

Oral History Interview Transcript

Edward Deng (interviewer): Today is March 7, 2023, 8:30 PM Central Standard Time. This is Edward Deng, or Teddy Deng speaking, interviewing my father Kun Deng for my Energy in World Civilizations course oral history assignment. This interview is being conducted virtually over Zoom. I am located at Chicago, Illinois, currently, while my father is speaking from Cambridge, Massachusetts.

So, you were born around 1960s in rural China. So, starting on sort of a smaller scale, can you walk me through a typical day, uh, sort of in your childhood?

Kun Deng (interviewee): So, I was in a very small village, uh, South of China in Jiangxi Province, where my mother was sent down to the countryside as part of the greater wave of intellectuals' being sent to the countryside to be reeducated by peasants. It was one of the Mao movements launched during the Cultural Revolution. So, I was very little at the time. My daily life was actually fairly simple. I would go to school, it's a village primary school, and then, in the afternoon, I would normally, with other village boys, take the cows to the mountains, and then get them fed on, basically on wild grass.

ED: So, were you actually sort of born in the city, and then you moved really early to the countryside, or were you sort of born in the countryside?

KD: That's right, I was born in the city, and my mother was sent down to the countryside for reeducation. I went with her.

ED: And so, um—

KD: It is actually typical of millions of families who used to live in the city, because of the political movement which purged intellectuals in China, they pretty much all went to every corner of the Chinese countryside to be reeducated by the peasants. (*air quotes*) Reeducated.

ED: Were you old enough to sort of remember your childhood in the city before you moved?

KD: Um, yes. I remember a little bit about my city life. Yes.

ED: How much do you remember, sort of?

KD: City life was actually fairly simple, in the sense that, well, I was very little at the time, so, mostly I was spend—I should say I was home pretty much all of the time, and then going to a local school with many other—it's a big school with many other kids.

ED: And then about how old were you when you got sent to the countryside?

KD: I think I was . . . when I was, five or six years old? I was sent to the countryside.

ED: How do you remember sort of feeling about . . . like if there was a drastic transition from the city to the countryside?

KD: The countryside life was really quite different in the way . . . I think the biggest difference at the time was that there was no electricity in the countryside, so . . . we used kerosene as the lighting source for the night, and then kerosenes were very hard to come by, so you would try to save as much as possible, um, unless you have the absolute need, you would actually not use the light, you would typically try to have dinner early, and then normally just go to bed.

ED: So, who generally provided the kerosene, like how did you generally acquire it?

KD: Yeah. You do go to the state, sort of on the stores, and then I think every family gets some sort of ration per month, you know, sort of a designated quantity per family for that. It's not really, you can't really use it generously.

ED: And do you sort of remember ever families sharing with each other or that sort of thing?

KD: It's possible, because, yeah, it's possible, because for some of the fam—some of the bigger families who had greater needs, then you would. I think, I think it was quite interesting, in China, when I was growing up, there's much more sharing among people, because there's not really any social safety, safety net. It's not really any social sort of help network; professional help is not really available. Whether you are moving a house or whether you are, or anything, any family has, you ask your neighbors, your friends, your family members to help out. And obviously kerosene's one of the examples, yes.

ED: Now, were there any sort of other types of energy like that that you sort of used for lighting or heat, like coal or oil or something like that?

KD: So, at the time, we normally, every family goes to a well, a village well, to get water. There's no public water system, so, every village would have an existing well already, which exists in the, (?) already. So, typically, to cook a meal, you use the wood that you chop in the mountains. So, I went back to the questions earlier I answered, so the life of the typical village boy, in addition to raising cows, you know, taking the cows to grass fields to be fed, you also help the

family to chop the woods from the mountain and take it back home and burning woods was the primary means of cooking for every family at the time.

ED: Mm. So, were you aware of, did you sort of have any classmates that you were aware of that were sort of using, either sort of different or sort of more like urban or sort of more modern technologies, that sort of thing?

KD: In the village level, everybody, it's the same for pretty much every other village in the nearby. You would fetch water from a well, you would chop the woods from the mountains, and then take it home to be dried, and then use, burn the woods for cooking purposes. Use kerosene for lighting, and, in the slightly smaller cities, I should say they obviously, they wouldn't have access to the mountains to chop the woods for fuel purposes, so they would actually have a small ration from the government, of coal I should say, and then I remember early on, it was a very ugly sight, because you have these allocations of coal, and then you would put it either on the wall or the ground to be dried. So, every city you go, small cities you go, you see these patches of the, sort of the coal being dried. I think it was an ugly scene. I think that was the primary means of the cities, sort of as the fuel. The bigger cities, I think, I should say the biggest cities in China, such as Beijing or Shanghai, they would have the normal modern convenience, they would have electricity, they would have running water as well, and then, but they, they also use coal I believe. I think, even in Beijing, in the capital, they would also dry the coal on the wall and use those as the source of fuel, I believe. And then, so, in other words, if you visit China in those days, even the biggest of cities, just go to the neighborhoods, you'll see those ugly remains from every wall people used to dry their coal.

ED: And then, so, so for collecting wood, was that, was the area where the trees were growing, was that generally a common area, or did people sort of try to claim certain sections for themselves?

KD: Any mountains within half an hour, it's pretty much, I should say completely chopped off. So, I remember when I was little, you basically go farther and farther, so, a typical day, you would walk for an hour before you find a decent mountain for you to chop the woods and then take it back home. So, it's typically, normally it is a two hour round trip.

ED: Mm. Now, were there any sort of efforts to regrow or replant some areas so you would get more wood? Like sort of closer by?

KD: I think at the time it was very difficult because if you do, people would take it down anyway, so it was really . . . in the village I live in, and then most of the villages nearby, it is really going farther and farther into the mountains to chop the woods. But I should say—

ED: And then—

KD: A little bit later on, it became more and more difficult to get the woods, so I think my family was one of the first, along with some other families, to use the sawdust, because it is actually very easy to buy piles of sawdusts from the timber companies, and then you buy, some sort of electric fan to be installed to . . . along with the fan and the sawdust, and those were, I remember for quite a few years, that was used as the, as the, sort of the fuel.

ED: So, were these sort of electric fences (*misheard*) like sort of something that appeared towards, more towards later, or was that around early on?

KD: No, it's uh, it's very rudimentary made, very easy to generate. It's fairly easy, yeah, so, the typical cooking experience involved basically one person fanning the sawdust to be burned and then your mom and dad would be cooking, so typically it's a two-persons job. And then, the person taking charge of the fanning the sawdust, typically, I think, you would be in tears.

ED: And then, so for the land that ended up being cleared from the wood, was some of that eventually used as farmland, or was it just sort of left bare?

KD: Well, the government owns all the land. The government owns all the mountains. So, unless the government, well it's collective land anyway, so nobody cares whether it's vacant or used.

ED: Mm. And then, so, when you're sort of moving to college, were you sort of beginning to see any changes in your hometown then or was it still generally sort of the same?

KD: Yeah, when I moved into college, I think a few instances . . . So, I moved into college, which actually coincided with China's reform process, with opening up to the world as well, it was, obviously now looking back, was forty years of economic transformation, which completely changed China. In terms of energy, obviously the running water was an easy thing for me to notice, and then electricity, of course, is available as well. But, however, I should say the hot

water was not that easy to get by, so we would typically take a bath once every month. I think, for girls, they probably are slightly better, but I think no more than once a week, because you go to the university's public bath, and it only operates, I believe, a few days a month. So, I think it's the case for everybody. So, I remember when I was in college, I would probably . . . so, I would take actually cold showers when I exercise, but normally, for the hot bath, it is once a month. And even once a month is a luxury, I should say.

ED: And then, did you sort of get the sense of, that the government was sort of working to put the sort of the high end, like, innovative front-line sort of technologies on government buildings or the university, for example, in comparison to sort of other surrounding buildings in the city?

KD: I think in terms of energy use, everywhere in the country pretty much is the same. For the government buildings, I think obviously the water usage, the electricity usage, um, well I should say when I grew up, everything belongs to the government anyway; there's no private ownership, there's no private property. So, private property is really a notion only about 20 years ago in China. It's a fairly recent phenomenon. The Communist party made, basically made everything state-owned since 1949 when they took over mainland China.

ED: Mm. So, where did you sort of begin hearing about the United States in general?

KD: So, it's quite interesting. I actually went to college in the fall of 1978. So, January the first, 1979, the United States and China established diplomatic relationships. That really, I should say, the first thing that struck us at the time was watching television. Well, we would actually go to a friend's house. You walk, probably an hour, to go to somebody's, you know, high government official's house, to watch television. For the first time, I was able—I was astounded to see television, those documentaries from the United States, showing how beautiful the country was, how prosperous it was. And then, people were smiling, so, I should say, in 1979, as a college student in China, we were astounded to see that the world outside of China was so much more advanced technologically, and then life was much better. So, no wonder that kickstarted an entire China reform process.

ED: And just to go back to the TV real quick. So, is that TV sort of an example of what you could say, like, the sort of government-associated people, some kind of luxuries that they would have that other people might not have, like in the university?

KD: Absolutely. So, in China at the time, a bicycle, for instance, would be a huge luxury in the sense, because it is strictly rationed, sort of only the privileged families or people with connections would be able to buy a bicycle. Television I think is too exp—number one, it's not available; you wouldn't be able to buy one. Number two, even if you can—you are able to buy one, it would be too expensive for you to own it; you wouldn't be able to afford it.

I remember that for a girl to agree to be married to a man, the girl would typically demand that the man would be able to provide a watch, a bicycle, and a television. Today, obviously, it's entirely different. Today, a girl would demand the man has a house, has a car, and has a decent job.

ED: And sort of in Chinese kitchens at the time, everything was generally manual, right? There weren't sort of, or at least in, if you went to any high-end kitchens at the time, did you notice any type of machine or appliance or that sort of thing?

KD: I think in the, after the reform process, I should say, the kitchen in China probably went through a lot of changes. So, coal burning is very common, and then, I remember, later on, gas was also introduced as well. The electricity pressure cooker was introduced, and I remember that became a huge, sort of popular stuff in China as well. So, I should say the kitchen was one of the places where you see how life in China really has changed. I also remember, when I was at the university, when I read stories about students in the United States, that they're able to use washing machines to wash their clothes. I was very envious at the time, because every one of us in college at the time, we had to manually wash our clothes. Washing machine was heard of, but it was not accessible, even in universities, at all. Not to mention that it was absent in pretty much all the families.

ED: And then, just sort of generally on that note, were there ever any sort of efforts either by the local government, sort of trying to, like in college, trying to either promote the, sort of Chinese way of life, vs. sort of the American one, like, sort of in the context of the Cold War?

KD: I think after the reform process in 1978, and then from our college days in 1978, and then afterwards, I became a professor, and then subsequently went back for graduate school, and then in 1989 I came to the United States. I think the way of life at the time was really to learn from the West, to copy the West, to fancy the life in the West, and then, the aspiration is really,

for a normal family, I remember, the aspiration is really to own a television, especially made in Japan, I think, because the Japanese-made television had a reputation for high quality, and, well, not only made in Japan but has to be assembled in Japan, and washing machine as well, I think, and obviously bicycle as well. So, those were the aspirations at the time. And then, I should say, some Western clothes. I remember my grandfather in Hong Kong gave me some of the suits that he no longer was able to get in, so I was able to wear those suits in the university, and then I think, sort of, every head was turning, I should say.

ED: And did you ever get, sort of, in this general attitude of copying the West, did you ever get the sort of sense of “we’re going to learn from them, and then we’ll get better than them,” or sort of surpass them, I guess?

KD: Not really, because China realized that we were really far behind the United States and the West, so I think the official goal was sort of hopefully by the year 2000, that China is able to at least modernize itself. So, that was actually the official goal at the time. But there was never any sort of remote possibility or chance being discussed that China would actually take over the United States. That was—

ED: And then . . . there was a what? Sorry, I couldn’t—

KD: No, no, I should say, at that time I should say, it was certainly completely unrealistic to even think about that, compared to now, you know, China obviously has the aspiration to exceed the United States or the West.

ED: So, sort of after watching documentaries of the US, and then when you actually moved to the US and saw everything in person, what were the things that sort of stood out to you immediately?

KD: As soon as I got off the plane, I was quite surprised by the sheer number of heavyweight people I saw, because I myself was quite slim at the time, and so were most of the Chinese, and I said “Jesus Christ, everyone in the United States look very heavy.” So, that was, I think, the first impression I had. And then the second impression was that it really struck me how affordable material-wise in the United States, for instance, an apple and orange were incredibly cheap. Chicken, for instance, I was really surprised how cheap a whole chicken was. I mean, in China, for instance, it probably takes a whole month’s salary to purchase a whole chicken,

whereas in the United States, it's only a couple of dollars. I remember, as a student coming to the United States at the time, most of the students like myself, for instance, we had a lot of chicken, I remember, a lot of chicken wings.

ED: Did you sort of notice, I guess the amount of personal private transport that people had, especially in terms of the automobile, for example?

KD: Yeah, its quite interesting. So, I when I was little, obviously, you walk all the time. Car is not available. Only the very senior government officials have a car, so walking is pretty much done by everybody. When I went to Peking University in Beijing, I think the first sight that really surprised me was the sheer number of bicycles at the campus. So, I bought one right, used one right away as well, so everybody was riding, pretty much everybody was riding a bicycle. And if you go to Tiananmen Square, the big streets in Beijing, you can see the sea of bicycles in that sense, so that was the impression I had. In 1995, so I left Beijing in 1989, so in 1995, you're talking about literally only a few years after I left, I came back to Beijing, I was very surprised that the bicycle, sea of bicycles already were being replaced by motorcycles. And then, a few years later, when I started going back to Beijing again, I do see a lot of private cars popping up. So, obviously, if you go to Beijing as of today, you are, you are really seeing very little bicycles going around. You do see a lot of automobiles, but the vast majority are cars. So, that's why most of the Chinese cities are jammed in the sense . . . I remember many years ago, when Shenzhen built its express from Hong Kong, I think they built six lanes, and then it was really heavily criticized because at—and then I remember the headlines of the newspaper was saying “empty highways,” you know, who is going to pay for this? And then, it was heavily criticized, it was completely a waste of money, but a few years later, it was completely jammed, and people were asking questions, saying, “Why don't build more?” Which is really happening in China pretty much everywhere. So, that's why infrastructure buildup in China for the last forty years was just incredible. And it is continuing.

ED: So, would you say that the culture in China is sort of, would you say it's sort of paralleling America's car culture?

KD: Absolutely. I think that today, China actually has exceeded the United States as the largest buyer of automobiles. And, obviously, the result of that is that . . . I should say in 1995, when I

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went back to China, I was instantly sick; I was not able to speak for some reason. I think the reason was that, if you look into, look up into the sky, it was full of dust, basically. So, I think, because of the dust, all of a sudden, I couldn't speak. So, that was the first impression I had of the reform process, the aftermath of the economic reform, the economic growth, hyper economic growth. Why? Because every city is building up tremendously, not only infrastructure, but housing as well. China got into a housing boom, and then, subsequently, when I returned to Beijing, it was quite interesting. When I, I remember, when I got off the plane in Beijing Airport, it was one o' clock, sort of one o' clock in the afternoon, and I got out of the airport, I couldn't really see anything. So, it was like the fantasy land, Disney fantasy land. You see ghosts, the fog, sort of, foggy ghosts everywhere. I was really surprised. I said, "Wait a minute, I thought it was a sunny day." So, I checked the weather forecast—it is, it is a bright sunny day. So, a bright sunny day, you can't really see anything. So, that was, that's why, I think, for two or three decades after the economic reform in China, in the big cities at least, you were no longer able to see sunshine. You were no longer able to see a blue sky, I should say. So, I think it was incredible, sort of, the kind of damage, the kind of pollution, that was going on, So, that's why you see—one of the things that the United States embassy did, was to put up a pollution indicator. That really infuriated the Chinese government, but also brought people aware that there is something called PMI, something.

ED: So, sort of in comparison, what would you say, very generally, are sort of the biggest differences between my upbringing and then your upbringing?

KD: So, my upbringing coincided with China's struggling to survive. Not only did we have sort of inadequate access to water, to electricity, but also to food as well. I remember the first letter I wrote home when I went to college, I said I'm actually able to eat pork every day. And nobody at home believed it. Even later on, when I got back home, I say, "I'm actually able to eat pork every day," people said, "That's not true," because in China at the time, a normal family will be allowed to have access to luxury stuff like pork, beef, only once a month. So, the government obviously were trying to provide special and privileged access to these university students, because university students at the time, when I was in college in 1978, were really really few. So, we were given special treatment, but, however, the, I should say the surroundings are really

lack of material access, inadequate access to everything. So, your life growing up in New York City and a luxury suburb in New Jersey, you have access to abundance of everything, I should say overabundance to everything, so that's obviously the biggest difference.

ED: Would you say there are any advantages that your upbringing had over mine?

KD: I believe so. I think, more appreciation for nature, more appreciation for hard work, more awareness of what life used to be like and what life continues to be like in a lot of the parts of the world. So, this is why, in my profession as an investment professional in a Wall Street investment bank, when I travel to emerging markets these days, I can understand, for instance, in countries, before COVID, the last trip I made was in Morocco, Côte d'Ivoire, and also Ghana, and I completely understood the life that was going on at the time. I remember talking to a US embassy economic attaché in one of the countries hosted by US embassy, and then the US official said he was astounded at the kind of life people in Ghana are, not that far away from the capital, was actually living, but I actually can, understood, their situation, and I can, also understood, the aspirations of those people, and then the kind of economic reforms the government was pushing as well.

ED: So, sort of keeping in, keeping the theme of your current job position, what kind of perspectives has your job positions provided on energy sort of shaping civilization, right now and then towards the future?

KD: So, in my job as an investment professional, investing around the world, I obviously have seen that, the life being transformed because of globalization in the last twenty years and forty years. I think some of the biggest changes going on is really, some of the biggest changes going on is that energy is becoming one of the most important factors driving the economy. I think if you look at the world economy as a whole, the theme has been that the developed world, in particular, has been able to get cheap labor from China. They have been able to get cheap oil from Russia and other countries, and then that really has powered sort of the globalization as we have seen it. I do believe, going forward, the world is changing, because there's a much greater awareness of the kind of, sort of damage in many countries that the sort of single-minded pursuit of economic growth has caused. I mean, look at China, for instance. The environment is just completely, not only just damaged, but just completely almost wasted in

that sense. And it is sort of, if you talk about pollution in Beijing or China, it is the same in New Delhi, for instance. It is the same in many other countries. I think there is much more awareness today, not only in the investment world, but also in the corporate world, of the kind of responsible investment, responsible corporate citizenship should be like. So, my guess is that energy will be one of the most important parts in this world, in the sense that, so, the companies have to assess, what are the good things that they are doing, what are the bad things that they are doing. What's quite interesting, so, when I was walking, I should say a few weeks ago, when I was walking along Grand Central looking at the new Vanderbilt building, called One Vanderbilt, that was built up, and I noticed that there is a newspaper article that they posted on the building saying that One Vanderbilt was built with a 100% energy efficiency in the sense that they were built in a way that they actually collect all the rainwater and then recycle that rainwater as well. And then the electricity was completely generated from solar. I think this is not an isolated example of corporate, of one corporation doing this. This is a trend that every corporation has to think about—how to factor that into their corporate strategy, and my guess is that we are at the start of a seismic change in the energy, sort of world going forward.

ED: And then, sort of thinking on that note, in terms of sort of the energy transition, do you think just everyone sort of moving towards renewable, sort of carbon-zero energy—is that itself going to be enough, or do other things need to change?

KD: Certainly, I think renewable energy is the first step. It's going to, it's not going to be easy; it's going to take time, but it's a good start. It certainly requires a lot of, I should say initiatives from the people, the society, but also takes the government will and political power to make it happen. I do see it is happening pretty much everywhere, I should say, even though resistance has been strong. In my investment world, for instance, we are really pushing for ESG in the sense, that, even though there is a lot of, I should say, political resistance to ESG, but I have no doubt that ESG will be the, will be the future in that sense. So, I have no doubt that that's going to happen.

ED: And do you think people sort of need to change, sort of their lifestyle in general as well?

KD: I think people are. It's not only, I should say, it's not only a good thing to do, but it is also an economic thing to do as well. So, as you remember, that I just bought a Tesla car not that long ago. I think, sort of, and I actually . . . I love the car. So, my guess is that sort of, not only it's the good thing to do, but also, it's the economic thing to do as well. So, these two things will really push the trend a long way.

ED: Mm. So, do you think there are any differences in the way that Chinese or American societies will face challenges during this transition?

KD: Yeah, I think the Western world will certainly go, take the step, take the first step. The developed countries, even a country like China, they're going to play catch-up, because I believe in many parts of the world, unfortunately, they continue to be, I should say, a lack of, they do not have the access to, you know, solar or other EV technologies. And then in many parts of the world, they will continue to be concerned about the survival, in that sense. So, in that case, it's going to take time. So, I mean Amazon is one example, right, even though, politically, you have politicians advocating for protection of the Amazon, it's not only for Brazil but for the entire world, but you also have the populist politicians saying that "we have to survive first," and then it's always going to be a battle between the two forces. But I think with more innovation, with better technologies, with better awareness, and then also economically, I should say the renewable energy and better energies will continue to power forward.

ED: And then, sort of . . . you've been back to China and to your hometown a couple of times in recent years. So, how do you think the energy and sort of societal living standards have sort of changed ever since you left your hometown sort of all those years ago?

KD: What's quite interesting, every time I go back to China, I would normally visit the hometown. There are a lot of—almost every year, there are changes happening, but, however, in terms of energy, obviously, it is a big change. People generally do not go to wells to fetch water anymore; the city or the public running water is mostly available. The gas is pretty much available as fuel, I should say, and then electricity is fairly widely available, even though you continue to see these reports of periodical sort of electricity outage, even in big cities, in the sense, especially when there is a weather-related disruptions in that case. But I do see, I should say, in terms of the basic survival, the necessities of life, China has already come out of it, so

this is why I should say you do see China playing a catch-up in terms of making up for damaging the environment. To a certain extent, China has done a lot of good things in terms of the energy side of it. For instance, they have announced that, I think 2050, that no combustion engine cars will be produced in China, so, I mean, even today China sells more EVs than the United States. If you see a company like BYD, they sell already far more EVs than Tesla, for instance. So, I have no question that China will be the biggest leader in terms of the electric automobiles.

ED: And then back when you were still a child, how were sort of most people getting food? Were they sort of farming it directly off the land, or was it, yeah, how did that work exactly?

KD: Yeah, so, when I grew up, I should say, the peasants typically grew rice themselves, and then they save a portion for them, and then they sell the rest to the government. It's mandated; they have to sell to the government. And then for, they grew vegetables on their own. So, I remember that, even when we moved back to the cities later on, we still actually cultivated a plot of land, sort of about ten minutes from our home to grow our own vegetables. So, I think that one of the biggest changes in China right now is that more and more agricultural land is being, I should say, used to build houses, to build apartments, to build, so there is less and less agricultural land. So, I think food security will probably be one of the biggest issues, not only for China, but also for other countries. So, this is why when the Ukraine–Russia war happened, one of the biggest disruptions is to the food security in the world.

ED: And then would you say that in the modern era, smaller villages are becoming, would you say that they're becoming more dependent or getting more food from outside, or are they still growing enough food for themselves, or are they just sort of supplementing it from imports?

KD: I think they will grow some themselves, but I think, I should say, to a large extent, because of new technology, they will be able to sustain themselves, because I remember when I was little, we actually used our, we actually planted rice by hand, one by one. But it was an eye-opening experience for me when I went back to China a few years ago, and then I did not see anybody planting the rice by hand—it's all done by machine—any more, so, apparently, it's much more efficient right now, and also, I should say, because of the infrastructure improvement, because of the international trade, I was, right now, in a remote village in China,

you are able to eat a banana from Peru or Colombia, in that sense, which was unthinkable sort of twenty or thirty years ago.

ED: And then, would you say these sort of modern innovations have given the villagers sort of more time, more leisure time or something like that?

KD: Absolutely. I should say, well, I should say, sad, in the sense that, the younger generation, there are less younger generation sort of working, in China, at least, working in the farmlands, because they make much more working in the cities, as a construction worker, for instance, to work on the highways, to work on roads. So, in China right now, I should say, it's typically the women and then the older generation tending to those farm fields, so, hopefully, that trend can be reversed, otherwise it's a little bit sad. But, however, I should say life in general is better, because at least when I was in China, I, in my childhood, I have never seen a new house being built. But right now, if you go to the Chinese countryside, it's fairly often that new houses are being built pretty much all the time.

ED: Now, I know you're away from home, so it might be a little difficult, but I was wondering if you had sort of any photos, like, relevant photos that you can, that you have in mind that you might be able to share?

KD: I can try to find, I can try to see if I can find some.

ED: Okay. And then, sort of wrapping up, is there anything else that you think I should know that we haven't covered?

KD: I think, in terms of energy, will involve, will always be a struggle between survival, economic profits, and then responsibility to the society or to the world and to your, to prosperity in that sense. It's always going to be political, it will always depend on the political will, it will always depend on how powerful the corporates will be, so I think it's going to be a treacherous road in the sense. Just imagine, if you ask these powerful companies such as Exxon, Chevron, and British Petroleum, saying, "You can no longer damage the environment" in the sense, are they going to do it? No. They are making massive profits right now, they have enough money to move the political power, so it's going to be, I think it's going to be a very tough road continuously in that sense. And then for, even if you look at right now, for instance, even if the Europeans are willing to try to, I should say stay away or try to actually sort of

survive without access to the Russian, cheap Russian gas and oil, but obviously they have expressed the will, but I'm not quite sure how successful they're going to be. For instance, if you look at the Europeans, right, you have the Italian government saying, "No, no, we're not going to do it," you have the Hungarians saying, "No, we're not going to do that." So, I think the road ahead for a responsible energy policy is, will continue to be a very difficult struggle.

ED: Thank you very much.

KD: Okay, you're welcome.

ED: I'll stop the recording.

KD: Okay, bye.