Faculty Profile
Bruce Usher
Executive in Residence

RITIJA GUPTA MBA '10

Bruce Usher, Columbia Business School adjunct professor and Executive in Residence, is the former CEO of EcoSecurities, where he and his firm promoted the development of carbon credit markets under the Kyoto Protocol. The firm, which was acquired by JP Morgan in late 2009, is also responsible for the creation of many clean development mechanism methodologies for the UN. Prior to his work at EcoSecurities, Prof. Usher worked as the CEO of TreasuryConnect, an electronic trading solutions company, and as the COO of the Williams Capital Group, and was a VP at Lehman Brothers in both New York City and Tokyo.

What made you interested in the field of sustainable development, particularly in the field of carbon credits trading?

To be honest, my brother got me interested in this field. When I was in business school, it was not something I was really interested in—I'm not sure there even was a field [at that time]. After graduation I spent 10 years in finance on Wall Street and ended up selling a very small financial company in 2001. Afterwards, I had some time to myself. My brother, who worked for the United Nations, was previously a solar engineer and I posed a question to him about how finance was being used to address renewables and climate change. My expectation was that there would be a lot of people already doing that, but what I found was the opposite. However, people in the industry were really open to working with me, and learning about how financial tools and expertise could be of value to them. So at the end of 2001, I was introduced to one of the founders of EcoSecurities, and a few months later, I took the position of CEO at the company.
I think a lot of things that you end up doing in life are very much influenced by siblings and friends. You get influenced as you go along.

What were some of the more significant obstacles you faced as CEO of EcoSecurities? And what led to the acquisition of EcoSecurities by JP Morgan?

EcoSecurities was founded back in 1997—the early days of the climate change industry. I was brought in to build it into a bigger company, raise capital and to manage its growth trajectory. The biggest initial challenge was 2002 to 2005 as there was no significant carbon market or international agreement to reduce emissions of greenhouse gases. Initially that seemed like a good thing because there was no competition in terms of firms. But one of the things I discovered was that an industry without competitors probably isn't a good industry because there's no value creation going on. Fortunately, in late 2004, the Russian government ratified the Kyoto Protocol, which went into effect in 2005, and lots of competitors showed up and capital flowed into these companies. That led to the second problem though—growing the company as rapidly as possible without going off the rails. We went from 20 employees in 2004 to 300 employees in late 2007, with 21 offices in 20 countries. It was growth both in personnel and geographically.

The third big challenge was managing turmoil in the industry. In 2007, market values peaked and the carbon markets ran into a bottleneck in project approvals from the UN. Projects that were expected to take only six months for approval were taking two to three years. As a result, the whole industry jammed into this bottleneck, and we had to manage industry contraction. In 2008, we downsized from 300 employees to 250, and had to manage that turmoil along with an extremely volatile stock price which went from 100 pence to 400 pence all the way down to 16 pence in three years before recovering to 105 pence at the time of the company sale.

The sale to JP Morgan was somewhat anticipated. At some point, companies like EcoSecurities are acquired by large banks because the carbon markets, like many new markets, are initially dominated by entrepreneurial companies. Eventually, large global institutions move into that business—they have the credit and balance sheet to build the business, the relationships and capital. What EcoSecurities brings is expertise, a portfolio of projects (at that point about 400 projects in 35 countries) and, in EcoSecurities' case, a strong brand that JP Morgan was keen on. So it was a great fit, and by 2009 it made sense to do this and it turned out to be a very successful transaction.

What is EcoSecurities business model?

In terms of working in financial markets, a license is required, but in some ways our business was very simple. We sourced projects in developing countries that were reducing emissions and greenhouse gases, for example a wind project in China. In every country we had local teams of people who were our employees. Once they found a project that a renewable energy developer was hoping to build (but not actually built because then it would be too late for our involvement) we would contract with them to get their project approved for carbon credits, technically called "certified emissions reductions" under the Kyoto Protocol. This is itself a challenging process that requires a lot of expertise to approve. We also sometimes invested in the projects, depending on the type of project.

Our revenue model was to acquire carbon credits from these projects as principal and then at some point in the future turn around and sell those credits to governments and utilities in Europe and Japan who needed them to meet their obligations under the Kyoto Protocol. We did this over and over again, nearly 400 times, as our model. These credits could be transacted anywhere in the world, although they have no value in the U.S. because the U.S. has not ratified the Kyoto Protocol. We sourced our projects in developing countries. More than 50 percent of our projects turned out to be from China, with many others coming from Brazil, Southeast Asia, a few in India, and we'd turn around and sell all these credits to Europe and Japan.

What are clean development mechanisms, and how did EcoSecurities create methodologies around them?

"Clean development mechanisms" or CDM is a market that was established under the Kyoto Protocol, and had two main objectives. The first objective was to reduce the emission of greenhouse gases at the lowest cost possible. The second was to promote sustainable development in emerging economies. In order to do that, any project under CDM has to be approved by the CDM executive board, which is composed of experts from around the world that utilizes methodologies to evaluate projects for approval, and (if approved), how they will measure the amount of reduction in emissions and credits. Some of these methodologies can be very sophisticated with upwards of 100 and 200 pages of technical writing—and the reason I point that out is obviously I didn't have that skill set before I joined EcoSecurities. Fortunately, the people within EcoSecurities had that skill set, and to this day are leading experts on this subject—they have developed more CDM methodologies for the UN than any other company. They have expertise and they built it up. I had appreciation for the value that was being created there, but I wouldn't say that I necessarily had that technical strength.

What would you recommend to students interested in moving into this industry?

I would recommend a few things. Addressing climate change begins with governments reaching agreements to limit emissions and greenhouse gases either at the national or international level—that's really a prerequisite. So that's the first thing—keep an eye on what's going on between governments. In terms of building expertise, I would advise students to give a good hard think to what they're really good at and what they like to do, and then think about how to apply that to this field. The reality is that climate change is such a multifaceted field that there are opportunities no matter what your skill set. But you have to pair your skill set with what's going on out there.

As the professor of such courses as Finance and Sustainability and Carbon Credits, what do you hope your students come away with?

I hope that students come away with an appreciation that traditional financial tools can have a real impact on these modern societal challenges like climate change and poverty—many environmental and social issues. The second thing, which is a bit harder to quantify, but is just as important, is that students come away with an appreciation that they can make that change happen, and they also have to make it happen. There's a tremendous opportunity and need for MBA students to take this up and run with it.

As a recently appointed Executive in Residence, you are frequently sought out by students for career and academic advice. What are some of the most common questions students ask you?

One question is "I'm interested in sustainability—at what point in my career should I switch from a traditional job to one more oriented towards sustainability?" My answer is that you should do it whenever you're ready, not when it's the hot thing to do. For me it took 15 years, I guess I'm a little slower—but for some people, the minute they graduate they're ready to jump into this area. The timing doesn't matter—what does matter is that students become really good at whatever it is they do. So if they are in marketing, become great marketers so that when they make the switch, they can add a lot of value to the sector.

Another question is usually about how to go about finding a job in this area, and there's no easy answer. It's primarily about assessing your skill set and how it applies, and secondly network like crazy. The reality is that these industries are quite small, so you meet a couple dozen people and you've often met a significant number of players. Good ways to network other than direct outreach are conferences and seminars. In other words, go to places where people from the industry are showing up and talking to each other.

Also, at the moment, in terms of climate change and renewable energy, there's more activity outside the U.S. There is little opportunity now in climate but there's a lot going on in renewable energy, and primarily in developing countries and Europe. Another point I want to make is that we're a global and globalizing world, and there's clearly enormous growth opportunity, particularly in developing economies. If one is able to work in those areas, I'd highly recommend it both as a way to be on the ground and getting great work experience, and also a way to build one's personal capabilities.