

Chevron's John Watson Talks Oil, Drilling, Shale, Renewables, and the Future of the Energy Industry

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Excerpts from Mr. Watson's Remarks

How many barrels of oil a day does the world consume today? About 97 million barrels of oil per day. And the U.S. consumes about 19 million barrels

And the U.S. produces how much? Of liquids, all liquids account to roughly 12 ½ million barrels a day.

So we're still importing? We're now importing, yes.

How much shale oil are we producing in the United States out of the 9-plus million barrels a day we're producing? : It's a little under 5 million barrels.

What happened that all of a sudden oil went from \$140 down to \$22 at one point? Well, the industry had invested and more production came online. We also saw a bit of a slowdown in the world economy, so you had a little bit less demand growth. And then you did see several events that took place really at the same time. One is Saudi Arabia, for reasons of market share, chose to increase production into what was already a surplus market. That was a decision that they made. You saw sanctions take place on Russia. And with their currency devaluing, suddenly they were able to produce much more cheaply. And then you had the shales in the United States. And so you had a confluence of supply events at a time when the market wasn't growing as fast, and prices fell.

We had 1,600 [oil rigs operating in the United States] at the peak, 400 at the low point, now we've got 800. With 800, we're producing almost as much oil as we did with 1,600. Why are we producing so much oil with half the rigs? Well, it's the productivity gains that we have made in the Permian Basin. We used to drill these horizontal wells I was describing. And the lateral length, the horizontal portion, might be a few hundred feet, then it's gone to 500, now a thousand feet or so. And we have experimented with different types of sand and proppant¹ to hold those fractures open I was talking about. And so as the industry experiments and gets a little better, we're able to get more production out of fewer rigs, fewer number of wells.

Some people think the oil industry has a view that there is no such thing as climate change and you're kind of against people who say that there is climate change. What is the industry's view on whether there is climate change or global warming? I think most people accept there has been some warming. If you look at the temperature gauges and you look at temperature data, there has been some warming. I think the debate is, how much is natural, how much is due to greenhouse gases, and what's likely to happen going forward. I read everything

¹ A proppant is a solid material, typically sand, treated sand, or man-made ceramic materials, designed to keep an induced hydraulic fracture open, during or following a fracturing treatment.

the International Panel on Climate Change puts out, and they have a very wide range of outcomes. So I think most people know that.

Today, what is the biggest challenge that the energy industry faces? Is it deregulation or regulation? Is it the supply/demand factor? What is it? I think the perception is that getting costs down and focusing on earnings and those things is the hardest thing.

As you look at the President of the United States and what he's doing, what do you think is the most useful thing he could do to help your industry? Is it deregulation? You know, what I would like to hear out of our elected officials is a positive statement about the role of private enterprise....I would really love to hear about the virtues of competition, the virtues of free enterprise in this country....We remain a country that's very popular overseas. Many countries still look up to the United States. And I think we have to have a positive narrative for our own people in this country, to talk about all the things that we have going for us, and energy is just one of them. Around the world, they think we're the luckiest country in the world. They say you've got oil, you've got gas, now you've got this shale oil and shale gas, you've got vast agriculture, you have so much. And I think we could do a lot by unleashing that and making sure that we understand that what got us here is a very strong private sector.

What about renewable energy?...Do you think there's enough potential in renewable in our lifetime? Well, actually, we've been the largest producer of renewables amongst major oil companies, thanks to our geothermal business that's in Indonesia and the Philippines. We had difficulty growing that in recent years, but it's been a big business for us. And we've done a lot of work on advanced biofuels. And that's very hard. I don't think anyone feels corn ethanol is a solution. We've got 40 percent of our corn crop going to that, and it's a big land-use issue. But advanced biofuels have been tough.

Wind and solar have their role. They're not new. I just think we ought to make sure that they can compete. And that instead of mandating volumes of wind and volumes of solar, we do a lot of that in this country, and what we're seeing is we're driving electricity prices up. I mean, it's ironic. In California, 60 percent of the electricity comes from natural gas, but utility rates are going up very quickly because we're pushing capacity that may not be needed because we have to hit a mandate into the system.

So when you're trying to get oil overseas, you have to meet with heads of state, do any members say, well, like, maybe I have a favorite charity you could help or my son would like a job? Do you ever have any of those kind of things that ever happen, or you have to be very careful? We're very careful. [Laughter.]

DAVID M. RUBENSTEIN: Good evening, members and guests of The Economic Club of Washington. I'm David Rubenstein, president of the Club. Welcome to this dinner event at the JW Marriott Washington, DC.

Our guest this evening is John Watson, who is chairman of the board and chief executive officer (CEO) of Chevron Corporation, a position that he has held since 2010. Let me give you a little background of both Chevron and John. Chevron is a company that was actually started in 1879 as the Pacific Coast Oil Company. Later it was bought by Standard Oil. Standard Oil was broken up, it became SoCal. SoCal bought Gulf Oil in 1984 and it changed its name then to Chevron and subsequently bought Texaco and also Unocal.

The company today has a market capitalization of roughly \$204 billion and about \$103 billion in revenue. It's the 14th-biggest company in the United States by revenue, and it has about 52,000 employees, about half of them are in the United States.

John joined the company shortly after he graduated from college at the University of California at Davis, where he was a member of the golf team. [Laughter.] Scratch golfer then, three handicap now, not bad. He then went to the University of Chicago to get his Masters in Business Administration (MBA). He graduated in 1980, joined Chevron, and rose up in a series of positions. He headed up the Canadian operation. He headed up strategic planning. He headed up mergers and acquisitions. He headed up international. And he was ultimately at one point the vice chairman in charge of government affairs, compliance, and virtually everything else, and then assumed the top position in 2010.

MR. WATSON: He does his homework. [Laughter.]

MR. RUBENSTEIN: He is today the chairman of the American Petroleum Institute and also a member of the Business Council and the Business Roundtable. And we're very honored to have you here.

MR. WATSON: Thank you, David. Nice to be here. [Applause.]

MR. RUBENSTEIN: So what could be better than being the head of an oil company when a former head of the oil company is the Secretary of State, a businessman is the President of the United States, we're deregulating energy, we're building the Keystone Pipeline, how can it get any better than that for you? [Laughter.]

MR. WATSON: It would be nice if we made some money. No, it's been a difficult stretch. I am optimistic about the industry and what I see ahead. But the industry is still adjusting to lower prices. So it's been a challenging time. But all those things, I think, bode well for the industry going forward.

MR. RUBENSTEIN: OK. Well, let's talk about the industry generally. People buy iPhones and they seem to like Apple. People buy things from Amazon, they seem to like Amazon. But people buy gasoline, they don't seem to like oil companies. Why is that? [Laughter.]

MR. WATSON: Well, I think of it this way. There are a couple of reasons. Every schoolboy and schoolgirl in this country, when they took U.S. history, the first thing they learned about is the Sherman Antitrust Act, and they learned about the Rockefellers, and not all is characterized well. And then about every 10 years, our industry does something really, really bad. So we have the Exxon Valdez, we have the Enron scandal, we have the Macondo incident. And so just about the time people are warming up to us, something else comes up. So they see those things.

Now, the official answer is that the consumer research says they don't like things they don't have much choice in the buying.

MR. RUBENSTEIN: OK.

MR. WATSON: And our products are a necessity.

MR. RUBENSTEIN: Let's talk about oil and gas generally. So would you think that civilization would be better off if there had been no oil and gas ever discovered on the face of the earth, no carbon energy? Would we have advanced civilization more or would we be further behind?

MR. WATSON: Well, that's a little bit like asking if someone hadn't figured out the wheel, where would we be? You know, we haven't found anything better and there's been plenty of opportunity and lots of incentive to do that. And there have been renewables for a long time and there will continue to be renewables and other forms of energy. But our product has some pretty amazing characteristics to it that enable everything that we all enjoy every day.

MR. RUBENSTEIN: So years ago, people used to think that there wasn't going to be enough oil in 50 years or a hundred years. But with new techniques, is there enough oil on the face of the earth at our current consumption rates and projected population growth to feed everybody for a hundred years or 200 years or 300 years? How much oil is there, oil and gas?

MR. WATSON: Well, there's a lot of it is the short answer. You know, people think of the world and they think, well, it's fixed, and so it's axiomatic that there is a fixed amount of oil and gas out there. And I think that's true. But what is not as well-understood is where technology has gone. So let me give you an example.

We were Standard Oil Company in California. One of those oil fields that we discovered going way back is the Kern River Field in California. It was found about 1900. And we felt pretty good when we were able to produce and get about 8 to 10 percent of the oil out of the rock. Oil is entrained in rock, it's not just sitting in a pool underground.

But over time, technology has advanced and so we've learned how to do steamflood, things like that where you heat up the oil so it moves a little bit easier so you can extract it much simpler. Now out of Kern River, we'll ultimately produce 70 or 80 percent of the rock in place. And so technology keeps advancing.

The shales aren't new. We've been drilling through them for a long time; we've just figured out how to produce from them. So there is a lot of oil, but we keep finding more ways to get at it.

MR. RUBENSTEIN: Right. Let's put it in context. How many barrels of oil a day does the world consume today?

MR. WATSON: Well, the world consumes about 97 million barrels of oil per day.

MR. RUBENSTEIN: Right.

MR. WATSON: And the U.S. consumes about 19 million barrels.

MR. RUBENSTEIN: Nineteen. And we produce roughly how much?

MR. WATSON: Of liquids, all liquids account to roughly 12 ½ million barrels a day.

MR. RUBENSTEIN: Twelve-and-a-half million, and we consume 19 million, so we're still importing.

MR. WATSON: We're now importing, yes.

MR. RUBENSTEIN: And by the way, why do they use this phrase "barrels of oil"? Why don't they have a different measurement, because people don't know what's in a barrel? [Laughter.] Have they ever thought of doing something that people really know, because people don't see barrels very much anymore? Have they ever thought of a different unit?

MR. WATSON: Maybe they didn't want to confuse, but, you know, they used to come in a big drum like this. And I've had arguments with people, well, there really aren't 42 gallons in a barrel, it's really some other amount. But it's just a unit of measure.

MR. RUBENSTEIN: OK. All right. So right now, the world is consuming roughly 97 million barrels a day.

MR. WATSON: Yes, sir.

MR. RUBENSTEIN: And we are producing a little bit more than that or roughly around that?

MR. WATSON: The markets are roughly in balance today. I mean, inventories have grown in recent times. And there's debate, are we balanced or are we getting close to that balance? But give or take half-a-million barrels a day, the market's pretty balanced.

MR. RUBENSTEIN: Given even with current techniques, is it realistic that the United States could be, quote, "energy independent" in our lifetime? We're still importing a lot of oil. We've tried to be energy independent for 30 or 40 years and that hasn't really worked.

MR. WATSON: I think in aggregate we can produce as much energy as we consume for liquids for oil, if you will. I think it'll be difficult to get to the point where we're producing as much as we're consuming, that 19 million barrel a day number.

MR. RUBENSTEIN: OK. So let's talk about shale oil, that you said it was a technique that's been around for a while, but perfected a little bit. How much shale oil are we producing in the United States out of the 9-plus million barrels a day we're producing? How much of that is so-called shale oil?

MR. WATSON: It's a little under 5 million barrels. So when people – there's a preoccupation with shale oil, and it is remarkable the progress my industry has made. But it's about 5 million

barrels a day in that 97 million barrel a day market or of the 9 million barrels a day of crude oil or, say, 12, 13 million barrels a day of liquids.

MR. RUBENSTEIN: So we call it shale oil. Some people call it fracking. Fracking is seen to be a less favorable word than shale oil, I guess. But do you think fracking is unsafe?

MR. WATSON: There's a difference. Fracking is the technique.

MR. RUBENSTEIN: All right, the technique. Yes, OK. So when the word "fracking" is used, some people get upset about it.

MR. WATSON: I'm not trying to hide anything.

MR. RUBENSTEIN: You don't get upset.

MR. WATSON: No. [Laughter.]

MR. RUBENSTEIN: But some people say that it's an unsafe technique because ultimately the chemicals will get into the water supply. What is your argument about that or thinking about that?

MR. WATSON: Well, it's kind of interesting. Fracking, if you will, is not new. We've been doing it for 60 years. People think that fracking is new, but the industry has been doing it a long time. What is the innovation and what has revolutionized the business is combining horizontal drilling with hydraulic fracturing, which is injecting water, sand, and trace detergents in a way into the rock to fracture the rock so that oil can move to the lower-pressure fractures and up through the well bore. It's not new and it's not complicated, we're just doing a lot of it. And in some cases, we're doing it in locations that aren't used to it.

MR. RUBENSTEIN: Where do the water and chemicals go ultimately after the oil comes up? Where do the water and chemicals go, do they go into the aquifer or they just –

MR. WATSON: No. It comes back up through the well bore and you have a choice of what you can do with it. In the case of the Marcellus Shale, where we are and in the Permian Basin, we do a lot of recycling of that water. But you also have the choice to inject it. We have 150,000 industrial disposal wells in this country from my industry and others and you have to do that safely, and so that's where people get concerned. But it's not new and it's something we can do well.

MR. RUBENSTEIN: And some people say earthquakes are caused by fracking. Do you have any view on that?

MR. WATSON: If you don't recycle wastewater, you need to inject in a proper way. So you have to site wastewater wells properly and you have to inject it. For example, if you lubricate a fault, kind of micro-seismic events, if you lubricate a fault, this isn't a new subject, you can cause earth movements, but they're generally at very, very small levels. And we just have to site

disposal wells where water is injected, wastewater is injected for our industry and others. We have to site them properly.

MR. RUBENSTEIN: Why is it that the United States seems to dominate the fracking world? We're just a small part of the world. Why don't they use fracking other places? Is our geology so much better for it?

MR. WATSON: Part of it is in the innovation that takes place in our business. The other part that's underestimated is private property rights in this country. There's tremendous incentive and innovation in this country. Most countries around the world, the mineral rights are owned by government, and so the progress, the innovation may not be as fast.

There are shales elsewhere. We have properties that we own in Canada, Argentina, for example. There are shales elsewhere in the world. None of them have proven to be as productive as what we have here in North America yet, but perhaps in due course.

MR. RUBENSTEIN: All right. Explain to everybody what happens with oil prices. They were peaking at \$140 a barrel a number of years ago, everybody was happy in the oil industry, I assume. Right?

MR. WATSON: I was much smarter. [Laughter.]

MR. RUBENSTEIN: One hundred and forty dollars a barrel and people were saying it could go to \$200 a barrel or something like that. What happened that all of a sudden oil went from \$140 down to \$22 at one point? What was the cause of that?

MR. WATSON: Well, it sounds simple, but it is supply and demand, that 97 million barrels a day. What happens in our business is you tend to invest a lot of money and then you produce. And if the market collectively misgauges supply and demand and you wind up producing a little more or a little bit less, prices can fly up. And it takes time for supply and demand to equalize, if you will.

MR. RUBENSTEIN: But in other words, I thought what happened was sort of like the Saudi government said they weren't going to reduce their production and nobody else wanted to reduce their production as demand was going down, so we just had too much. Right?

MR. WATSON: Well, the industry had invested and more production came online. We also saw a bit of a slowdown in the world economy so you had a little bit less demand growth. And then you did see several events that took place really at the same time. One is Saudi Arabia, for reasons of market share, chose to increase production into what was already a surplus market. That was a decision that they made. You saw sanctions take place on Russia. And with their currency devaluing, suddenly they were able to produce much more cheaply. And then you had the shales in the United States. And so you had a confluence of supply events at a time when the market wasn't growing as fast, and prices fell.

MR. RUBENSTEIN: So today there's an agreement, OPEC² has an agreement and I think Russia and Mexico are part of it, more or less, so they're going to produce a little bit less, maybe 1.8 million barrels a day less. Is that going to have an impact on prices? And are they going to go up? They've been going down for the last couple of weeks.

MR. WATSON: It has had an impact as natural declines take place in our business. Oil fields decline with time, and so there is some natural decline that helps balance the markets. But what we've seen is the resiliency of the shale in the United States where, for example, Chevron's one of the largest acreage holders in the Permian Basin in Texas and New Mexico, and we have some 2 million acres. We're able to produce a little bit more at low prices.

And so we're continuing to egg on that supply imbalance at a time when supply isn't needed. So our industry is able to contribute to hold markets in check.

MR. RUBENSTEIN: So when oil prices were going down, people who had bought oil, by the time they got it on the ship and they were going to ship it, somebody's price was going down. So I think they bought a lot of ships and just filled them up.

MR. WATSON: They did.

MR. RUBENSTEIN: And where are those ships now? Do they still have the oil or are they waiting for prices to come back? [Laughter.] What's happened?

MR. WATSON: Well, world inventories are at or close to an all-time high, and so oil is everywhere it can find a home around the world. And so one of the things that OPEC has stated that they want to do is to get inventories back to a more manageable level because they act as a buffer to any price increase.

MR. RUBENSTEIN: OK. Now, the last Administration allowed oil to be exported from the United States. That hadn't been allowed before. Is that actually helping the oil industry or had no impact or whatever happened?

MR. WATSON: The oil export if you want to call it controversy or issue is really one of what I call economic efficiency. What's happened with all the shale oils being produced, it's very light and it doesn't fit in all our refineries. A lot of the refineries in the United States are built along coasts, and they were done because we need imported oil. So they're built for a different type of crude, a heavier crude oil. And so, literally, all the oil in the United States that's coming out of the shales can't be run in these refineries and turned into gasoline.

So what we're doing now is we're exporting that light crude oil and it's going to refineries better suited for it elsewhere and we're importing heavy crude. So think of it as just the industry balancing out the type of crude oil that's available on the market with the manufacturing capabilities that we have here.

MR. RUBENSTEIN: And is that helping consumers?

² OPEC is Organization of the Petroleum Exporting Countries.

MR. WATSON: It is. What was happening before is, since you couldn't export crude oil, U.S. oil prices were lower. And because you could export gasoline, there was rent – we're in the Economic Forum here – there was rent that was being captured by some domestic refiners. And it wasn't going to consumers, it was going to refiners. And now it's equilibrated.

MR. RUBENSTEIN: Explain this to everybody, if you could. Right now we have about 800 oil rigs in operation. I think we had 1,600 at the peak, 400 at the low point, now we've got 800. With 800, we're producing almost as much oil as we did with 1,600. Why are we producing so much oil with half the rigs?

MR. WATSON: Well, it's the productivity gains that we have made in the Permian Basin. We used to drill these horizontal wells I was describing. And the lateral length, the horizontal portion, might be a few hundred feet, then it's gone to 500, now a thousand feet or so. And we have experimented with different types of sand and proppant³ to hold those fractures open I was talking about. And so as the industry experiments and gets a little better, we're able to get more production out of fewer rigs, fewer number of wells.

MR. RUBENSTEIN: OK. All right. So one of your former colleagues, I guess, in the industry is the Secretary of State⁴. Have you asked him if he's happy with his job? [Laughter.]

MR. WATSON: You know what? I have not talked to him since he got his job, but I hear he's doing quite well.

MR. RUBENSTEIN: OK. And suppose the President called you and said, well, I have another Cabinet position I want to fill.

MR. WATSON: Yeah. You know, I think one oil company CEO is probably enough for the Administration. [Laughter.]

MR. RUBENSTEIN: OK. So let's talk about Chevron for a moment. You had these names that everybody understood, Pacific Coast Oil –

MR. WATSON: Yes.

MR. RUBENSTEIN: – and then Standard Oil and Standard Oil of California, but now you have a name called Chevron. Why don't you have "oil" in it anymore? What is a chevron? Why did you use that as your name?

MR. WATSON: Well, you would like this. I'm sure you know architecture; you know a lot of other things. [Laughter.]

MR. RUBENSTEIN: The last thing you think about is architecture, except the bills are high.

³ A proppant is a solid material, typically sand, treated sand, or man-made ceramic materials, designed to keep an induced hydraulic fracture open, during or following a fracturing treatment.

⁴ The Secretary of State is Rex Tillerson, former Chairman and CEO of Exxon Mobil Corporation.

MR. WATSON: But a chevron was actually an architectural symbol going back a thousand years. And so some enterprising person in our company in the 1930's figured that out. And, of course, it was associated with the military and something of strength. And so that chevron symbolizes strength and the military has always been popular, and so we use that chevron symbol.

MR. RUBENSTEIN: So now, you produce how many barrels of oil or oil equivalent a day?

MR. WATSON: Oil and gas equivalent, we produce 2.6 million barrels a day.

MR. RUBENSTEIN: And today you have service stations, have 13,000 around the world or something like that. So of those, if somebody goes in and, you know, says I want some Chevron gasoline, is it really any different than ExxonMobil gasoline?

MR. WATSON: We have gasoline that is unsurpassed and second to none. [Laughter.] [Applause.]

MR. RUBENSTEIN: Wow. At a higher price or a lower price?

MR. WATSON: I'm surprised you don't know that. [Laughter.]

MR. RUBENSTEIN: Well, I always thought it was all the same, but it's not. You know, you got a secret sauce, like Coca-Cola formula, you put something in there?

MR. WATSON: I know because we don't market in this area, we don't market in New York. You need to come to California, and we'll take you to one of our fine branded outlets there and we'll show you the high-quality gasoline that we have.

MR. RUBENSTEIN: Well, when I go to a gasoline station, I'm mostly trying to see what food they're selling on the inside part because I'm trying to get something to eat. [Laughter.] But I always thought that gasoline was the same. OK.

MR. WATSON: We have all the basic food groups, salt, sugar, we have it all over our convenience. [Laughter.]

MR. RUBENSTEIN: And when you're driving your car, let's say on weekends, your company is headquartered in San Ramon, California –

MR. WATSON: Yes, it is.

MR. RUBENSTEIN: – so on weekends you're driving around, I assume, yourself and you need to fill up. Do you go in and pump the gas yourself?

MR. WATSON: That's all you can do in California.

MR. RUBENSTEIN: You have to do that. OK.

MR. WATSON: We have self-serve, pay at the pump, all those good things.

MR. RUBENSTEIN: And what happens if you're running out of gas and the only station nearby is Exxon, what would you do? [Laughter.]

MR. WATSON: You know, that would be a bad event.

MR. RUBENSTEIN: So a lot of people like their cars with gasoline in them and so forth. They go fast, they're powerful and so forth. But eventually, maybe electric cars might come along. Will that hurt your industry, if everybody goes to electric cars?

MR. WATSON: Well, electric cars are coming and they're going to fill a role. I think their evolution is going to take more time than people think. Right now, most electric cars are on the road because they're very heavily subsidized. We're paying people to buy them and we have very significant subsidies at the manufacturing level. So it will depend on whether they can evolve and meet consumer tastes and preferences. There are currently range issues and other factors.

By the way, they still require, you know, electricity, which requires fuel. And we provide that with natural gas.

MR. RUBENSTEIN: But you don't have an electric car yet.

MR. WATSON: I don't.

MR. RUBENSTEIN: OK. So let me ask about global warming, or climate change as it's now called. Some people think the oil industry has a view that there is no such thing as climate change and you're kind of against people who say that there is climate change. What is the industry's view on whether there is climate change or global warming?

MR. WATSON: Well, I don't think there is an industry view, per se. I was at the API⁵ meeting today and there are literally dozens and dozens of companies. And I expect everyone has their own view.

MR. RUBENSTEIN: What's your view?

MR. WATSON: I think most people accept there has been some warming. If you look at the temperature gauges and you look at temperature data, there has been some warming. I think the debate is, how much is natural, how much is due to greenhouse gases, and what's likely to happen going forward.

I read everything the International Panel on Climate Change puts out, and they have a very wide range of outcomes. So I think most people know that.

⁵ API is American Petroleum Institute.

MR. RUBENSTEIN: Well, let's say you take the Paris climate agreement that was agreed to a couple of years ago. If the current President said maybe that was too tough on climate change and we ought to get rid of it, what would your view be on that? Should we stay with part of that agreement?

MR. WATSON: You know, President Obama right as he was leaving office, he said we're talking past each other on this issue. And I think this is one of those examples. If you look at the Paris accord, there are a couple of things we haven't really come to grips with. One is that it's voluntary, largely. The second is, what are the costs going to be?

So, in terms of the objectives that President Obama set out for the United States, what's it going to cost and how are we going to get there? And more importantly actually, because the U.S. is only about 15 percent of the world's greenhouse gas emissions and we're actually a very energy efficient economy is, what's going to happen around the world, particularly in the developing world?

Because I travel extensively in the developing world, and they have the same objectives we do. They want affordable energy. They have other objectives. We have to be sure that we meet all the objectives in addition to greenhouse gas. And it's expensive to do some of the things that are called for in those plans.

MR. RUBENSTEIN: But you think we should stay in the current Paris accord or you haven't made up your mind?

MR. WATSON: Yeah. No, I haven't advocated leaving the accord. I would like to see more definition. Let me give you an example. India's national plan, if you read it, it's online, it's 40 pages, and they talk about the importance of alleviating poverty and they talk about needing affordable energy, and they talk about needing \$2 ½ trillion to meet their commitments. And that's a serious subject. Where is that going to come from? India can't afford that. And so where are the funds going to come from? It's a serious issue and it merits more discussion than we've had.

MR. RUBENSTEIN: Now, you're in Washington today. And I guess today you were in Washington for the API meeting.

MR. WATSON: Yeah. I've been here four times this year. It's wonderful. Right?

MR. RUBENSTEIN: So when you go, do you meet with Members of Congress when you're here or Cabinet officers?

MR. WATSON: Yes.

MR. RUBENSTEIN: And do you think Members of Congress are sympathetic to your concerns or not?

MR. WATSON: I think Members of Congress right now are focused on an agenda –

MR. RUBENSTEIN: Other things.

MR. WATSON: – that’s very significant. Obviously, the health care vote today or tomorrow and tax reform. They’ve got a prescribed agenda. I will say I have been encouraged by some of the actions the Administration has taken on the regulatory side.

You know, when you talk about regulations, people’s eyes glaze over. And if you try it with the general public, their eyes glaze over. But I’ll tell you, when you talk to business, we can go down a list of regulations that are raising costs and I think they have contributed significantly to this economy underachieving. I would not have thought we could run up \$9 trillion in debt, which should be a stimulus, drive interest rates to zero, and never see 3 percent growth. And I think the regulations are a big part of that, not just in my industry, but in many industries.

MR. RUBENSTEIN: So when you go to talk to Members of Congress, what is your biggest agenda item? What is the thing you’re asking them to do, if anything?

MR. WATSON: Well, I’ve been asking a lot about tax reform. I think all of us are curious about tax reform. I think, you know, everyone in principle is in favor of tax reform until it affects them. And I think business has sometimes, you know, been very fractured on this. But I think most people want lower rates, they want the U.S. economy to be competitive and the issues is, how do we get there?

MR. RUBENSTEIN: So let’s talk about your background. You grew up in northern California.

MR. WATSON: I did.

MR. RUBENSTEIN: And how did you become such a good golfer?

MR. WATSON: Well, I started out caddying for my father, so I learned a little bit from him.

MR. RUBENSTEIN: So you played in college?

MR. WATSON: Played in high school and college. I got the golf bug early. I was about 11.

MR. RUBENSTEIN: But you didn’t think you could play on the PGA⁶ Tour.

MR. WATSON: I did until I played with a couple of guys that are out there today or played for a lot of years and I realized I wasn’t nearly good enough.

MR. RUBENSTEIN: OK. So, like, you’ve played in the AT&T Pro-Am at Pebble Beach.

MR. WATSON: Yes.

⁶ PGA is Professional Golfers' Association.

MR. RUBENSTEIN: And is that nerve-racking when you're doing that and playing with the pros and people are watching you?

MR. WATSON: I've played a fair amount competitively, so I wouldn't describe it as nerve-racking.

MR. RUBENSTEIN: You ever hit the ball in the crowd or anything like that? You don't do that. [Laughter.]

MR. WATSON: I've had some mishaps, yes, I have. [Laughter.]

MR. RUBENSTEIN: But when you're walking along, do people say, hey, there's the CEO of Chevron, or they don't know who you are when you're walking down there?

MR. WATSON: Thankfully, they don't know who I am most of the time, so it's good. [Laughter.]

MR. RUBENSTEIN: OK. So how did you decide not to be a professional golfer? You decided to go to business school. And after you graduated from the University of Chicago Business School, did you know that you wanted to be in the energy world, and how did you happen to pick Chevron?

MR. WATSON: Well, I had to work all along. You know, in college I worked in a tomato cannery and that motivated me to work a lot harder and to get better grades. And I went straight from undergraduate to the University of Chicago to the business school. I was pretty young actually, didn't know very much. But I graduated from the business school at 23 and interviewed broadly.

MR. RUBENSTEIN: So your entire career has been at one company. At what point did you realize you probably were going to be the CEO? Did they tip you off a few years in advance or they don't tell you? [Laughter.]

MR. WATSON: No. I really didn't know. In fact, when I joined the company I just was glad to have a paycheck and thought about, gee, if I kept my nose clean maybe I could have one of those jobs someday. But no, it was actually some years later. I was happy as a clam as the chief financial officer of the company because that was what a finance guy from the University of Chicago might do someday. And then I was asked to run our international business, and so I spent a lot of time around the world, spent the better part of three years on an airplane, you know, with all of our international businesses. And it was about that time that I realized that there might be something else in store. But, you know, I just was so busy I focused on that.

MR. RUBENSTEIN: So they called you one day and said you're going to be the CEO and you said I'll think about it, or you said I'll do it, or you said no? [Laughter.]

MR. WATSON: No, it wasn't quite that simple. We're a long lead-time business in our company. We a very much promote-from-within company. So you realize that there are some good people and there are others that are possible for the job also.

MR. RUBENSTEIN: So you are a little more than 61 now?

MR. WATSON: Almost 61.

MR. RUBENSTEIN: Almost 61. So you have to retire in your company at 65.

MR. WATSON: Yes.

MR. RUBENSTEIN: You're not going to get the age expanded or extended, I guess.

MR. WATSON: Oh, no.

MR. RUBENSTEIN: So already you're grooming your successor. But what will you do when you do retire? Would you consider going into government or would you go into private equity or something important like that? [Laughter.]

MR. WATSON: No, I don't think I will go – I know I won't go into government. I actually haven't thought a lot about it because I've been pretty busy. And when you're not making any money, you focus a lot on what you're doing.

MR. RUBENSTEIN: So last year, actually, now that you've brought it up, you didn't make any money.

MR. WATSON: Thank you.

MR. RUBENSTEIN: You lost –

MR. WATSON: Thank you for that.

MR. RUBENSTEIN: Well, you lost \$500 million, is that right, for the year?

MR. WATSON: You know, you could have brought up that we've made \$20 billion in recent years. [Laughter.]

MR. RUBENSTEIN: Well, you have. But, you know, my job is to make the other point.

MR. WATSON: You could have brought up that we've outperformed our biggest competitors for any time period.

MR. RUBENSTEIN: That's right.

MR. WATSON: You know, so, no, it's been a rough stretch. And so we're working to get our costs down and return to a suitable level of profitability.

MR. RUBENSTEIN: OK. So today, what is the biggest challenge that the energy industry faces? Is it deregulation or regulation? Is it the supply/demand factor? What is it?

MR. WATSON: I think the perception is that getting costs down and focusing on earnings and those things is the hardest thing. But actually, there are two areas that you worry about, if you will. One is replacing resource over time. We are in a depleting resource business, so you always have to have an eye out many years.

There was a lease sale yesterday in the Gulf of Mexico. We participated. There won't be any production from those leases for six, eight, ten years. We picked up a lease in Mexico. The Ambassador is here. That requires exploration work. So we think about the long term from a resource point of view a great deal.

And then I always think about making sure that our people go home safely every day. And that is a preoccupation.

MR. RUBENSTEIN: Talk about technology. Your industry is not considered a technology industry, but is it not really one where you're using a lot of technology to find out whether gas is here or oil is there? And how do you use technology to make it possible for you to discover where oil or gas is?

MR. WATSON: I do think of us as a technology business, but people don't think of us as a technology business, because our end product visibly doesn't change, even though the gasoline is a lot different in composition than it was years ago. People don't think of us as a technology business.

But, you know, I worked for the company in New Orleans back in the early '80s. And we thought deep water was a few hundred feet. Now we're drilling wells in 7,000 to 10,000 feet of water. And so that takes real technology. And we collaborate with a lot of vendors and suppliers who help us a great deal. But technology is a big part of our business.

MR. RUBENSTEIN: So people think that your job, in part, is to get oil from other countries because not enough oil here so you're always looking for new oil. Is it you have to deal with the heads of state typically when you're trying to negotiate these leases?

MR. WATSON: You know, we do. It depends on the country, but we've got the Ambassador of Kazakhstan that's here. Chevron was one of the early companies from the West to come into Kazakhstan after they became an independent country. And so President Nazarbayev is someone that we have a good relationship with. And so we do build relationships.

I mean, you talked about Rex Tillerson earlier. One of the reasons I think he was selected is because our business is a diplomacy business. And it's mostly a quiet diplomacy business. If

we're doing our job well, we may have a difference of opinion with a government, but we talk to them. So we do build relationships with governments at all levels.

MR. RUBENSTEIN: So if I wanted to invest in the energy industry, would I invest in a major like yours, should I invest in a service company? Where is the best money to be made in the energy industry over the next couple of years? [Laughter.]

MR. WATSON: Well, I've had people tell me they've invested in our stock and they're putting their kids through college here. So I think our stock remains a very good investment. And as I said, we've outperformed our major peers.

MR. RUBENSTEIN: Suppose you couldn't invest in Chevron, you had to invest in some other energy company, where would you invest? [Laughter.] Is there anybody else out there that's any good?

MR. WATSON: You know, I just can't think of anybody at this point. [Laughter.] [Applause.]

MR. RUBENSTEIN: OK. All right. All right. And today, as you look at the President of the United States and what he's doing, what do you think is the most useful thing he could do to help your industry? Is it deregulation?

MR. WATSON: You know, what I would like to hear out of our elected officials is a positive statement about the role of private enterprise. I told you I went to the University of Chicago. And I would really love to hear about the virtues of competition, the virtues of free enterprise in this country.

And, you know, we remain a country that's very popular overseas. Many countries still look up to the United States. And I think we have to have a positive narrative for our own people in this country, to talk about all the things that we have going for us, and energy is just one of them.

Around the world, they think we're the luckiest country in the world. They say you've got oil, you've got gas, now you've got this shale oil and shale gas, you've got vast agriculture, you have so much. And I think we could do a lot by unleashing that and making sure that we understand that what got us here is a very strong private sector.

MR. RUBENSTEIN: What about renewable energy? Are you involved in helping to promote renewable in some way? Do you think there's enough potential in renewable in our lifetime? Or what is your view on that?

MR. WATSON: Well, actually, we've been the largest producer of renewables amongst major oil companies, thanks to our geothermal business that's in Indonesia and the Philippines. We had difficulty growing that in recent years, but it's been a big business for us. And we've done a lot of work on advanced biofuels. And that's very hard. I don't think anyone feels corn ethanol is a solution. We've got 40 percent of our corn crop going to that, and it's a big land-use issue. But advanced biofuels have been tough.

Wind and solar have their role. They're not new. I just think we ought to make sure that they can compete. And that instead of mandating volumes of wind and volumes of solar, we do a lot of that in this country, and what we're seeing is we're driving electricity prices up. I mean, it's ironic. In California, 60 percent of the electricity comes from natural gas, but utility rates are going up very quickly because we're pushing capacity that may not be needed because we have to hit a mandate into the system.

MR. RUBENSTEIN: So when you're trying to get oil overseas, you have to meet with heads of state, do any members say, well, like, maybe I have a favorite charity you could help or my son would like a job? Do you ever have any of those kind of things that ever happen, or you have to be very careful?

MR. WATSON: We're very careful. [Laughter.]

MR. RUBENSTEIN: Nobody ever asks for anything, they just say you have the best.

MR. WATSON: Actually, governments all have different priorities and they all want local content, they all want to build up the industry in their own country, they want jobs in their own country. So we do face those demands. In fact, they're a part of many of our agreements. And a lot of the social work that we do, we do much of it voluntarily, but they want development in their country. They want a better way of life. And they want more than just come in, extract, and leave. And that was the model 50 years ago. That's not the model now.

MR. RUBENSTEIN: So let's suppose I'm a young person graduating from college, just as you were, or graduating from business school, why would I want to go into the energy industry? What would be the pitch that you would make to me to want to come to the energy industry as opposed to something more important like private equity? [Laughter.]

MR. WATSON: You know, that's such an antiseptic business. You know, I greatly enjoy our business. And what I've learned about the things that we do to enable progress, you have to have fun. I have fun in our business. If you look at geopolitics, look at technology, everything we do, it takes many different disciplines, many different areas of expertise to make this business work. And it's a fun business.

And I would encourage people to pick something they're going to have fun with. And I never thought I'd spend 37 years with Chevron, but I keep being asked to do different things and have had a lot of fun over the years.

MR. RUBENSTEIN: So if I wanted to tomorrow, let's say, make a bet on the price of oil whether it's going to go up or down, which way would you suggest? I bet in the next week or two or three? [Laughter.] It will go up or down.

MR. WATSON: You know, I'm surprised you ask given my track record. [Laughter.]

MR. RUBENSTEIN: If you knew mine, yours is better I'm sure.

MR. WATSON: No, part of the difficulty is trying to predict what governments will do. And markets can be very fickle. I will say that over the near term it's probably range bound for a little bit. But if you look forward, it is going to take more than just the shale, more than just some of the short-cycle-time investments that you hear a lot about.

We're in the midst of a project where we're spending \$3 billion dollars a year for the next five years in Kazakhstan because that is, the Tengiz Field, which we have 50 percent ownership in the company that operates it, we're going to need oil fields like that developed around the world if we're going to meet supply. So we do make those kinds of commitments. And it's going to be needed and it's because oil prices are likely going to need to be higher than they are to draw that.

MR. RUBENSTEIN: Final question would be, what's the downside to being the CEO of Chevron? Other than an interview like this, is there something that is the downside that you don't really like about the job? Or you love everything about the job?

MR. WATSON: No, you know, I told my kids, I have two boys.

MR. RUBENSTEIN: Are they in the energy world?

MR. WATSON: No, they're not. And I told them, you know, if I ever complain, go get a hammer and hit me until I stop complaining because I am very fortunate. You know, there's something about, you know, traveling around the world, particularly in the developing world, where you talk to Chevron employees and they are so proud of what they do. In many cases, we're not just producing oil and gas. We operate a meritocracy. We have certain values by which we operate and they love it. And to see the look in their face when I show up, I may not take myself too seriously, but they do. And they are so proud, they're so wonderful.

So I get excited by meeting with employees. Tomorrow I'm going to Pittsburgh, and our employees are waiting. And I look forward to that. And I have no regrets. And any CEO that complains shouldn't be a CEO.

MR. RUBENSTEIN: All right. Well, thank you very much for an interesting conversation. [Applause.] Thank you.

MR. WATSON: Thank you, David.

MR. RUBENSTEIN: On behalf of the members of The Economic Club of Washington, I'd like to give you a gift, a copy of the original map of the District of Columbia.

MR. WATSON: Thank you very much, David. Thank you. [Applause.]



JOHN S. WATSON

Chairman of the Board and
Chief Executive Officer
Chevron Corporation

Chairman of the Board and Chief Executive Officer John S. Watson, 60, is chairman of the board and chief executive officer of Chevron Corporation, a position he has held since 2010.

Previously Mr. Watson served as vice chairman of the board from 2009 to 2010 and was responsible for business development; mergers and acquisitions; strategic planning; corporate compliance; policy, government and public affairs; procurement; and the Project Resources Company.

In 2008, he was elected executive vice president for strategy and development. In 2005, Mr. Watson was elected president of Chevron International Exploration and Production Company. In 2000, he led the company's integration effort following the Chevron-Texaco merger and then became the corporation's chief financial officer. In 1998, he was elected a vice president of the corporation, with responsibility for strategic planning and mergers and acquisitions. Prior to being elected president of Chevron Canada Limited in 1996, he held financial, analytical, and supervisory positions.

Mr. Watson serves on the board of directors and the executive committee of the American Petroleum Institute. He is a member of the National Petroleum Council, The Business Council, the Business Roundtable, the J.P. Morgan International Council, the American Society of Corporate Executives, and the University of California Davis Chancellor's Board of Advisors.

Mr. Watson joined Chevron in 1980 as a financial analyst. He earned a bachelor's degree in agricultural economics from the University of California, Davis, in 1978 and a master's degree in business administration from the University of Chicago in 1980.

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