

TRANSCRIPT

Environmental Insights

Guest: Spencer Dale

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- Spencer Dale: We are on an unsustainable path. Carbon emissions are continuing to rise. We don't just need carbon emissions to stop rising. We need carbon emissions to fall to zero. The current path we're on is unsustainable. Something which can't go on forever will stop.
- Rob Stavins: Welcome to [Environmental Insights](#), a podcast from the [Harvard Environmental Economics Program](#). I'm your host, [Rob Stavins](#), a professor at the Harvard Kennedy School and director of the [Environmental Economics Program](#) and our [Project on Climate Agreements](#). I think it's fair to say that some environmental advocates, at least in the United States, consider the oil and gas industry to be the moral equivalent of tobacco companies, simply out to maximize profits without any consideration given to the broader social implications of the use of their products. Furthermore, many such critics would paint the industry with a broad brush, not considering ways in which the companies may differ from one another. My guest today, [Spencer Dale](#), and more to the point, his employer, may provide a counter example. Spencer is group chief economist of [BP](#), the multinational oil and gas company based in London, where he leads BP's global economics team. Prior to joining BP in 2014, he was chief economist of the [Bank of England](#). Spencer, welcome to Environmental Insights.
- Spencer Dale: Thank you. Thank you for having me Rob.
- Rob Stavins: So, I'm very interested to hear about your impressions of the response of the oil and gas industry to the global pandemic, as well as the threat of climate change. But before we talk about that, let's go back to how you came to be where you are, and I mean to go way back. So where did you grow up?
- Spencer Dale: So, I grew up... I moved around. My father's job meant we moved around, but so I had no fixed place in London, but largely in Southern England, different parts of Southern England.
- Rob Stavins: And that means primary school, and what we call high school was also in that area?
- Spencer Dale: Yes. But I was a new kid in school every two or three years, every two or three years, we moved somewhere else. So, I was always the new boy in the class.
- Rob Stavins: That must've been a particular challenge. And then what about university?

Spencer Dale: So, I did my first degree in the University College Cardiff, which is in Wales. And then I did my master's degree at Warwick University.

Rob Stavins: And that master's degree was in economics. Is that right?

Spencer Dale: Yes, it was. Yes.

Rob Stavins: And then your first job out of school?

Spencer Dale: I couldn't decide what I wanted to do. And I thought, should I stay and do a PhD or should I go to the real world and start earning a living. I couldn't quite make my mind out what to do, so I went to the Bank of England, where I thought there was a good place where I could carry on doing research, but decide whether I would move further into the commercial world or go back into academia. And I got the policy-making bug and stayed there for 25 years.

Rob Stavins: So, then Spencer, what was your first job out of school?

Spencer Dale: So, my first job out of school was I moved to the Bank of England, the UK central bank or the Federal Reserve bank in the U.S. And it was largely because I wasn't sure what I wanted to do with my life. Did I want to move into a full scale commercial career? Or did I want to carry on working in academia, perhaps stay and do a PhD? And I thought moving to the central bank was a good halfway house while I made up my mind. And I didn't really make up my mind, I got the policy bug and in terms of helping to make monetary policy and stayed there for the next 25 years.

Rob Stavins: And over those 25 years, you rose up to become chief economist in fact.

Spencer Dale: I did. Yes, which is a wonderful job and a huge honor.

Rob Stavins: So, given that it was a wonderful job and a huge honor, how did you wind up moving to BP?

Spencer Dale: Largely, if I'm honest, Rob, just because life seems too short to work for the same institution for your entire career. You always think different environments, different challenges. But if you've been working in central banking, I was the chief economist all the way through the financial crisis, you want to go to a place to a role where the issues you're dealing with feel as big and as significant as the ones you had just been working on. And so it was hard to know what to do. And then this opportunity at BP came along, which suddenly the challenges you're dealing with are huge. And in some sense, there's nothing bigger than climate change as a challenge to spend your life working and thinking about.

Rob Stavins: Let's turn to those challenges. In fact, the situation in which we now find ourselves, the global coronavirus pandemic, what have been its impacts and what will be its impacts on the oil and gas sector?

Spencer Dale: So, I think in the near term, the impact on the oil and gas sector is it's hit the oil and gas sector very significantly. The price of the products that we sell in terms of oil and natural gas have fallen very sharply. And so therefore the impact that has on our finances and our revenues is very significant. And so there's a significant degree of belt tightening, as you know, BP, along with several other companies have had to cut their dividend to shareholders and so on. So I think in the near term, is that issue. I think further out, I think the big issue will be, will the impact of the pandemic act to slow the pace of the energy transition to a low carbon world, or will it act to quicken it? And I think there are powerful forces moving in both directions. I hope that the force is moving towards helping to accelerate the energy transition will win out and I'm hopeful of that, but I don't think it's by no means certain.

Rob Stavins: So, if you mean by transition, movement from fossil fuels to renewables, there are some other effects I would think, but you'll know better than me of the pandemic, even when it's over. And one that would seem to be fairly clear is business travel. I would assume that what companies around the world have learned is that it turns out that remote conferences and meetings, although they're not as good as in person compared with the savings and opportunity cost, out of pocket costs, as well as opportunity cost of time, mean that they're pretty darn good in a lot of circumstances. And so we might see lower demand for international business air travel, as well as those hotels in Singapore, Beijing or New York, which are supported by business travelers. Does BP see it that way or no?

Spencer Dale: Yes we do. I think we will see less particularly business travel, I think perhaps the biggest behavioral change which we think could persist out into the longer run is more generally people working from home. I think for many people, the idea of going back to the office to work in an office from nine till five, five days a week, seems perverse when you've just spent the last seven or eight months working efficiently from home. So I think that's an impact in terms of oil demand. I think the far greater impact on oil demand is not through these behavioral changes however, it's through the economic impact. So even once, the wonderful thing over the last few months, we've heard the great news in terms of successful vaccines. And hopefully the pandemic will be brought under control over the next year or so, but the economic scars from the pandemic are likely to last for far longer, and in particular, those economic scars are likely to fall disproportionately on emerging markets around the world. India, Africa, parts of Latin America, it is those parts of the world, which drive economic growth.

Spencer Dale: And it's those parts of the world, which will drive demand for energy going forward. And so, the impact of the pandemic on the economic growth of those

parts of the world, I think will have a far greater bearing on the prospects for oil, gas demand, and energy demand, more generally going forward.

Rob Stavins: So, if not economic recession on an ongoing basis, at least a considerably slower rate of economic growth in those emerging economies?

Spencer Dale: Yes. And it's a slow economic growth and it's also that you'd never get back to the level or a trend you would have been on. So even if it's not slower growth, you just don't get back to that same level. So a permanently lower levels of income and living standards, if not permanently, those scars could easily last for 10 or 20 years.

Rob Stavins: Now you said something interesting before that I want to follow up on, you mentioned that the pandemic could result when we come out of it, either in an accelerated movement of what you characterized as the energy transition I believe, or a delay in it. Can you explain that to me?

Spencer Dale: Yes. And I think there are powerful forces on both directions. If you like, the pessimistic story is the impact of the pandemic has meant many governments around the world are focused on their own domestic economies. They're worried about the resilience of their economies in terms of their health systems, personal protection equipment, and so on. And they're worried about getting their economies going again. They have huge levels of unemployment, many of their businesses are under pressure. And so, governments are increasingly focused on near term domestic issues. And if governments are focused on near term domestic issues, the ability, their bandwidth, to start focusing on long-term global issues of which climate change is one of them is correspondingly less. And an example of that is I think the attention that was devoted to climate change immediately after the great financial crisis of 2008-'09 was less because people was focusing on that, trying to just deal with the financial crisis.

Spencer Dale: On the other side, I think the pandemic has highlighted the fragility of the planet and the unsustainable way in which we are living in the planet today. Moreover, the scale of the government interventions we're seeing around the world give us an unprecedented opportunity to use those government interventions, to kickstart or to boost the economy in such a way as the growth we see going forward is greener and more sustainable than it would otherwise have been and this is the momentum underlying the Build Back Better campaign. And I think the evidence so far is encouraging is that that Build Back Better pressure is winning out against a near-term concerns of governments in terms of their domestic economies in the near term. So that's why I'm hopeful that the pandemic, when we look back in 10 or 15 years time, one silver lining from the pandemic may well be, it was seen to turbo boost that transition to a lower carbon energy system.

Rob Stavins: Although different companies, I suppose, may react in different ways. Whereas the European majors — BP, Royal Dutch Shell, and Total — have been quite ambitious in their climate related plans, others, and I think of ExxonMobil and

Saudi Aramco, for example, have just recently set targets for the first time under the banner of the Oil and Gas Climate Initiative. Do you view the industry as being heterogeneous on climate change issues or is it so much somewhat homogeneous in that regard?

Spencer Dale: I think different companies will have different strategies about what is best for their companies in terms of how to respond to the challenge of climate change. I think there's pretty much universal understanding across the industry of the challenge of climate change, the reality of climate change, and the need for our energy system to shift over time. And so, I think that fundamental understanding I think is shared, but the role that individual companies wish to play in helping to generate and push that energy transition and the strategies which different companies think is best for them will clearly vary. And that's right and proper, I think, but I think the general sense of understanding of it, I think is shared fairly widely.

Rob Stavins: So, focusing in on BP, the company was the first of the super majors, I believe, to expand its focus seriously into renewable sources of energy back in 2005. And earlier than that in the late 1990s, perhaps under then CEO John Browne, I recall it was announced that BP no longer stood for British Petroleum, but beyond petroleum. But I believe that many observers, at least the major green groups would say that BP did not live up to that promise back from the Browne era. Do you think it did?

Spencer Dale: Is before my time in BP, but I think many people in BP look back at that beyond petroleum period with considerable pride in the sense that I think BP was one of the first major oil and gas companies to highlight the importance of climate change and in highlight the importance of a change in our company. And we certainly invested huge sums of money in trying to do that. And some of those investments were successful and stay today and remain today, but we lost a lot of that money. And there're some learnings from how we lost that. Some of it was we invested in things which I think in hindsight, weren't perhaps necessarily the smartest things to invest in. So at one point I think BP was the second or third largest producer of solar PV panels in the world. And we don't have a strong comparative advantage in mass manufacturing of solar PV cells relative to some of the companies in China.

Spencer Dale: And so, we ended up not being successful there. However, we also invested in a number of other businesses, which were sound businesses, which had sound business models, but they were based on the assumption that by now there would be a carbon price around the world of \$40 or so. And if there's a carbon price of \$40 a ton on carbon emissions, these businesses make perfect sense. Unfortunately, as you know, better than I do, Rob, it's very hard to find many parts of the world where there is a carbon price of \$40 a ton. So one of the lessons there, if you get out too far ahead of where governments and societies are, then it's quite a hard thing to do. And so that was a lot of learning we took from that.

Rob Stavins: Now more recently, at least from what I saw on the internet, there was a week or maybe it was a two-week series, a conference that BP put on. And it seems that the company's slogan seems to have become re-imagining energy. Can you explain to our listeners and to me for that matter, what does that mean? And also, why should those green groups who are skeptical, they're always worrying about so-called greenwashing from private sector companies. Why should those green groups take it seriously? But first, what does it actually mean?

Spencer Dale: I think we're trying to fundamentally pivot the company. And if you like, you think of companies like BP as an international oil company, an IOC, and we're trying to switch from being an international oil company to an integrated energy company. So, from IOC to an IEC. Now, why is that? What underpins that? One, is a strong belief that the nature of energy demand is likely to shift very materially over the next 20, 30 years away from fossil fuels with the share, the role that fossil fuels play in providing the world's energy declining quite materially over that period of time. And that's to be replaced by very significant growth in renewable energy led by wind and solar power. And so we want to pivot away from those fossil fuels into a wider energy company.

Rob Stavins: Not again, become a manufacturer of solar panels and the like, or is that now back in the mix?

Spencer Dale: No. Never say never, but I think the key focus here is not being a manufacturer of kit, but rather a developer of wind and solar power. And the other part here is a belief that as we shift from traditional fossil fuels to renewable energy, the nature of energy markets will also shift such that power will move away from upstream producers to energy consumers. And so, there'll be far more greater customer choice, a far more diverse fuel mix. And in doing that, energy companies that provide energy services to customers be that — in the form of cities, large corporations, households, allowing them to integrate across different types of energies, allowing them to pick, helping them to reduce their carbon footprint over time.

Spencer Dale: That's where we see enormous growth area for our company. So moving away from an international oil company focused on upstream production towards an energy company, providing integrating across different energy types, focused on providing solutions for energy customers. And that's what we think is if you feel like the right type of business model to both support the energy transition, this transition to a low carbon energy system, but also as well as support it, also to actually thrive in it as well.

Rob Stavins: Now, if I understand this correctly, then that would include equity stakes in energy generation facilities, whether they are a solar panel farm or wind resources, or possibly fossil fuel generation capacities am I right there? Or is that out of the picture?

Spencer Dale: No, that's in. And so an example of that is today we have in terms of wind and solar power, we have a footprint of about two and a half gigawatts of capacity,

and we've committed to developing 50 gigawatts of capacity by 2030. And this relates a little bit to your point about why should people believe us? And I think partly you can believe us by understanding the clear business case for why we're doing this. This is good for the planet, but it's also good for our shareholders, this makes, we think makes good, strong business sense. And so that's why if one reason why you should believe us, but in some sense, I think the proof's in the pudding, it's in the eating. And so, we not only have made a commitment we will be a net zero company by 2050.

Spencer Dale: We've also put down some very clear milestones of what company we'd like to be by 2030. And it's a fundamentally different company. The amount of oil and gas we will produce by 2030 will fall by 40% is our aim. And we have that aim, I just mentioned in terms of going from two-and-a-half gigawatts of wind and solar capacity to 50 gigawatts. So, in some sense, you can track us and those people that want to actually see us deliver on those aims. I can totally understand that. And we've got some clear milestones so you can track us over time to see if we're actually living up to our word.

Rob Stavins: And where do people go to track you on living up to your word? Is there a specific web address or the name of a website you can tell us about?

Spencer Dale: Yeah. So, all of this information will be on bp.com and it's all there. Just taking your point a little bit, Rob, I think part of the challenge and the opportunity in terms of this as the world shifts to a lower carbon energy system is there's a far greater emphasis on transparency, on companies like BP being transparent about these business plans. And part of that transparency I think, is for NGOs and others, so they can monitor us and make sure that we're trying staying true to our word. It's also for many investors and shareholders around the world who are just worried about their investments and they're worrying about whether is an oil and gas company fit for that future. And what are the risks associated with that? And how is your business model adapting over time? And I think there's a far greater emphasis, I think, on companies like us in terms of increasing our transparency, so people can monitor us in real time. And part of our strategy going forward is to have a significant increase in our levels of transparency and reporting.

Rob Stavins: Now, as an economist, what I actually find the most compelling argument you made for people to believe that this is real, is that not only is it the energy transition to green, but in fact, it is also in the long-term interest of the company. That's what convinces me as an economist, that it's likely to be sustainable as opposed to a short-term discussion that fades away.

Spencer Dale: And I think this is absolutely critical Rob, and you'll perhaps remember the U.S. economist, Herbert Stein. And for those who don't know, Herbert Stein was I think, the chairman of the Council of Economic Advisors in the early 1970s. And Herbert Stein had had a very famous saying, and the Herbert Stein saying was, "If something can't go on forever, it will stop."

Rob Stavins: Right.

Spencer Dale: And this is known as Stein's Law. And at one level people may laugh and say, well, if we're really getting a law out of that. This is very powerful. We are on an unsustainable path. Carbon emissions are continuing to rise. We don't just need carbon emissions to stop rising. We need carbon emissions to fall to zero. The current path we're on is unsustainable. Something which can't go on forever will stop. And so when I'm thinking about a strategy for a company like BP, which is resilient to the future, I have Stein's Law very firmly ringing in my ears, and that is why in some sense you should believe us because it makes good business sense for us to start this pivot of our company away from traditional international oil company towards this modern integrated energy company.

Rob Stavins: That's very helpful. And I anticipate, I wonder if you do, that others of the major, major, super majors of the oil and gas sector are going to follow suit, or maybe that's already happening? I don't know.

Spencer Dale: I think around the world, you see, not just in oil and gas, and I think in oil and gas, there are many other major companies also changing their strategies and everyone will have their own nuance. And that's quite right. In a competitive economy, you don't want everybody behaving in the same way you want that competition. But I think just in general, the amount of companies which are recognizing the need to shift their business models is very significant. I think in the last numbers I saw, the number of companies around the world that have committed to a net zero target has increased from something like 500 companies last year to over 1500 companies this year. And so, an enormous, and that's not just in energy, but I think that's an important point here.

Spencer Dale: This isn't just in energy. This is, all of us have to change the way we behave, the way we use energy, the type of energy we consume, the efficiency with which we consume it. And we are seeing that momentum, that part of that story, why I'm optimistic that when we look back in time, we may look at this point, this period we're living through now as a point of inflection which actually led to a significant acceleration in the energy transition.

Rob Stavins: I'm glad to hear you say that Spencer, because it's a point I find myself regularly having to make and in discussions and debates that it's insufficient only to look at the supply side for the necessary evolution. We have to look at the demand side. It's the intersection of those two that determines what are the sources of energy? What are the emissions? And everything else.

Spencer Dale: If I may just tell you a little anecdote, Rob. About a year ago, or 18 months ago, I was doing a talk in a hotel in Washington and I'd finished talking and somebody stood up from the environmental community and said, and what are you BP going to do about this? And what was striking it was in the summer and it was a Washington summer's day so you know how hot it was, but we was all sitting in this hotel ballroom with our shirts, jackets and ties on with the air conditioning turned right up and nobody saw any irony in the fact that we were sitting there

talking about how to use energy efficiently, sitting in a room with the air conditioning turned right up.

Spencer Dale: If somebody had lit a cigarette at that point, they would have been seen as social pariah. But the fact that we could all sit there and essentially just be wasting energy by having jackets and ties and shirts on, where we could just take off our ties and jackets and turn the air conditioning down a little bit, it was lost on people and it was what are you going to do about it? And I think it's flipping this mindset around and saying, what are we all going to do about this to try and to achieve the transition we need.

Rob Stavins: So, with that, let's naturally turn to thinking about this green transition in particular, I recognize it's not part of your job description to follow closely climate policy developments in Brussels, but the European Union has put forward this Green Deal. Do you have a view on that?

Spencer Dale: It's enormously ambitious and enormously encouraging. It's a classic example of what I was talking about earlier, Rob, in terms of the government intervention, which is being brought about because of the pandemic in order to get the economies up and running again, it's been focused on trying to ensure that in doing so it equips the economy to grow in a more sustainable greener way going forward. And I think many of us would look back in history and say, what Germany did in terms of acting as a leader for the adoption of a wind and solar power had huge benefits to the rest of the world because it allowed that mass adoption in one country, which allowed those costs to come down, which benefited many others. And it's quite conceivable that the EU could play that role in several other dimensions as part of the Green Deal, including in particular, with very ambitious plans for developing a hydrogen economy. So I think what is happening in the EU, I think is enormously encouraging for the EU, but potentially has significant benefits for the wider global economy.

Rob Stavins: And you've probably seen, in fact, perhaps you participated in the study that came out not very long ago from the University of Oxford. Cameron Hepburn in fact, was with us previously to talk about that in terms of agreeing economic stimulus, not specifically the Green Deal, but a generic green economic stimulus for the United Kingdom and for Europe more broadly.

Spencer Dale: Yes. I think there's this growing recognition that we can have stimulus packages, which are both good for the environment, but also good in terms of creating jobs in the near term. And I think that's what we've got to do. If you asked governments today with levels of unemployment or potential unemployment, potentially going back to levels not seen for many decades, if you ask them to trade off near-term jobs versus long-term climate issues, that's a hard challenge for governments to do, but I think the work Cameron and others have done is shown there doesn't need to be a trade off between those two. You can design smart policies, which are both good for the long-run sustainability, but also generate jobs in the near-term.

Rob Stavins: So, that's surely the objective. Let me wrap up by asking you a much broader question and that is something that's been striking at least to me over the last couple of years, particularly in the year 2019 before the pandemic, was this rise of youth movements of climate activism, both in Europe and in the United States. And I'm interested because those people are the future. I'm just interested in your reaction to those young climate activists.

Spencer Dale: I think it's a wonderful movement. And I think it's brought home the fact that you see that passion and that commitment that many of those people bring. We had the Friday afternoon or the Friday class strikes where people were leaving their classrooms for period to demonstrate. And in some sense, it brings it home because it's people of my generation and your generation Rob, who are making decisions now, but it's that future generation and their children with you are going to bear the cost of that if we don't get it right. And I think that it just brings it home. And I certainly know I have two children, young adults now in their early twenties, and they are far more climate aware than I ever was at the same time in my life. And they are far more focused on these issues. And I think they look at us as if to say, look, don't mess it up for us. And I think that's quite a powerful thing to bear in mind, I think.

Rob Stavins: Yes, my children are also in their twenties in my case, in their high twenties. And I've observed the same phenomenon that at that age I certainly didn't even think about this and it's very important to them. And then I recognize that children who are today starting primary school, just out of kindergarten in the very first grade are hearing about climate change, which is quite remarkable. Whereas that surely was not the case, I assume, 10 or 15 years ago.

Spencer Dale: Yeah. Now, and in some sense, it's a worry, because the reason why they're hearing about it is because we haven't made enough progress over the last 10 or 15 years. So, let's hope in 10 or 15 years time that we're on such good progress, it becomes less such a point of concern. But you do hear people who have genuine climate anxiety and it's affecting the way they live their lives. And I think it's incumbent on our generation to do what we can to make sure we leave the world in a better place for the next generation.

Rob Stavins: Well, let's bring it to a close on that very positive note. Thank you very much, Spencer, for taking time to join us today. It was great to talk with you.

Spencer Dale: Thank you very much for the opportunity, Rob. It's a pleasure. Thank you.

Rob Stavins: So, thanks again to our guests today, [Spencer Dale](#), group chief economist at [BP](#). Please join us for the next episode of [Environmental Insights: Conversations on Policy and Practice](#) from the [Harvard Environmental Economics Program](#). I'm your host, [Rob Stavins](#). Thanks for listening.

Announcer:

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