

# Robert Skinner

**Date and place of birth (if available):** Rural Ontario, somewhere between Toronto and Ottawa

**Date and place of interview:** Wednesday, August the 29th, 2012; Canada School of Energy and Environment located at 906 - 8th Avenue Southwest, Calgary

**Name of interviewer:** Brian Brennan

**Name of videographer:** Peter Tombrowski

**Full names (spelled out) of all others present:** N/A

**Consent form signed:** Yes.

**Interview Duration:** 1 hour, 47 minutes

Initials of Interviewer: BB

Last name of subject: SKINNER

BB: My name is Brian Brennan and today on Wednesday, August the 29th, 2012 I am speaking with Dr. Robert Skinner for the Petroleum History Society Oil Sands Oral History Project. We are conducting this interview at the office of the Canada School of Energy and Environment which is located at 906 - 8th Avenue Southwest in Calgary. Also with me today is Peter Tombrowski, who is recording this interview on video. Dr. Skinner is an independent strategy advisor and consultant, currently advising the Canada School of Energy and Environment on its strategy and research programs. He worked in public service for many years. And more recently, has been associated with such companies as Statoil Canada and Total EMP Canada, assisting them in getting involved with the oil sands. So, good morning, Bob.

SKINNER: Morning.

BB: Thanks for doing this. Maybe you can start with you just giving a brief biography of yourself, where you were born, where you went to school, that kind of thing?

SKINNER: I was born in rural Ontario, somewhere between Toronto and Ottawa, up against the Canadian Shield. And, like all good farm boys from Ontario I went to Queen's University where I studied biology, and then I majored in geology, and then when I graduated I went off to do graduate work at the University of Washington in Seattle. That was in 1968 during the tumultuous times on campuses in the US. And, I did a masters and a PhD in geology at the University of Washington, and my specialty was in the last million years. And, I did a project on the glacial, inter-glacial stratigraphy and ancient climate changes as reflected in the buried deposits of the James Bay Lowlands, one of the most formidable swamps in Canada. But, it has a terrific geological record, and I made a few breakthroughs there interpreting the ancient climate change. And then, my project was

for the Geological Survey of Canada, they funded it. And I also had a Naval scholarship, so I was fairly independent and I finished my research fairly quickly and, good thing, because the Geological Survey of Canada was having a hiring freeze but they wanted to hire me. So, I showed up in advance in Ottawa and started my research there. I worked on developing techniques for exploring for base metals up in the northern Quebec Abitibi area of Ontario and also to look for diamonds. Because we knew that diamonds existed in the Canadian Shield and develop those techniques, which eventually led to the discovery of diamonds and the development of the diamond industry 45 odd years later.

And then in 1973, I was seconded to foreign affairs as a science advisor at the headquarters for Law of the Sea, Outer-space Law and so on. That was during the Cold War. And also part of the negotiations, supporting negotiations for the Canadarm, for the space shuttle with NASA. So, those relationships with NASA which all seemed like Buck Rogers to me, sort of like oil sands. They retired the shuttle just the same year that I retired from the industry, but I'm not entirely retired. That was last year. I was over there for two or three years, I guess and then with the explosion of environmental issues internationally, but also in Canada and the requirement for the federal government to do environmental impact assessments, I was recalled to the Department of Energy, Mines and Resources to set up the office of Environmental Affairs, which I did.

Then in 1980, after the famous and infamous National Energy Program, the Deputy Minister asked if I would write an oil import strategy because that was an issue raised in the NEP but was never filled out. The minister at the time, the previous minister rather, Alastair Gillespie, had struck a state-to-state oil deal with Mexico. And, Canada wasn't alone doing those things because other countries had state-to-state oil deals and used their national oil companies to achieve those. But, the deal with Mexico was terrible because it brought in lots of heavy oil that our refineries in the east couldn't really use. So, I wrote a rather technical – I was a technical person, the geologist, doing this as opposed to the economists on the NEP side – and I came up with all kinds of technical reasons and business reasons as to why pursuing more state-to-state oil deals would be the stupidest thing we could do. And, the Minister (Marc) Lalonde actually bought it, the advice. And, it sounds a bit boastful, but someone from the National Energy Board subsequently told me years later that he saw that as turning point in the NEP. But actually it was maybe a turning point in the intervention of the government in the oil and gas industry. But, international oil prices really took care of that.

I was then asked to look after the administered oil pricing system, the infamous new oil reference priced, oil import, the synthetic crude oil price compensation and so on. And, I did that and ran an account that was multi-billion dollars. In fact, it was the largest line item in the public accounts of Canada until the terrible double-dip recession of '82, '83, '84, '85 that then made unemployment insurance the biggest line item surpassed. By that I mean, it was \$4 or \$5 billion a year was the compensation account for fuel import compensation and so on. And then, when the Mulroney government was elected September 4th, 1985, and I remember that that date, because September 4th, 1974 was when Pierre Elliott Trudeau, in face of the rise of international oil prices as OPEC seized control of the pricing system. Trudeau asked the oil industry to freeze oil prices and not pass them on at the pump. That led to a series of first ministers meetings, which actually Bill Davis, the Progressive Conservative leader of Ontario and of course, Quebec insisted on having a lower made-in-Canada oil prices. A few people realized that pressure came from central Canada and not Pierre Trudeau himself, although I'm sure he enjoyed the lift that gave to him politically to have the so-called "made in Canada" prices. It was a most arcane bizarre system and we thankfully deregulated in 1985; that was oil prices.

Then subsequently, natural gas prices and about that time, actually 1985 I was appointed assistant deputy minister of energy commodities succeeding Roland Priddle who went off to be chairman of the National Energy Board. And then, my principal job was to downsize a large part of the department. I had, I think, well over 380 something staff. I wrote a report saying that I couldn't see any reason why the Canadian government needed to have all those people; in particular, looking over the shoulders of the oil and gas industry. And so, I took over the role of another assistant deputy minister in uranium, nuclear and electricity and alternative transport fuels, emergency planning, et cetera. And so, I spent most of those few years downsizing and counselling people out and advising new ministers as they came in. Then, in nineteen ... I actually did myself out of a job again. And at that time, the world was starting to address the climate change issue. Again, I say again because I've been exposed to that several times when the climate was getting colder.

In '77 there was an interdepartmental working group on climate change when the environment department thought that the energy department was not being aggressive enough on regulations to ensure that Canadians had lots of oil and gas to keep us warm in a colder climate. Of course, there are lots of reasons why that misinterpretation applied. But anyway, I did myself out of a job. There were two assistant deputy ministers of energy. We didn't need two, they only needed one. I got in the terrible position of being... it was the minister vehemently disliked the deputy minister at the time, who actually sort of tended to favour approaches to problems that the previous government, the liberal government, would favour with lots of programs and lots of civil servants. And, the Mulroney government was not interested in that sort of thing. So, there was a real conflict.

The minister used to call me directly, which was just not a position to be in. And so, foreign affairs had been asking me repeatedly if I would throw my name into this international log-rolling race to become director of policy at the International Energy Agency in Paris. And, I had said, "No, I'm not interested in that." But then, I basically had to get out of town, and the post had been held by a Canadian once before: a former deputy of finance. So, I called him and he said, "Well, nothing happening in energy." But, he says, "It's great opportunity for you to go, for your boys." And, my sons at the time were 11 and 13 or whatever, and off we went. I got the job and off we went. And, no sooner did I arrive and the wall came down in the east against all **the pundits'** expectations. Then we had the first Gulf War, and the International Energy Agency was implicated in that because we organized the OECD member states' strategic reserves of product in crude. The US is talking today about the SPR and whether Obama would use it in the face of hurricane Isaac. So, that put the IEA back on the map and of course, with the wall having come down we had a whole stream of governments, new governments from the central European economies, coming to us saying, "How do you set up an energy department or a finance department? Or, how do you do policy for a market-based economy and a pluralist government economy?" So, I led several teams who immediately went to Budapest to meet with those officials. I led a team to do the first review of Czechoslovakia when it was. Then, I also did one for Ukraine and also after Apartheid ended in South Africa. Then both the ministers of mines of energy came to the OECD and IEA and begged us to come down and give them some advice. So, I led a team down there. And, we interviewed some 70 odd unions and politicians and so on. Fascinating experience; I wrote the first review on South Africa's energy sector.

Anyway, I stayed there for my term as director and then the government was going through the Martin ... Paul Martin was finance minister and there was major downsizing in the federal government. So, I took early retirement at the ripe age of 50. Total and the French government were interested in my work that I'd done on gas and power and deregulated markets. So, I joined Total,

and was there as a gadfly to kind of stimulate new ideas but principally on the downstream gas and power group doing strategy and business development and LNG and so on. Then, I proposed that they get into the oil sands. They were very simple about it and I said, “You know, we’ve got the technology: SAGD has been demonstrated in the Underground Test Facility.” There was a new fiscal regime in place, a generic regime rather than the one-on-one negotiations that we used to do with the province, which were terrible and unproductive, and inequitable between companies. And also, all of the leases that were taken out in the 50s, the late 50s and early 60s, were coming up for renewal and so there would be this period when new players with new ideas and capital could possibly make a contribution. I was wrong on that.

Anyway, they simply said, “Yeah, pourquoi pas?” So, I came back and set up the office. In fact, Total had been here twice before and they exited with an IPO, their holdings back in, I guess it was 1990 or ’91, and I used my personal credit card to rent the office, because they had no credit rating in Canada, or no longer. And, within a month and a half, we were in a data room with Gulf Canada to look at the Surmont Lease. And, Total wanted to (a) get access to the technology, to see for themselves – they’re very French – that SAGD works. So, they wanted to get access to some pilot projects and Gulf had two, Kindersley and Surmont. So, we stipulated, yes, an entry and the usual kind of terms of the agreement. And, with the objective of putting in a third ... they had two well pairs. They were short; they wanted a longer one and have it well instrumented, run it for at least two years so that we’d get the learnings from that on which to base a project. Long, long negotiations, 13 months before we finally got a deal. All kinds of off-ramps, Gulf Canada was somewhat stressed, remember this is ’98. And, oil prices had just bottomed out after the Asian Crisis.

And so, there was very little being done. You could have picked up leases at five, six, seven cents a barrel. In fact, I recommended Total buy the Deer Creek Lease when I was doing some scouting in ’97. We could have had it for \$20-\$25 Million depending on puts and takes with the leaseholder, which at the time was Talisman, because they wanted to get rid of that. However, they said, “No, no, no. Mining is not our forte.” And so they didn’t want it. And, it was too quick to make that kind of decision. Just to leap ahead, eventually in 2004, I believe, or in 2005, they bought the Deer Creek, the Joslyn Lease for many, many times that.

BB: Oh, really?

SKINNER: Billion, yeah, Billion plus. But, that’s the way of the history and that’s an indication of the boom. Then they merged with Elf, or Fina. They bought Fina, effectively and they merged with Elf. And then, by 2001, 2002 things were again very quiet, there was a bit of a slump in the market. Having merged with Elf, they had all these cadres in France that they couldn’t lay off, being a somewhat socialist country. So, they were getting rid of locals and giving them packages and so on. I was on a special contract, so we had a friendly departure, and I went off to do something else. The Prime Minister’s office actually asked me to dust off the Alaskan Gas Pipeline file, the Northern Pipeline Agency. So, I did that for a while and wrote a report as to the viability of that legislation. Then, the Oxford Institute of Energy Studies called, “Hey, come over and run this place; it’s a **think** tank in Oxford.” So, I said, “Why not.” Energy was getting very interesting again, so I went over there, during the second Gulf War.

I was there for about a little under four years and then I said, “I’ve had enough of that.” Academia was very interesting, it was a very interesting time, and I was coming up to 65 and so I said, “Sure.”

Or, 60 rather, so I said, “Sure,” and I left. As I was leaving, Statoil wanted to get in, the Norwegians wanted to get into the oil sands, they said, “Do for us what you did for the French.” And, I said, “Yeah, okay.” So, we scouted around and eventually they bought the North American Oil Sands Company and then they asked me if I’d stay and help them with business development and legal and government relations and general corporate stuff. And, I did lands and all kinds of stuff. Then I retired, finally from Statoil Canada last year and so I’ve been doing a number of things since.

BB: So, when did you first hear about the oil sands and what did you know about them?

SKINNER: Well, it’s interesting. My first summer job as a geologist was here in Alberta. To go up in the Swan Hills was the idea, so I came out and did the seismic shot logs to get the surface geology and so on. Did that job and they said, “Okay, we’ll go down and join a field party at the Head Smashed in Buffalo Jump.” So, I was working down there on the geology. That took all of the day to do that because it wasn’t as archeologists had thought. Then I went up to the Athabasca River. And, I was doing the geology as a senior summer student, a junior summer student rather, for Geological Survey of Canada. And, going along the Athabasca River and other rivers, you encounter these great ... well actually, big boulders of the carbonate that had been plucked up by the glaciers. And, the bitumen is in the pores and so on, and dig it out with your hunting knife. And also, as you go further down the river the glaciers froze to the oil sands and then got reinvigorated and of course, plucked this stuff up and moved it and you can see this stuff in the glacial moraine.

BB: So, what year would that have been?

SKINNER: ’66.

Then that was my first exposure and then when I was in the environment office in the EMR under the time, under the environment minister, Jeanne Sauvé who became governor general eventually. There was a big issue about acid rain with the US and of course, the Inco stack up in (Sudbury) was a big sore thumb and also the Syncrude stack had just been built, ’76-’77, and it was belching out hundreds of tonnes per day. And so, that was a big issue. But at the time, energy security and the importance of ... remember this is ’76-’77, the early signs of the problems in Iran, the oil prices were beginning to pick up again, ’78. And then, ’79, of course the Iran revolution and it was a simple matter of the political interplay between environment and energy security. And so, they went slow I think and my recollection was that we were fairly slow on Syncrude and getting them to do something. But, the company saw that it would be within their interest to do something and they did. Whether it was enough, I cannot recall. But, I remember one of the arguments being that, “Oh well, the soils out there need their alkaline and they need the acid rain anyway. So, it won’t do them any harm.” That was trotted out.

Then of course, in Ottawa we had the oil sands negotiations, and then we had the OSLO negotiations, probably others have talked about those. The original six lease owners – that was during the Mulroney government – which was bizarre because I thought they would get away from doing these mega projects with these huge handouts and uplifts for industry. But, both of those projects fell through. That basically was what led to the decisions of the governments and industry was to sit down through the Alberta Chamber of Resources that really stickhandled this thing to get a discussion of what kind of fiscal regime should be applied to the oil sands. That came out in ’96, I believe. A generic regime that was then adjusted by the Stelmach government with the rise of oil prices, but still a generic regime, just the numbers have changed.

BB: What was the federal government's general position then back when the OSLO negotiations were going on?

SKINNER: Clearly, they were negotiating corporate tax. They were negotiating low interest loans. And of course, the provincial government said, "Well, what are you going to put into the kitty," in terms of royalty relief or municipal tax relief or whatever? To get it right of course, our economics branch was deeply involved in doing the modelling based on price assumptions. The price assumptions at the time were not particularly robust. They were also doing negotiations on Hibernia project to get that going. And so, the federal government was leading in these because they had the pockets, perceived to have the pockets, to underwrite these projects; of course, the Lloydminster upgrader with Husky and then one other one, the Co-op Upgrader in Saskatchewan. It goes back to Syncrude and Syncrude if you recall was the Ontario government, the federal government and..

BB: Imperial Oil ...

SKINNER: Alberta government, Imperial Oil, Cities Service ...

BB: Atlantic Richfield...

SKINNER: Atlantic Richfield and ARCO and so on, yeah. I wasn't part of those negotiations because I was in the environment office at that point. So, the federal government really was negotiating those things and they were very fragile. I mean, any change to the oil price and the thing would fall apart. Because they didn't want to be, obviously, too generous and the oil price was up and down, sagging. And Hibernia is not going to make any money when we want \$21.00, and we're not going to get \$21.00. And, the federal government's share, it generated a lot of money for the feds.

BB: I don't know all the facts on the OSLO failure, so maybe you can tell me why it eventually fell apart? Do you know?

SKINNER: That was done in '87-'88, in there. And I recall, Mulroney's government, the second election was coming up. And there were these three negotiations going on at the time that Mulroney wanted to get finished. One was Hibernia, one was the OSLO, the other one was the Vancouver Island Natural Gas Pipeline, which was a promise that went way back in the Liberals time. And the Tories had, during the campaign, had said something out there. Pat Carney had said, "Yes, we're going to get gas to Vancouver Island," and so on. And actually, I led those negotiations for the federal side. So, there was a bit of a hurry to put that package together prior to calling an election. And so, they were put together and I remember flying with the minister from Whistler, where we announced the Vancouver Island Pipeline deal.

We flew in a little jet over to Fort McMurray and there was a ceremony there to announce the OSLO thing. But, I think it was simply a matter of the price not performing. And, it fell apart. And, of course then, the companies said, "No, we're not going to do this..." So, that really was the nail in the coffin of those "one-off" project-by-project negotiations, which is not the way you should do it. You should have a generic regime.

BB: Were you involved then in crafting the generic regime?

SKINNER: No. At that time of course, I was at the International Energy Agency. Because, I went there in 1989, in January 1989 effectively, so the hustle fell apart and then ... But, I was watching it closely because at the IEA, we were concerned and interested in member countries' oil production. But, I wasn't involved in the Chambers' discussions. But, I would talk to people in the federal department of energy and it is like, "Okay, what are the feds going to put on the table?" Well, they put the accelerated capital costs deduction that the hard rock mining sector had, a few other things I'm not quite sure of. But, the feds had very little to give and it was up to the provinces to come up with a royalty regime that depended on payout.

BB: You touched on acid rain. You mentioned that when you were with the office of environmental affairs and the federal department of energy there was an issue with Syncrude regarding acid rain. But basically, they promised to be good boys and good girls?

SKINNER: Yeah.

BB: And, do the right thing and that was the end of that. You also mentioned, in a note to me I think, that while you were administrator of the pricing system under which synthetic oil was to receive the world price, that you had to rectify some imbalances in compensation to the companies after the phasing out of the National Energy Program. Do you remember what was involved there?

SKINNER: Yeah. I actually, I have had a family emergency, so I didn't get around to going back and checking something with one of my contacts at that time. But for reasons that I do not recall, but I could find out, it'll take a bit of digging. Suncor did not get the same compensation that Syncrude got. I was brought in to administer this thing and at first I had a set of questions that I in doing my briefing, a set of questions, I said, "Why not? This is bizarre." There were some arcane reasons why this happened, probably because Suncor was considered not to be new oil because it started before 1974. Syncrude started in 1977 or thereabouts. I think there were other fiscal and uplifts that Suncor enjoyed and for that reason I believe the Alberta government didn't raise a stink. At least I don't recall. In the end, Suncor had a small office in Ottawa. And, I remember the junior person there became a good friend of mine. He was a former Alberta official and he worked with an interesting individual, for an individual there, who spent hours and hours and days and months lobbying patiently the finance department in Energy, Mines and Resources to get that fixed. In the end, we fixed it.

Of course, the petroleum compensation system, the petroleum ... what is it called? ... the Petroleum Administration Act, I forget the name of the act. It was an incredible piece of legislation that came out of that energy security Omnibus Bill of Trudeau's in 1982, which was then broken up into several bills. I remember being part of the committee in that sort of drafting exercise. It allowed the minister to declare any liquid hydrocarbon. And to declare any price for it. So, you could have a bottle of Chanel perfume if it had some kind of hydrocarbon in it and give it a price of a \$1,000 a barrel to compensate it; which led to all kinds of interesting issues later on with Minister Chrétien when he was the energy minister, Prime Minister Chrétien. So, we had to do a special regulation that gave Suncor the price. So, I spent a lot of my time drafting regulations with lawyers. It was an interesting program and we did have all kinds of puts and takes. Of course in 1982, when the price of oil started to go south, you remember the September agreement after the NEP that negotiated with the provinces of Alberta and BC and Saskatchewan, principally Alberta, that led those.

Then there's the agreement on this pricing agreement, pricing and other things that would allow the price, the domestic price to go up every six months and as long as it was 80 some odd percent, no higher than 85%, I believe, of the world price. Of course, in order to pay for that difference as well as the difference between the world price that the import dependent refineries in Canada paid for their oil and this regulated domestic price that went up in six-month steps. That was paid by the petroleum compensation charge and was a levy that was imposed on all consumers of oil in Canada and had to be set by the compensation board, of which I was a member. In such a way as to anticipate all these payments we made, to anticipate how much new oil is going to come out of the ground as well as drilled after a certain date, which we adjusted the date even back further, back in 1982 to get more money into the pockets of the oil industry which made me very popular. But the pass-through of the petroleum compensation charge was instantaneous. So, when the minister announced it, it passed through that night at midnight. The oil price increases, it gave them 60 days to roll through to central Canada and then gasoline prices would go up. Of course, they would never go up necessarily to recover the full cost of that. But, it was an amazing system and I worked with all the producing provinces. I mean, Ontario had new oil off Lake Erie. Ontario to BC, so we had a regime basically that plugged into their regulations that defined total depth and defined when the well was completed and so on or when it was spudded.

So, I had very good relations with the administrators in the various provinces. But, it got way out of line because the differentials between their regulated price which is done on the Alberta Petroleum Marketing Commission's grid of sulphur and gravity, that was a very straight line because each of those little boxes and within each box there would be a quality adjustment for the price and of course, reality for the price of heavy oil and the very lightest condensate, if you like, the sweetest oil was different. The lightest, sweetest oil was getting compensated at a price way higher than it actually was commanding in the market. Of course, the very heavy grades were getting terribly over-compensated on the straight line system because the curve differential was like that they were getting a terrible uplift which led to a hilarious anecdote.

When we got around to deregulating, the chairman of the Canadian Petroleum Association, the precursor to CAPP, the big industry side, he wrote the minister of finance, Michael Wilson, this letter which caused us great, I mean we just about peed our pants laughing at this letter. Which basically said, "Commend the new government's deregulation of oil prices and blah, blah, blah, but we draw your attention to the very difficult times the heavy oil industry is having and therefore, while we like international oil prices we must have the new oil reference price. That is, a regulated price for the heavy oil." Which shows they didn't get it. I remember during the negotiations and I spent a lot of time back and forth, not only meeting with the government but also, principally the industry. I spent a lot of time telling them so they understood the system. I mean, they were on the end of the whip of this very bizarre and arcane calculation which only a few people understood and when it came to "Okay, we're going to deregulate oil prices," I said, "How about cold turkey, overnight?" "Oh, we can't do that, we can't do that."

You've got to remember that a lot of guys went out and drilled in eastern Alberta and Saskatchewan for the heavy oil because it was a no-brainer. There's lots of it and it paid pretty good money if you had that new oil reference price for it, so a bit of a gravy train. So, I said, "How about 30 days?" "Oh, well we can't do it in 30 days." They said, "We would need at least three months." I said, "No, no. That's way too long." Because, there were other cycles in the payment role to payments and we said, "Okay, 60 days we trade it off." Which was a bit of a give and I remember Alberta said, "Well, we have to keep the pro-rationing system." because of the IPL, the pipeline system, was a little bit



chock full at the time, obviously with the stimulus. I remember the late Rick Hyndman, dear friend of mine, and he was an economist. In fact, he was the guy who asked me to come and help him to clean up the mess here at the Canada School of Energy and Environment. And of course I said, “Of course I would after I retire.” And, I did and poor Rick passed away. But, I remember Rick trying to keep a straight face arguing on the other side of the table – he worked for the Alberta government – that we need to keep the pro-rationing system. He’s an economist and I’m a geologist and I would say, “Well, this is very strange. I would have thought that as an economist you would expect the market would clear itself.” So, the producers would just drop the price until either they didn’t produce any more of the stuff or it would be cleared in the market. Anyway, he laughed and admitted it and then they finally said, “Okay. We’ll forget that.” It was very interesting times and very easy. And of course, we were pushing at an open door to deregulate oil. Deregulating gas a little more difficult and problematic, then the Free-Trade Agreement came along and then NAFTA was in the 1990s.

BB: So, when you finally fixed the compensation issue for Suncor, did you have to write a cheque for back pay?

SKINNER: I don’t recall. I don’t think we did. My recollection was that there was no retroactivity.

BB: Let’s jump to Total. When you worked with Total then in the 1990s, you encouraged them to get into the oil sands. What was the reason for that?

SKINNER: Total is a big company in a 130 odd countries around the world. Given the air cover that the French government had historically given to Total, it was basically a state oil company, Compagnie Francaise des Petroles, CFP, which people used to joke was “can’t find petroleum”. But they were involved in the discovery of the original Kirkuk field in Iraq, and they’re in West Africa, in all kinds of dodgy countries.

And as the investment community would say, they had a rather excessive amount of non-OECD risk in their portfolio, that is they’re in countries that had high political risk, maybe they had very good prospects but the commercial risk was high. And so, these compounding risk factors in terms of an investor, it’s not good. So, you need some OECD risk. That wasn’t the primary reason but they already had gone into the Orinoco, in Venezuela under the Apertura Program of opening up to the international oil industry the oil development in Venezuela. So they had the Sincor [now, PetroCedeno] project and they were actually looking around for partners here in Canada to join them, through Statoil. Statoil remained as a partner with Total and PDVSA. There’s transferability, it’s the same value chain, and so there’s a logic for getting into the oil sands. And it’s an immense resource, and the technology had been proven, and the reasons I gave before, the new fiscal regime ...

BB: And presumably the price was right at that point too?

SKINNER: Well, the price was not right.

BB: Oh, okay.

SKINNER: Because, this was in ’96 that I started with ... January, ’96 with Total. ’97-’98 was with the crisis. But, probably one of the brightest CEOs I’ve ever encountered Thierry Desmarest who was an extremely astute, brilliant man, a very clear thinker and not a complicated person. If you

come to him with a project, a venture that makes sense in terms of scale, in terms of their matière, that is what they're good at and it fits, he will say, "Yes, let's look at it further." And of course, there's a very rigorous, structured approach to it. But, he looked at this as being ... I remember the discussion and before the committee exécutif saying, "Well, at these prices nothing makes sense." But, at \$10 Brent, the project in Venezuela paid its costs. Such were the economics of that project and the fiscal burden put on it which was extremely light. That project made a lot of money, of course, with its history and what President Chavez has done with the regime down there, with the fiscal regime and changing it. But, they still made money. So, they said, "Why not?" at least we have a Canadian.

So, I came here, as I said, and I was joined by a senior Frenchman who had been in the company a long, long time. Actually, had been posted here to Canada back in the early 70s and we were a perfect match. He's a great guy and he passed away last year, unfortunately. But, he had all that was needed in terms of internally back in France and I had what was needed here. So, we were very complimentary in terms of our skills and whatnot. During that time, Shell, just to show the Total approach, BHP withdrew from the Shell project which eventually became the Albion Sands project. And, Shell was looking around for a new partner and so I called Neil Camarta who was running that and he said – this is commentary on Neil and his style but also the Canadian and Calgary approach to business development – I said, "You guys have lost your partner," and even though it was mining and I knew Total was very reluctant to go into mining. Even though they were in coalmines in South Africa.

So, I kept arguing with them: "At one point we were never in LNG but we're in LNG. At one point, we were never in offshore, deep, hot, high-pressure fields in the North Sea, we're doing that now. I mean, just because we've never done it doesn't mean we shouldn't do it." But there was a real bias in the company. And, a real ignorance in the sense of the French interpretation of the meaning of that word, they did not know what there was. I remember trotting the project around in the company, which you have to do. You've got to get key people on board. Then the downstream people said, "But, are there any pilot projects to prove that this can be produced?" And, this is in '97. At that point, I mean Suncor was producing 200,000 some odd barrels a day and Syncrude was 310,000 or whatever. There were pilot projects like SAGD and cyclic steam in Cold Lake and so on.

The lack of awareness, not only in Total but throughout Europe, was phenomenal. I encountered that when I went to Oxford and I was writing a book called, "Difficult Oil" on all of these unconventional forms of hydrocarbons, on oil sands, cold liquids, gas liquids, bio-fuels and so on. And, regarding the oil sands, they knew nothing about it. That was in, I guess, 2003. That is less than a decade ago. You could give a talk down in London and have people say, "Oh?" I mean given all the hurly-burly we've encountered in the last five or six years, hard to understand that, but I can tell you 15 years ago, oil sands hardly ever mentioned.

BB: So, there's a little bit of educating on your part then?

SKINNER: A lot. But, Mr. Desmarest said, "Yes. Let's go." The business plan was very simple: Seek out a company with a large resource base, a pilot project, learn and have a presence and eventually get some leases and so on. And, it was as simple as that. So, of course, the rest is history, with Gulf being bought out by – and I recommended that Total buy Gulf – but again, the price wasn't right. And, they eventually came back to realizing that mining was ... But, coming back to the Shell project, Neil Camarta said, "Well, come on over." I said, "Well, when?" And he said, "Can you

come over in about an hour?” I said, “Sure.” Actually, half an hour, I remember because I went into see Jean, my buddy. And I said, “Jean ...” because we’d been talking about the Shell project and BHP’s withdrawal. And I said, “Look, we’ve got a meeting with Shell about this.” “Oh good,” he says, “When’s it going to be?” And, he was getting out his calendar. I said, “By the time we walk over there.” And he said, “No.” And I said, “Yeah, it is okay because I know the guy.” So, he says, “This is fantastic.”

So, we go over there and Neil has a team in there and a lawyer and he gives us a CD with ... and I said, “Look, we’ve got a sign a confidentiality agreement.” He said, “Bob, I know you.” I said, “Yeah, we’ll have to fix this up.” “Okay, fine.” So, he gives us a presentation and so I got back and write a thing, we write a thing for our business development people in Paris. And again, we came up against a system of prejudices. I don’t mean that in a pejorative sense but préjugés of mining, c’est pas pollute. So, it didn’t go up through. But, I subsequently talked to someone who had the ear up to Thierry Desmarest and he said, “Had you ignored the structure and gone directly, history probably would have been different.”

BB: Oh, okay.

SKINNER: But anyway, they eventually got into mining and paid a thousand times more than they should have, or maybe could have at one point, but that’s all right. I think the deal they’ve done with Suncor is fantastic. It’s an excellent, very sensible thing for them to do.

BB: So, by contrast then when you joined Statoil, you didn’t have to convince them? They were already convinced?

SKINNER: They were very keen.

BB: They were asking you, “How do you we do this?”

SKINNER: Yes. They were keen to get in. They were Johnny Come Lately, totally different context. Oil sands was the girl on the block that everybody wanted to court. Unfortunately, a lot of the best leases had been taken up. There were a lot of companies out there who were building up a land base, small Canadian teams like Ameg or whatever. And, North American Oil Sands had assembled a land base of what can generously be called second tier resource. But, the Norwegians have probably an over-inflated belief in their ability to be technologically innovative and to solve the problem and to extract wealth from a resource that the local peasants here in Canada have been unable to do. And, they arrive at that conclusion by a manifestly terrific story in the North Sea. But, one that has been somewhat force-fed. Statoil was set up as conscious act of the state, to get a piece of the action of the North Sea. The Norwegian model of resource management and conservation is unique. And, it’s only in Norway. I mean it’s a fantastic story. They insisted on the majors, ConocoPhillips and so on, that they had to bring in Norwegian companies. It was Statoil was set up in 1971 or so, 1970. And, Norsk Hydro which goes right back to 1906 and Saga Petroleum which was another company and those three companies, Norwegian companies, were part of every project. And, Statoil to this day operate, I think operate about 80 some percent of the ... some huge percentage of the North Sea fields. And they had the market, the state share, they market their own shares. So, they’ve had this enormous rent cash cow from the North Sea. And, they had done some terrific things, innovative things.

In a fiscal regime, where the government would say, “That’s okay.” We’ll leapfrog. Rather than go through what a more careful, private sector would do where they go step by step and very risk adverse, and we’re not going to implement new technology on a multi-billion dollar platform, the Norwegians would take the risk. I’ll tell you an anecdote, to understand the culture, which is very different. I mean cultures are absolutely fundamental to the industry. There’s the Calgary culture; within Calgary every company has its own culture. They were floating out the big Statfjord ... a great big structure it was, like, it was high as the Eiffel Tower and these things float out in the fjords, a very deep fjord around 6:00 o’clock in the morning or thereabouts. And, something ... the cement wasn’t proper and it imploded. And this whole thing, this whole **shitaree** just sunk to the bottom of the fjord. The guy that I was doing the business development here for Statoil, Stig Bergseth, fantastic guy, he was in charge of that project at the time.

And he told me this story, and it’s a ... He said by 10:00 o’clock that morning, they had all the blueprints laid out on a big boardroom war room table and they were there going over it with the contractors and so on and saying how they would start again. That’s the Norwegian culture. In North America, the United States in particular, we would have been spread out in law offices, right? Saying, “Who is going to sue whom?” And, we’d be doing ... there would be a lot of this blaming and so on, look at attribution, who is going to pay the costs. Norway doesn’t care. In fact, the first week I worked for Norway there was a death on an offshore boat, supply boat, and by 4:00 o’clock that afternoon the widow had agreed on some kind of compensation package and everything was fine, and the training or whatever.

They are not a litigious society. So, that culture of “we’ll do it” is charming but anecdotally, it’s absolutely hilarious some of the things that happen when they came here. They have a very by the book, bureaucratic approach to everything and very consensual. Everybody has the right to say something and be consulted. And, it goes back to fjord culture and it goes back to this abhorrence of arrogance. You can call a Frenchman arrogant: “We’ve got the Louvre, we’ve got the Eiffel Tower and we’ve got culture. Sure, we’re arrogant.” But, to call a Norwegian or Scandinavian arrogant is very ... you must not stand above the other. The tall poppies are to be chopped down. But, conforming is absolutely essential. There’s a reason for it in the oil and gas development because they’re very safety conscious. I mean everything ... and that’s good and that’s absolutely essential; safety first. If you get your bottom line six weeks ahead of time but you’ve had some injuries, you’ve failed. If you made a lot of money for the company but you killed somebody, you failed and you will be penalized for that if not fired. So, I like that culture and in a way I also like their embrace of environmental goals for the oil sands. They want to come here and set, at least for themselves particularly, the bar higher on emissions and on dealing with the local communities and so on. To a large extent, they have done that. Although, they’ve done some innovative things and I don’t think it’s the Norwegians who’ve done it, in fact I know they haven’t. It’s the Canadians who work for the company who said, “Okay, within that environment, let’s do this.” We ran into some problems and some hilarious things.

For example, these white boards that you can write and you can copy and so on they were invented here in Calgary, just down the street at the manufacturer. When we first arrived ... we thought we’d order one of these things for one of the boardrooms and of course the Canadians being very compliant said, “Oh, yeah, the Norwegians know how to do it.” They wanted to have it shipped over to Norway to make sure that it was compliant with Statoil standards which are basically Norwegian standards. So, some joker in Norway cut off the 3-prong plug we have and they installed a 2-prong, Norwegian plug and shipped it back. I am not making this up. But, it’s just a methodical

way of doing things. They have the project engineers come over and they were looking at early stages, because we bought a company that was just starting to build a project, the Leismer project. And so, the company made the decision to, “Yes, go ahead.”

In retrospect, I think it probably the wrong decision, probably should have waited a year and reviewed some things. But, for all kinds of reasons including keeping the Canadians on staff and keeping the morale up, I said, “Okay, let’s go ahead.” So, these builders, these engineers, had come over who had been doing nothing but North Sea platforms, and they see the modules and they break out the fabrication plants south of Edmonton, and they’re all ready to be shipped up there. And they say, well I’m giving you a red flag on your check-off list. I said, “What’s that?” “You haven’t painted the modules. You’ve got to paint them to protect them from the sea spray.” Well, the sea is about 1,000 kilometres to the west and it is drier than a popcorn fart up there, maybe not down here so much. Things like that where they just go by rote, and I found them an interesting company to work for.

I told the CEO that having worked for a large Westminster form of government at a senior level, and as a scientist working for an international organization run by the French or large French oil company and Oxford, one of the oldest universities in the world with all its arcane procedures and so on, I found Statoil to be the most bureaucratic organization I’ve ever worked for. But, they do get things done. They seem to have deep pockets to incur all kinds of costs. They take a long-term view of this; they’ve taken an enormous amount of criticism in Norway. They let it get it out of hand. It became an election issue in Norway, in 2010 I think it was, or nine. It became such a problem that the CEO really was beginning to get worried. So we had to come up with a whole plan for the future which included selling down part of it, and they eventually sold, I guess, a year and a half ago, 40% ... actually two years ago ... 40% to the Thai National Oil Company, PTTEP, and they have plans to go further. But, some of the innovative things they’ve done is they came up with a local opportunity centre. Actually, the idea came from a Canadian. But, the idea was to have a job office over towards **Corner** which is off the leases but for the local communities. And, ConocoPhillips actually is part of that, they joined it. And, the Alberta government has an office there. So, the idea is if you got a ... they post jobs, it’s not just necessarily for Statoil but for other companies. They have resources there, computers and so on. If a guy wants to ... if he doesn’t have boots, there are ways of providing you with safety boots and so on. When the Norwegians first came they were absolutely... and they were building the project, they were building a new road. They were absolutely aghast at the labour, the culture in the labour pool there. I mean alcohol, abuse of alcohol, drugs, people showing up driving one of those big earthmovers ... substance of some kind of another. I think we rolled over five of them and nobody got killed. We shut the site down I think two or three times for a safety week or whatever. But, in the end, and also they bought a company that had all kinds of Canadian talent and experience in thermal projects. I mean a lot of people who had worked with Husky and also other companies on virtually every thermal project in western Canada.

So, there was a lot of that savvy that was brought to bear. And then if you bring the Norwegian culture of doing step-by-step and not being driven by schedule but by performance and making sure everything is right. They did some things that were very right and they brought the Leismer plant up, given its resource which is not the best that’s up there but they brought it up extremely well. And, the steam/oil ratio it was relatively low, better than expected and much earlier than expected. So, I think they had performed very well. Whether they will go on and do more, I am not sure.

BB: Was there an economic reason for them then to get into the oil sands? Economic reason in the sense that perhaps they could see that some day the returns from the North Sea would start diminishing and that they needed to sort of look down the road? When North Sea eventually dwindles to nothing, where do we go then? Was there an aspect of that?

SKINNER: Yes, there's that aspect. About 11 years ago they got the mandate to go international. They teamed up with BP in a joint venture. But BP had interests obviously in the North Sea and so they had a ... and joint ventures at the end of the 90s and early 2000 were kind of strategic partnerships. These were a bit of the fad in the industry. And then, after a while they didn't amount to much because you know the interest in the parties diverge at some point and like teenage marriages, they don't last very long. But, Statoil wanted to get this exposure to other petroleum theatres in the world. And, when they merged with ... they took over the hydrocarbon side of Norsk Hydro. Of course they had ... Norsk Hydro had been on the east coast of Canada in Hibernia because they did a joint venture with Petro-Canada, where Petro-Canada thought they'd get into the North Sea and that didn't amount to much. But, Hydro had these small pieces of Petro-Canada assets in the east coast and that's been ... they've been very good at that. Of course, it's their skill sets. I mean offshore, they made a discovery or two and they are going great guns on that front.

It is prospective out there. They also inherited some heavy oil prospects and discovery that Norsk Hydro had made in the North Sea and also off Brazil. So, they said, "Well, we're in the **Sincor – PetroCedeno**, whatever the project is in Venezuela." It was renamed by Chavez. So, we have this heavy oil portfolio and difficult oil portfolio. They said, "Let's get in the oil sands." And actually, Peter Mellbye who has just retired this ... he retires at the end of this week ... has been terrific player in Statoil's internationalization. After we did the deal with North American Oil Sands, we were standing on 8th Avenue going to dinner and he said, waiting for the traffic light, he said, "You know this is the first project that we've gone after that we plan to go after. It was not an accident." Meaning, Peter is very honest and very straightforward. So, it was kind of a conscious business development strategy, heavy oil. Again, things were going wobbly in Orinoco even though Statoil felt that they could still grow in the new Orinoco play in the Chavez environment and they stuck it out as did Total. They thought they should get into this and so they did a lot of homework at first. Unlike, Total. They did some homework in Total and then said, "Well, let's just go and see what we can get." Here, with Statoil they had come and we did a lot of studies but because they had just done this thing with Norsk Hydro, the market or the street felt that, "Oh well, that's a big chunk. They won't be doing anything else." So, Stig [Bergseth] and I we worked very much behind the scenes and it didn't get out so much on the street that ... although they had known we were here. When the deal was done it was a bit of a surprise for many people.

BB: Bob, you've given lots of lectures and talks on the oil sands in Europe. What kind of reactions have you been getting when you talk about oil sands?

SKINNER: Well...

BB: Are there perceptions we need to change?

SKINNER: Yeah. There is a perception in Europe and it goes back to this, I call it the "Hansel and Gretel" view of the forest. And, it's very much a black forest sort of, there are very few trees and "Goodness we really shouldn't cut down the trees." They have this notion of Canada as being this image we used to fight, that we're more than just the Rockies and lakes and forests and Mounties

wearing red tunics. So, they tend to think our forests are these wonderful, verdant, sort of sequoias a mile high and so on and we're just bulldozing them into the ground. And also, the Europeans have this notion that the aboriginals in Canada are running around with feathers and buckskins. In fact, we hired aboriginals at Statoil. We spent a lot of time with them and they did me the great honour of telling me that I was ... They viewed me, they were young people, they viewed me as the elder and I thought it was a bit hurtful at first. Because, you get to a point when you're old and they're calling you the elder. But for them it was honorific and I was delighted ... but some of the stories ...

One lady got a request from someone from Norway coming over. They'd come over in droves from the company to see the project and no one would say, "Well, why you going?" they'd jump on a plane and away they'd come. And, he wanted to buy a headdress for a friend. There are clubs in Germany, in Austria, in France... and in France they're called Le Club Rouge where families go off and they live in teepees. In Germany, they live in these authentic teepees that cost of thousands of euros and they all dress up in buckskins and feathers and they play out this Rousseau view of the noble savage. And so, as soon as that element is introduced in the oil sands debate, it's just very easy to say, "Look, we hear you're abusing the natives, your taking their rights and you're bulldozing their land where they trap and hunt and fish." So, when you say, there are in that whole Lac La Biche/Wood Buffalo area there are about 5,600 aboriginals or something like that. I forget the number. It's not that big. They don't believe you. And when you say, "Look, the oil sands constitute an area that is 41% of the area of Norway." It's the scale that they don't ... they can't grasp. So, we changed our approach. At first we were frustrated like crazy with the number of visitors we had. Then we said, "You know this is important. We bring them over. We show them the project. We're very open with everything. And, drag them around up there, and they go back and they act as ambassadors." Because, the Norwegians always chit-chat-chat.

So, they can say, "No, I've been there and here's what I've seen." So that was extremely important. I gave some talks in Norway and I spoke with a couple of the NGOs that were very critical. And, we had them over here just prior to my retiring. I mean they come ... the best thing to do is to hopefully have the weather so we could land at our project. We had to land in Lac La Biche before McMurray and then drive them an hour and a half or two hours depending on the weather. Endless Boreal Forest, up and down and it doesn't change. So, while your chatting you say, "Well, there are seven species of woody, plant trees here and they are such and such." The Boreal Forests have evolved and bug infestations are one that clears large areas of the land and the species progression as it comes back in and such and such. So, that's basically what we do. We duplicate that in the oil sands. Obviously, we'd like everything to be put right in our own lifetime, put back in our lifetime, but that's not the way it is. But, you can tell the story and you can show them the facts and the change.

I think there is a perception too of the emissions, the carbon emissions and indeed it's the fastest growing CO2 emissions of the sector in Canada. It's not... we always say in the industry, "Oh, the intensity is going down per barrel." But the overall emissions are going up. No question about it. And, they'll continue to go up. The big challenge is technology. There's a story to be told there. Changes have been made. Little improvements are made but they take a long time. And, people tend to look at the news that's dominated by the high-tech industry or the consumer product industry where they come up with a new product. And, the time is 18 months for the idea for a new type of toaster to when it's on the market. Or, a new gadget in high-tech, 18 months. Whereas, it takes 18 months to just talk about maybe drilling a well pair a little bit differently. Then it takes two or three years to see what kind of results you get from that, different configuration or a different liner or a different type of pump or whatever. Then you say, well you're going to spend millions of dollars or

maybe billions for one project that's going to use that new technology, you go step-by-step. SAGD, the idea was what 1969 with Roger Butler, proven in 1989 or so at the Underground Test Facility.

BB: Yes, it wasn't until the 1980s ...

SKINNER: Because the fiscal regime wasn't right, the oil price flopped in the late 90s, it really ... we didn't really get commercial SAGD projects going until the early 2000s at McKay and Foster Creek. And the fiscal regime has only started to gear in now and we're still learning. So, SAGD is a technology that is actually quite new. And in Norway, I encountered ... Greenpeace was there and they were extremely effective. And, Andrew Nikiforuk went to the Statoil annual meeting. I was there in the background writing speeches and so on, questions and answers. And, Andrew got up and said, well SAGD is old technology and of course, all of Norway said, "Yes, it's old technology." And, even employees, 31,000 employees of Norway, or in the company said, "No, no. We have to wait for new technology." Some guy who worked for the United Nations, some famous Norwegian was invited to write this magazine, internal magazine that Statoil has called the, "We Magazine" stating the most outrageous things. That Statoil should wait to see, for new technologies to be developed before proceeding.

Where on earth in the oil and gas industry has anyone waited? You learn by doing. This idea seemed to take hold and I found it extremely frustrating. I found that they were a very, very reluctant culturally to really be open to foreigners. They were open, yes. But, open in the sense of "I'm open to sharing with you all I know about catching mackerel, all I know about the oil sands. So, it's my duty to as an employee to share with you everything I know about the oil sands." And, I did that of course. But, they're not necessarily open to how we do things. They have their own ways. Can we take a break?

BB: Yeah. I just have two more questions.

**[END OF FIRST RECORDING]**

**[START OF SECOND RECORDING]**

SKINNER: I just want to... some of the key people on the Statoil side. I should name them.

BB: Oh, okay. Yeah and maybe just spell the names as well.

SKINNER: Yes, I will. Some of the people in Statoil who really were behind the drive to get in the oil sands. I mentioned Peter Mellbye, Helge Lund is a man and Peder Sortland and Per Markestad. Those two guys were pivotal in terms of the business development team. Along with Stig Bergseth who I mentioned before who is a local guy here. Vern Johnson and I were the locals. Vern was working on a very part-time basis and I also was sort of half-time. But I think probably the five of us were the ones that dealt with the North American Oil Sands team and moved the paper up through the system and the rest of the board, the executive board, and then the board itself kind of watched this process and understand that some of the board members were not in favour of the oil sands. Some thought it was immoral.

BB: Why?



SKINNER: Remember the World Wildlife Fund and suddenly environmental groups in Europe, Greenpeace in particular got hold of it and they ran away with it. The Canadian government's posts, the embassies, it was just like deer in the headlights of a car watching this ... watching the headlines. It was completely erroneous, defamatory and extreme characterizing the oil sands as dirty oil in these photographs of the tailings ponds, which make terrific statements about dirty oil, they take the right. Then it got into this ethical and non-ethical ...

And, I remember saying to the Norwegians who would use words like that. They would talk about ... they would use words in English which are translation from the Norwegian did not have the same kind of legal impact there as it would here. "You must not say things like that, you must not say that so and so is unethical." And they just look at you. And, I soon learned with the Norwegians that ... I had a legal friend who worked with them much longer than I did, to thank for this. And he said, "Bob, there are two ways of understanding Norwegians. They're bimodal; they're either when you're talking to them about something, the oil sands or whatever they'll either go 'hm?' or [snorting sound]." And, "Hm?" means yes, it means I'm open to it, I understand it or it's interesting whatever. And, [snorting sound] means I did not understand it, I don't care, I'm going to do it anyway, I disagree or whatever. But, they're not a very...

BB: Loquacious?

SKINNER: Loquacious culture. In fact, we had a lot ... the first part of my job was, I spent a lot of time...because I work with many cultures at the IEA, the OECD in my career and with the French. I'm fascinated by the cultural context for technology, for example. Fukushima nuclear disaster and how it was handled, why it happened. There's very much a cultural story there, in terms of the Japanese culture. The Canadians, we're all friendly and we're excessively friendly and you would say from a European perspective completely phony because people don't do that. I said, "Look. The Canadians have..." The Norwegians when first coming over they just go to the executive assistants and they'd say, "I want to rent a car for the weekend to go to Banff." And no please, no thank you, nothing.

The Canadians thank too much and the Norwegians don't thank at all. So, we had these kinds of little funny tensions that would build up. And some of the Canadians who were with North American Oil Sands were very entrepreneurial and very kind of approach life like Eddie Shack did to hockey, straightest line between two points is where you go and fit. So, eventually they left. But, a fascinating, in fact Peter Mellbye is retired, Peder Sortland he left the company because of opportunities were not presented. That's again, that's Norwegian. It's very common for you to go up and you reach the executive level, you're a senior vice-president and then they have a rolling of the positions and you go down and you work for someone that used to work for you. To our way of thinking, this is bizarre. They of course, think that we're all about money here. And, you try to explain to them that you are looked after from cradle to grave and your salaries go like this [pointing upward] and our salaries go like this [pointing down] ...

BB: Well, having named some of the key people in Statoil that you worked with, maybe you could do the same for Total, some of the key people that you worked with.

SKINNER: Well, the key person was the CEO, Thierry Desmarest. Jean Paul Vetier was in charge of downstream. He was keen on it. Daniel Valot he was in charge of E&P, Exploration and Production. And, eventually Christophe de Margerie who at that time was in charge of the Middle

East and he's now the CEO of Total, a very interesting man. Much different, he's not a polytechnician but he embraced the oil sands. He became PDG or CEO after I had left and very likeable guy, very brilliant sort of thinker but very flamboyant in some respects, whereas the others were much more understated. I mentioned Jean Valet was my local buddy and there were a whole... Charles Mattenet, he was very reluctant to get into mining and very uncertain. And, I should mention this series of CEOs or presidents of Total Canada, Michael Borrell who was English actually.

Mike and I worked together in the gas and power group when I first joined Total. He is a wonderful guy, very bilingual and taught me all I need to know about cricket. And, he was here for a while, did a good job. Then he was succeeded by Jean Michel Gires and Jean Michel was, at that time when I was here he was looking after the Venezuelan operations. And, we had a meeting of all the heads of Total's offices from Argentina to Alaska or whatever up at Banff. And, I arranged to take him on a tour of Syncrude. And, so we had a bus tour and there were all these guys and I've teased Jean Michel about this since. This is in 2001 or 2002 and we're on the bus going around, it is Gulliver's Travels up there. Everything is immense and this huge open pit. Jean Michel had also started up the Sustainable Development Environment Group in Total and the French didn't have a word for sustainable development or a term.

Once they did then Total got going on it. And, he's genuinely environmentally prone and favours all those things. And Jean Michel said to me, "Ce n'est pas pour nous." That's not for us, the mining. And, he smiles. Of course they're very much into mining. But, those are the key people. I mean there are lots of others, technical people who are involved and spent a lot of time on the negotiations.

BB: In one of your talks, which I found on YouTube, you said in response to Greenpeace criticisms that you think government and industry were remiss in not reclaiming the mined areas of the oil sands soon enough or sufficiently enough. How do you think they're doing today? Is it too little too late?

SKINNER: On that comment first, I'm in good company in saying that. I think Neil McCrank would also agree. In fact, I know he would agree. Whether he would agree publicly, I'm not sure. But he's a former regulator of the ERCB. But, during the Klein years there seemed to be this licence that everyone in Alberta enjoyed. So, the projects were coming along and the pace of restoration of the tailings ponds and the pits and so on was not what it should have been. So, it presented to the world a terrific photographic opportunity for the NGOs to make a very pejorative statement about the industry. You could say and the evidence was there staring you in the face from outer space, that they're not, you know they're just stripping and they're not recovering and recuperating the land, even though that's all part of the deal. And, the herd of bison just didn't cut it. It's a good story but it doesn't cut it. So, not enough was being done. Now, since then there are directives in terms of posting bonds and in terms of pace and so on. And, I think it's starting to show results. But, we need to have a lot more land recovered. As I said before, it takes time. And, the public and NGOs are impatient. And, NGOs can be impatient and say, "Well, they're doing nothing." And, of course they can get away with making a statement like that, whereas companies have to be very careful and the industry associations have to be very careful because if they say something that's too aggressive then they're dismissed.

BB: As you were saying earlier, 18 months to bring a new piece of high-tech equipment on the market, the latest iPod or the latest iPad or whatever. 18 months in the industry and you're talking about something that might change, yeah.

SKINNER: I think the interesting changes are in the last two years or so, three years, is that industry has decided that this kind of competitive thing is fine below the surface, where you want to get competitive advantage with some technique that makes your costs lower and therefore your returns higher, therefore your stock more attractive to the punters... there's a logic there. There's kind of a nuclear Chernobyl thing where a nuclear accident anywhere is a nuclear accident everywhere and it applies in the oil sands. On the surface, how we deal with water, how we deal with local communities, aboriginals, the land recovery, our emissions and so on. There is a real need to collaborate and through OSLI the Oil Sands Leadership Initiative which Statoil was very quickly leaked into the breach, "It's a great idea." And also, they are a member of what is COSIA, which is much more formally structured and OSLI is as well.

But, this idea to get together and collaborate and pool on technologies to address these surface or environmental issues is key. But, it's not that simple because there still are intellectual property issues as we've seen just in the last week with Samsung and Apple. I mean not of that magnitude but intellectual property is still intellectual property and some companies have developed an idea and do they just necessarily want to... It has value to the shareholders, can you just sort of plunk into the hands of other companies? It's easier said than done. Yeah, it's all nice and fine, Kumbaya, we'll collaborate. It's difficult. They're making headway and I think they'll get there. But again, as with the heavy oil it's extremely viscous and flows very slowly, everything about it moves very slowly.

BB: Right. One more question for you Bob, you've said that the key to good oil sands development is getting more oil out with less energy. How are the companies doing there compared to several years ago?

SKINNER: Actually, things are very simple. The bitumen is stuck to the sand. Unfortunately, there's a little skin of water between the bitumen and the sand grains and that means you can get it off the sand grains. Just as there is when you walk on a beach down in Florida and you get tar on your feet and you go back to our hotel and off the beach and there's a bottle of kerosene solvent there and you squirt your paper towel and you wipe the tar off the bottom off your feet. That's one way you can get it out. The other way is heat. You don't want to use heat on your feet. And, it's not more complicated than that. How can you reduce the air emissions and reduce the amount of energy. Because, energy costs money and that's one of the biggest costs with natural gas prices as low as they are now it's not as big as it used to be or was threatening to be. So, there are all kinds of technology to use solvents with steam, without steam, hot solvents and so on. And, they are being looked at. The problem with solvents is you're using something that's 15-20% more valuable than the stuff you're getting out of the ground. So, you don't want to replace the bitumen with the solvents you've left underground. So, those technologies are being tested and also being implemented commercially. Solvico injections being done by EnCana, I believe in their Christina Lake project.

To reduce the energy is to reduce the emissions. To reduce the emissions is to reduce that big wart on the industry's nose, forehead and that big bull's-eye for criticism. On the one hand, they're doing that, they're making progress. But on the other hand, they don't usually start in any resource sector extracting anything but the best at first. And so, the highest quality will learn on that and then we'll

go for lower quality resource. They say, well we may be getting better at it, we're also having to use more energy to get out the stuff from a lower quality reserve. If you've got shale zones or clay zones in your reservoir you're going to be giving those a lot of energy through the steam and it's not going to give you any bitumen or very little bitumen back. And so, that then says well look there are there better ways of understanding the reservoirs so that when we put our well pairs underground, can we inject the steam using flow diverters to stop it...? Inject the steam in such a way that we can get a very loyal development of the steam chamber, along the well pair commensurate with the geology to give you back the bitumen in such a way that you're not leaving cold spots or having hot spots; especially, for the lower well.

So, all of that subsurface geometry is a big challenge and that's competitive. Some companies think that they've got a better way. When I first came here in '98 in the oil sands with Total, seismic geophysics was problematic, it was useless according to the geophysicists because enriched sand, bitumen sand, soaked sand looked seismically just like mud and you drilled and say, "Ah, this is great." And, you drill and it's just mud. But they've now, they got better at that and the seismic, 3D Seismic is and then 4D where we have a project to actually monitor the steam chambers is much better. So, energy input, labour, the cost of materials. People say, "Oh yeah, well when the price goes to \$125.00, oil sands is great. But as the oil price goes up, so does the cost for everything else. The cost of the diesel in the truck for labourers to go up there goes up. The cost of steel, the cost of everything goes up. So, we chase our tails as the oil price goes up. So, the thing is we have to control the costs. And, I can remember when it was thought that if the oil sands only had \$21.00, they'd make money. The price was \$16.00.

BB: It's changed. Anything else, just generally that you want to say about the oil sands, as somebody who hasn't been so much in industry but more of an observer along the way?

SKINNER: I find the hyperbole attached to the oil sands often a bit misplaced. Of course, Canadians tend to drink our own bath water. Whenever I was living abroad and I'd come back and give speeches in Canada, invariably I get the question if not from the audience after on the margins ... "What are they saying about us in Canada?" We had this notion that seven billion people get up every morning and say, "Now, I wonder what they're doing in Canada today?" Nobody gives a damn. At the Oxford Institute of Energy Studies, it's very much an Arab influenced think tank and the Arabs they don't, I mean they tend to view us as kind of being cold Americans. We just live up north of the US and the Brits as well. I've been in international conferences in the UK and given talks and an American will get up and Americans and Canadians have a different credibility. In the oil sands, we go on and on about the oil sands. We're producing 1.7 million barrels a day. The world is consuming 89 to 90 million barrels a day. The growth, apart from the current depression or whatever you want to call it, recession, on average since 1965 the oil demand in the world has increased by 1.2 million barrels a day per year.

So, more or less 2005 oil sands, right, total oil sands every year. There's no way on God's green earth, especially if you want to keep it green that the oil sands could ever be a major, major contributor to that annual demand. Can you imagine... in fact, I just gave a talk in Kingston last week to a bunch of economists about energy strategy and policy and so on. And, I got a slide out that I had used in 2003 because I was talking about the context in which the current energy strategy hype started. At that time, the gap between North American demand, that's Mexico, the United States and Canada and North American supply was opening up at the rate of 300,000 barrels a day per year. Now that's five large SAGD projects per year. So, I was asked the question, is the oil sands

going to address the problem of North American oil security, supply security. I said, “Well, look at the numbers.” And at that time, it was \$40,000 per barrel, per running barrel was the capital cost. That is a one hundred some odd billion dollar a year or whatever the huge, huge number you’ve got to spend to produce that, to meet that.

We just can’t do it. I mean, we don’t have \$12 Billion here, we can’t do that. Today, that gap given Bakken, Eagle Ford and the tar sands, oil sands and Mexico is wobbling which makes it even worse. But you know the gap is closing at 280,000 barrels a day per year. So, on the one hand things change, but on the other hand what does that say? That says that, it begs a lot of secondary questions. Are we seeing a window close for us? Are we sort of again, fiddling around on getting access to Pacific and this opportunity is going to shrink away? It’s a totally different set of questions than it is if the gap is opening. Bob’s your uncle, sky’s the limit... now, I’m not so sure. So, we have a lot of challenges and getting the cost down, getting access to market. Dealing with the aboriginals, which I think is probably one of the most fundamental issues that Canada faces in resource development. After all, Canada is a resource largely resource based economy. Yes, we have high-tech and yes we have a gazillion nurses, we’re a service economy and all the rest but it’s natural resources in general and oil and gas in particular that are a big contributor.

And, all of British Columbia basically is up for grabs. And, unless we address that issue of the aboriginals in a straight-forward and business-like way and also someone has got to say that there is a direct line, a linkage between the rent or the money that is thrown off from resource development that goes to the federal government, the coffers; which in turn goes to the \$12 or \$13 Billion that goes to the budget for Indian Northern Affairs, which is distributed to and among others, the 50-60 native bands in B.C. along the Gateway Pipeline route. And no one is so politically incorrect or crass because we don’t do that in Canada, we don’t talk about money likewise we don’t talk about it in terms of Quebec Separatism and so on. We don’t want to talk about the money. But at some point, you’ve got to sit down and say, “Look, let’s be partners. You get the benefits, some of the benefits from this resource endowment that the country has and so you’ve got to share on some of the risk.” [The Calgary Herald’s] Deborah Yedlin wrote a column yesterday on that, I believe. But, she didn’t quite put it that way. So, we’ve got to come up with a much more sensible, creative way of dealing with the aboriginals on resource development. A lot of progress has been made up in the oil sands. And those bands are not talking to the bands, apparently, along the pipeline route.

So, I mean if you imagine a Canada where the oil sands just kind of piddle away and we’re not going to develop them anymore because they’re not economic for all kinds of reasons, then Canada’s a different country economically.

BB: Sure, yeah. That’s trillions of dollars that are going into the toilet.

SKINNER: Yeah, absolutely.

BB Well, thank you for your time. I appreciate that. You’ve given me lots of time, which is great.

SKINNER: When you’re retired, you’ve got lots of time.

BB: Well, that’s when you get busier, you know.

SKINNER: Absolutely.

**[END OF RECORDING]**