more people come out to help, and so it grows and the beach becomes pristine. So pristine that sea turtles start laying their eggs on the beach where they wouldn't do it before because it was so trashy and polluted.

So, there is a different consciousness happening, and I think a new world is being born out of this crisis.

JENIFFER: I think so too. Absolutely. Yeah, it's pretty crazy. The fact that there's a hope -- like, I see hope out of something that is so utterly, you know -- fear-inducing, because of the uncertainties, but I keep seeing really good things happening. Goodwill among people and the type of community we're creating with one another, you know, on Zoom and here we are, doing this podcast over the phonelines, you know?

There are ways we reach each other and connect with one another when we're forced into that situation, into that space, and that's what I see happening and it gives me a lot of hope.

Not just that we're saving yogurt containers and recycling everything, but you know, we're looking at everything differently and do we all have to go to work? Will more people work from home? Will we experience a shift in the work from home culture as well? I'm wondering.

YUDELSON: Well, that's the big question. And I think the answer is -- like, my brother in the Bay Area works for a large company as a paralegal, and he had already started working from home three days a week so because he didn't have to be in an office, you know?

JENIFFER: Yeah.

YUDELSON: It's like you come into the office maybe once a month for an "all-hands meeting" in your department or in your group, and the rest of the time you're pretty much free to work however you want, and so getting together in an office is one thing. You know, factories don't work that way, and we've seen already the effects of having to shut down food production factories because of too many people testing for the virus, but office culture will definitely change. It's interesting, because we used to have the cubicle culture, where everybody had their individual workstations. I once worked in a place that cubicles were 66 inches high, so that's five and a half feet, and so you had these walls, and inside your cubicle you put up your family photos to remind you why you were putting up with this nonsense.

But then we went to the open office plan in the 2000s and just everything's now open office and you have WeWork and all these other open office environments -- I don't think anybody now is going to want to work cheek-to-jowl with people they don't even know -- all sitting on laptops and sipping espresso, so --

JENIFFER: Yeah. Why would you do that? It's interesting. People say oh, I can't work from home. I've heard this a lot, you know -- how do you do it? How do you stay motivated? And when you're forced --

YUDELSON: How do you keep your cat off of your lap?

JENIFFER: Yeah, you don't, right? And why should you? You know, let the cat in. I mean, that's something that's been happening too with work meetings and

Zoom is, you know -- we're seeing the kids come into the room and interrupt the meeting and we're seeing the cat walk in and meow and our cat was just meowing a couple seconds ago.

We're seeing some humanity. You know, there's something real happening in our interactions that's kind of cool.

YUDELSON: Yeah, it is. I think there's also productivity issues, and I notice how everything has slowed down a little and the expectations one might have for how quickly something would be done are all of a sudden -- like you have to temper them.

YUDELSON: This morning I went to Costco, and you know -- for the "senior hours." Nobody gets carded, so I guess you could just put some white dye in your hair -- but there I was -- it used to be at Costco, you just kind of walk in, do your shopping, you wait in line, you check out. Now, there was 25-minute line to get into the store because they limit the number of people inside at any given time, so there's -- you know, pluses and minuses, but I think we're all -- after a month of this, we're all antsy to resume a little more interaction. I think we kind of got into hugging each other and now it's sort of like get away from me you potentially --

JENIFFER: Stand six feet away.

YUDELSON: You know? Stand six feet away, you asymptomatic beast. Well, six feet apart or six feet under, as they say. So --

JENIFFER: Your book is incredibly warm and very real. You don't hold back the embarrassing moments either, like for example when you were at camp as a kid and you learn how to pee in the right direction. Apparently, you peed into the wind and that didn't work out so well?

YUDELSON: Well, I think the real -- the first thing you learn is don't pee uphill if you're a boy because water tends to run downhill.

JENIFFER: There you go. OK. So that was your early grounding in physics, right there?

YUDELSON: You know, when I became an environmental engineer, I also learned that wastewater flows downhill, so there you have it.

JENIFFER: There's another scene in your book where you answer a pretty important phone call and you are on the toilet in an airport -- so no, it's not about toilet paper, it's more about how real your book is, and it reads like a novel. You know, bringing that character to life, yourself, and discovering who you are.

When you set out to write this book, did you know exactly what you wanted to write and the message that it would deliver or did it just sort of happen as you were writing?

YUDELSON: You know, I had a really rough idea that I wanted to talk about these three environmental movements, the Earth Day environmental movement, then solar power and wind power, and then green building -- and I wanted to talk about my meditation practice and sort of spiritual awakening.

That was the gist of it, and the first draft was -- *yadda, yadda, yadda*. It was like, you know, all things, and I had a couple of good readers, and they basically said this is boring. And one of them, who had written her own memoir about being anorexic, who was a writing coach, said you have to practice *free writing*. You have to go deeper.

And so I just started doing that, and as the book evolved, it got more interesting, a little deeper, but it still wasn't there. I still realized that I was holding back and that there were things -- I mean, you know, it's a memoir and you have to have a story arc, as they say, so you can't -- particularly a long period of time that's being covered -- you can't tell everything, but I wanted it to be interesting for people, I wanted people to get something valuable out of it, and I wanted to really explore for myself the turning points and seminal moments.

Things started popping up. Like I said, that first thing in the book at my father's funeral -- I hadn't thought about in a long time, and a story of my mother and getting lost in New York City when I was with my mother and my siblings.

Fortunately, I'd kept a few -- I'm not a journal keeper, but I had a few journals from way back when I first met my meditation teacher, and so I was able to fill in some things and say oh, yeah, my god, that really happened.

And just as I was kind of -- I had gotten a publisher, last August, and I was -- now I have to get serious and Earth Day's coming up in eight months and I have to polish it -- that's when some of the things started coming back to me and I loosened up the writing and I realized there were things that didn't really fit in anywhere but they would make great beginnings of a chapter, and so each chapter begins with a particular story which has some resonance throughout the chapter, and that, I think, is what makes it an interesting book.

Fortunately, Ed Begley, Jr. agreed to write the Foreword, which gave it some caché and a quasi-celebrity name on the front cover, because I'm known in the green building world, but I'm certainly not known for people who might be interested in reading a memoir -- and fortunately the publisher came up with a great cover -- she had trained as a graphic artist, so her covers were always knockouts, and she came up with a great cover.

And then gradually I sent it out to my friends and a few LinkedIn acquaintances, and we got some nice advance praise.

JENIFFER: There you go.

YUDELSON: Gradually, everything congealed in the late fall and we were fortunate that because of the way publishing goes today, your *drop-dead* date on making changes is close to your publication date, which didn't used to be the case.

Because with Ingram, everything gets printed basically on demand. So, you know, we were able to make some changes, and it's interesting -- I had these sort of "Homer Simpson moments" where I read something that was wrong and I'd just say "Doh! my god, I totally blew this" -- e.g., how to spell this person's name or reconstruct this sequence of events. Fortunately, I had one superpower, which was my wife -- we've been married almost 35 years now -- and she forgets nothing. That's good news and bad news.

JENIFFER: Yeah, I can see where that would get you into trouble.

YUDELSON: You know, it's like, "do you remember that time in 1989 where you did this stupid thing?" I'm like "no, I don't remember that." "Well, I do." You know? But so when we were -- one thing the book needed, because -

- some things are a long time ago -- it needed more dialogue, and one of the things that she remembered was that when we first met, and I --

Because like most guys don't remember the conversation you had when you first met your spouse, you know, after so many decades, and so she -- yeah, and I said well, what did we talk about? "Well, you talked about this and I thought that was boring, but I liked you."

JENIFFER: She stuck with you anyway. Good for her, and good for you.

YUDELSON: We had this sort of blooper-filled honeymoon. And she was able to flesh out a lot of details and one of the things -- I had this crazy idea that I would write this second memoir which would be the outtakes. With everything that wound up on the so-called cutting room floor, but I've squashed that idea -- it took too much effort to write the first one.

JENIFFER: Right. You know, your book is as much about environmental activism as it is about your spiritual journey to find enlightenment, and you just mentioned the scene from your childhood in 1952 -- you're pretty little, I'm guessing, and you're walking ahead of your mother in New York City when all of a sudden a crowd of people are let out of a movie theater, and they annoyingly swarm around you and you describe this moment of panic that overtakes you when you realize you've been separated from your mother.

You recall this same sensation of panic 20 years later when you feel "separated from your own self by life's confusing on-rush," is how you put it. Can you speak to this moment of realization and how it affected your lifelong journey to find yourself?

YUDELSON: Well, the first moment was just, you know, a kid -- I mean, I was seven or eight at the time, and so -- you know, I was -- I had some awareness that it was actually at a theater -- so, in New York theaters on Sundays they usually have matinees at 2:00.

JENIFFER: Sure. Yeah.

YUDELSON: So, if you're on the streets at 4:00 or roughly, all of a sudden, you know how theaters are, the doors fling open and the crowd comes out and --

JENIFFER: The people -- out they come. Yeah.

YUDELSON: -- of course, everyone's elbowing each other to get a taxi and -- because we were on 42nd Street by Times Square where all the theaters are -- so, you know, I was a little panicky as a kid and I was eight years old -- or seven, whatever, I was still young and I remember what I actually did -- I kind of found a streetlamp and hung onto that and then --

JENIFFER: Which is really smart. You know, that you didn't go wandering around looking for her. You just stayed put as it were.

YUDELSON: And my mother, of course, was a bit panicked even though she had lived in New York City as a young woman, as a nurse, and she was shouting "don't move, don't move."

Anyway, you know, that passed and that wasn't like a childhood trauma but when I had this meditation experience, which -- I was already probably in my 50s, it reminded me of that sense of panic and kind of translating back to my young adulthood how a lot of us feel out of sorts. We don't really know who we are, we don't really know what we want to do. We've gone along, and gone along, with school, and now we're in college and it's like life is happening and yet it's like -- college is like "life interrupted" in a lot of ways for kids, which is why they drop out, because nothing's happening, or you have a summer abroad in Venice or Florence or someplace and that's your big adventure, and for more -- so, there was this sense of not knowing who I am. Not really --

Certainly, after Earth Day, when I dropped out, I went to live in the woods, became a quasi-hippie and so forth -- it was like what am I supposed to do? And so, there's a little bit of panic that creeps in if you're not following this kind of carefully prescribed life path, which some people still do (but not as many as we think.)

And for most people it's like they cover up all that early stuff with a veneer of respectability as they get older.

JENIFFER: Right? Or at least we try.

YUDELSON: Well, you know, it's like you have a life, you're living, you make money, you're active in your community, you have children, whatever -- and you

know, you don't want to be reminded, so here I had this meditation experience which reminded me of that feeling, and it was that feeling which led me onto a spiritual search, because not only did I feel kind of at sea, I kind of had my gap year after graduate school instead of after high school, so I was a bit of a retarded learner.

I met this young woman who was a student, was six years younger than me, and she had this same urge for seeking something different, because of the way she was brought up and you know, also not feeling like she was really wanted. As a single child, she came along late in her parents' life, etc., so she really egged me on, which I needed because I was an engineering student. Engineers are notoriously conservative, and yet the times were in ferment and I couldn't help but be affected by it. So, by the time I met her I had already started teaching environmental studies at U.C. Santa Cruz and she just kept pushing -- she wanted to do, you know, earth goddess kind of stuff -- that didn't really grab me but we did some things like that.

We started looking around. In the Bay Area, where we lived at that time, there was this spiritual smorgasbord that you could snack from endlessly.

JENIFFER: Sure, yeah. There was a lot happening.

YUDELSON: With all kinds of teachers coming through there, and these big consciousness raising movements and things like EST which was a program for more people in business about getting real. Everything was happening, and San Francisco had been a place of ferment, you know, 15 years earlier with the beatnik movement in the mid-50s and this was the place to be if you wanted to question how things were and think about --

It was also where the Sierra Club was headquartered, the environmental movement had a very strong foothold there, and so it kind of brought these two things together for me in a way that I would probably not have found had I been living elsewhere.

JENIFFER: Yeah. In 1976, Governor Jerry Brown created OAT, the Office of Appropriate Technology, and named you its first director. This was your chance to make something good happen for solar energy, which seems like it was pretty radical thinking during a time driven by fossil fuels and nuclear power.

Solar had a reputation among ultra-liberals and hippies and I understand that you became known as the “OAT flakes,” if I get that right. Did this feel like you were fighting an uphill battle at the time or did you feel confident that people would listen and you could make a difference?

YUDELSON: So, we started this Office of Appropriate Technology and it had its genesis in a book that had been published a few years earlier, and if you think about it in today’s terms, it was like a sustainability office, you know? And it was like what can you do in state government to make it more sustainable?

So, we call it the Office of Appropriate Technology because we got to -- in naming it, we got to say what was appropriate, right? We wanted to have the last word. So, because the initials were O-A-T, and people at that time who were into these sort of far-out environmental things were called flakes, it naturally became OAT Flakes, and we designed a logo that had a donkey with a feedbag that said O-A-T on it.

Our first office was in the choir loft of a former mortuary, which kind of told us where things were going.

JENIFFER: Oh my gosh. A harbinger, if you will.

YUDELSON: Secondhand furniture -- I mean, in state government secondhand furniture is really bad. Even firsthand furniture isn’t so good. It’s all made in the prisons.

So we had this thing and we did some things and it was more of an educational effort, and then after nine months, I got kind of tired of it because it wasn't really what I thought it would be, and I took an invitation to go to India and meditate for three months with Swami Muktananda in his Ashram near Bombay.

When I came back, you know, somebody else had the job as director and I went into doing some environmental consulting -- anyway, about a year later they invited me back and said well, we want to do something more serious around solar energy this time and we have this national day coming up, which is with the same people that started Earth Day eight years earlier.

It's called Sun Day and President Jimmy Carter is behind it. You know, he's supporting it, so let's do something in California, and of course, Jerry Brown, at that time, had run for president the first time in the Democratic primaries against Jimmy Carter two years earlier and Carter had won those and Brown had a little bit of a sore spot about losing to him, so when Carter announced this solar energy day, Brown thought this would be a great chance to one-up the president and do our own thing.

You know, maybe we could get this Earth Day mob to come out again. Well, as it turned out -- I like to say that the sun god, Apollo, just doesn't have the emotional resonance of the earth goddess, Gaia -- and also, it was a top-down thing, not a bottom-up thing the way Earth Day was, and so people came out and got educated about solar power but it didn't have that emotional resonance of Earth Day and it was never repeated.

JENIFFER: You often refer to the fact that there is no Planet B, and can you speak to our current climate crisis? Do you think we have enough time to save our planet?

YUDELSON: Well, it's not saving the planet that's the issue, Jeniffer. It's saving the people who live on the planet as human beings.

JENIFFER: Well, that's true.

YUDELSON: But we are in deep, deep yogurt right now if we don't make major changes, and to some degree, a lot of the warming that's happened is already baked into the pie for the next 100 or 200 years. If we stop putting CO2 into the atmosphere today it would take that long for the oceans to absorb the excess carbon dioxide that's already there and go back to a pre-21st century level of warming, but the fact is we have temperatures now that human beings have not experienced in the entire evolution of the species, in the past 2 or 3 million years.

So, this is unprecedented, and the problem we have is that our current way of life is so culturally embedded in our psyches that *the biggest issue is not technology, it really is culture change*, and I think that's what makes it daunting and that's why I talk in my last chapter, an epilogue that's addressed to young climate strikers. I say well, I'm passing the baton to you; I'm an older guy and you're going to have to live with this thing that

we've created, but here are some things I've learned that you might find helpful for your struggle.

You know, maybe 7% of us -- pick a number -- are cut out to be activists who leave everything behind and go lie down in front of bulldozers and chain ourselves to trees and pipelines and so forth. Most of us aren't going to do that. But what we can do, each of us, is to talk about this issue in whatever forums are present.

Whether you're a public person or a private person or a social media person or an educator, you have a forum. Even if it's just talking to your neighbors. So, I think that the real issue now is changing the dialogue.

JENIFFER: Right.

YUDELSON: One thing we learned from Earth Day -- the dialogue then was if you're going to save the environment, if you're going to stop pollution, you're going to destroy the economy. That was the argument 50 years ago. You hear the same nonsense today.

JENIFFER: That's the argument today, yeah.

YUDELSON: The fact of the matter is we didn't (destroy the economy with environmental laws and regulations). What we need to be doing in the next 10 years is starting to decelerate, and we can see with the few months of data that we have on COVID-19 shutdowns, that we are actually on a glide path in terms of energy use and CO2 emissions that we need to be on. The problem, of course, is we must restart our economies -- because people are suffering terribly -- but we already know what the glide path is, and you know, it's like well, you're going to cut airline use by 95%.

I'm not sure that's a feasible thing, but maybe we'll all rethink this idea of going to Paris for the weekend if you live in New York or going to Hawaii on vacation. We have to start somewhere.

There are a lot of places to start and you could start in your garden and you're going to say well, do I really need to buy stuff that I then have to recycle or I then have to throw away? There's a lot of cultures that don't throw away stuff, they just repurpose it.

So, beginning if you're in the building business -- building large buildings, you begin to think about how is this building going to be used in 50 years? How is this going to be used in 100 years? It's probably going to be used very differently, and shouldn't I design it for multiple uses over a long lifetime?

In the 19th century, people used to live above their store, you know -- above any store. The ground floor was retail and the rest was housing. We're starting to rediscover that.

JENIFFER: Yeah, absolutely.

YUDELSON: And in the 20th century, we decided to separate all these uses so everything would be nice and clean. The industry would be over here, offices would be over here, homes would be over there, and now we're discovering well, we don't really have the kind of industry that we have to put somewhere far away, because most of it is research labs and microchip factories and stuff that doesn't generate a lot of emissions.

They could be in the middle of cities, and the same way you could live above the store and you've got buildings now in L.A., big tall buildings that are being built with housing on top, hotels in the middle, office buildings below, retail down the first two stories, et cetera. And so, we've already learned how to rethink a lot of our assumptions.

What we have to do is to get a new toolbox for the 21st century that's carbon-neutral, and I think that is well in progress, and maybe I made some contribution to it in the green building movement to moving us along, and that's kind of where *The Godfather of Green* came along and that story is at the end of my book, and you referred to one of the passages which was actually doing research for a book and sitting on an airport loo when my phone rang. I thought that was a fun way to start a chapter.

JENIFFER: Absolutely. Yeah. Well, Jerry Yudelson, thank you so much for taking the time to have this discussion with us today here on Earth Day, 50-year anniversary, and thank you for the conversation that you have started, and that you are continuing. We really appreciate it.

YUDELSON: You're very welcome.