

Dr. Lawrence (Trey) Meckel is an experienced leader in the global energy industry, and an expert in alternative energy, decarbonization, and oil and gas. During his career, spanning more than 30 years, he has identified, matured, commercialized, and operated energy projects in Australia, SE Asia, North America, South America, and Africa. He began his career with Shell and Woodside, where he developed expertise across oil and gas exploration, production, and R&D. From 2016-2021, he was Vice President of Global Exploration and Geosciences, a member of the Risk Management Committee, and a founding member of the Sustainability Leadership Committee for Latin America's largest private oil and gas company. In 2021, Trey founded Monteverde Energy, a consultancy which advises on and manages alternative energy and decarbonisation projects, including Carbon Capture and Storage (CCS). He is a Senior Consultant to CO2CRC, Australia's leading CCS organization, in which role he provides business-critical services to various Australian projects. In addition, Trey is involved in geothermal projects in Western Australia and the USA, and is the co-founder of Groundbreaking Energy, a geothermal exploration company actively acquiring leases in Australia. He is Secretary of the Australian Geothermal Association. Trey is also a tutor at the University of Cambridge (UK) Institute for Sustainability Leadership (CISL), training senior executives across multiple sectors in net-zero strategies. Trey has a PhD in Earth Sciences from the Swiss Federal Institute of Technology (ETH-Zürich), a Master of Arts in Geology from the University of Texas at Austin, and a Bachelor of Arts in Geology (Honors, Cum Laude) from Williams College (USA).

Why did you choose to do the University of Cambridge Business and Climate Change course? Tell us a bit about the course.

When I began my career, I never intended to work in oil and gas. My original idea was to work in hydrogeology or environmental geology after receiving my geology PhD. Then, 25 years later, I found myself a long way down a career path I hadn't expected. It was lucrative and intellectually rewarding but it wasn't what I'd thought I would be doing. So, in early 2021, I decided to transition my career to sustainability and alternative energy. I sought advice from numerous colleagues, one of whom recommended I consider the CISL Business and Climate Change course. It met my career objectives, offering me the opportunity to learn about climate change in a business context from a very different perspective from what I'd been exposed to previously in my career. I was particularly attracted to the combination of business imperative to achieve Net Zero.

What were the biggest takeaways from the course and did it influence the direction of your career? Did your decision to focus on decarbonisation work come before or after the course and what was the primary driver for the change in direction?

The primary driver for changing direction in my career was that I wanted to change how oil and gas addresses the energy transition. Earth scientists are integral to the transition, and I wanted to influence how it will happen. On the course, I met many leaders who had similar stories to my own. Their thinking raised my aspirations. Tutors, peers, and mentors across sectors were all influential. Although my decision to move towards decarbonisation and sustainability predated the course, their support and their insights solidified my desire to transition my career to seek ways to decarbonize global energy. The biggest takeaway from the course – for me – was that there are an enormous number of ways for us all to impact sustainability, and there are many people from whom we can all learn. Decarbonising is a collective effort, which requires us to recognise the many ways we can all contribute to making necessary changes.

What is your career focus right now vs. your long term aspiration? What is similar in your current work to your previous roles in O&G and what is different? What are the most challenging and most interesting aspects of it?

These days, I am working on sustainability, carbon capture and storage (CCS), and geothermal energy. The space is enormously exciting, with an incredible diversity of people working to make Net Zero happen. There are many geoscientific and engineering skills that make the transition easier, but one needs to consider his or her specific goals. Geothermal and CCS are not as simple as 'producing hot water' or 'turning old wells around' although it may seem that way at first blush. My greatest learning is that people who have

been involved in those spaces for years will welcome enthusiastic, proactive collaborators, but we cannot be arrogant about our understanding. The sciences are different, despite certain similarities.

[Any advice for those in O&G who want to contribute to decarbonisation, either specifically in geothermal or CCS or more generally?](#)

Be open to collaboration - you cannot imagine how many excellent and brilliant minds are looking for your contribution, whether in agriculture, mining, building, energy, banking, finance, medical supplies, small business, or something else entirely. To be clear, though, there are a lot of talented scientists and engineers doing the same thing, and everyone wants to contribute to Net Zero, so seek out your best collaborators and figure out what excites you. Consider what the critical success factors are, and where your skills meet those requirements. Be persistent, especially when your skills don't 'seem' to match expectations. Be sensible – spend 6-36 months learning about whichever field (geothermal, CCS, hydrogen, etc.) you think you want to do. Be as serious about those fields as you were about O&G. Train yourself – don't expect someone else to do it! Expect less money – and be satisfied with different rewards. Be honest about your intentions.