

FINA 7397

Future of Electricity

Class:	Dates: 7/8/2019 – 8/8/2019 Days: Mondays and Wednesdays Time: 6:00 – 10:00 PM

Burhan Koc is the adjunct professor for the Executive MBA program at the University of Houston Bauer College teaching Energy Value Chain as well Renewables and Energy Sustainability courses.

Burhan worked in various segments of Energy Value Chain past 18 years. In Senior Director capacity, Burhan is currently heading up the Renewable and Energy Sustainability Solutions initiative within ENGIE North America focusing on commercializing the strategic, structuring and commercial development of Energy solutions for Commercial & Industrial businesses. Burhan also worked as the Director of Business Development at Phillips 66 for 3 years overseeing Oil & Gas projects in the US. Prior to joining to Phillips 66. Burhan worked as the Director of Trading, Supply and Portfolio Management at GDF Suez for 8 years. In his capacity, Burhan managed the Wholesale and Retail Power, Natural Gas and Renewable Energy commodity portfolios in the U.S. Prior to joining to GDF Suez, Burhan assumed various other roles in the Energy space including Project and Procurement Management for international Oil and Gas drilling and production projects as well as Field Engineering on Offshore platforms in the Gulf of Mexico.

Burhan received his Bachelors in Electrical Engineering from Cukurova University in Turkey in 1999 and his MBA from the University of Houston Bauer College in 2009.

Course Objectives:

I. High-level Overview:

- Electricity 101: Current business models; how it works today
- Electrification and Electric Vehicle trends
- Energy Transition and 3Ds (Decarbonization, Decentralization and Digitalization): Formula Forward and Why Sustainability/Renewables

II. Decentralization:

- Energy efficiency
- Demand response
- Battery Storage

III. Decarbonization:

- Distributed Solar
- Utility-scale Renewables (Wind/Solar/Hydro): Traditional business model, current commercial offerings (REC, PPA, etc.) as well as Emerging Offsite Renewable Structures and Commercialization of these new products

IV. Digitalization:

- Emerging Digital Trends: AI, Machine Learning, Internet of Things, Blockchain, etc.

Course Books, Case Studies, Reading Assignments and Guest speakers:

The course content will be supplemented by the following activities:

- Guest speaking from Energy industry professionals
- Textbook
- Harvard Business Cases
- Relevant reading assignments (articles, whitepapers, research study, etc.)
- Individual project
- Team project