

Graduate School of Management, UC Davis
Sustainable Energy Industry Immersion

Syllabus for Winter 2019 (as of November 13, 2018)

Instructors: Nicole Woolsey Biggart, Benjamin Finkelor

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Winter 2019

MGT 290-004, 3 unit, Fridays 10:00-2pm, Classroom TBD

Office Hours: by appointment

Course Schedule:

Winter Quarter, 2019 (First class is scheduled for Friday January 4, 2018, optional but highly recommended for non-GSM students unfamiliar with energy sector and regulations)

Course Instructors:

- Nicole Biggart, Research Professor, Graduate School of Management
- Benjamin Finkelor, Executive Director, Energy and Efficiency Institute

Course Abstract:

The Sustainable Energy Industry Immersion program at the UC Davis Graduate School of Management (GSM) brings together graduate students from multiple departments who are interested in the energy industry and exposes them to significant managerial problems being faced in this transforming sector. The main objective of this program is to continue to build on the reputation and connections of UC Davis in sustainable energy and transportation by training students to examine problems comprehensively in interdisciplinary teams.

The increase in global population, alterations in climate patterns, the possibility of exhausting fossil fuel reserves, the challenge to produce, store, and distribute energy while minimizing negative effects on our environment are all critical determinants of global development and security.

The importance of the energy industry is increasingly recognized by business generally, for example see this recent discussion on BBC (<http://www.bbc.com/future/story/20170313-the-biggest-energy-challenges-facing-humanity> (Links to an external site.)Links to an external site.).

The impact of new technologies and other innovations in solving a wide array of problems in this industry opens possibilities for energy companies and for other companies that depend on stable energy supplies.

Regulation of energy is a prominent policy conundrum that must balance economic, health, social equity and technology concerns.

The aim of the GSM program is to produce next generation leaders in this vital industry and other industries that depend on access to stable energy stores. Participants will learn from business and policy leaders who will present current energy challenges. Students will work in interdisciplinary teams to find solutions to present for discussion. The program has several distinguishing features:

- Curriculum designed by both UC Davis faculty and industry executives to reflect the latest challenges in the industry
- Classes comprised of students from Graduate School of Management and the Energy Graduate Group
- Nine weeks of interactive classes on Fridays in Winter Quarter taught by senior executives from a select group of companies (Southern California Edison, Sunpower, Honda, PG&E, SMUD, etc.)
- Group assignments in every class, examining potential solutions to management challenges
- Possible project work to follow in Spring Quarter, giving students more in-depth exposure to specific problems in a certain company
- Possible internship opportunities in the featured companies during Summer Quarter

Readings will be developed in conjunction with each week's executives. There is no required textbook.

COURSE REQUIREMENTS/GRADES

Because this is an interactive, group case analysis class attendance and participation are critical elements of successfully meeting three course requirements.

1. Nine weekly case discussions in class and presentation to the speaker: 1/3 of grade (drop lowest grade)
2. Eight weekly Reflection Papers of 500-1000 words submitted online. 1/3 grade (drop lowest grade). There will be no reflection paper due on the last speaker/class.
3. White Paper done in a group with no less than one MBA student, 2500-5000 words uploaded as a file by the last day of class. Instructions on how to write a white paper are available on Canvas under Files. 1/3 grade.

CLASS SCHEDULE

January 4

Introduction to Energy and Sustainability: Optional Orientation Class for non-Energy Students.

Nicole Biggart is former Faculty Director of the Energy Efficiency Center and **Benjamin Finkel** is current Executive Director of the EEI <https://energy.ucdavis.edu>. Ben and Nicole will do a broad overview of energy, its types, and historic trajectory. We will discuss the meaning of sustainability and how energy, sustainability and consumption connect in our choices every day. Chance to get to know other students who will be your partners in solving case problems.

January 11

Leonard (Len) Dorr is Senior Vice President at AECOM's North America (Canada, US and Mexico) Power and Energy Business Line focused on identifying and forming multi-company strategic relationships and leading integrated multi-disciplined JVs and teams for capture of medium to large (\$10M to \$1B) EPC, Design Build, DBFOM, P3 projects for electricity Transmission and Distribution, district energy (CHP, solar, microgrid, etc) and transportation electrification infrastructure.

January 18

Jerry Mix has been Chief Executive Officer of Finelite Inc. since January 1, 2012. Mr. Mix co-founded The Watt Stopper, Inc. in 1984 and served as its President until November 2011 and also its Chief Executive Officer. He has provided extraordinary vision and leadership throughout the past 28 years. Mr. Mix serves as Director of Atomic Aquatics, Finis Aquatic Products, ETM Tailored Power Subsystems and Finelite Lighting. He serves as a Member of Advisory Board of Lumewave Inc., ETM Electromatic Incorporated and California Lighting Technology Center. Mr. Mix graduated from the University of Arizona with a BSBE in Marketing in 1980.

January 25

Maureen Eisbrenner is Co-founder and CEO, and **Simon West** is Co-founder and Director of **Arbnco**, a building modeling and simulation company that partners with leading research bodies to develop scalable, global and disruptive software solutions for managing energy and environmental performance in the built environment. Headquartered in Glasgow, Arbnco's technology is used to manage Indoor environmental quality, scope energy efficiency retrofit, assess renewable deployment and stress-test building design for climate change. Active across multiple sectors, they are one of the leading software providers to the UK real estate market, enabling some of the world's largest property investors to make better and quicker decisions regarding the performance and regulatory compliance of commercial property.

February 1

Jill Anderson is vice president of Customer Programs and Services at Southern California Edison (SCE), one of the nation's largest electric utilities. She is responsible for leading SCE's energy efficiency, demand response and clean self-generation program portfolios as well as customer strategy, marketing, e-commerce and strategic alliance functions. Previously, Anderson was executive vice president and chief commercial officer at the New York Power Authority (NYPA), the country's largest state power organization. She directed all wholesale and retail operations. Anderson oversaw the marketing of NYPA's generation assets, trading, fuel operations, hedging and business development for new transmission and generation activities.

Before joining NYPA, Anderson worked for Hess Corporation, and for Consolidated Edison Company of New York, leading teams responsible for natural gas and electric substation construction and operation, redesign of the distribution system to improve efficiency and integrate new technologies, and electricity and natural gas procurement. Anderson received a Master of Business Administration degree from New York University and a Bachelor of Science in Mechanical Engineering degree from Boston University.

February 8

Scott Crider is Vice President of Customer Services for San Diego Gas & Electric (SDG&E), one of Sempra Energy's California regulated utilities. In his current role as vice president of customer services, Crider oversees all customer-related activities for SDG&E, including call centers, energy efficiency, demand response and customer assistance programs, customer privacy, revenue cycle activities, electric rates and analysis, field services, corporate brand, marketing and customer communications. Crider has a bachelor's degree in law and society from the University of California, Santa Barbara.

February 15

Elisabeth Brinton is Global VP Strategy & Portfolio New Energies at Royal Dutch Shell, arriving at The Hague in October 2018. Elisabeth has been a digital entrepreneur across multiple industries, including energy retail, customer services, consumer products, food and high tech. In 2016, Elisabeth joined Australian Energy leader, AGL Energy Limited (AGL - ASX Listed) as the Executive General Manager, New Energy where she pioneered the introduction of the company's first digital consumer energy products and helping AGL earn its first ranking in AFR's most Innovative Companies list. She also developed the strategy for and delivered the Amazon exclusive offers and other ground-breaking channel partnerships with global brands including Tesla. Elisabeth has been a digital innovator from the first days of the internet, helping to create core technologies and business models with her role on the founding executive team of Loudcloud. Elisabeth previously served on the Advisory Board of the UC Davis Energy and Efficiency Institute.

February 22

Robert Bienenfeld is Assistant Vice President, Environment and Energy Strategy for American Honda's Product Regulatory Office. Bienenfeld is responsible for policy (legislative proposals and regulatory rule making) as it relates to the automobile and its impact on the environment. In addition, he is responsible for recommending long-term strategies to address greenhouse gas, energy security, and air quality issues. Bienenfeld was responsible for Honda's discussions with the White House that led to the historic 2012–2016 and 2017–2025 Greenhouse Gas and Fuel Economy Regulations. Bienenfeld is a 30+ year Honda veteran. Key accomplishments include: the initial proposal for Honda's "Safety for Everyone" strategy, Honda's introduction of telematics, Honda's investments in car sharing, and vehicle refueling technologies. Bienenfeld led the launch of Honda's first battery electric car, the 1997-9 EV PLUS, Honda's first generation Civic natural-gas vehicle (1998), and the original Honda Insight (1999). Bienenfeld graduated from St. John's College. He serves on the Advisory Board of the UC Davis Energy and Efficiency Institute.

March 1

Tom Werner serves as SunPower's CEO and chairman of the SunPower board of directors. Prior to joining SunPower, he held the position of chief executive officer of Silicon Light Machines, Inc., an optical solutions subsidiary of Cypress Semiconductor Corporation. Previously, Werner was vice president and general manager of the Business Connectivity Group of 3Com Corp., a network solutions company, and has also held a number of executive management positions at Oak Industries, Inc., and General Electric Co. He currently serves as a board member of Cree, Inc., Silicon Valley Leadership Group, and is a member of the Marquette University board of trustees. Werner holds a bachelor's degree in industrial engineering from the University of Wisconsin, Madison, a bachelor's degree in electrical engineering from Marquette University and a master's degree in business administration from George Washington University.

March 8

Larry Kellerman is Managing Partner of TFC Utilities, an investment platform for acquiring and leveraging regulated utilities to take advantage of their access to low cost capital and large customer bases. TFC uses a "Million Rate Base" model to provide customers with the lowest possible cost solar panels or other energy technology using low cost financing. Regulated customers can choose their preferred source of energy and have access to the latest battery systems and energy devices such as charging stations for vehicles. Larry Kellerman has worked in energy finance at Goldman Sachs and Quantum Utility Generation. He is an alumnus of UC Davis and he holds an MBA from West Coast University.